

# Condition of Education 2014









# The Condition of Education 2014

#### **MAY 2014**

Grace Kena
Susan Aud
Frank Johnson
National Center for Education Statistics

Xiaolei Wang
Jijun Zhang
Amy Rathbun
Sidney Wilkinson-Flicker
Paul Kristapovich
American Institutes for Research

Liz Notter Virginia Robles-Villalba Production Managers Synergy Enterprises, Inc.

Thomas Nachazel
Senior Editor
Allison Dziuba
Editor
American Institutes for Research



#### U.S. Department of Education

Arne Duncan Secretary

#### **Institute of Education Sciences**

John Q. Easton Director

#### **National Center for Education Statistics**

John Q. Easton
Acting Commissioner

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfills a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries.

NCES activities are designed to address high-priority education data needs; provide consistent, reliable, complete, and accurate indicators of education status and trends; and report timely, useful, and high-quality data to the U.S. Department of Education, the Congress, the states, other education policymakers, practitioners, data users, and the general public. Unless specifically noted all information contained herein is in the public domain.

We strive to make our products available in a variety of formats and in language that is appropriate to a variety of audiences. You, as our customer, are the best judge of our success in communicating information effectively. If you have any comments or suggestions about this or any other NCES product or report, we would like to hear from you. Please direct your comments to

NCES, IES, U.S. Department of Education 1990 K Street NW Washington, DC 20006-5651

#### May 2014

The NCES Home Page address is <a href="http://nces.ed.gov">http://nces.ed.gov</a>/pubsearch. The NCES Publications and Products address is <a href="http://nces.ed.gov/pubsearch">http://nces.ed.gov/pubsearch</a>.

This publication is only available online. To download, view, and print the report as a PDF file, go to the NCES Publications and Products address shown above.

This report was prepared for the National Center for Education Statistics under Contract No. ED-IES-12-D-0002 with American Institutes for Research. Mention of trade names, commercial products, or organizations does not imply endorsement by the U.S. Government.

#### **Suggested Citation**

Kena, G., Aud, S., Johnson, F., Wang, X., Zhang, J., Rathbun, A., Wilkinson-Flicker, S., and Kristapovich, P. (2014). *The Condition of Education 2014* (NCES 2014-083). U.S. Department of Education, National Center for Education Statistics. Washington, DC. Retrieved [date] from <a href="http://nces.ed.gov/pubsearch">http://nces.ed.gov/pubsearch</a>.

#### **Content Contact**

Grace Kena (202) 502-7888 grace.kena@ed.gov



# Letter From the Commissioner of the National Center for Education Statistics

May 2014

The Congress has mandated that the National Center for Education Statistics (NCES) produce an annual *Condition of Education* report to help inform policymakers about the progress of education in the United States. This year's report presents 42 indicators on important topics and trends in U.S. education. These indicators focus on population characteristics, participation in education, elementary and secondary education, and postsecondary education. This year's *Condition* shows that about 90 percent of young adults ages 25 to 29 had a high school diploma or its equivalent in 2013, and that 34 percent had a bachelor's or higher degree. As in previous years, in 2012, median earnings were higher for those with higher levels of education—for example, 25- to 34-year-olds with a bachelor's degree earned more than twice as much as high school dropouts. Also, the unemployment rate was lower for bachelor's degree holders in this age range than for their peers with lower levels of education.

In 2012, almost two-thirds of 3- to 5-year-olds were enrolled in preschool, and 60 percent of these children attended full-day programs. At the elementary and secondary level, there were nearly 50 million students in public schools in 2011—over 2 million of which were in charter schools. The number of students in elementary and secondary schools is expected to grow to 52 million by 2023. Postsecondary enrollment was at 21 million students in 2012, including 18 million undergraduate and 3 million graduate, or postbaccalaureate, students.

One in five school-age children lived in poverty in 2012, up from about one in seven in 2000. In school year 2011–12, some 3.1 million public high school students, or 81 percent, graduated on time with a regular diploma. About 66 percent of 2012 high school completers enrolled in college that fall. Meanwhile, the status dropout rate, or the percentage of 16- to 24-year-olds who are not enrolled in school and do not have a high school diploma or its equivalent, declined from 12 percent in 1990 to 7 percent in 2012.

At public and private nonprofit 4-year colleges in 2011, most of the full-time undergraduates (88 and 86 percent, respectively) were under the age of 25; however, only about 29 percent of full-time students at private for-profit colleges were. About 56 percent of male students and 61 percent of female students who began their bachelor's degree in the fall of 2006, and did not transfer, had completed their degree by 2012. In that year, over 1 million associate's degrees, 1.8 million bachelor's degrees, and over 750,000 master's degrees were awarded.

The Condition of Education 2014 contains the latest data available on these and other key indicators. As new data are released, the indicators will be updated on the Condition of Education website. Along with these indicators, NCES produces a wide range of reports and data to help inform policymakers and the American public about trends and conditions in U.S. education.

John Q. Easton

Acting Commissioner

National Center for Education Statistics

John 2. Eastm

This page intentionally left blank.

#### Reader's Guide

The Condition of Education is available on the National Center for Education Statistics (NCES) website as a full pdf of this volume for 2014, as individual pdfs, in html, and on our mobile website. Individual pdfs and html files are updated throughout the year as new data become available. All reference tables are hyperlinked within the pdf and html versions, as are the sources for each of the graphics. The reference tables can generally be found in other NCES publications—primarily the *Digest of Education Statistics*.

#### **Data Sources and Estimates**

The data in these indicators were obtained from many different sources—including students and teachers, state education agencies, local elementary and secondary schools, and colleges and universities—using surveys and compilations of administrative records. Users should be cautious when comparing data from different sources. Differences in aspects such as procedures, timing, question phrasing, and interviewer training can affect the comparability of results across data sources.

Most indicators summarize data from surveys conducted by NCES or by the Census Bureau with support from NCES. Brief explanations of the major NCES surveys used in these indicators can be found in the Guide to Sources (<a href="http://nces.ed.gov/programs/coe/sources.asp">http://nces.ed.gov/programs/coe/sources.asp</a>). More detailed explanations can be obtained on the NCES website (<a href="http://nces.ed.gov">http://nces.ed.gov</a>) under "Surveys and Programs."

The Guide to Sources also includes information on non-NCES sources used to compile indicators, such as the American Community Survey (ACS) and the Current Population Survey (CPS). These are Census Bureau surveys used extensively in the indicators. For further details on the ACS, see <a href="http://www.census.gov/acs/www/">http://www.census.gov/acs/www/</a>. For further details on the CPS, see <a href="http://www.census.gov/cps/">http://www.census.gov/cps/</a>.

Data for indicators are obtained primarily from two types of surveys: universe surveys and sample surveys. In universe surveys, information is collected from every member of the population. For example, in a survey regarding certain expenditures of public elementary and secondary schools, data would be obtained from each school district in the United States. When data from an entire population are available, estimates of the total population or a subpopulation are made by simply summing the units in the population or subpopulation. As a result, there is no sampling error, and observed differences are reported as true.

Since a universe survey is often expensive and time consuming, many surveys collect data from a sample of the population of interest (sample survey). For example,

the National Assessment of Educational Progress (NAEP) assesses a representative sample of students rather than the entire population of students. When a sample survey is used, statistical uncertainty is introduced, because the data come from only a portion of the entire population. This statistical uncertainty must be considered when reporting estimates and making comparisons.

Various types of statistics derived from universe and sample surveys are reported in the indicators. Many indicators report the size of a population or a subpopulation, and often the size of a subpopulation is expressed as a percentage of the total population. In addition, the average (or mean) value of some characteristic of the population or subpopulation may be reported. The average is obtained by summing the values for all members of the population and dividing the sum by the size of the population. An example is the annual average salaries of full-time instructional faculty at degree-granting postsecondary institutions. Another measure that is sometimes used is the median. The median is the midpoint value of a characteristic at or above which 50 percent of the population is estimated to fall, and at or below which 50 percent of the population is estimated to fall. An example is the median annual earnings of young adults who are full-time, full-year wage and salary workers.

#### Standard Errors

Using estimates calculated from data based on a sample of the population requires consideration of several factors before the estimates become meaningful. When using data from a sample, some *margin of error* will always be present in estimations of characteristics of the total population or subpopulation because the data are available from only a portion of the total population. Consequently, data from samples can provide only an approximation of the true or actual value. The margin of error of an estimate, or the range of potential true or actual values, depends on several factors such as the amount of variation in the responses, the size and representativeness of the sample, and the size of the subgroup for which the estimate is computed. The magnitude of this margin of error is measured by what statisticians call the "standard error" of an estimate.

When data from sample surveys are reported, the standard error is calculated for each estimate. The standard errors for all estimated totals, means, medians, or percentages are reported in the reference tables.

In order to caution the reader when interpreting findings in the indicators, estimates from sample surveys are flagged with a "!" when the standard error is between 30 and 50 percent of the estimate, and suppressed with a "‡" when the standard error is 50 percent of the estimate or greater.

#### Data Analysis and Interpretation

When estimates are from a sample, caution is warranted when drawing conclusions about one estimate in comparison to another, or about whether a time series of estimates is increasing, decreasing, or staying the same. Although one estimate may appear to be larger than another, a statistical test may find that the apparent difference between them is not reliably measurable due to the uncertainty around the estimates. In this case, the estimates will be described as having no measurable difference, meaning that the difference between them is not statistically significant.

Whether differences in means or percentages are statistically significant can be determined using the standard errors of the estimates. In these indicators and other reports produced by NCES, when differences are statistically significant, the probability that the difference occurred by chance is less than 5 percent, according to NCES standards.

Data presented in the indicators do not investigate more complex hypotheses, account for interrelationships among variables, or support causal inferences. We encourage readers who are interested in more complex questions and in-depth analysis to explore other NCES resources, including publications, online data tools, and public- and restricted-use datasets at <a href="http://nces.ed.gov">http://nces.ed.gov</a>.

For all indicators that report estimates based on samples, differences between estimates (including increases and decreases) are stated only when they are statistically significant. To determine whether differences reported are statistically significant, two-tailed t tests at the .05 level are typically used. The t test formula for determining statistical significance is adjusted when the samples being compared are dependent. The *t* test formula is not adjusted for multiple comparisons, with the exception of statistical tests conducted using the NAEP Data Explorer (<a href="http://nces.ed.gov/nationsreportcard/tdw/">http://nces.ed.gov/nationsreportcard/tdw/</a> database/data tool.asp). When the variables to be tested are postulated to form a trend, the relationship may be tested using linear regression, logistic regression, or ANOVA trend analysis instead of a series of t tests. These alternate methods of analysis test for specific relationships (e.g., linear, quadratic, or cubic) among variables. For more information on data analysis, please see the NCES Statistical Standards, Standard 5-1, available at https://nces.ed.gov/statprog/2012/pdf/Chapter5.pdf.

A number of considerations influence the ultimate selection of the data years to feature in the indicators. To make analyses as timely as possible, the latest year of available data is shown. The choice of comparison

years is often also based on the need to show the earliest available survey year, as in the case of the NAEP and the international assessment surveys. In the case of surveys with long time frames, such as surveys measuring enrollment, the decade's beginning year (e.g., 1980 or 1990) often starts the trend line. In the figures and tables of the indicators, intervening years are selected in increments in order to show the general trend. The narrative for the indicators typically compares the most current year's data with those from the initial year and then with those from a more recent period. Where applicable, the narrative may also note years in which the data begin to diverge from previous trends.

#### Rounding and Other Considerations

All calculations within the indicators are based on unrounded estimates. Therefore, the reader may find that a calculation, such as a difference or a percentage change, cited in the text or figure may not be identical to the calculation obtained by using the rounded values shown in the accompanying tables. Although values reported in the supplemental tables are generally rounded to one decimal place (e.g., 76.5 percent), values reported in each are generally rounded to whole numbers (with any value of 0.50 or above rounded to the next highest whole number). Due to rounding, cumulative percentages may sometimes equal 99 or 101 percent rather than 100 percent.

#### Race and Ethnicity

The Office of Management and Budget (OMB) is responsible for the standards that govern the categories used to collect and present federal data on race and ethnicity. The OMB revised the guidelines on racial/ ethnic categories used by the federal government in October 1997, with a January 2003 deadline for implementation (Office of Management and Budget 1997). The revised standards require a minimum of these five categories for data on race: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White. The standards also require the collection of data on the ethnicity categories Hispanic or Latino and Not Hispanic or Latino. It is important to note that Hispanic origin is an ethnicity rather than a race, and therefore persons of Hispanic origin may be of any race. Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. The race categories White, Black, Asian, Native Hawaiian or Other Pacific Islander, and American Indian or Alaska Native, as presented in these indicators, exclude persons of Hispanic origin unless noted otherwise.

The categories are defined as follows:

- American Indian or Alaska Native: A person having origins in any of the original peoples of North and South America (including Central America) and maintaining tribal affiliation or community attachment.
- Asian: A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- Black or African American: A person having origins in any of the black racial groups of Africa.
- Native Hawaiian or Other Pacific Islander: A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- White: A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.
- Hispanic or Latino: A person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race.

Within these indicators, some of the category labels have been shortened in the text, tables, and figures. American Indian or Alaska Native is denoted as American Indian/ Alaska Native (except when separate estimates are available for American Indians alone or Alaska Natives alone); Black or African American is shortened to Black; and Hispanic or Latino is shortened to Hispanic. When discussed separately from Asian estimates, Native Hawaiian or Other Pacific Islander is shortened to Pacific Islander.

The indicators draw from a number of different sources. Many are federal surveys that collect data using the OMB standards for racial/ethnic classification described above; however, some sources have not fully adopted the standards, and some indicators include data collected prior to the adoption of the OMB standards. This report focuses on the six categories that are the most common among the various data sources used: White, Black, Hispanic, Asian, Pacific Islander, and American Indian/Alaska Native. Asians and Pacific Islanders are combined into one category in indicators for which the data were not collected separately for the two groups.

Some of the surveys from which data are presented in these indicators give respondents the option of selecting either an "other" race category, a "two or more races" or "multiracial" category, or both. Where possible, indicators present data on the "two or more races" category; however, in some cases this category may not be separately shown because the information was not collected or due to other data issues. The "other" category

is not separately shown. Any comparisons made between persons of one racial/ethnic group to "all other racial/ethnic groups" include only the racial/ethnic groups shown in the indicator. In some surveys, respondents are not given the option to select more than one race. In these surveys, respondents of two or more races must select a single race category. Any comparisons between data from surveys that give the option to select more than one race and surveys that do not offer such an option should take into account the fact that there is a potential for bias if members of one racial group are more likely than members of the others to identify themselves as "two or more races." For postsecondary data, foreign students are counted separately and are therefore not included in any racial/ethnic category.

The American Community Survey (ACS), conducted by the U.S. Census Bureau, collects information regarding specific racial/ethnic ancestry. Selected indicators include Hispanic ancestry subgroups (such as Mexican, Puerto Rican, Cuban, Dominican, Salvadoran, Other Central American, and South American) and Asian ancestry subgroups (such as Asian Indian, Chinese, Filipino, Japanese, Korean, and Vietnamese). In addition, selected indicators include "two or more races" subgroups (such as White and Black, White and Asian, and White and American Indian/Alaska Native).

For more information on the ACS, see the Guide to Sources (<a href="http://nces.ed.gov/programs/coe/sources.asp">http://nces.ed.gov/programs/coe/sources.asp</a>). For more information on race/ethnicity, see the Glossary (<a href="http://nces.ed.gov/programs/coe/glossary.asp">http://nces.ed.gov/programs/coe/glossary.asp</a>).

#### Limitations of the Data

The relatively small sizes of the American Indian/Alaska Native and Pacific Islander populations pose many measurement difficulties when conducting statistical analysis. Even in larger surveys, the numbers of American Indians/Alaska Natives and Pacific Islanders included in a sample are often small. Researchers studying data on these two populations often face small sample sizes that reduce the reliability of results. Survey data for American Indians/Alaska Natives often have somewhat higher standard errors than data for other racial/ethnic groups. Due to large standard errors, differences that seem substantial are often not statistically significant and, therefore, not cited in the text.

I Such bias was found by a National Center for Health Statistics study that examined race/ethnicity responses to the 2000 Census. This study found, for example, that as the percentage of multiple-race respondents in a county increased, the likelihood of respondents stating Black as their primary race increased among Black/White respondents but decreased among American Indian or Alaska Native/Black respondents. See Parker, J. et al. (2004). Bridging Between Two Standards for Collecting Information on Race and Ethnicity: An Application to Census 2000 and Vital Rates. *Public Health Reports*, 119(2): 192–205. Available through <a href="http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1497618">http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1497618</a>.

Data on American Indians/Alaska Natives are often subject to inaccuracies that can result from respondents self-identifying their race/ethnicity. Research on the collection of race/ethnicity data suggests that the categorization of American Indian and Alaska Native is the least stable self-identification (U.S. Department of Labor, Bureau of Labor Statistics 1995). The racial/ ethnic categories presented to a respondent, and the way in which the question is asked, can influence the response, especially for individuals who consider themselves of mixed race or ethnicity. These data limitations should be kept in mind when reading this report.

As mentioned above, Asians and Pacific Islanders are combined into one category in indicators for which the data were not collected separately for the two groups. The combined category can sometimes mask significant differences between subgroups. For example, prior to 2011, the National Assessment of Educational Progress (NAEP) collected data that did not allow for separate reporting of estimates for Asians and Pacific Islanders. Information from the Digest of Education Statistics, 2011 (table 21), based on the Census Bureau Current Population Reports, indicates that 96 percent of all Asian/Pacific Islander 5- to 24-year-olds are Asian. This combined category for Asians/Pacific Islanders is more representative of Asians than Pacific Islanders.

#### **Symbols**

In accordance with the NCES Statistical Standards, many tables in this volume use a series of symbols to alert the reader to special statistical notes. These symbols, and their meanings, are as follows:

- Not available.
- † Not applicable.
- # Rounds to zero.
- ! Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.
- ‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) for this estimate is 50 percent or greater.
- \* p < .05 Significance level.

## **Contents**

| Let | ter From the | Commissioner of the National Center for Education Statistics  | Page<br>iii |
|-----|--------------|---|-------------|
|     |              |   |             |
| 100 | ader 3 Guide |   | ···· v      |
| Cł  | napter 1.    | Population Characteristics  | 1           |
| At  | tainment     |   |             |
| 1   | Educationa   | Attainment  | 2           |
|     | Figure 1.    | Percentage of 25- to 29-year-olds who completed bachelor's and master's degrees, by sex: Selected years, 1990–2013  | 2           |
|     | Figure 2.    | Percentage of 25- to 29-year-olds who completed at least a high school diploma or its equivalent, by race/ethnicity: Selected years, 1990–2013  | 3           |
|     | Figure 3.    | Percentage of 25- to 29-year-olds who completed a bachelor's or higher degree, by race/ethnicity: Selected years, 1990–2013   | 4           |
| 2   | Internationa | al Educational Attainment   | 6           |
|     | Figure 1.    | Percentage of the population 25 to 64 years old in Organization for Economic Cooperation and Development (OECD) countries who attained selected levels of education, by age group: 2011                   | 6           |
|     | Figure 2.    | Percentage of the population 25 to 64 years old in Organization for Economic Cooperation and Development (OECD) countries who attained selected levels of education: Selected years, 2001, 2005, and 2011 | 7           |
| Ec  | onomic C     | Putcomes  |             |
| 3   | Annual Ear   | nings of Young Adults   | 10          |
|     | Figure 1.    | Percentage of wage and salary workers ages 25–34 who worked full time, year-round, by educational attainment: 1995–2012   | 10          |
|     | Figure 2.    | Median annual earnings of full-time, year-round wage and salary workers ages 25–34, by educational attainment: 2012   | 11          |
|     | Figure 3.    | Median annual earnings of full-time year-round wage and salary workers ages 25–34, by educational attainment: 1995–2012   | 12          |
|     | Figure 4.    | Median annual earnings of full-time year-round wage and salary workers ages 25–34, by educational attainment and sex: 2012  | 13          |
| 4   | Labor Force  | Participation and Unemployment Rates by Educational Attainment  | 14          |
|     | Figure 1.    | Unemployment rates, by age group and educational attainment: 2013   |             |
|     | Figure 2.    | Unemployment rates of persons 20 to 24 years old, by sex and educational attainment: Selected years, 2000 through 2013  |             |
|     | Figure 3.    | Unemployment rates of persons 25 to 64 years old, by sex and educational attainment: Selected years, 2000 through 2013  | 16          |
|     | Figure 4.    | Unemployment rates of persons 25 to 34 years old, by sex and educational attainment: Selected years, 2000 through 2013  | 17          |
| De  | emograph     | ics   |             |
| 5   | Children Li  | ving in Poverty   | 20          |
|     | Figure 1.    | Percentage of 5- to 17-year-olds in families living in poverty, by region: 1990, 2000, and 2012   |             |
|     | Figure 2.    | Percentage of 5- to 17-year-olds in families living in poverty, by state: 2012  |             |
|     | Figure 3.    | Percentage of children under age 18 living in poverty, by race/ethnicity: 2012  |             |
|     | Figure 4.    | Percentage of children under age 18 living in poverty, by selected race/ethnicity subgroups: 2012   |             |
|     | Figure 5.    | Percentage of children under age 18 living in poverty, by family structure and race/ethnicity: 2012   |             |

| Cł                         | napter 2.    | Participation in Education  |
|----------------------------|--------------|---|
| ΑI                         | Ages         |   |
| 6 Enrollment Trends by Age |              | Trends by Age   |
|                            | Figure 1.    | Percentage of the population ages 3–17 enrolled in school, by age group: October 1990–201228  |
|                            | Figure 2.    | Percentage of the population ages 18–19 enrolled in school, by education level:  October 1990–2012  |
|                            | Figure 3.    | Percentage of the population ages 20–34 enrolled in school, by age group: October 1990–2012 30  |
| Pre                        | eprimary l   | Education   |
| 7                          | Preprimary   | Enrollment  |
|                            | Figure 1.    | Percentage of 3-, 4-, and 5-year-old children enrolled in preprimary programs: Selected years, 1990 through 2012  |
|                            | Figure 2.    | Percentage of 3-, 4-, and 5-year-old children in preprimary programs attending full day: Selected years, 1990 through 2012  |
|                            | Figure 3.    | Percentage of 3-, 4-, and 5-year-old children enrolled in preprimary programs, by parents' highest level of education and children's attendance status: October 2012          |
| Ele                        | ementary/    | Secondary Enrollment  |
| 8                          | •            | ool Enrollment  |
|                            | Figure 1.    | Actual and projected public school enrollment in grades prekindergarten (preK) through 12, by grade level: School years 2000–01 through 2023–24                               |
|                            | Figure 2.    | Projected percentage change in public school enrollment in grades prekindergarten (preK) through 12, by state or jurisdiction: Between school years 2011–12 and 2023–24       |
| 9                          | Charter Sch  | nool Enrollment   |
|                            | Figure 1.    | Number of U.S. public charter schools: Selected school years, 1999–2000 through 2011–12 38  |
|                            | Figure 2.    | Number of students enrolled in U.S. public charter schools: Selected school years, 1999–2000 through 2011–12  |
|                            | Figure 3.    | Percentage of all public school students enrolled in charter schools, by state or jurisdiction: School year 2011–12   |
|                            | Figure 4.    | Percentage of students enrolled in U.S. public charter schools, by race/ethnicity: School years, 1999–2000 and 2011–12  |
| 10                         | Private Scho | pol Enrollment  |
|                            | Figure 1.    | Private school enrollment in prekindergarten (preK) through grade 12, by grade level:<br>School years 1995–96 through 2011–12   |
|                            | Figure 2.    | Number of private school students in prekindergarten through grade 12, by school type:  Selected school years, 1995–96 through 2011–12  |
|                            | Figure 3.    | Percentage distribution of private elementary and secondary school enrollment, by school level and type: 2011–12  |
|                            | Figure 4.    | Percentage distribution of private elementary and secondary school enrollment, by school locale and type: 2011–12   |
|                            | Figure 5.    | Percentage distribution of private elementary and secondary school enrollment, by race/ethnicity and school type: 2011–12   |
| 11                         | Racial/Ethr  | nic Enrollment in Public Schools  |
|                            | Figure 1.    | Percentage distribution of U.S. public school students enrolled in prekindergarten through 12th grade, by race/ethnicity: Selected years, fall 2001, fall 2011, and fall 2023 |
|                            | Figure 2.    | Number of U.S. public school students enrolled in prekindergarten through 12th grade, by region and race/ethnicity: Fall 2001 through fall 2011                               |

|    | Figure 3.   | Percentage distribution of U.S. public school students enrolled in prekindergarten through 12th grade, by region and race/ethnicity: Fall 2011   | . 50 |
|----|-------------|--|------|
| 12 | English Lar | nguage Learners  | . 52 |
|    | Figure 1.   | Percentage of public school students who are English language learners (ELL), by state:<br>School year 2011–12   | . 52 |
|    | Figure 2.   | Percentage of public school students who are English language learners (ELL), by locale:<br>School year 2011–12  | . 53 |
| 13 | Children an | nd Youth With Disabilities   | .54  |
|    | Figure 1.   | Percentage distribution of children ages 3–21 served under the Individuals with Disabilities Education Act (IDEA), Part B, by disability type: School year 2011–12   | . 54 |
|    | Figure 2.   | Percentage of students ages 6–21 served under the Individuals with Disabilities Education Act (IDEA), Part B, placed in a regular public school environment, by amount of time spent inside general classes: Selected school years 1990–91 through 2011–12 | 55   |
|    | Figure 3.   | Percentage of children 3–21 years old served under the Individuals with Disabilities Education Act (IDEA), Part B, by race/ethnicity: School year 2011–12  | . 56 |
| Ро | stsecond    | ary Enrollment   |      |
| 14 | Undergradu  | iate Enrollment  | . 58 |
|    | Figure 1.   | Actual and projected undergraduate enrollment in degree-granting postsecondary institutions, by sex: Fall 1990–2023  | . 58 |
|    | Figure 2.   | Actual and projected undergraduate enrollment in degree-granting postsecondary institutions, by attendance status: Fall 1990–2023  | 59   |
|    | Figure 3.   | Undergraduate enrollment in degree-granting postsecondary institutions, by control of institution: Fall 1990–2012  | .60  |
|    | Figure 4.   | Actual and projected undergraduate enrollment in degree-granting postsecondary institutions, by level of institution: Fall 1990–2023   | . 61 |
|    | Figure 5.   | Percentage of undergraduate students at degree-granting postsecondary institutions who participated exclusively in distance education courses, by control and level of institution: Fall 2012  | . 62 |
| 15 | Postbaccala | ureate Enrollment  | .64  |
|    | Figure 1.   | Actual and projected postbaccalaureate enrollment in degree-granting postsecondary institutions, by sex: Fall 1990–2023  | 64   |
|    | Figure 2.   | Actual and projected postbaccalaureate enrollment in degree-granting postsecondary institutions, by attendance status: Fall 1990–2023  | . 65 |
|    | Figure 3.   | Postbaccalaureate enrollment in degree-granting postsecondary institutions, by control of institution: Fall 1990–2012  | . 66 |
|    | Figure 4.   | Percentage of postbaccalaureate students enrolled in degree-granting postsecondary institutions who took distance education courses, by control of institution: Fall 2012  | . 67 |
| Ch | apter 3.    | Elementary and Secondary Education   | 69   |
| Sc | hool Cha    | racteristics and Climate   |      |
| 16 | Characteris | tics of Traditional Public and Public Charter Schools  | .70  |
|    | Figure 1.   | Percentage distribution of public schools, by school status and enrollment size: School years 1999–2000 and 2011–12  | . 70 |
|    | Figure 2.   | Percentage of public schools, by school status and racial/ethnic concentration: School years 1999–2000 and 2011–12   | .71  |
|    | Figure 3.   | Percentage distribution of public schools, by school status and percentage of students eligible for free or reduced-price lunch: School year 2011–12   | . 72 |

|     | Figure 4.    | Percentage distribution of public schools, by school locale, region, and status: School year 2011–12   | . 73 |
|-----|--------------|--|------|
| 17  | Concentrati  | ion of Public School Students Eligible for Free or Reduced-Price Lunch   | . 74 |
|     | Figure 1.    | Percentage distribution of public school students, by school poverty level: School years 1999–2000 and 2011–12   | . 74 |
|     | Figure 2.    | Percentage distribution of public school students, by school locale and school poverty level: School year 2011–12  | . 75 |
| 18  | Rates of Sch | nool Crime   | . 76 |
|     | Figure 1.    | Rate of total nonfatal victimizations against students ages 12–18 per 1,000 students, by location: 1992–2012   | . 76 |
|     | Figure 2.    | Rate of thefts against students ages 12-18 per 1,000 students, by location: 1992-2012  | .77  |
|     | Figure 3.    | Rate of all violent victimizations against students ages 12–18 per 1,000 students, by location: 1992–2012  | . 78 |
|     | Figure 4.    | Rate of serious violent victimizations against students ages 12–18 per 1,000 students, by location: 1992–2012  | . 79 |
|     | Figure 5.    | Rate of nonfatal victimizations against students ages 12–18 at and away from school per 1,000 students, by type of victimization and age: 2012   | .80  |
|     | Figure 6.    | Rate of nonfatal victimizations against students ages 12–18 at and away from school per 1,000 students, by type of victimization and sex: 2012   | . 81 |
| 19  | Teachers an  | d Pupil/Teacher Ratios   | . 82 |
|     | Figure 1.    | Teachers as a percentage of staff in public elementary and secondary school systems, by state: Fall 2011   | . 82 |
|     | Figure 2.    | Public and private elementary and secondary school pupil/teacher ratios: Selected years, fall 1955 through fall 2011   | . 83 |
| Fin | ance         |  |      |
| 20  | Public Scho  | ol Revenue Sources   | .84  |
|     | Figure 1.    | Total revenues for public elementary and secondary schools, by revenue source: School years 2000–01 through 2010–11  | .84  |
|     | Figure 2.    | State revenues for public elementary and secondary schools as a percentage of total public school revenues, by state: School year 2010–11  | . 85 |
|     | Figure 3.    | Property tax revenues for public elementary and secondary schools as a percentage of total public school revenues, by state: School year 2010–11   | . 86 |
| 21  | Public Scho  | ol Expenditures  | .88  |
|     | Figure 1.    | Total expenditures per student in fall enrollment in public elementary and secondary schools nationwide, in constant 2012–13 dollars, by type of expenditure: 2000–01, 2005–06, 2009–10, and 2010–11                                   | . 88 |
|     | Figure 2.    | Current expenditures per student in fall enrollment in public elementary and secondary schools nationwide, in constant 2012–13 dollars, by type of expenditure: 2000–01, 2005–06, 2009–10, and 2010–11                                 | . 89 |
|     | Figure 3.    | Percentage of current expenditures per student in fall enrollment in public elementary and secondary schools nationwide, by type of expenditure: 2000–01, 2005–06, 2009–10, and 2010–11  | .90  |
| 22  | Education I  | Expenditures by Country  | . 92 |
|     | Figure 1.    | Annual expenditures per full-time-equivalent (FTE) student for elementary and secondary education in selected Organization for Economic Cooperation and Development (OECD) countries, by gross domestic product (GDP) per capita: 2010 |      |

|    | Figure 2.    | Annual expenditures per full-time-equivalent (FTE) student for postsecondary education in selected Organization for Economic Cooperation and Development (OECD) countries, by gross domestic product (GDP) per capita: 2010 | 94    |
|----|--------------|---|-------|
|    | Figure 3.    | Direct expenditures on education as a percentage of gross domestic product (GDP) for Organization for Economic Cooperation and Development (OECD) countries with the highest percentages, by level of education: 2010.      | 95    |
| As | sessment     | s   |       |
| 23 | Reading Per  | rformance   | 96    |
|    | Figure 1.    | Average reading scale scores of 4th- and 8th-grade students: Selected years, 1992–2013  | 96    |
|    | Figure 2.    | Percentage distribution of 4th- and 8th-grade students across National Assessment of Educational Progress (NAEP) reading achievement levels: Selected years, 1992–2013  | 97    |
|    | Figure 3.    | Average reading scale scores of 4th- and 8th-grade students, by race/ethnicity: 1992, 2011, and 2013  | 98    |
|    | Figure 4.    | Average reading scale scores of 4th- and 8th-grade students, by English language learner (ELL) status: Selected years, 1998–2013  | 99    |
|    | Figure 5.    | Change in average reading scale scores for 4th- and 8th-grade public school students, by state:  Between 2011 and 2013  | . 100 |
|    | Figure 6.    | Comparison of average reading scale scores for 4th- and 8th-grade students, by jurisdiction: 2013   | . 101 |
| 24 | Mathematic   | es Performance  | . 104 |
|    | Figure 1.    | Average mathematics scale scores of 4th- and 8th-grade students: Selected years, 1990–2013  | . 104 |
|    | Figure 2.    | Percentage distribution of 4th- and 8th-grade students across National Assessment of Educational Progress (NAEP) mathematics achievement levels: Selected years, 1990–2013  | . 105 |
|    | Figure 3.    | Average mathematics scale scores of 4th- and 8th-grade students, by race/ethnicity: 1990, 2011, and 2013  | . 106 |
|    | Figure 4.    | Average mathematics scale scores of 4th- and 8th-grade students, by English language learner (ELL) status: Selected years, 1996–2013  | . 107 |
|    | Figure 5.    | Change in average mathematics scale scores for 4th- and 8th-grade public school students, by state: Between 2011 and 2013   | . 108 |
|    | Figure 6.    | Change in average mathematics scale scores for 4th- and 8th-grade public school students, by jurisdiction: Between 2011 and 2013  | . 109 |
| 25 | Reading an   | d Mathematics Score Trends  | . 112 |
|    | Figure 1.    | Average reading scale scores on the long-term trend National Assessment of Educational Progress (NAEP), by age: Selected years, 1971 through 2012   | . 112 |
|    | Figure 2.    | Average mathematics scale scores on the long-term trend National Assessment of Educational Progress (NAEP), by age: Selected years, 1973 through 2012   | 113   |
|    | Figure 3.    | Average reading scale scores on the long-term trend National Assessment of Educational Progress (NAEP) for 13-year-olds, by race/ethnicity: Selected years, 1971 through 2012   | 114   |
|    | Figure 4.    | Average mathematics scale scores on the long-term trend National Assessment of Educational Progress (NAEP) for 17-year-olds, by race/ethnicity: Selected years, 1973 through 2012   | 115   |
| 26 | Internationa | al Assessments  | 116   |
|    | Table 1.     | Average scores of 15-year-old students on the Program for International Student Assessment (PISA) mathematics literacy scale, by education system: 2012   | 117   |
|    | Figure 1.    | Percentage of 15-year-old students performing on the Program for International Student Assessment (PISA) mathematics literacy scale, by selected proficiency level and education system: 2012                               | 112   |
|    | Table 2.     | Average scores of 15-year-old students on the Program for International Student Assessment (PISA) science literacy scale, by education system: 2012   |       |

|     | Figure 2.   | Percentage of 15-year-old students performing on the Program for International Student Assessment (PISA) science literacy scale, by selected proficiency level and education system:  2012 |
|-----|-------------|--|
|     | Table 3.    | Average scores of 15-year-old students on the Program for International Student Assessment (PISA) reading literacy scale, by education system: 2012  |
|     | Figure 3.   | Percentage of 15-year-old students performing on the Program for International Student Assessment (PISA) reading literacy scale, by selected proficiency level and education system: 2012  |
|     | Table 4.    | Average TIMSS mathematics assessment scale scores of 4th-grade students, by education system: 2011   |
|     | Table 5.    | Average TIMSS science assessment scale scores of 4th-grade students, by education system:  2011  |
|     | Table 6.    | Average TIMSS mathematics assessment scale scores of 8th-grade students, by education system: 2011   |
|     | Table 7.    | Average TIMSS science assessment scale scores of 8th-grade students, by education system: 2011   |
|     | Figure 4.   | Number of instructional hours per year for 4th-grade students, by country or education system and subject: 2011  |
|     | Figure 5.   | Number of instructional hours per year for 8th-grade students, by country or education system and subject: 2011  |
|     | Table 8.    | Average PIRLS reading literacy assessment scale scores of 4th-grade students, by education system: 2011  |
| Stu | ıdent Effor | t, Persistence, and Progress   |
| 27  | High Schoo  | l Coursetaking   |
|     | Figure 1.   | Percentage of high school graduates who completed selected mathematics and science courses in high school: 1990 and 2009   |
|     | Figure 2.   | Average National Assessment of Educational Progress (NAEP) 12th-grade mathematics scale scores of high school graduates, by highest mathematics course taken and race/ethnicity: 2009      |
| 28  | Public High | School Graduation Rates  |
|     | Figure 1.   | Averaged Freshman Graduation Rate (AFGR) for public high school students: School years 1990–91 through 2011–12   |
|     | Figure 2.   | Averaged Freshman Graduation Rate (AFGR) for public high school students, by race/ethnicity: School year 2011–12   |
|     | Figure 3.   | Averaged Freshman Graduation Rate (AFGR) for public high school students, by state or jurisdiction: School year 2009–10  |
| 29  | Status Drop | out Rates  |
|     | Figure 1.   | Status dropout rates of 16- through 24-year-olds, by sex: 1990 through 2012  |
|     | Figure 2.   | Status dropout rates of 16- through 24-year-olds, by race/ethnicity: 1990 through 2012 143   |
|     | Figure 3.   | Status dropout rates of 16- through 24-year-olds, by income level: 1990 through 2012 144   |
|     | Figure 4.   | Status dropout rates of 16- through 24-year-olds, by years of school completed: Selected years, 1990 through 2012  |
|     | Figure 5.   | Status dropout rates of 16- through 24-year-olds, by race/ethnicity and institutional status:  American Community Survey (ACS) 2011  |
|     | Figure 6.   | Status dropout rates of 16- through 24-year-olds in the noninstitutionalized group quarters and household population, by race/ethnicity and nativity: American Community Survey (ACS) 2011 |

#### **Transition to College**

| 30  | Immediate '  | Fransition to College  | . 148 |
|-----|--------------|--|-------|
|     | Figure 1.    | Percentage of high school completers who were enrolled in 2- or 4-year colleges by the October immediately following high school completion, by level of institution: 1990–2012      | . 148 |
|     | Figure 2.    | Percentage of high school completers who were enrolled in 2- or 4-year colleges by the October immediately following high school completion, by sex: 1990–2012                       | . 149 |
|     | Figure 3.    | Percentage of high school completers who were enrolled in 2- or 4-year colleges by the October immediately following high school completion, by family income: 1990–2012             | . 149 |
|     | Figure 4.    | Percentage of high school completers who were enrolled in 2- or 4-year colleges by the October immediately following high school completion, by race/ethnicity: 1990–2012            | . 150 |
| Ch  | apter 4.     | Postsecondary Education  | 153   |
| Ch  | aracterist   | ics of Postsecondary Students  |       |
| 31  | Characterist | ics of Postsecondary Institutions  | . 154 |
|     | Figure 1.    | Number of degree-granting institutions with first-year undergraduates, by level and control of institution: Academic years 2000–01 and 2012–13                                       | . 154 |
|     | Figure 2.    | Percentage distribution of 4-year degree-granting institutions with first-year undergraduates, by application acceptance rate and control of institution: Academic year 2012–13      | 155   |
|     | Figure 3.    | Percentage distribution of 2-year degree-granting institutions with first-year undergraduates, by application acceptance rate and control of institution: Academic year 2012–13      | . 156 |
|     | Figure 4.    | Percentage of 4-year degree-granting institutions with first-year undergraduates, by admission requirements and control of institution: Academic year 2012–13                        | 157   |
| 32  | Characterist | ics of Postsecondary Students  | 158   |
|     | Figure 1.    | Percentage distribution of full-time undergraduate enrollment in degree-granting postsecondary institutions, by institutional level and control and student age: Fall 2011           | 158   |
|     | Figure 2.    | Percentage distribution of part-time undergraduate enrollment in degree-granting postsecondary institutions, by institutional level and control and student age: Fall 2011           | 159   |
|     | Figure 3.    | Percentage distribution of total undergraduate enrollment in degree-granting postsecondary institutions, by institutional level and control and race/ethnicity of student: Fall 2012 | . 160 |
|     | Figure 4.    | Percentage distribution of total postbaccalaureate enrollment in degree-granting postsecondary institutions, by institutional control and race/ethnicity of student: Fall 2012       | 161   |
|     | Figure 5.    | Percentage of college students 16 to 24 years old who were employed, by hours worked per week and attendance status: October 2012  | . 162 |
|     | Figure 6.    | Percentage of college students 16 to 24 years old who were employed, by attendance status and hours worked per week: October 2000 through 2012                                       | . 163 |
| Pro | ograms ar    | nd Courses   |       |
| 33  | Undergradu   | ate Degree Fields  | . 164 |
|     | Figure 1.    | Number of associate's degrees awarded by Title IV postsecondary institutions in selected fields of study: Academic years 2001–02, 2006–07, 2010–11, and 2011–12                      | . 164 |
|     | Figure 2.    | Number of bachelor's degrees awarded by Title IV postsecondary institutions in selected fields of study: Academic years 2001–02, 2006–07, 2010–11, and 2011–12                       | . 165 |
| 34  | Graduate D   | egree Fields   | . 166 |
|     | Figure 1.    | Number of master's degrees awarded by Title IV postsecondary institutions in selected fields of study: Academic years 2001–02, 2006–07, 2010–11, and 2011–12                         | . 166 |
|     | Figure 2.    | Number of doctor's degrees awarded by Title IV postsecondary institutions in selected fields of study: Academic years 2001–02, 2006–07, 2010–11, and 2011–12                         | . 167 |

#### **Finance and Resources**

| 35 | Price of Atto | ending an Undergraduate Institution   | 168 |
|----|---------------|---|-----|
|    | Figure 1.     | Average total cost of attending degree-granting institutions for first-time, full-time students, by level and control of institution and living arrangement: Academic year 2012–13  | 168 |
|    | Figure 2.     | Average total price, net price, and grants and scholarship aid for first-time, full-time students paying in-state tuition and receiving aid at public 4-year institutions, by income level:  Academic year 2011–12              | 169 |
|    | Figure 3.     | Average total price, net price, and grants and scholarship aid for first-time, full-time students receiving aid at private for-profit 4-year institutions, by income level: Academic year 2011–12                               | 170 |
|    | Figure 4.     | Average total price, net price, and grants and scholarship aid for first-time, full-time students receiving aid at private nonprofit 4-year institutions, by income level: Academic year 2011–12                                | 171 |
| 36 | Grants and    | Loan Aid to Undergraduate Students  | 172 |
|    | Figure 1.     | Percentage of first-time, full-time undergraduate students in degree-granting institutions receiving any financial aid, by level and control of institution: Academic years 2006–07 through 2011–12                             | 172 |
|    | Figure 2.     | Percentage of first-time, full-time undergraduate students receiving financial aid at 4-year degree-granting institutions, by type of aid and institutional control: Academic year 2011–12                                      |     |
|    | Figure 3.     | Percentage of first-time, full-time undergraduate students receiving financial aid at 2-year degree-granting institutions, by type of aid and institutional control: Academic year 2011–12                                      | 174 |
|    | Figure 4.     | Average amount of student aid awarded to first-time, full-time undergraduate students receiving aid at 4-year degree-granting institutions, by type of financial aid and institutional control: Academic year 2011–12           | 175 |
|    | Figure 5.     | Average amount of student aid awarded to first-time, full-time undergraduate students receiving aid at 2-year degree-granting institutions, by type of financial aid and institutional control: Academic year 2011–12           | 176 |
| 37 | Postseconda   | ry Revenues by Source   | 178 |
|    | Figure 1.     | Percentage distribution of total revenues at degree-granting postsecondary institutions, by institution level, institution control, and source of funds: 2011–12  |     |
|    | Figure 2.     | Revenues per full-time-equivalent (FTE) student from tuition and fees for degree-granting postsecondary institutions, by institution control and level: 2006–07 and 2011–12   | 179 |
|    | Figure 3.     | Revenues per full-time-equivalent (FTE) student from government grants, contracts, and appropriations for degree-granting postsecondary institutions, by type of revenue and institution control and level: 2006–07 and 2011–12 | 180 |
| 38 | Expenses of   | Postsecondary Institutions  | 182 |
|    | Figure 1.     | Percentage of total expenses at degree-granting postsecondary institutions, by purpose of expenses and control of institution: 2011–12  |     |
|    | Figure 2.     | Expenses per full-time-equivalent (FTE) student at degree-granting postsecondary institutions, by purpose of expenses and control of institution: 2011–12   | 183 |
|    | Figure 3.     | Instructional expenses per full-time-equivalent (FTE) student for instruction at 2-year and 4-year degree-granting postsecondary institutions, by control of institution: 2006–07 and 2011–12                                   | 184 |
| 39 | Characterist  | ics of Postsecondary Faculty  | 186 |
|    | Figure 1.     | Number of instructional faculty in degree-granting postsecondary institutions, by employment status: Selected years, fall 1991 through fall 2011  | 186 |
|    | Figure 2.     | Percentage of full-time instructional faculty whose race/ethnicity was known, in degree-granting postsecondary institutions, by academic rank, selected race/ethnicity, and sex: Fall 2011                                      | 187 |
|    | Figure 3.     | Average salary of full-time instructional faculty on 9-month contracts in degree-granting postsecondary institutions, by academic rank: Selected years, 1992–93 through 2012–13   |     |

| Figure 4.     | Average salary of full-time instructional faculty on 9-month contracts in degree-granting postsecondary institutions, by control and level of institution: 2012–13   | 189                                   |
|---------------|--|---------------------------------------|
| Student Loa   | n Volume and Default Rates   | 190                                   |
| Figure 1.     | Average tuition and fees for full-time students at Title IV degree-granting postsecondary institutions, by level and control of institution: 2000–01 through 2011–12   | 190                                   |
| Figure 2.     | Percentage of first-time, full-time students enrolled in financial aid programs receiving loan aid at Title IV degree-granting postsecondary institutions, by level and control of institution: Selected years, 2000–01 through 2011–12        | 191                                   |
| Figure 3.     | Average loan amounts for first-time, full-time students receiving loan aid at Title IV degree-granting postsecondary institutions, by level and control of institution: Selected years, 2000–01 through 2011–12                                | 192                                   |
| Figure 4.     | Two-year student loan cohort default rates at Title IV degree-granting postsecondary institutions, by level and control of institution: Fiscal years (FY) 2009 and 2011  | 193                                   |
| mpletions     |  |                                       |
| Institutional | Retention and Graduation Rates for Undergraduate Students.   | 194                                   |
| Figure 1.     | Annual full-time student retention rates at 2- and 4-year degree-granting institutions, by institution level, institutional applicant acceptance rate, and control: 2012   | 194                                   |
| Figure 2.     | Percentage of students seeking a bachelor's degree at 4-year degree-granting institutions who completed a bachelor's degree within 6 years, by control of institution and sex: Starting cohort year 2006                                       | 195                                   |
| Figure 3.     | Percentage of students seeking a bachelor's degree at 4-year degree-granting institutions who completed a bachelor's degree within 6 years, by institutional applicant acceptance rate:  Starting cohort year 2006                             | 196                                   |
| Figure 4.     | Percentage of students seeking a certificate or degree at 2-year degree-granting institutions who completed a credential within 150 percent of the normal time required to do so, by control of institution and sex: Starting cohort year 2009 | 197                                   |
| Degrees Cor   | nferred by Public and Private Institutions   | 198                                   |
| Table 1.      | Number of degrees conferred by Title IV postsecondary institutions and percentage change,  |                                       |
| Figure 1.     | Percentage distribution of certificates and associate's degrees conferred by Title IV postsecondary institutions, by control of institution: Academic years 2000–01 and 2011–12  | 199                                   |
| Figure 2.     | Percentage distribution of bachelor's, master's, and doctor's degrees conferred by Title IV postsecondary institutions, by control of institution: Academic years 2000–01 and 2011–12  | 200                                   |
| ide to Source | S  | 202                                   |
| ssary         |  | 224                                   |
|               | Student Loa Figure 1. Figure 2. Figure 3. Figure 4.  Institutional Figure 1. Figure 2. Figure 3. Figure 4.  Degrees Cor Table 1. Figure 1. Figure 1.   | Student Loan Volume and Default Rates |

| The indicators in this chapter of <i>The Condition of Education</i> report on educational attainment and economic outcomes for the United States as a whole. The level of education attained by an individual has implications for his or her median earnings and other labor outcomes, such as unemployment. Comparisons at the national level to other industrialized nations provide insight into our global competitiveness. In addition, this chapter contains indicators on key demographic characteristics, such as poverty. |
|---|
| Indicators on population characteristics from previous editions of <i>The Condition of Education</i> not included in this volume are available at <a href="http://nces.ed.gov/programs/coe">http://nces.ed.gov/programs/coe</a> .   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |



# Chapter 1

# **Population Characteristics**

| Attainment   |  |    |
|--------------|--|----|
| Indicator 1. | Educational Attainment                           | 2  |
| Indicator 2. | International Educational Attainment             | 6  |
| Economic C   | Outcomes   |    |
| Indicator 3. | Annual Earnings of Young Adults                  | 10 |
| Indicator 4. | Labor Force Participation and Unemployment Rates |    |
|              | by Educational Attainment                        | 14 |
| Demograph    | nics   |    |
| Indicator 5. | Children Living in Poverty                       | 20 |
|              |  |    |

**Chapter:** 1/Population Characteristics

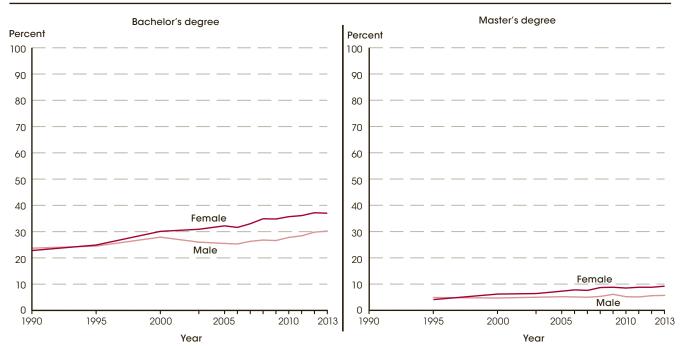
**Section:** Attainment

#### **Educational Attainment**

In 2013, some 34 percent of 25- to 29-year-olds had earned a bachelor's or higher degree. Between 1990 and 2013, the size of the White-Black gap at this education level widened from 13 to 20 percentage points, and the White-Hispanic gap widened from 18 to 25 percentage points.

Educational attainment represents the level of education completed (i.e., a high school diploma or equivalency certificate, a bachelor's degree, or a master's degree). Between 1990 and 2013, educational attainment rates among 25- to 29-year-olds increased. The percentage who had received at least a high school diploma or its equivalent increased from 86 to 90 percent, with most of the change (3 percentage points) occurring between 2003 and 2013. The percentage who had completed a bachelor's or higher degree increased from 23 to 34 percent. In 2013, some 7 percent of 25- to 29-year-olds had completed a master's degree or higher, a 3-percentage-point increase from 1995.

Percentage of 25- to 29-year-olds who completed bachelor's and master's degrees, by sex: Selected Figure 1. years, 1990-2013



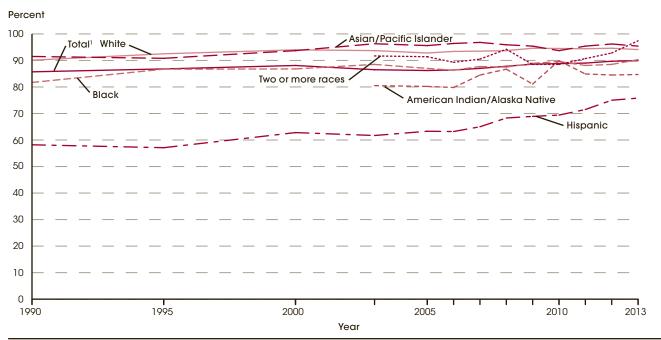
NOTE: Prior to 1995, data on attainment of a master's degree were not available. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), "Annual Social and Economic Supplement," selected years 1990-2013. See Digest of Education Statistics 2013, table 104.20.

Differences in educational attainment by sex have shifted over the past few decades, with female attainment rates higher than male attainment rates at each education level since 2000. For example, in 1990 the percentages of male and female 25- to 29-year-olds who had completed a bachelor's degree or higher were not measurably different, but in 2013 the percentage of females (37 percent)

attaining this level was 7 points higher than the percentage of males doing so (30 percent). Similarly, in 1995 the percentages of males and females who had completed a master's degree or higher were not measurably different, but in 2013 some 9 percent of females had completed a master's degree or higher, compared with 6 percent of

**Section:** Attainment

Figure 2. Percentage of 25- to 29-year-olds who completed at least a high school diploma or its equivalent, by race/ethnicity: Selected years, 1990–2013



Included in the total, but not shown separately, are estimates for persons from other racial/ethnic groups.

NOTE: Race categories exclude persons of Hispanic ethnicity. Prior to 2003, separate data on American Indians/Alaska Natives and persons of two or more races were not available.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), "Annual Social and Economic Supplement," selected years, 1990-2013. See Digest of Education Statistics 2013, table 104.20.

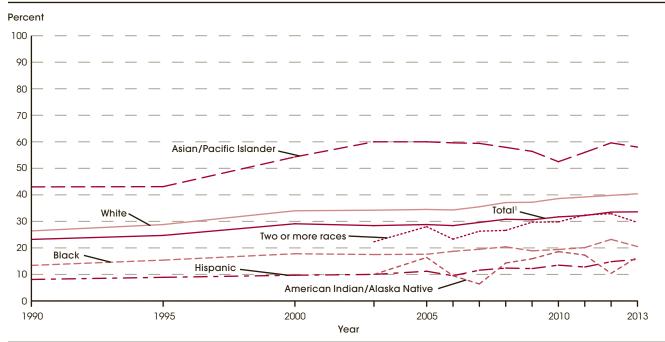
Between 1990 and 2013, the percentage of 25- to 29-year-olds who had received at least a high school diploma or its equivalent increased for Whites (from 90 to 94 percent), Blacks (from 82 to 90 percent), and Hispanics (from 58 to 76 percent). For Hispanics, most of this change (14 percentage points) occurred in the 10 years since 2003. For Asians/Pacific Islanders, the percentage attaining at least a high school diploma or its equivalent in 2013 (95

percent) was not measurably different from the percentage in 1990 (92 percent). During this period, the percentage of Whites who had attained at least a high school diploma or its equivalent remained higher than that of Blacks and Hispanics. However, the size of the White-Black attainment gap at this education level narrowed from 8 to 4 percentage points, and the White-Hispanic gap narrowed from 32 to 18 percentage points.

**Chapter:** 1/Population Characteristics

**Section:** Attainment

Figure 3. Percentage of 25- to 29-year-olds who completed a bachelor's or higher degree, by race/ethnicity: Selected years, 1990-2013



<sup>1</sup>Included in the total, but not shown separately, are estimates for persons from other racial/ethnic groups

NOTE: Race categories exclude persons of Hispanic ethnicity. Prior to 2003, separate data on American Indians/Alaska Natives and persons of two or more races were not available.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), "Annual Social and Economic Supplement," selected years, 1990-2013. See Digest of Education Statistics 2013, table 104.20.

From 1990 to 2013, the percentage of 25- to 29-year-olds who had attained a bachelor's or higher degree increased from 26 to 40 percent for Whites, from 13 to 20 percent for Blacks, and from 8 to 16 percent for Hispanics. For Hispanics, most of this increase (6 percentage points) occurred in the most recent decade. For Asians/Pacific Islanders, the rate of attaining at least a bachelor's degree in 2013 (58 percent) was higher than the rate in 1990 (43 percent). Between 1990 and 2013, the gap in the attainment rate at this education level between Whites and Blacks widened from 13 to 20 percentage points, and the gap between Whites and Hispanics widened from 18 to 25 percentage points.

From 1995 to 2013, the percentage of 25- to 29-year-olds who had attained a master's or higher degree increased for Whites (from 5 to 9 percent), Blacks (from 2 to 3 percent), Hispanics (from 2 to 3 percent), and Asians/Pacific Islanders (from 11 to 21 percent). In 2013, the gaps in the attainment of a master's or higher degree between Whites and Blacks (5 percentage points) and between Whites and Hispanics (6 percentage points) were wider than in 1995 (when both gaps were 4 percentage points).

Reference tables: Digest of Education Statistics 2013, table 104.20

**Glossary:** Educational attainment (Current Population Survey)

This page intentionally left blank.

**Chapter:** 1/Population Characteristics

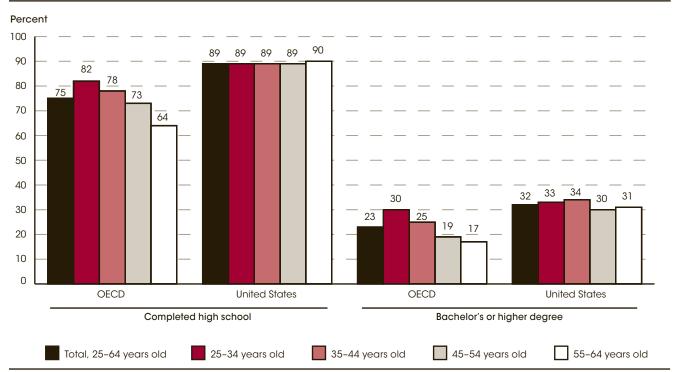
**Section:** Attainment

#### International Educational Attainment

The percentage of 25- to 64-year-olds who had earned a bachelor's or higher degree was higher in 2011 than in 2001 in the United States (32 vs. 28 percent) and across OECD countries (23 vs. 15 percent).

In 2011, some 27 out of 33 OECD<sup>1</sup> countries reported that 70 percent or more of their adult populations (ages 25 to 64 years old) had completed high school. Among OECD countries, the percentages of high school completers ranged from under 40 percent in Turkey, Portugal, and Mexico, to over 90 percent in the Slovak Republic and the Czech Republic. Additionally, 21 countries reported that 20 percent or more of their adult populations had completed a bachelor's or higher degree. Among OECD countries, the percentages of bachelor's degree completers ranged from under 15 percent in Austria, Slovenia, Turkey, and Italy, to 30 percent and higher in Iceland, Israel, the United States, and Norway.

Figure 1. Percentage of the population 25 to 64 years old in Organization for Economic Cooperation and Development (OECD) countries who attained selected levels of education, by age group: 2011



NOTE: Educational attainment data in this figure refer to degrees classified by the OECD as International Standard Classification of Education (ISCED) level 3 for high school and level 5A or 6 for bachelor's or higher degrees. The OECD average refers to the mean of the data values for all reporting OECD countries, to which each country reporting data contributes equally.

SOURCE: Organization for Economic Cooperation and Development (OECD), Education at a Glance, 2013. See Digest of Education Statistics 2013, tables 603.10 and 603.20.

In most OECD countries, higher percentages of the youngest adult age group (ages 25 to 34) than the oldest adult age group (ages 55 to 64) had completed high school in 2011. For example, the average percentage of 25- to 34-year-olds completing high school across countries was 18 percentage points higher than the average percentage of 55- to 64-year-olds completing high school (82 vs. 64

percent, respectively). Only in two countries, the United States and Estonia, did the youngest and oldest age groups have high school completion percentages that were not measurably different (89 vs. 90 percent and 86 vs. 87 percent, respectively). Additionally, there were seven other countries where 80 percent or more of 55- to 64-yearolds had completed high school: Switzerland, Norway,

<sup>&</sup>lt;sup>1</sup> The Organization for Economic Cooperation and Development (OECD) is an organization of 34 countries whose purpose is to promote trade and economic growth. This indicator only discusses these 34 OECD countries. Attainment data refer to comparable degree levels, as classified by the International Standard Classification of Education (ISCED). In 2011, Japan did not report data on high school graduation rates.

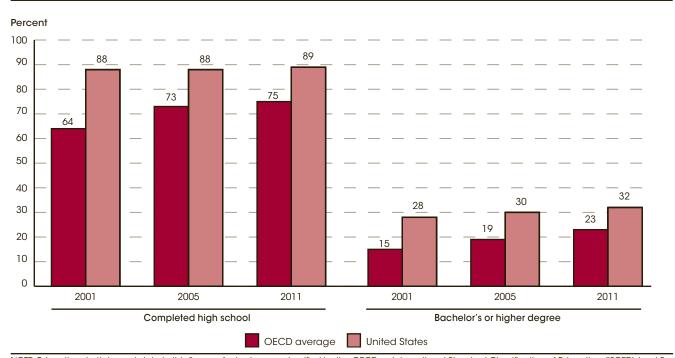
Canada, the Slovak Republic, Germany, the Czech Republic, and Poland.

The same general pattern of higher percentages of the youngest age groups attaining higher levels of education also applied to the attainment of bachelor's degrees in 2011. In OECD countries, a higher percentage of 25- to 34-year-olds than of 55- to 64-year-olds had attained

**Chapter:** 1/Population Characteristics **Section:** Attainment

a bachelor's or higher degree in 2011. On average, 30 percent of 25- to 34-year-olds had a bachelor's degree in 2011, compared with 17 percent of 55- to 64-year-olds. In the United States, 33 percent of 25- to 34-year-olds and 31 percent of 55- to 64-year-olds had a bachelor's or higher degree. The United States had the highest percentage of 55- to 64-year-olds attaining a bachelor's or higher degree in 2011.

Figure 2. Percentage of the population 25 to 64 years old in Organization for Economic Cooperation and Development (OECD) countries who attained selected levels of education: Selected years, 2001, 2005, and 2011



NOTE: Educational attainment data in this figure refer to degrees classified by the OECD as International Standard Classification of Education (ISCED) level 3 for high school and level 5A or 6 for bachelor's or higher degrees. The OECD average refers to the mean of the data values for all reporting OECD countries, to which each country reporting data contributes equally.

SOURCE: Organization for Economic Cooperation and Development (OECD), Education at a Glance, 2002, 2007, and 2013. See Digest of Education Statistics 2013, tables 603.10 and 603.30.

All countries with data reported that the percentages of 25- to 64-year-olds who had completed a bachelor's degree or higher were higher in 2011 than they were in 2001. The percentages of 25- to 64-year-olds who had completed a high school education were higher in 2011 than they were in 2001, with the exceptions of Denmark, New Zealand, Norway, and Switzerland. The OECD average percentage of the adult population completing a high school education increased 11 percentage points, from 64 percent in 2001 to 75 percent in 2011. The percentage of adults in the United States who had completed high school increased from 88 to 89 percent during this period.

The OECD average percentage of 25- to 34-year-olds with a high school education increased 8 percentage points, from 74 percent in 2001 to 82 percent in 2011. In comparison, there was only a 1-percentage-point increase in the percentage of U.S. young adults with a high school education (88 vs. 89 percent) during this period.

The OECD average percentage of the adult population with a bachelor's or higher degree increased 8 percentage points between 2001 and 2011, from 15 to 23 percent. During the same period, the percentage of U.S. adults with a bachelor's or higher degree increased 4

**Chapter:** 1/Population Characteristics

**Section:** Attainment

percentage points, from 28 to 32 percent. Similarly, the OECD average percentage of 25- to 34-year-olds with a bachelor's or higher degree rose from 18 percent in 2001 to 30 percent in 2011, an increase of 11 percentage points. The comparable percentage for young adults in the United States increased 3 percentage points, from 30 to 33 percent. Thus, the relatively larger increases in the bachelor's or higher degree attainment rates for young

adults in many countries compared with the United States were reflected by a decreasing difference between OECD average and U.S. attainment rates. In 2001, there was a 12-percentage-point gap between the OECD average and the United States in the rate of attainment of a bachelor's or higher degree among 25- to 34-year-olds; by 2011, this gap had decreased to 3 percentage points.

Reference tables: Digest of Education Statistics 2013, tables 603.10, 603.20, and 603.30

Glossary: Bachelor's degree, Educational attainment, High school completer, International Standard Classification of Education (ISCED), Organization for Economic Cooperation and Development (OECD)

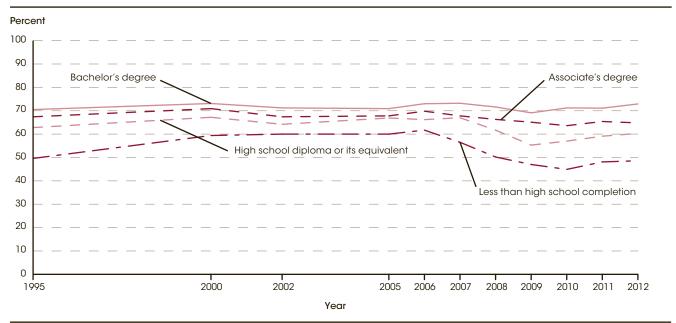
This page intentionally left blank.

### **Annual Earnings of Young Adults**

In 2012, young adults with a bachelor's degree earned more than twice as much as those without a high school credential (\$46,900 vs. \$22,900) and 57 percent more than young adult high school completers (\$46,900 vs. \$30,000).

This indicator examines the annual earnings of young adults ages 25-34, many of whom have recently completed their education. In 2012, some 64 percent of young adults ages 25-34 who were in the labor force worked full time, year round (i.e., worked 35 or more hours per week for 50 or more weeks per year). The percentage of young adults working full time, year round was generally higher for those with higher levels of educational attainment. For example, 73 percent of young adults with a bachelor's degree worked full time, year round in 2012, compared with 60 percent of young adult high school completers (those with a high school diploma or its equivalent).

Percentage of young adults ages 25-34 who worked full time, year round, by educational attainment: Figure 1.

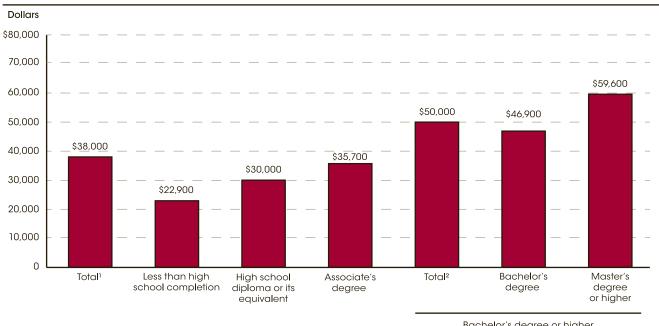


NOTE: Full-time year-round workers are those who worked 35 or more hours per week for 50 or more weeks per year. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), "Annual Social and Economic Supplement," 1996–2013. See Digest of Education Statistics 2013, table 502.30.

Changes over time in the percentage of young adults who worked full time, year round varied by educational attainment. From 2002 to 2012, the percentage of young adults without a high school credential (i.e., without a high school diploma or its equivalent) who worked full time, year round dropped from 60 to 49 percent, and the corresponding percentage of those who had a high school credential was lower in 2012 than in 2002 (60 vs. 64 percent). However, the percentages of those with a bachelor's degree and of those with at least a master's degree who worked full time, year round did

not change measurably between 2002 and 2012. Over a longer period, the percentage of young adult high school completers who worked full time, year round was also lower in 2012 (60 percent) than in 1995 (63 percent), but the corresponding percentage of those with a bachelor's degree was higher in 2012 (73 percent) than in 1995 (71 percent). For those who did not complete high school and those with at least a master's degree, the percentage who worked full time, year round did not change measurably between 1995 and 2012.

Figure 2. Median annual earnings of full-time year-round wage and salary workers ages 25-34, by educational attainment: 2012



Bachelor's degree or higher

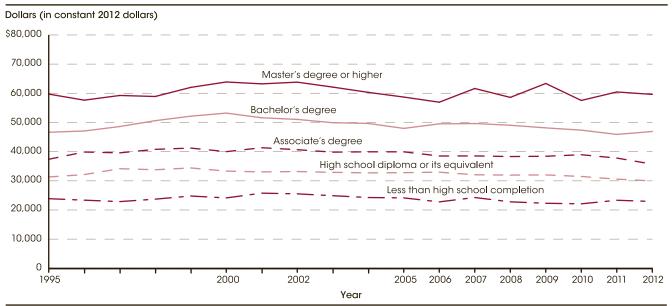
**Educational attainment** 

Total represents median annual earnings of all full-time year-round wage and salary workers ages 25-34. <sup>2</sup>Total represents median annual earnings of young adults with a bachelor's degree or higher. NOTE: Full-time year-round workers are those who worked 35 or more hours per week for 50 or more weeks per year. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), "Annual Social and Economic Supplement," 2013. See Digest of Education Statistics 2013, table 502.30.

For young adults ages 25–34 who worked full time, year round, higher educational attainment was associated with higher median earnings; this pattern was consistent for 1995, 2000, 2002, and 2005 through 2012. For example, in 2012 the median of earnings for young adults with a bachelor's degree was \$46,900, while the median was \$22,900 for those without a high school credential and \$30,000 for those with a high school credential. In other words, young adults with a bachelor's degree earned more than twice as much as those without a high school

credential (105 percent more) and 57 percent more than young adult high school completers. Additionally, in 2012 the median of earnings for young adults with a master's degree or higher was \$59,600, some 27 percent more than the median for young adults with a bachelor's degree. For the above years between 1995 and 2012, this pattern of higher earnings associated with higher levels of educational attainment also held across sex and racial/ ethnic subgroups (White, Black, Hispanic, and Asian).

Median annual earnings of full-time year-round wage and salary workers ages 25–34, by educational Figure 3. attainment: 1995-2012

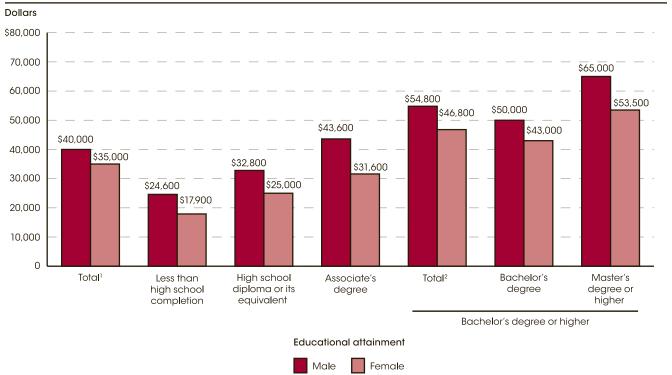


NOTE: Earnings are presented in constant dollars, based on the Consumer Price Index (CPI), to eliminate inflationary factors and to allow for direct comparison across years. Full-time year-round workers are those who worked 35 or more hours per week for 50 or more weeks per year SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), "Annual Social and Economic Supplement," selected years, 1996-2013; and previously unpublished tabulations. See Digest of Education Statistics 2013, table 502.30.

Median earnings (in constant 2012 dollars) for young adults with different levels of educational attainment generally declined over the period of 2002 to 2012. Between 2002 and 2012, the median earnings for young adults without a high school credential declined by 10 percent from \$25,500 to \$22,900, and the median earnings for young adult high school completers declined by 10 percent from \$33,200 to \$30,000. The median earnings for those with a bachelor's degree also decreased by 8 percent from \$51,000 to \$46,900. The median of earnings for those with at least a master's degree was lower in 2012 (\$59,600) than in 2002 (\$63,800). Over the longer period, the median of earnings of young adults with different levels of education in 2012 was not measurably different from that in 1995, with the exception that the median of earnings for high school completers was lower in 2012 (\$30,000) than in 1995 (\$31,300).

The difference in median earnings (in constant 2012 dollars) between those with varying levels of educational attainment exhibited different patterns of change over time. The difference in median earnings between those with a bachelor's degree or higher and those without a high school credential widened between 1995 and 2009, then narrowed between 2009 and 2012. In 1995, the median of earnings for young adults with a bachelor's degree or higher was \$25,800 greater than the median for those without a high school credential; in 2009, this earnings differential was \$31,000; but in 2012, it was \$27,000. There was no measurable difference between the 2012 and the 1995 median earnings differentials of those with at least a bachelor's degree over high school completers. Neither was there any measurable difference between the 2012 and 1995 median earnings differentials of those with a master's degree or higher over those with a bachelor's degree.

Figure 4. Median annual earnings of full-time year-round wage and salary workers ages 25-34, by educational attainment and sex: 2012



<sup>&</sup>lt;sup>1</sup> Total represents median annual earnings of all full-time year-round wage and salary workers ages 25–34.

<sup>2</sup> Total represents median annual earnings of young adults with a bachelor's degree or higher. NOTE: Full-time year-round workers are those who worked 35 or more hours per week for 50 or more weeks per year.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), "Annual Social and Économic Supplement," 2013. See Digest of Education Statistics 2013, table 502.30.

In 2012, the median of earnings for young adult males was higher than the median for young adult females at every education level. For example, in 2012 young adult males with a bachelor's degree earned \$50,000, while their female counterparts earned \$42,900. In the same year, the median of earnings for White young adults generally exceeded the corresponding medians for Black and Hispanic young adults at each educational level, except

less than high school completion and master's degree or higher. Among those with a bachelor's degree and those with a master's degree or higher, Asian young adults had higher median earnings than their peers in other racial/ ethnic groups. For example, the median of earnings in 2012 for young adults with at least a master's degree was \$69,700 for Asians, \$56,900 for Whites, \$54,700 for Blacks, and \$50,000 for Hispanics.

Reference tables: Digest of Education Statistics 2013, table 502.30

Glossary: Bachelor's degree, Consumer Price Index (CPI), Constant dollars, Educational attainment, High school completer, Master's degree

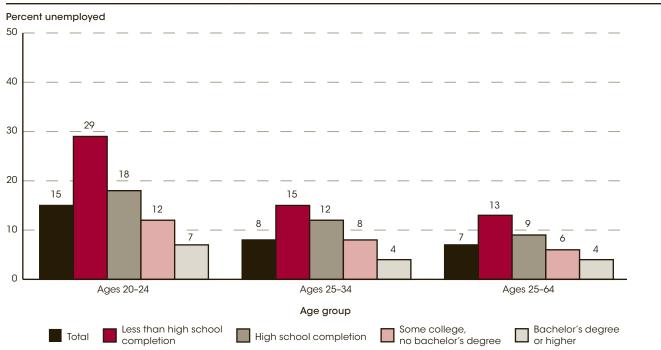
## **Labor Force Participation and Unemployment Rates** by Educational Attainment

In 2013, the unemployment rate for those with at least a bachelor's degree was lower than the rates for those with lower levels of educational attainment. During the most recent economic recession (2008 through 2010), the unemployment rate increased less for those who had at least a bachelor's degree than for those who had less than a bachelor's degree.

In 2013, some 15.2 percent of young adults ages 20-24 were unemployed, as were 8.0 percent of 25- to 34-yearolds. The unemployment rates for both of these younger age cohorts were generally higher than the unemployment rate for 25- to 64-year-olds (6.6 percent), which included the subset of 25- to 34-year-olds. This pattern was consistent among individuals with different levels of education. Educational attainment in this indicator refers to the highest level of education achieved (i.e., less than

high school completion, high school completion or an equivalency credential such as a General Educational Development [GED] certificate, some college education, or a bachelor's degree or higher). In this indicator, the unemployment rate is defined as the percentage of persons in the civilian labor force who are not working and who made specific efforts to find employment during the prior 4 weeks. The civilian labor force refers to the civilian population who are employed or seeking employment.

Unemployment rates, by age group and educational attainment: 2013 Figure 1.



NOTE: The unemployment rate is the percentage of persons in the civilian labor force who are not working and who made specific efforts to find employment sometime during the prior 4 weeks. The civilian labor force consists of all civilians who are employed or seeking employment. Data for 20- to 24-year-olds exclude persons enrolled in school. High school completion includes equivalency credentials, such as the General Educational Development (GED)

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, unpublished annual average data from the Current Population Survey (CPS), 2013. See Digest of Education Statistics 2013, table 501.80.

Between 2000 and 2013, the unemployment rate for individuals without a bachelor's degree was generally higher than the rate for their peers with at least a bachelor's degree. This pattern was consistent for young adults (ages 20-24), 25- to 34-year-olds, and 25- to 64-year-olds. In 2013, for example, the unemployment rate for young adults was 29.2 percent for those who did not complete high school, 17.5 percent for those whose highest level of education was high school completion, and 12.2 percent for those with some college education, compared with an unemployment rate of 7.0 percent for those with at least a bachelor's degree. For 25- to 34-year-olds, the unemployment rates for those who did not complete high school (15.1 percent), for those who were high school completers (12.1 percent), and for those with some college education (8.0 percent) were also higher than the unemployment rate for those with a bachelor's or higher degree (3.6 percent). This pattern of higher

unemployment rates corresponding with lower levels of

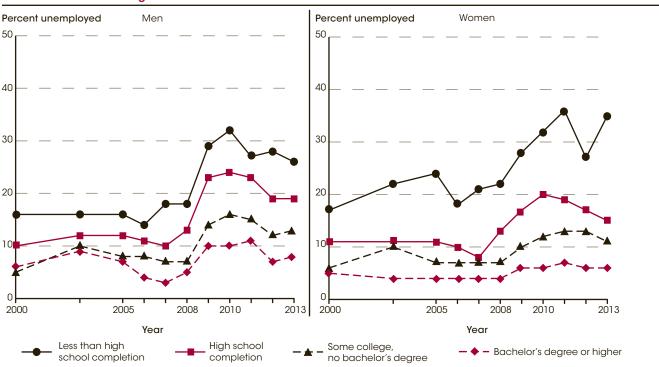
educational attainment also generally held across males

and females for each age group from 2000 to 2013.

#### **Chapter:** 1/Population Characteristics **Section:** Economic Outcomes

In 2013, for young adults ages 20-24, there was no measurable difference in the unemployment rate between males and females among those whose highest level of education was less than high school completion, those with some college education, and those with at least a bachelor's degree. However, both the overall unemployment rate and the rate for high school completers were higher for males (16.5 and 19.0 percent, respectively) than for females (13.4 and 15.1 percent, respectively). For 25- to 64-year-olds, both the unemployment rate overall and the rate for high school completers were higher for males (6.9 and 9.2 percent, respectively) than for females (6.3 and 8.1 percent, respectively). The unemployment rate for those who did not complete high school was higher for females than for males (14.1 vs. 11.9 percent). Among individuals ages 25-34, the unemployment rate overall was higher for males than for females (8.4 vs. 7.5 percent). However, the unemployment rate for those who did not complete high school was higher for females than for males (19.3 vs. 13.2 percent).

Unemployment rates of persons 20 to 24 years old, by sex and educational attainment: Selected years, Figure 2. 2000 through 2013



NOTE: The unemployment rate is the percentage of persons in the civilian labor force who are not working and who made specific efforts to find employment sometime during the prior 4 weeks. The civilian labor force consists of all civilians who are employed or seeking employment. Data for 20- to 24-year-olds exclude persons enrolled in school. High school completion includes equivalency credentials, such as the General Educational Development (GED)

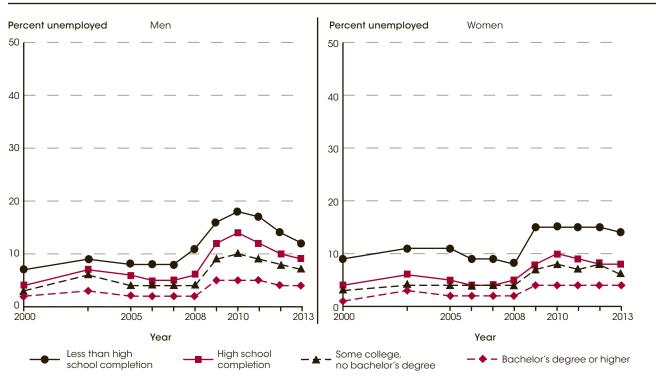
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, unpublished annual average data from the Current Population Survey (CPS), selected years, 2000 through 2013. See Digest of Education Statistics 2013, tables 501.85 and 501.90

During the recent economic recession and recovery from 2008 to 2013, the magnitude of change in unemployment rates varied by educational attainment. In general, individuals with at least a bachelor's degree faced a lesser impact on employment from the recession than did high school completers and those who did not complete high school. For young adults ages 20–24, the unemployment rates for males and females generally increased from 2008 to 2010 at each level of educational attainment. From 2008 to 2010, the 14.3-percentage-point increase (from 18.2) to 32.4 percent) in the unemployment rate for males who did not complete high school and the 10.5-percentagepoint increase (from 13.3 to 23.7 percent) for male high school completers were higher than the 5.1-percentagepoint increase (from 4.7 to 9.8 percent) for males with at least a bachelor's degree. For female young adults, the unemployment rate for those who had at least a bachelor's degree did not change measurably between 2008 and 2010. Although the unemployment rate for female young adults increased from 2008 to 2010 for those with some college education (from 6.5 to 12.1 percent), for high school completers (from 12.5 to 19.9 percent), and for those who did not complete high school (from 21.6 to 32.2 percent), these unemployment rate increases across

educational attainment levels were not measurably different from each other.

As the economy was recovering from 2010 to 2013, unemployment rates for young adults did not change measurably within any of the educational attainment levels for either males or females, with the exception of both male and female young adult high school completers. The unemployment rates for male and female high school completers were lower in 2013 (19.0 and 15.1 percent, respectively) than in 2010 (23.7 and 19.9 percent, respectively). Compared with 2008, when the recession started, the unemployment rates for both male and female young adults who did not complete high school and the rates for both males and females with some college education were higher in 2013. The unemployment rate for male young adults who did complete high school was also higher in 2013: some 19.0 percent were unemployed in 2013, compared with 13.3 percent in 2008. However, for male and female young adults with a bachelor's or higher degree the 2013 unemployment rate was not measurably different from the rate in 2008. In addition, the 2013 unemployment rate for female young adults who completed high school was not measurably different from the 2008 rate.

Figure 3. Unemployment rates of persons 25 to 64 years old, by sex and educational attainment: Selected years, 2000 through 2013



NOTE: The unemployment rate is the percentage of persons in the civilian labor force who are not working and who made specific efforts to find employment sometime during the prior 4 weeks. The civilian labor force consists of all civilians who are employed or seeking employment. High school completion includes equivalency credentials, such as the General Educational Development (GED) credential. SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, unpublished annual average data from the Current Population Survey (CPS), selected years, 2000 through 2013. See Digest of Education Statistics 2013, tables 501.85 and 501.90

As was the case for male young adults ages 20-24, unemployment rates for both male and female 25- to 64-year-olds also increased from 2008 to 2010 at each level of educational attainment. The increase in the unemployment rate from 2008 to 2010 was higher for both males and females who did not complete high school, who did complete high school, and who had some college education than for both males and females who had at least a bachelor's degree. From 2008 to 2010, for 25- to 64-year-olds the unemployment rate increased 6.9 percentage points (from 10.9 to 17.8 percent) for males who did not complete high school, 7.5 percentage points (from 6.3 to 13.8 percent) for male high school completers, and 6.0 percentage points (from 4.2 to 10.2 percent) for males with some college education, whereas the rate increased 3.1 percentage points (from 2.0 to 5.1 percent) for males with at least a bachelor's degree. During the same period, the unemployment rate increases were 6.5 percentage points (from 8.5 to 15.0 percent) for females who did not complete high school, 4.8 percentage

points (from 5.1 to 9.8 percent) for female high school

completers, and 3.3 percentage points (from 4.2 to

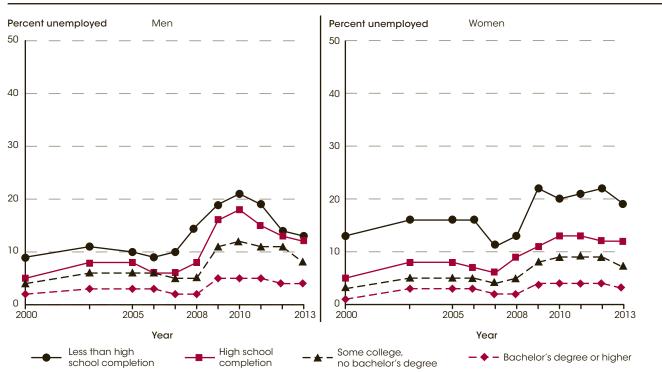
7.5 percent) for females with some college education,

compared with an increase of 2.2 percentage points

#### **Chapter:** 1/Population Characteristics **Section:** Economic Outcomes

(from 2.1 to 4.3 percent) for females with at least a bachelor's degree. From 2010 to 2013, unemployment rates for 25- to 64-year-old males decreased at each level of educational attainment: the decreases were 5.9 percentage points (from 17.8 to 11.9 percent) for males who did not complete high school, 4.6 percentage points (from 13.8 to 9.2 percent) for male high school completers, 3.7 percentage points (from 10.2 to 6.5 percent) for males with some college education, and 1.4 percentage points (from 5.1 to 3.7 percent) for males with at least a bachelor's degree. From 2010 to 2013, unemployment rates for 25- to 64-year-old females decreased at each level of educational attainment except for those who did not complete high school. The unemployment rate decreased 1.8 percentage points (from 9.8 to 8.1 percent) for female high school completers, 1.1 percentage points (from 7.5 to 6.4 percent) for females with some college education, and 0.5 percentage points (from 4.3 to 3.8 percent) for females with at least a bachelor's degree. Nevertheless, unemployment rates in 2013 remained higher than they had been in 2008 for both male and female 25- to 64-year-olds at each level of educational attainment, except for males who did not complete high school.

Unemployment rates of persons 25 to 34 years old, by sex and educational attainment: Selected years, Figure 4. 2000 through 2013



NOTE: The unemployment rate is the percentage of persons in the civilian labor force who are not working and who made specific efforts to find employment sometime during the prior 4 weeks. The civilian labor force consists of all civilians who are employed or seeking employment. High school completion includes equivalency credentials, such as the General Educational Development (GED) credential. SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Employment and Unemployment Statistics, unpublished annual average data from the

Current Population Survey (CPS), selected years, 2000 through 2013. See Digest of Education Statistics 2013, tables 501.85 and 501.90.

**Chapter:** 1/Population Characteristics **Section:** Economic Outcomes

For 25- to 34-year-olds, the change in unemployment rates from 2008 to 2010 followed a pattern similar to that of the change in unemployment rates for 25- to 64-year-olds. For example, from 2008 to 2010 the unemployment rate increases were 9.3 percentage points (from 8.5 to 17.8 percent) for male high school completers and 6.8 percentage points (from 5.0 to 11.8 percent) for males with some college education, compared with a 2.7-percentage-point increase (from 2.1 to 4.8 percent) for males with at least a bachelor's degree. Among females, from 2008 to 2010 the unemployment rate increased 6.7 percentage points (from 12.8 to 19.5 percent) for those who did not complete high school and 4.3 percentage points (from 5.1 to 9.3 percent) for those with some

college education, compared with a 2.0-percentage-point increase (from 2.3 to 4.3 percent) for females with at least a bachelor's degree. The unemployment rate was lower in 2013 than in 2010 for males with some college education (8.5 vs. 11.8 percent), males who were high school completers (11.8 vs. 17.8 percent), and males who had not finished high school (13.2 vs. 20.7 percent). The unemployment rate was lower in 2013 than in 2010 for females with at least a bachelor's degree (3.3 vs. 4.3 percent) and females with some college education (7.4 vs. 9.3 percent). For both male and female 25- to 34-yearolds, the unemployment rate remained higher in 2013 than in 2008, except for males who did not complete high school.

Reference tables: Digest of Education Statistics 2013, tables 501.80, 501.85, and 501.90

Glossary: Bachelor's degree, Educational attainment, High school completer

This page intentionally left blank.

**Chapter:** 1/Population Characteristics

**Section:** Demographics

## **Children Living in Poverty**

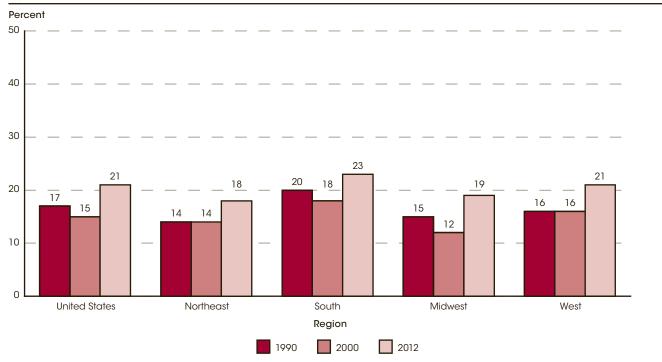
In 2012, approximately 21 percent of school-age children in the United States were in families living in poverty. The percentage of school-age children living in poverty ranged across the United States from 11 percent in North Dakota to 32 percent in Mississippi.

In 2012, approximately 11.1 million school-age children, or children 5 to 17 years old, were in families living in poverty.1 The percentage of school-age children living in poverty in 2012 (21 percent) was higher than it was two decades earlier in 1990 (17 percent), even though

the poverty rate for school-age children was lower in 2000 (15 percent) than in 1990. Between the two most recent survey years, 2011 and 2012, the poverty rate for school-age children did not change measurably.

<sup>1</sup> In this indicator, data on household income and the number of people living in the household are combined with the poverty threshold, published by the Census Bureau, to determine the poverty status of children. A household includes all families in which children are related to the householder by birth or adoption, or through marriage. The householder is the person (or one of the people) who owns or rents (maintains) the housing unit. In 2012, the poverty threshold for a family of four was \$23,283. This poverty threshold is for a family of four with two related children under 18 years old (http://www.census.gov/hhes/www/poverty/data/threshld/thresh12.xls).

Percentage of 5- to 17-year-olds in families living in poverty, by region: 1990, 2000, and 2012 Figure 1.



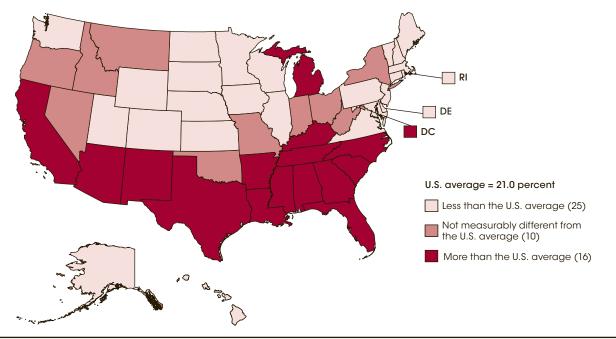
NOTE: The measure of child poverty includes families in which all children are related to the householder by birth, marriage, or adoption. 1990 data are based on 1989 incomes and family sizes collected in the 1990 census, and 2000 data are based on 1999 incomes and family sizes collected in the 2000 census. Data for both years may differ from Current Population Survey data that are shown in other tables. SOURCE: U.S. Department of Commerce, Census Bureau, 1990 Summary Tape File 3 (STF 3), "Median Household Income in 1989" and "Poverty Status in 1989 by Family Type and Age"; Decennial Census, 1990, Minority Economic Profiles, unpublished data; Decennial Census, 2000, Summary Social, Economic, and Housing Characteristics; Census 2000 Summary File 4 (SF 4), "Poverty Status in 1999 of Related Children Under 18 Years by Family Type and Age"; and American Community Survey (ACS), 2012. See Digest of Education Statistics 2013, table 102.40.

**Chapter:** 1/Population Characteristics **Section:** Demographics

All regions of the United States (Northeast, South, Midwest, and West) had higher poverty rates for school-age children in 2012 than in 1990. In 2012, the South had the highest rate of poverty for school-age children (23 percent), followed by the West (21 percent), Midwest (19 percent), and the Northeast (18 percent). From 1990 to 2000, both the South and the Midwest

experienced a decrease in the poverty rate for school-age children (from 20 to 18 percent and from 15 to 12 percent, respectively), while the Northeast and the West did not show measurable changes. All regions had higher percentages of school-age children living in poverty in 2012 than in 2000.

Figure 2. Percentage of 5- to 17-year-olds in families living in poverty, by state: 2012



NOTE: The measure of child poverty includes families in which all children are related to the householder by birth, marriage, or adoption. SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2012. See Digest of Education Statistics 2013, table 102.40.

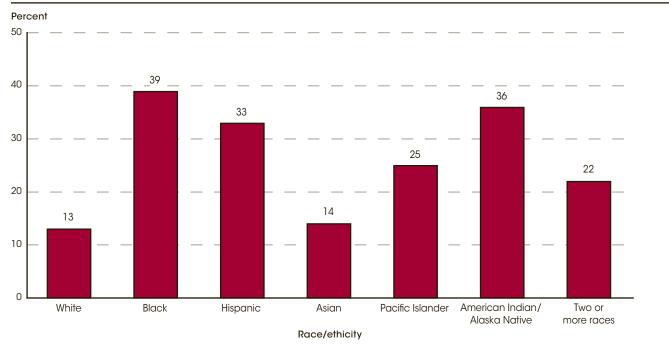
In 2012, the percentage of school-age children living in poverty ranged from 11 percent (North Dakota) to 32 percent (Mississippi). In that same year, the national average poverty rate for school-age children was 21 percent; some 25 states had poverty rates for school-age children that were lower than the national average, 15 states plus the District of Columbia had rates that were higher than the national average, and 10 states had rates that were not measurably different from the national average. Of the 16 jurisdictions (15 states and the District of Columbia) that had poverty rates higher than the national average, 12 were located in the South.

In 2012, some 37 states had higher poverty rates for school-age children than in 1990, while 9 states plus the

District of Columbia had poverty rates for school-age children that were not measurably different from those in 1990. In four states (Louisiana, North Dakota, South Dakota, and West Virginia), the percentage of school-age children living in poverty was lower in 2012 than in 1990. From 1990 to 2000, the poverty rate for school-age children decreased in 38 states, while it increased in 6 states plus the District of Columbia. From 2000 to 2012, the poverty rate for school-age children increased in 44 states and did not change measurably in the remaining 6 states and the District of Columbia.

**Section:** Demographics

Figure 3. Percentage of children under age 18 living in poverty, by race/ethnicity: 2012



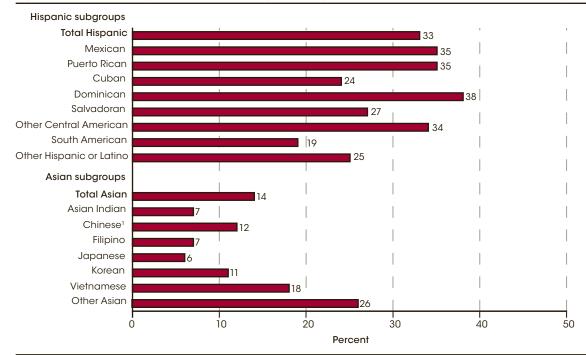
NOTE: The measure of child poverty includes families in which all children are related to the householder by birth, marriage, or adoption. Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2012. See Digest of Education Statistics 2013, table 102.60.

In 2012, approximately 16.0 million, or 22 percent, of all children under the age of 18 were in families living in poverty; this population includes the 11.1 million 5- to 17-year-olds and 5.0 million children under age 5 living in poverty. The percentage of children under age 18 living in poverty varied across racial/ethnic groups. In 2012, the percentage was highest for Black children (39 percent), followed by American Indian/Alaska Native children (36 percent), Hispanic children (33 percent), Pacific Islander children (25 percent), and children of two or more races (22 percent). The poverty rate was lowest for White children (13 percent) and Asian children (14 percent).

**Chapter:** 1/Population Characteristics

**Section:** Demographics

Figure 4. Percentage of children under age 18 living in poverty, by selected race/ethnicity subgroups: 2012



<sup>&</sup>lt;sup>1</sup> Excludes Taiwanese. Taiwanese is included in "Other Asian."

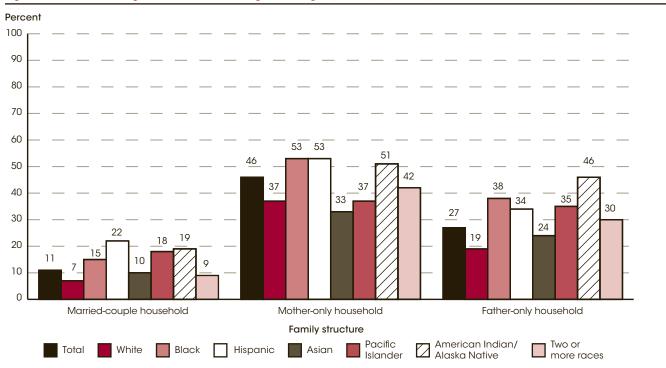
NOTE: The measure of child poverty includes families in which all children are related to the householder by birth, marriage, or adoption. SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2012. See Digest of Education Statistics 2013, table 102.60.

In 2012, among Hispanics the percentage of children under age 18 living in poverty ranged from 19 percent for South American children to 35 percent each for Mexican and Puerto Rican children and 38 percent for Dominican children. Among Asians, the percentage of children living in poverty ranged from 6 percent for Japanese children

and 7 percent each for Filipino and Asian Indian children to 26 percent for other Asian children. Among children of two or more races, the percentage living in poverty was lowest for White-Asian children (9 percent) and highest for White-Black children (29 percent).

**Section:** Demographics

Percentage of children under age 18 living in poverty, by family structure and race/ethnicity: 2012 Figure 5.



NOTE: The measure of child poverty includes families in which all children are related to the householder by birth, marriage, or adoption. To determine family structure, children are classified by their parents' marital status or, if no parents are present in the household, by the marital status of the householder who is related to the children. Race categories exclude persons of Hispanic ethnicity SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2012. See Digest of Education Statistics 2013, table 102.60.

Among children under age 18 living in poverty in 2012, those living in a mother-only household had the highest rate of poverty (46 percent) and those living in a fatheronly household had the next highest rate (27 percent). Children living in a married-couple household had the lowest rate of poverty, at 11 percent. This pattern was observed across most racial/ethnic groups. For example, among Black children under age 18 living in poverty in 2012, the poverty rates were 53 percent for children living in a mother-only household, 38 percent for those living in a father-only household, and 15 percent for those living in a married-couple household.

For all family types, the poverty rates for Black, Hispanic, and American Indian/Alaska Native children were generally higher than the national poverty rates in 2012. On the other hand, the poverty rates for White and Asian children were generally lower than the national poverty rates. For example, among children living in mother-only households in 2012 the national poverty rate was 46 percent, which was lower than the rates for Black children (53 percent), Hispanic children (53 percent), and American Indian/Alaska Native children (51 percent) but higher than the rates for White children (37 percent) and Asian children (33 percent).

Reference tables: Digest of Education Statistics 2013, tables 102.40 and 102.60

Glossary: Poverty, Racial/ethnic group

This page intentionally left blank.

The indicators in this section of *The Condition of Education* report trends in enrollments across all levels of education. Enrollment is a key indicator of the scope of and access to educational opportunities and functions as a basic descriptor of American education. Changes in enrollment have implications for the demand for educational resources such as qualified teachers, physical facilities, and funding levels, all of which are required to provide high-quality education for our nation's students.

The indicators in this section include information on enrollment rates reported by age group, as well as enrollment by level of the education system. These levels are preprimary education, elementary and secondary education, undergraduate education, graduate and professional education, and adult education. Some of the indicators in this section provide information about the characteristics of the students who are enrolled in formal education and, in some cases, how enrollment rates of different types of students vary across schools.

Indicators on participation in education from previous editions of *The Condition of Education* not included in this volume are available at http://nces.ed.gov/programs/coe.



# **Chapter 2**

# **Participation in Education**

| <b>All Ages</b><br>Indicator 6. | Enrollment Trends by Age                   | 28 |
|---------------------------------|--|----|
| Preprimary I                    | Education                                  |    |
| Indicator 7.                    | Preprimary Enrollment                      | 32 |
| Elementary/                     | Secondary Enrollment                       |    |
| Indicator 8.                    | Public School Enrollment                   | 36 |
| Indicator 9.                    | Charter School Enrollment                  | 38 |
| Indicator 10.                   | Private School Enrollment                  | 42 |
| Indicator 11.                   | Racial/Ethnic Enrollment in Public Schools | 48 |
| Indicator 12.                   | English Language Learners                  | 52 |
|                                 | . Children and Youth With Disabilities     |    |
| Postsecond                      | ary Enrollment                             |    |
| Indicator 14.                   | . Undergraduate Enrollment                 | 58 |
| Indicator 15.                   | Postbaccalaureate Enrollment               | 64 |

**Chapter:** 2/Participation in Education

**Section:** All Ages

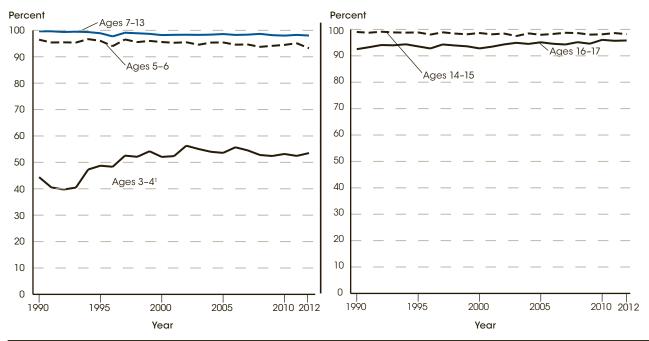
# **Enrollment Trends by Age**

In 2012, some 93 percent of 5- to 6-year-olds and 98 percent of 7- to 13-yearolds were enrolled in elementary or secondary school. In that same year, 47 percent of 18- to 19-year-olds and 40 percent of 20- to 24-year-olds were enrolled in postsecondary education. For most age groups from 3 to 34, the total school enrollment rate did not change measurably between 2011 and 2012, except for children ages 5-6, whose enrollment rate was 2 percentage points lower in 2012 than in 2011.

Changes in the number of students enrolled in school can stem from fluctuations in population size or shifts in enrollment rates. Enrollment rates may vary in response to changes in state compulsory attendance requirements, changes in the prevalence of homeschooling, changes in perceptions regarding the value of education (particularly at the preschool and college levels), and changes in the amount of time it takes to complete a degree. In the past two decades, school enrollment rates increased for

children ages 3-4 and for each age group from 16 to 34; however, enrollment rates decreased for those ages 5-6, 7–13, and 14–15 during the same period. For most age groups from 3 to 34, total school enrollment rates did not change measurably between 2011 and 2012. The only exception was for children ages 5-6, whose enrollment rate was lower in 2012 (93 percent) than in 2011 (95 percent).

Percentage of the population ages 3-17 enrolled in school, by age group: October 1990-2012 Figure 1.



Beginning in 1994, preprimary enrollment data were collected using new procedures. As a result, pre-1994 data may not be comparable to data from 1994 SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1990-2012. See Digest of Education Statistics 2013, table 103.20

Between 1990 and 2012, the enrollment rate for children ages 3-4 (the ages at which children are typically enrolled in nursery or preschool) increased from 44 to 54 percent, with most of the growth occurring between 1990 and 2000. There was no measurable change in the enrollment rate for 3- to 4-year-olds between 2000 and

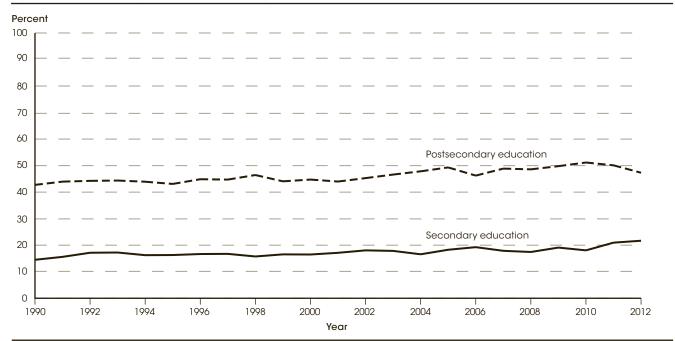
2012. For children ages 5–6, who are typically enrolled in kindergarten or first grade, the enrollment rate fluctuated between 94 and 97 percent in the 1990s, and then declined from 96 percent in 2000 to 93 percent in 2012. The enrollment rate for 5- to 6-year-olds in 2012 was 2 percentage points lower than in 2011.

**Chapter:** 2/Participation in Education **Section:** All Ages

The enrollment rates for 7- to 13-year-olds and 14- to 15-year-olds in 2012 were lower than their rates in 1990, but the overall enrollment rate for 16- to 17-year-olds increased from 93 percent in 1990 to 96 percent in 2012, with most of the increase occurring since 2000. The enrollment rate for 16- to 17-year-olds fluctuated between

93 and 94 percent from 1990 to 2000. Between 2000 and 2012, the enrollment rate for 16- to 17-year-olds increased from 93 to 96 percent, while the rates were not measurably different for either 7- to 13-year-olds or 14- to 15-year-olds.

Figure 2. Percentage of the population ages 18-19 enrolled in school, by education level: October 1990-2012



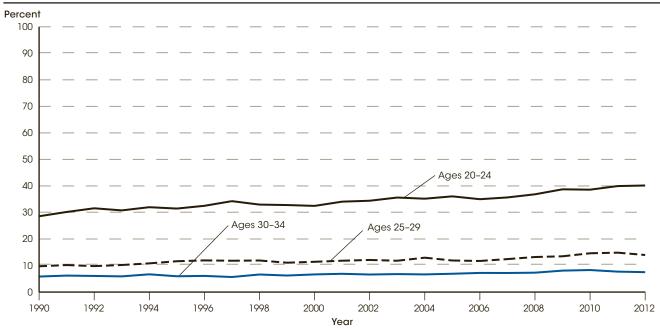
SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1990-2012. See *Digest of Education Statistics* 2013, table 103, 20.

Young adults at ages 18–19 are typically transitioning into either college education or the workforce. Between 1990 and 2012, the overall enrollment rate (i.e., enrollment at both the secondary level and the college level) for young adults ages 18–19 increased from 57 to 69 percent. During this period, the enrollment rate for these young adults at the secondary level increased from 15 to 22

percent, while at the college level it increased from 43 to 47 percent. Between 2000 and 2012, the overall enrollment rate for those in this age range increased from 61 to 69 percent; the secondary and college enrollment rates increased from 16 to 22 percent and from 45 to 47 percent, respectively.

**Section:** All Ages

Percentage of the population ages 20-34 enrolled in school, by age group: October 1990-2012 Figure 3.



SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1990-2012. See Digest of Education Statistics 2013, table 103.20.

Enrolled adults ages 20-34 are usually in college or graduate school. Between 1990 and 2012, the enrollment rate increased from 29 to 40 percent for adults ages 20-24, from 10 to 14 percent for adults ages 25-29, and from 6 to 7 percent for adults ages 30-34. Between 2000 and 2012, the enrollment rate for adults ages 20-24 increased from 32 to 40 percent; for adults ages 25-29, it increased from 11 to 14 percent; and for adults ages 30–34, it increased less than 1 percentage point.

Reference table: Digest of Education Statistics 2013, table 103.20

Glossary: College, Secondary school

This page intentionally left blank.

**Chapter:** 2/Participation in Education **Section:** Preprimary Education

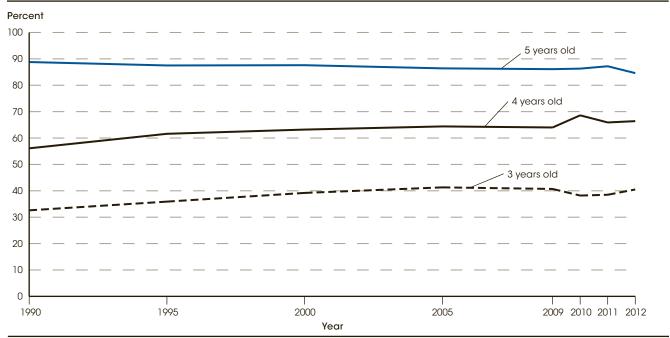
# **Preprimary Enrollment**

From 1990 to 2012, the percentage of 3- to 5-year-olds enrolled in preprimary programs increased from 59 to 64 percent. The percentage of these children who attended full-day programs increased from 39 to 60 percent during this period.

Preprimary programs are groups or classes that are organized to provide educational experiences for children and include kindergarten, preschool, and nursery school programs. From 1990 to 2012, the percentage of 3- to 5-year-olds enrolled in preprimary programs increased from 59 to 64 percent, with all of the growth occurring between 1990 and 2000. The percentages of 3- and 4-year-olds enrolled in preprimary programs in 2012

(41 and 66 percent, respectively) were higher than the percentages in 1990 (33 and 56 percent, respectively) but not measurably different from the percentages in 2000 or 2011. In contrast, the percentage of 5-year-olds enrolled in preprimary programs declined from 89 percent in 1990 to 85 percent in 2012. The percentage of 5-year-olds enrolled in preprimary programs in 2012 was nearly 3 points lower than the percentage in 2011 (85 vs. 87 percent).

Percentage of 3-, 4-, and 5-year-old children enrolled in preprimary programs: Selected years, 1990 Figure 1. through 2012



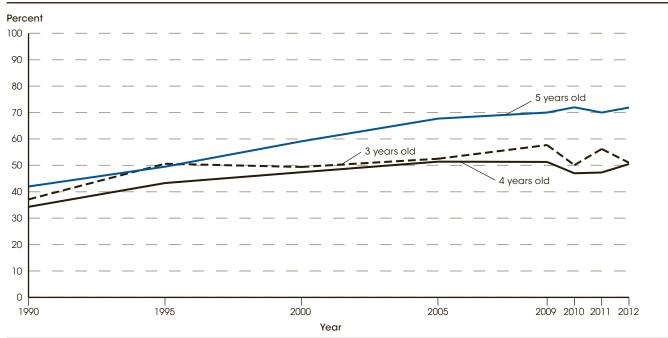
NOTE: Preprimary programs are groups or classes that are organized to provide educational experiences for children and include kindergarten, preschool, and nursery school programs. Enrollment data for 5-year-olds include only those students in preprimary programs and do not include those enrolled in primary programs. Beginning in 1995, new procedures were used in the Current Population Survey to collect preprimary enrollment data. As a result, pre-1995 data may not be comparable to data from 1995 or later. Data are based on sample surveys of the civilian noninstitutional population. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1990 through 2012. See Digest of Education Statistics 2013, table 202.10

**Chapter:** 2/Participation in Education **Section:** Preprimary Education

The percentage of 3- to 5-year-olds in preprimary programs who attended full-day programs increased from 39 percent in 1990 to 60 percent in 2012. This increase in the full-day enrollment rate was also observed for

5-year-olds. More recently, the full-day enrollment rate was higher in 2012 (72 percent) than in 2000 (59 percent) for 5-year-olds, but the rate did not change measurably for 3- or 4-year-olds.

Figure 2. Percentage of 3-, 4-, and 5-year-old children in preprimary programs attending full day: Selected years, 1990 through 2012



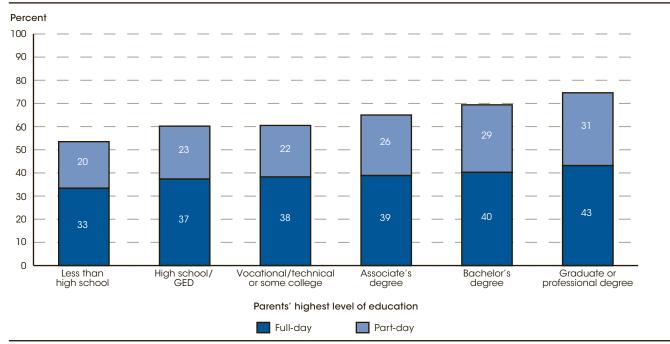
NOTE: *Preprimary programs* are groups or classes that are organized to provide educational experiences for children and include kindergarten, preschool, and nursery school programs. Enrollment data for 5-year-olds include only those students in preprimary programs and do not include those enrolled in primary programs. Beginning in 1995, new procedures were used in the Current Population Survey to collect preprimary enrollment data. As a result, pre-1995 data may not be comparable to data from 1995 or later. Data are based on sample surveys of the civilian noninstitutional population. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1990 through 2012. See *Digest of Education Statistics 2013*, table 202.10.

Differences by age in enrollment in full-day preprimary programs have shifted over the past few decades. The 1990 full-day enrollment rate for 5-year-olds (42 percent) was not measurably different from the rate for 3-year-olds (37 percent) and was 8 points higher than the rate for

4-year-olds (34 percent). By 2012, the full-day enrollment rate for 5-year-olds (72 percent) was 21 percentage points higher than the rates for 3- or 4-year-olds (51 percent each).

**Chapter:** 2/Participation in Education **Section:** Preprimary Education

Percentage of 3-, 4-, and 5-year-old children enrolled in preprimary programs, by parents' highest level of Figure 3. education and children's attendance status: October 2012



NOTE: Preprimary programs are groups or classes that are organized to provide educational experiences for children and include kindergarten, preschool, and nursery school programs. Enrollment data for 5-year-olds include only those students in preprimary programs and do not include those enrolled in primary programs. Highest level of education is defined as the diploma attained by the most educated parent. Data are based on sample surveys of the civilian noninstitutional population.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 2012. See Digest of Education Statistics 2013, table 202.20.

Enrollment in preprimary programs varied by parents' highest level of education, defined as the highest level of education attained by the most educated parent in the child's household. In 2012, the percentage of 3- to 5-year-olds who were enrolled in preprimary programs was generally higher for those whose parents had either a graduate or professional degree (75 percent) or a bachelor's degree (69 percent) than for children whose parents had lower levels of educational attainment. For instance, 54 percent of children whose parents had less than a high school credential and 60 percent of children whose parents had a high school credential were enrolled in preprimary programs. Enrollment in full-day and

part-day preprimary programs also differed by the highest educational attainment of parents or guardians. Forty-three percent of 3- to 5-year-olds whose parents had a graduate or professional degree were enrolled in full-day preprimary programs, an enrollment rate higher than for children whose parents had less than a high school credential (33 percent) or a high school credential (37 percent). Enrollment rates in part-day preprimary programs were also higher for children whose parents had a graduate or professional degree (31 percent) or a bachelor's degree (29 percent) than for children whose parents had less than a high school credential (20 percent) or a high school credential (23 percent).

**Reference tables:** *Digest of Education Statistics 2013*, tables 202.10 and 202.20

Glossary: Nursery school

This page intentionally left blank.

**Chapter:** 2/Participation in Education **Section:** Elementary/Secondary Enrollment

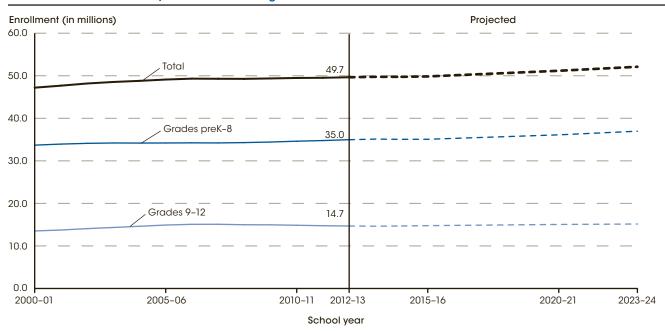
### **Public School Enrollment**

From school years 2011-12 through 2023-24, overall public elementary and secondary school enrollment is projected to increase by 5 percent (from 49.5 to 52.1 million students), with changes across states ranging from an increase of 22 percent in Nevada to a decrease of 11 percent in West Virginia.

Public school enrollment changes are largely reflective of demographic changes. This indicator discusses changes in public school enrollment overall as well as changes in public school enrollment for particular age groups and for U.S. states. In school year 2011-12, some 49.5 million students were enrolled in public elementary and secondary schools. Of these students, 34.8 million were enrolled in prekindergarten (preK) through grade 8 and 14.7 million were enrolled in grades 9 through 12.

After reaching a peak in the early 1970s, public school enrollment declined during the remainder of the 1970s and early 1980s but began rising in the latter part of the 1980s. Enrollment continued to increase throughout the 1990s, 2000s, and early 2010s. In 1997–98, public school enrollment reached 46.1 million students, surpassing its early 1970s peak. Between 2000-01 and 2011-12, public school enrollment increased by 2.3 million students, reaching a total of 49.5 million students. From 2011–12 to 2023–24 (the last year for which projected data are available), total public school enrollment is projected to increase by 5 percent, to 52.1 million students.

Figure 1. Actual and projected public school enrollment in grades prekindergarten (preK) through 12, by grade level: School years 2000-01 through 2023-24



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/ Secondary Education," 2000-01 through 2011-12, and National Elementary and Secondary Enrollment Model, 2000-2012. See Digest of Education Statistics 2013, tables 203.20, 203.25, and 203.30

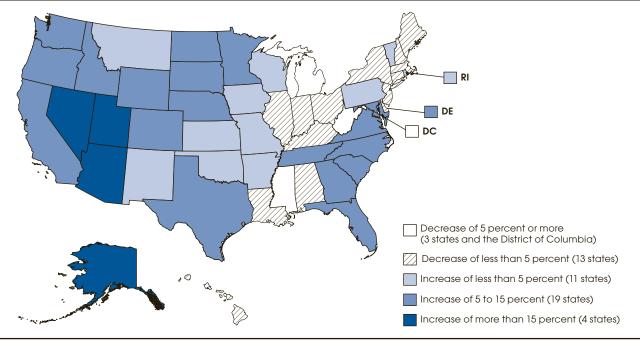
# **Chapter:** 2/Participation in Education **Section:** Elementary/Secondary Enrollment

Enrollment trends in grades preK-8 and 9-12 have differed over time as successive cohorts of students have moved through the public school system. For example, enrollment in grades preK-8 decreased throughout the 1970s and early 1980s, while enrollment in grades 9–12 generally did not begin to decrease until the late 1970s and continued to decrease further into the 1980s than enrollment in grades preK-8 did. Enrollment in grades preK-8 started to rise in the latter part of the 1980s and continued to rise throughout the 1990s and 2000s. Between 2000-01 and 2011-12, enrollment in grades preK-8 increased by 1.1 million students, reaching a total of 34.8 million students. Public school enrollment in grades preK-8 is projected to increase to 37.0 million in 2023-24, an increase of 6 percent over 2011-12. After declining in the 1980s, public school enrollment in

grades 9–12 began to increase again in 1990–91. Despite a period of decline from 2008–09 through 2011–12, the years from 2000–01 to 2011–12 saw a 9 percent increase in enrollment in grades 9–12, reaching a total of 14.7 million students. Enrollment in grades 9–12 is projected to increase by 3 percent between 2011–12 and 2023–24.

Public school enrollment in grades preK–12 increased in 30 states and the District of Columbia from 2000–01 to 2011–12, with the largest increases occurring in Nevada, Utah, Texas, and Arizona (29, 24, 23, and 23 percent, respectively). During this period, total enrollment declined in 20 states, with the largest decreases occurring in Vermont and North Dakota (12 and 11 percent, respectively).

Figure 2. Projected percentage change in public school enrollment in grades prekindergarten (preK) through 12, by state or jurisdiction: Between school years 2011–12 and 2023–24



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/ Secondary Education," 2011–12; and Public State Elementary and Secondary Enrollment Model: 1980–2012. See *Digest of Education Statistics 2013*, table 203.20.

From 2011–12 to 2023–24, Nevada, Arizona, Alaska, and Utah are projected to see the largest percentage increases in total enrollment (22, 20, 18, and 18 percent, respectively), while West Virginia is projected to see the largest percentage decrease (11 percent). From 2011–12 to 2023–24, the changes in public school enrollment in the states are projected to differ at the elementary and secondary school levels. Reflecting the larger national enrollment increase expected at the elementary school

level, 33 states are expected to have enrollment increases in grades preK–8, compared with 31 states in grades 9–12. In preK–8, enrollment is projected to increase by more than 20 percent in Nevada, Arizona, and Alaska, but it is projected to decrease by more than 10 percent in West Virginia. Enrollment in grades 9–12 is expected to increase by more than 20 percent in Utah, but it is projected to decrease by more than 10 percent in New Hampshire, Vermont, Connecticut, and Michigan.

**Reference table:** *Digest of Education Statistics 2013*, tables 203.20, 203.25, and 203.30; tables ESE 70 through ESE 89 at http://nces.ed.gov/surveys/AnnualReports/historicaltables.asp.

**Glossary:** Elementary school, Prekindergarten, Public school or institution, Secondary school

**Chapter:** 2/Participation in Education **Section:** Elementary/Secondary Enrollment

### **Charter School Enrollment**

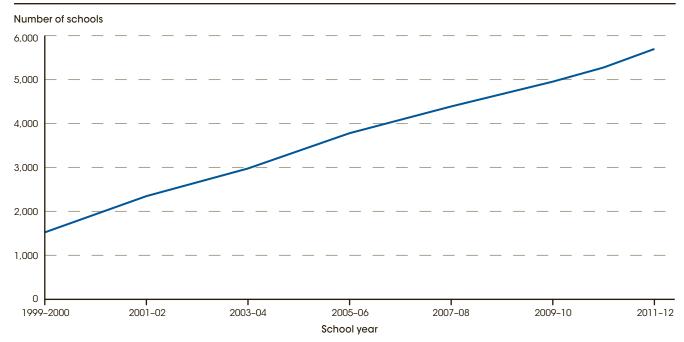
From school year 1999-2000 to 2011-12, the number of students enrolled in public charter schools increased from 0.3 million to 2.1 million students. During this period, the percentage of public school students who attended charter schools increased from 0.7 to 4.2 percent.

A public charter school is a publicly funded school that is typically governed by a group or organization under a legislative contract (or charter) with the state or jurisdiction. The charter exempts the school from certain state or local rules and regulations. In return for flexibility and autonomy, the charter school must meet the accountability standards stated in its charter. A school's charter is reviewed periodically (typically every 3 to 5 years) by the group or jurisdiction that granted it and can be revoked if guidelines on curriculum and management are not followed or if the standards are not met.1 The first law allowing the establishment of charter

schools was passed in Minnesota in 1991.2 Charter school legislation had been passed in 42 states and the District of Columbia as of school year 2011-12. Despite legislative approval in Maine and Washington, no charter schools were operational in these states in 2011–12. Charter school legislation has not been passed in the following states: Alabama, Kentucky, Montana, Nebraska, North Dakota, South Dakota, Vermont, and West Virginia.3

<sup>3</sup>The Center for Education Reform. (2013). The Last Eight States without Charter School Laws. Retrieved December 4, 2013, from http://www.edreform.com/2013/01/the-last-eight-states-withoutcharter-school-laws/.

Number of U.S. public charter schools: Selected school years, 1999–2000 through 2011–12 Figure 1.



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 1999-2000 through 2011-12. See Digest of Education Statistics 2013, table 216.30

<sup>&</sup>lt;sup>1</sup>Berman, P., Ericson, J., Kamprath, N., Nelson, B., Perry, R., Silverman, D., and Solomon, D. (2000). The State of Charter Schools 2000. National Center for Education Statistics, Office of Educational Research and Improvement, U.S. Department of Education. Washington, DC.

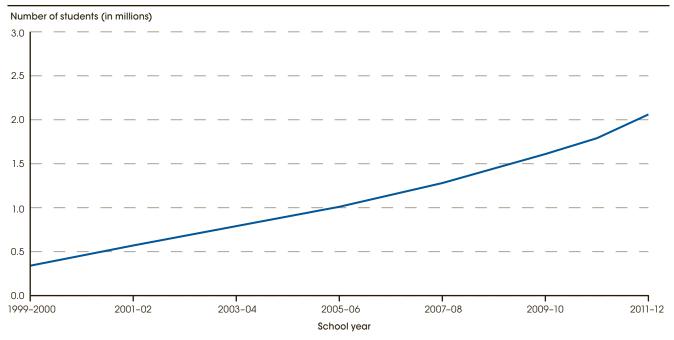
<sup>&</sup>lt;sup>2</sup> Adelman, N., Anderson, L., Cotton, L., Donnelly, M., Finnigan, K., and Price, T. (2004). Evaluation of the Public Charter Schools Program: Final Report. U.S. Department of Education, Office of the Deputy Secretary. Washington, DC: Policy and Program Studies

# **Chapter:** 2/Participation in Education **Section:** Elementary/Secondary Enrollment

From school year 1999–2000 to 2011–12, the percentage of all public schools that were public charter schools increased from 1.7 to 5.8 percent, and the total number of public charter schools increased from 1,500 to 5,700. In addition to increasing in number, charter schools have generally increased in enrollment size over time.

For instance, the percentages of charter schools with the largest enrollment sizes (500–900 students and 1,000 or more students) increased from 1999–2000 to 2011–12, and the percentage of charter schools with the smallest enrollment size (under 300 students) decreased from 77 to 56 percent.

Figure 2. Number of students enrolled in U.S. public charter schools: Selected school years, 1999–2000 through 2011–12

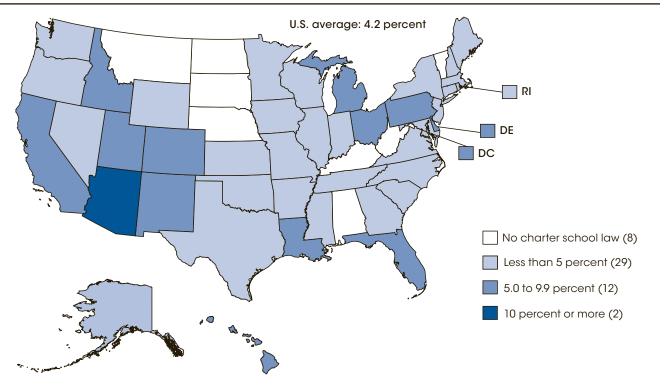


SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 1999–2000 through 2011–12. See *Digest of Education Statistics 2013*, table 216.30.

From school year 1999–2000 to 2011–12, the number of students enrolled in public charter schools increased from 0.3 million to 2.1 million students. During this period, the percentage of public school students who attended

charter schools increased from 0.7 to 4.2 percent. Between school years 2010–11 and 2011–12, the number of students enrolled in public charter schools increased from 1.8 million to 2.1 million.

Figure 3. Percentage of all public school students enrolled in charter schools, by state or jurisdiction: School year

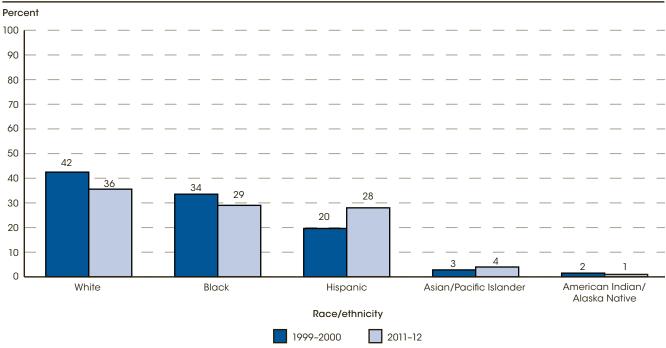


SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2011–12. See *Digest of Education Statistics 2013*, table 216.90.

In school year 2011-12, among all states California enrolled the largest number of students in charter schools (413,000, representing 7 percent of total public school students in the state), and the District of Columbia enrolled the highest percentage of public school students

in charter schools (39 percent, representing 29,000 students). After the District of Columbia, Arizona had the second highest percentage (13 percent) of charter school enrollment as a percent of total public school enrollment.

Figure 4. Percentage of students enrolled in U.S. public charter schools, by race/ethnicity: School years, 1999–2000 and 2011–12



NOTE: Estimates for the "two or more races" category are not presented in the figure because data for this category were not available prior to 2009-10. In 2011-12, some 3 percent of students were of two or more races and are not presented in the graphic; therefore, the percentages for this year will not equal 100 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 1999–2000 and 2011–12. See *Digest of Education Statistics 2013*, table 216.30.

From school year 1999–2000 to 2011–12, charter schools experienced changes in their demographic composition similar to those seen at traditional public schools. The percentages of charter school students who were Hispanic and Asian/Pacific Islander increased (from 20 to 28 percent and from 3 to 4 percent, respectively). In contrast, the percentage of charter school students who were White decreased from 42 to 36 percent, and the percentages who were Black and American Indian/Alaska Native decreased as well. For example, the percentage of charter school students who were Black decreased from 34 to 29 percent. Data were collected for charter school students of two or more races beginning in 2009–10. Students of two or more races accounted for 3 percent of the charter school population in 2011–12.

The percentage of students attending high-poverty charter schools—schools in which more than 75 percent of the students qualify for free or reduced-price lunch (FRPL) under the National School Lunch Program (NSLP)—increased from 14 percent in school year 1999–2000 to 31 percent in school year 2011–12. Over the same period, the percentages of students attending charter schools with lower percentages of students qualifying for FRPL decreased. For instance, the percentage of students attending low-poverty charter schools, schools in which 25 percent or less of students qualify for FRPL, decreased from 37 percent in 1999–2000 to 22 percent in 2011–12.

**Reference tables:** Digest of Education Statistics 2013, tables 216.30 and 216.90

**Glossary:** Charter school, Combined school, Elementary school, Free or reduced-price lunch, National School Lunch Program, Secondary school, Student membership, Traditional public school

**Chapter:** 2/Participation in Education **Section:** Elementary/Secondary Enrollment

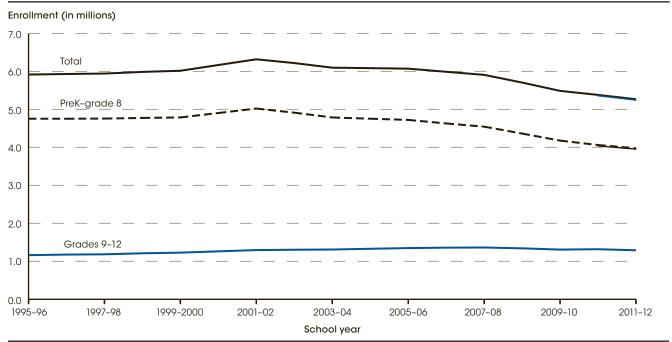
#### **Private School Enrollment**

Private school enrollment in prekindergarten through grade 12 increased from 5.9 million in 1995-96 to 6.3 million in 2001-02, then decreased to 5.3 million in 2011-12. The percentage of all students in private schools decreased from 12 percent in 1995-96 to 10 percent in 2011-12.

In school year 2011–12, some 5.3 million students were enrolled in private schools, excluding prekindergarten

students who were enrolled in private schools that did not offer at least one grade of kindergarten or higher.

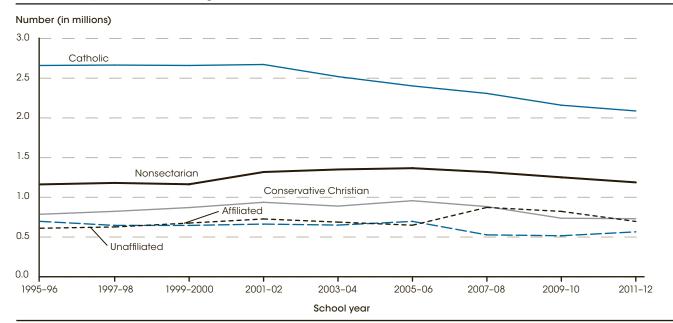
Figure 1. Private school enrollment in prekindergarten (preK) through grade 12, by grade level: School years 1995-96 through 2011-12



SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 1995-96 through 2011-12. See Digest of Education Statistics 2013, table 205.20

The percentage of all students in private schools decreased from 12 percent in 1995-96 to 10 percent in 2011–12. Private school enrollment in prekindergarten (preK) through grade 12 increased from 5.9 million in 1995-96 to 6.3 million in 2001-02, then decreased to 5.3 million in 2011–12. Similar to overall private school enrollment, private school enrollment in preK through grade 8 increased from 4.8 million in 1995–96 to 5.0 million in 2001–02, then decreased to 4.0 million in 2011–12. However, private school enrollment in grades 9 through 12 increased from 1.2 million in 1995–96 to 1.3 million in 2011–12.

Figure 2. Number of private school students in prekindergarten through grade 12, by school type: Selected school years, 1995–96 through 2011–12



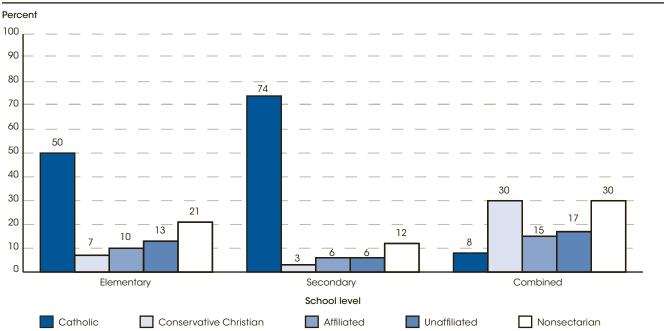
NOTE: Prekindergarten students who are enrolled in private schools that do not offer kindergarten or higher grades are not included in this analysis. Catholic schools include parochial, diocesan, and private Catholic schools. Conservative Christian schools have membership in at least one of four associations: Accelerated Christian Education, American Association of Christian Schools, Association of Christian Schools International, or Oral Roberts University Education Fellowship. Affiliated religious schools have a specific religious orientation or purpose but are not Catholic. Unaffiliated schools have a more general religious orientation or purpose but are not classified as conservative Christian or affiliated with a specific religion. Nonsectarian schools do not have a religious orientation or purpose.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), various years, 1995–96 through 2011–12. See Digest of Education Statistics 2013, table 205.20.

The number of total private school students attending Catholic schools decreased from 2.7 million in 1995–96 to 2.1 million in 2011–12 and the share of private school students in Catholic schools declined from 45 percent in 1995–96 to 40 percent in 2011–12. The decrease in the share of private school students attending Catholic schools was due to a decline in the number of students enrolled in Catholic parochial schools (from 1.5 million

in 1995–96 to 804,000 in 2011–12). The numbers of students enrolled in conservative Christian and affiliated schools were also lower in 2011–12 (731,000 and 565,000, respectively) than in 1995–96 (787,000 and 697,000, respectively). In contrast, the number of students enrolled in unaffiliated schools was higher in 2011–12 (696,000 students) than in 1995–96 (611,000 students).

Percentage distribution of private elementary and secondary school enrollment, by school level and type: Figure 3.



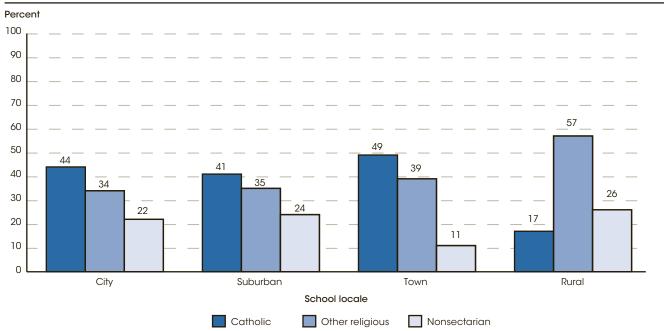
NOTE: Prekindergarten students who are enrolled in private schools that do not offer kindergarten or higher grades are not included in this analysis. Elementary schools have grade 6 or lower and no grade higher than 8. Secondary schools have no grade lower than 7 and include both junior high schools and senior high schools. Combined schools include those that have grades lower than 7 and higher than 8, as well as those that do not classify students by grade level. Catholic schools include parochial, diocesan, and private Catholic schools. Conservative Christian schools have membership in at least one of four associations: Accelerated Christian Education, American Association of Christian Schools, Association of Christian Schools International, or Oral Roberts University Education Fellowship. Affiliated religious schools have a specific religious orientation or purpose but are not Catholic. Unaffiliated schools have a more general religious orientation or purpose but are not classified as conservative Christian or affiliated with a specific religion. Nonsectarian schools do not have a religious orientation or purpose. Ungraded students are prorated into preK-8 and 9-12 enrollment totals. Detail may not sum to totals because of roundina SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2011-12. See Digest of Education

In 2011–12, half of all private elementary school students were enrolled in Catholic schools. Additionally, 7 percent were enrolled in conservative Christian schools, 10 percent were enrolled in affiliated religious schools, 13 percent were enrolled in unaffiliated religious schools, and 21 percent were enrolled in nonsectarian, or nonreligious, schools. Similarly, more private secondary

Statistics 2013, table 205.30

school students were enrolled in Catholic schools (74 percent) than in any other school type. In contrast to the large percentage of private school students enrolled in Catholic elementary and secondary schools, Catholic students made up the minority of private school students enrolled in combined schools, at only 8 percent.

Figure 4. Percentage distribution of private elementary and secondary school enrollment, by school locale and type: 2011-12



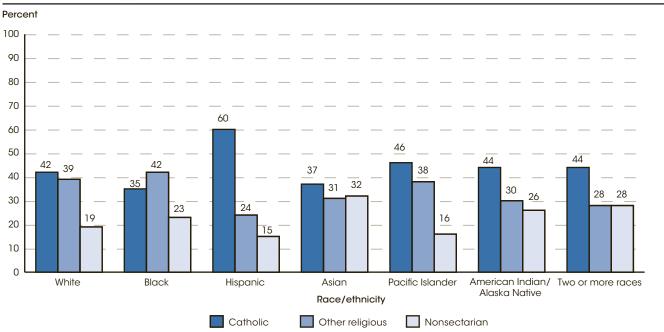
NOTE: Prekindergarten students who are enrolled in private schools that do not offer kindergarten or higher grades are not included in this analysis. Catholic schools include parochial, diocesan, and private Catholic schools. Other religious schools include conservative Christian, affiliated, and unaffiliated schools. Conservative Christian schools have membership in at least one of four associations: Accelerated Christian Education, American Association of Christian Schools, Association of Christian Schools International, or Oral Roberts University Education Fellowship. Affiliated religious schools have a specific religious orientation or purpose but are not Catholic. Unaffiliated schools have a more general religious orientation or purpose but are not classified as conservative Christian or affiliated with a specific religion. Nonsectarian schools do not have a religious orientation or purpose. Detail may not sum to totals because of

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2011-12. See Digest of Education Statistics 2013, table 205.30

In 2011–12, higher percentages of private elementary and secondary school students were enrolled in Catholic schools than in other religious or nonsectarian schools in cities, suburbs, and towns. In towns, for example, 49 percent of private school students attended Catholic schools, while 39 percent attended other religious schools

and 11 percent attended nonsectarian schools. In rural areas, however, a lower percentage of private school students (17 percent) attended Catholic schools than attended nonsectarian (26 percent) or other religious schools (57 percent).

Percentage distribution of private elementary and secondary school enrollment, by race/ethnicity and Figure 5. school type: 2011-12



NOTE: Prekindergarten students who are enrolled in private schools that do not offer kindergarten or higher grades are not included in this analysis. Catholic schools include parochial, diocesan, and private Catholic schools. Other religious schools include conservative Christian, affiliated, and unaffiliated schools. Conservative Christian schools have membership in at least one of four associations: Accelerated Christian Education, American Association of Christian Schools, Association of Christian Schools International, or Oral Roberts University Education Fellowship. Affiliated religious schools have a specific religious orientation or purpose but are not Catholic. Unaffiliated schools have a more general religious orientation or purpose but are not classified as conservative Christian or affiliated with a specific religion. Nonsectarian schools do not have a religious orientation or purpose. Race categories exclude persons of Hispanic ethnicity. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2011-12. See Digest of Education Statistics 2013, table 205.30.

There were differences in private elementary and secondary school attendance by school type within racial/ ethnic groups. For all racial/ethnic groups other than Black, higher percentages of private school students attended Catholic schools than other religious schools or nonsectarian schools in 2011-12. For example, 60 percent of Hispanic private school students attended Catholic schools, while 24 percent attended other religious

schools and 15 percent attended nonsectarian schools. In contrast, there was a higher percentage of Black private school students attending other religious schools (42 percent) than attending Catholic schools (35 percent). The percentage of Black private school students attending Catholic schools was also higher than the percentage attending nonsectarian schools (23 percent).

**Reference table:** Digest of Education Statistics 2012, table 3; Digest of Education Statistics 2013, tables 205.20 and 205.30 This page intentionally left blank.

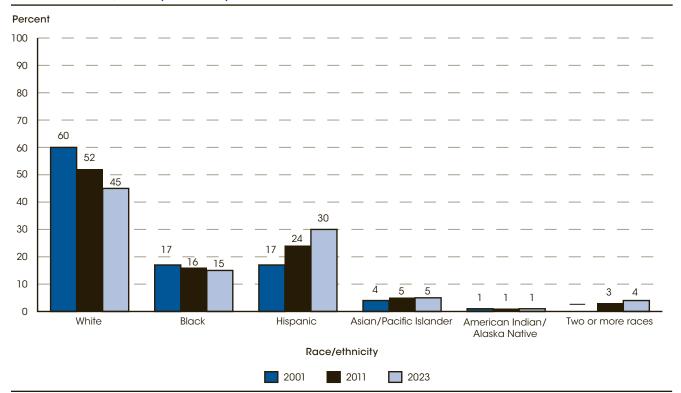
# Racial/Ethnic Enrollment in Public Schools

From fall 2001 through fall 2011, the number of White students enrolled in prekindergarten through 12th grade in U.S. public schools decreased from 28.7 million to 25.6 million, and their share of public school enrollment decreased from 60 to 52 percent. In contrast, the number of Hispanic students enrolled during this period increased from 8.2 million to 11.8 million students, and their share of public school enrollment increased from 17 to 24 percent.

Overall public school enrollment increased between 2001 and 2011 from 47.7 million to 49.5 million and is projected to continue increasing to 52.1 million in fall

2023 (which is the last year for which projected data are available). In addition, racial/ethnic and regional distributions of public school students have been shifting.

Figure 1. Percentage distribution of U.S. public school students enrolled in prekindergarten through 12th grade, by race/ethnicity: Selected years, fall 2001, fall 2011, and fall 2023



Data not available.

NOTE: Race categories exclude persons of Hispanic ethnicity. Prior to 2008, separate data on students of two or more races were not collected. Detail may not sum to totals because of rounding. Data for 2023 are projected.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary and Secondary Education," 2001–02 and 2011–12. See *Digest of Education Statistics 2013*, table 203.50.

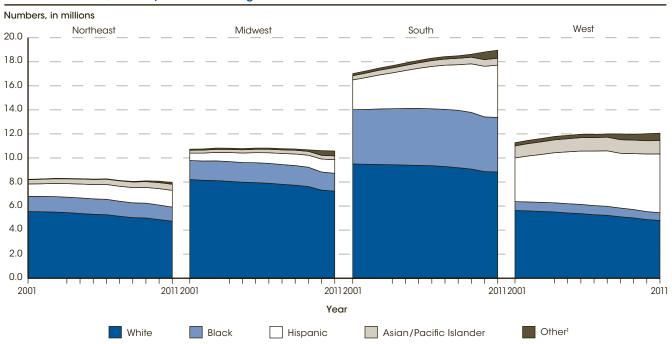
#### **Chapter:** 2/Participation in Education **Section:** Elementary/Secondary Enrollment

From fall 2001 through fall 2011, the number of White students enrolled in prekindergarten through 12th grade in U.S. public schools decreased from 28.7 million to 25.6 million, and their share of public school enrollment decreased from 60 to 52 percent. In contrast, the number of Hispanic students enrolled during this period increased from 8.2 million to 11.8 million students, and their share of public school enrollment increased from 17 to 24 percent. The number of Black students enrolled during this period fluctuated between 7.8 million and 8.4 million, and Black students' share of public school enrollment decreased from 17 percent in 2001 to 16 percent in 2011. In 2002, the Hispanic share of public school enrollment exceeded the Black share and has since remained higher than the Black share in each subsequent year through 2011.

continue decreasing from 25.3 million to 23.5 million, and White students' share of enrollment is expected to decline to 45 percent. The percentage of students who are White is projected to be less than 50 percent beginning in 2014 and to continue to decline as the enrollments of Hispanics and Asians/Pacific Islanders are expected to increase. The number of Hispanic public school students is projected to increase from 12.2 million in 2012 to 15.6 million, representing 30 percent of total enrollment in 2023. During this period, the number of Asian/Pacific Islander students is projected to increase from 2.5 million to 2.9 million, and their enrollment share in 2023 is projected to be 5 percent. Although the number of Black students is projected to fluctuate between around 7.6 million and 7.8 million during this period, their enrollment share is projected to decrease from 16 to 15 percent.

Between fall 2012 and fall 2023, the number of White students enrolled in U.S. public schools is projected to

Figure 2. Number of U.S. public school students enrolled in prekindergarten through 12th grade, by region and race/ethnicity: Fall 2001 through fall 2011

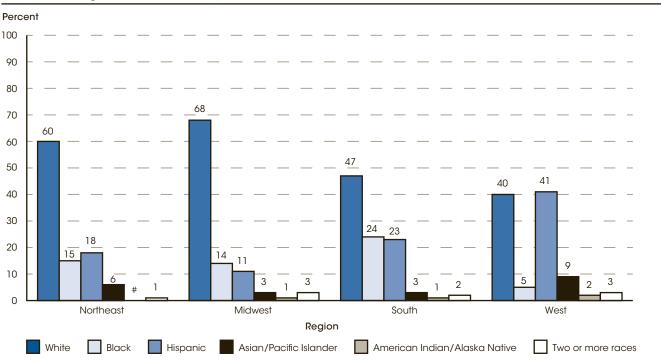


Other includes all students who identified themselves as American Indian/Alaska Native or two or more races. NOTE: Race categories exclude persons of Hispanic ethnicity. Prior to 2008, separate data on students of two or more races were not collected. In 2008 and 2009, data on students of two or more races were reported by only a small number of states. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary and Secondary Education," 2001-02 through 2011-12. See Digest of Education Statistics 2013, table 203.50

Changes in the racial/ethnic distribution of public school enrollment differed by region. From fall 2001 through fall 2011, the number of White students enrolled and their enrollment share decreased in all regions, with the largest decrease in their share of public school enrollment (9 percentage points) occurring in the West. The number of Hispanic students enrolled and their enrollment share increased in all four regions, with the largest increase in their share of public school enrollment (8 percentage points) occurring in the South. From 2001 through 2011,

the number of Black students enrolled fluctuated in the South and decreased overall in the Northeast, West, and Midwest. Black students' enrollment share fluctuated in the Midwest and decreased in the other regions. The number of Asian/Pacific Islander students increased in all regions, with the largest increase occurring in the South. Asian/Pacific Islander students' enrollment share fluctuated in the West and increased in the Northeast, Midwest, and South. There was minimal change among other racial/ethnic groups during this period.

Figure 3. Percentage distribution of U.S. public school students enrolled in prekindergarten through 12th grade, by region and race/ethnicity: Fall 2011



#Rounds to zero.

NOTE: Race categories exclude persons of Hispanic ethnicity. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary and Secondary Education," 2011–12. See Digest of Education Statistics 2013, table 203.50.

In fall 2011, the racial/ethnic distribution of public school enrollment differed by region. As a result of regional shifts in White and Hispanic enrollment, there was a difference of 1 percentage point between the White and Hispanic shares of public school enrollment in the West (40 and 41 percent, respectively). However, for all other regions, the share of White students was at least 24 percentage points greater than the share of Hispanic students. The share of Black student enrollment was 24 percent in the South and 5 percent in the West. In both

the Northeast and the Midwest, Black students' share of public school enrollment was within 2 percentage points of Black students' overall U.S. share (16 percent). American Indian/Alaska Native students represented 2 percent or less of student enrollment in each region of the United States. Students of two or more races made up 3 percent of student enrollment in the West as well as in the Midwest; they made up 2 percent of enrollment in the South; and they made up 1 percent of enrollment in the Northeast.

Reference table: Digest of Education Statistics 2013, table 203.50

Glossary: Public school or institution

This page intentionally left blank.

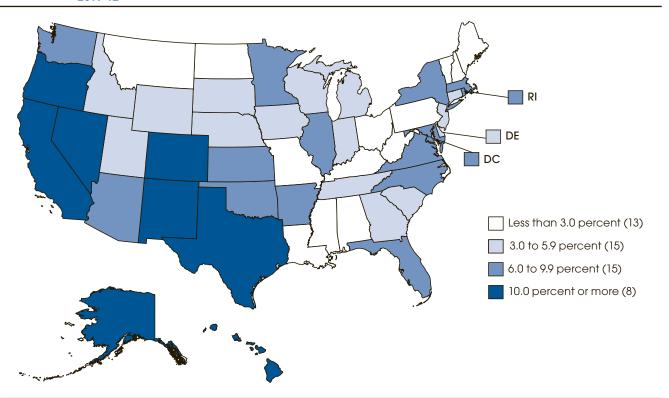
# **English Language Learners**

The percentage of public school students in the United States who were English language learners (ELL) was higher in school year 2011-12 (9.1 percent) than in 2002-03 (8.7 percent). Seven of the eight states with the highest percentages of ELL students in their public schools were located in the West.

Students who are English language learners (ELL) participate in appropriate programs of language assistance, such as English as a Second Language, High Intensity Language Training, and bilingual education. The percentage of public school students in the United States who were English language learners was higher in school year 2011-12 (9.1 percent, or an estimated 4.4

million students) than in 2002-03 (8.7 percent, or an estimated 4.1 million students). In contrast, during the latter part of this period, between 2009-10 and 2011-12, the overall percentage of ELL students remained about the same (9.1 percent or an estimated 4.4 million students).

Figure 1. Percentage of public school students who are English language learners (ELL), by state: School year 2011-12



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Local Education Agency Universe Survey," 2011-12. See Digest of Education Statistics 2013, table 204.20.

In 2011–12, seven of the eight states with the highest percentages of ELL students in their public schools were in the West. In eight states, Alaska, California, Colorado, Hawaii, Nevada, New Mexico, Oregon, and Texas, 10.0 percent or more of public school students were English language learners, with ELL students constituting 23.2 percent of public school enrollment in California. Fourteen states and the District of Columbia had percentages of ELL public school enrollment between 6.0 and 9.9 percent.

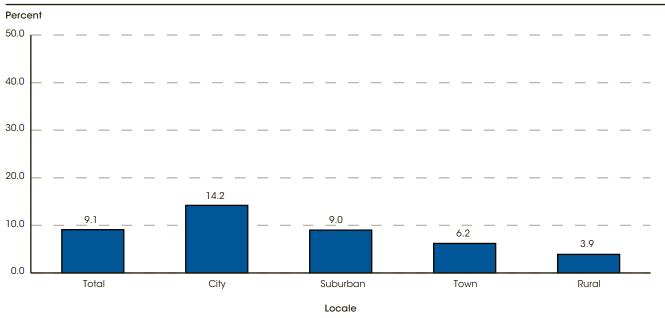
In addition to the District of Columbia, these states were Arizona, Arkansas, Florida, Illinois, Kansas, Maryland, Massachusetts, Minnesota, New York, Oklahoma, North Carolina, Rhode Island, Virginia, and Washington. The percentage of ELL students in public schools was between 3.0 and 5.9 percent in 15 states and was less than 3.0 percent in 13 states, with West Virginia having the lowest percentage (0.7 percent).

## **Chapter:** 2/Participation in Education **Section:** Elementary/Secondary Enrollment

The percentage of ELL students in public schools increased between 2002–03 and 2011–12 in all but 10 states, with the largest percentage-point increase occurring in Hawaii (6.6 percentage points) and the largest percentage-point decrease occurring in Arizona (8.4 percentage points). Although there was no percentage change nationally in the two most recent years,

percentages for many states did change. The percentage of ELL students in public schools decreased in 12 states and the District of Columbia, with the largest decrease occurring in Utah (1.8 percentage points). However, six states experienced an increase of more than 0.5 percentage points, with the largest increase occurring in Hawaii (2.9 percentage points).

Figure 2. Percentage of public school students who are English language learners (ELL), by locale: School year 2011–12



NOTE: Data are based on locales of school districts, rather than locales of schools.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2011–12; and "Local Education Agency Universe Survey," 2011–12. See *Digest of Education Statistics 2013*, table 214.40.

In 2011–12, ELL students in cities made up an average of 14.2 percent of total public school enrollment, ranging from 10.9 percent in small cities to 16.7 percent in large cities. In suburban areas, ELL students constituted an average of 9.0 percent of public school enrollment, ranging from 6.4 percent in midsize suburban areas to 9.4 percent in large suburban areas. Towns and rural areas are subdivided into fringe, distant, and remote areas according to their proximity to urban centers, with fringe

being the closest to an urban center and remote being the farthest from one. In towns, ELL students made up an average of 6.2 percent of public school enrollment, ranging from 5.7 percent in distant areas to 8.4 percent in fringe areas. In rural areas, ELL students made up an average of 3.9 percent of public student enrollment, ranging from 2.5 percent in distant areas to 4.7 percent in fringe areas.

Reference table: Digest of Education Statistics 2013, tables 204.20 and 214.40

**Glossary:** Achievement gap, English language learner (ELL), Public school or institution

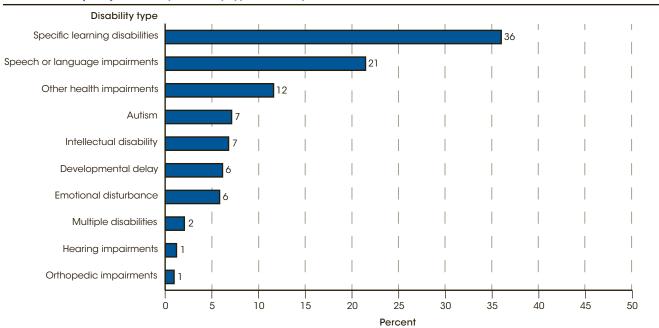
#### **Children and Youth With Disabilities**

The number of children and youth ages 3-21 receiving special education services was 6.4 million in 2011–12, or about 13 percent of all public school students. Some 36 percent of the students receiving special education services had specific learning disabilities.

Enacted in 1975, the Individuals with Disabilities Education Act (IDEA), formerly known as the Education for All Handicapped Children Act (EAHCA), mandates the provision of a free and appropriate public school education for eligible children and youth ages 3-21. Eligible children and youth are those identified by a team of professionals as having a disability that adversely affects academic performance and as being in need of special education and related services. Data collection activities to monitor compliance with IDEA began in 1976.

From school years 1990–91 through 2004–05, the number of children and youth ages 3-21 who received special education services increased, as did their percentage of total public school enrollment: 4.7 million children and youth ages 3-21, or about 11 percent of public school enrollment, received special education services in 1990–91, compared with 6.7 million, or about 14 percent, in 2004–05. The number and percentage of children and youth served under IDEA have declined each year from 2005-06 through 2011-12. By 2011-12, the number of children and youth receiving services had declined to 6.4 million, corresponding to 13 percent of total public school enrollment.

Percentage distribution of children ages 3-21 served under the Individuals with Disabilities Education Act Figure 1. (IDEA), Part B, by disability type: School year 2011-12



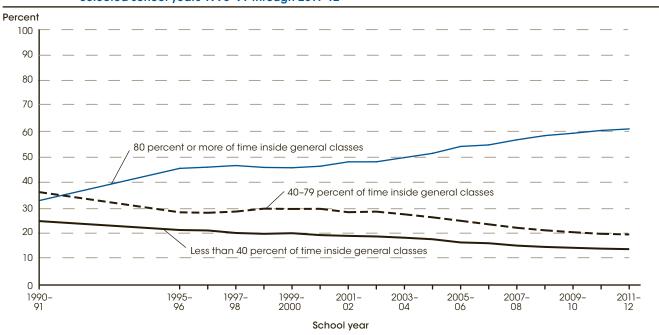
NOTE: Deaf-blindness, traumatic brain injury, and visual impairments are not shown because they each account for less than 1 percent of children served under IDEA. Due to categories not shown, detail does not sum to total. SOURCE: U.S. Department of Education, Office of Special Education Programs, Individuals with Disabilities Education Act (IDEA) database, retrieved March 21, 2013, from http://tadnet.public.tadnet.org/pages/712. See Digest of Education Statistics 2013, table 204.30.

#### **Chapter:** 2/Participation in Education **Section:** Elementary/Secondary Enrollment

A higher percentage of children and youth ages 3-21 received special education services under IDEA for specific learning disabilities than for any other type of disability in 2011–12. A specific learning disability is a disorder in one or more of the basic psychological processes involved in understanding or using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. In 2011–12, some 36 percent of all children and youth receiving special education services had specific learning disabilities, 21 percent had speech or language impairments, and 12 percent had other health impairments (includes having limited

strength, vitality, or alertness due to chronic or acute health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, or diabetes). Students with autism, intellectual disabilities, developmental delay, and emotional disturbances each accounted for between 6 and 7 percent of children and youth served under IDEA. Children and youth with multiple disabilities, hearing impairments, orthopedic impairments, visual impairments, traumatic brain injury, and deaf-blindness each accounted for 2 percent or less of those served under IDEA.

Figure 2. Percentage of students ages 6-21 served under the Individuals with Disabilities Education Act (IDEA), Part B, placed in a regular public school environment, by amount of time spent inside general classes: Selected school years 1990-91 through 2011-12

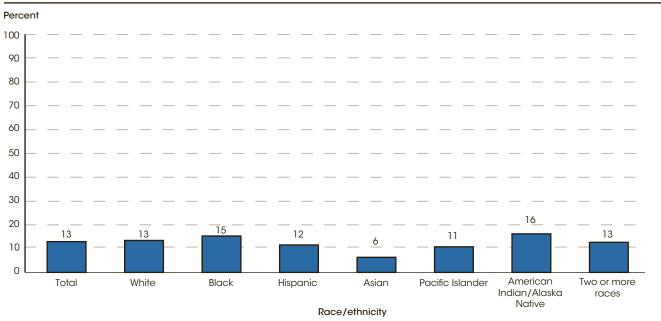


NOTE: Detail may not sum to totals because of rounding SOURCE: U.S. Department of Education, Office of Special Education Programs, Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act (IDEA), selected years, 1990-2009; and IDEA database, retrieved May 22, 2013, from http://tadnet.public.tadnet.org/pages/712. See Digest of Education Statistics 2013, table 204.60.

About 95 percent of school-age children and youth ages 6-21 who were served under IDEA in 2011-12 were enrolled in regular schools. Three percent of children and youth ages 6-21 who were served under IDEA were enrolled in separate schools (public or private) for students with disabilities; 1 percent were placed by their parents in regular private schools; and less than 1 percent each were in separate residential facilities (public and private), homebound or in hospitals, or in correctional facilities. Among all children and youth ages 6–21 who were served under IDEA, the percentage of children and youth who spent most (80 percent or more) of their school day in general classes in regular schools was higher in 2011-12 than in any other year. For example,

in 1990–91 some 33 percent of children and youth ages 6-21 spent most of their school day in general class, compared with 47 percent in 2000-01 and 61 percent in 2011–12. In 2011–12, the percentage of students served under IDEA who spent most of their school day in general classes was highest for students with speech or language impairments (87 percent). Sixty-six percent of students with specific learning disabilities and 64 percent of students with visual impairments spent most of their school day in general classes. In contrast, 17 percent of students with intellectual disabilities and 13 percent of students with multiple disabilities spent most of their school day in general classes.

Percentage of children 3-21 years old served under the Individuals with Disabilities Education Act (IDEA), Figure 3. Part B, by race/ethnicity: School year 2011-12



NOTE: Race categories exclude persons of Hispanic ethnicity. SOURCE: Individuals with Disabilities Education Act (IDEA) database, retrieved March 21, 2013, from <a href="http://tadnet.public.tadnet.org/pages/712">http://tadnet.public.tadnet.org/pages/712</a>. U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education," 2011-12. See Digest of Education Statistics 2013, table 204.50.

In school year 2011–12, the number of children and youth ages 3–21 who were served under IDEA as a percent of total enrollment in public schools differed by race/ ethnicity. The percentage of children and youth served under IDEA was highest for American Indians/Alaska Natives (16 percent), followed by Blacks (15 percent), Whites (13 percent), children and youth of two or more races (13 percent), Hispanics (12 percent), Pacific Islanders (11 percent), and Asians (6 percent). For each racial/ethnic group, the percentages of children and youth receiving services for specific learning disabilities and for speech or language impairments together accounted for over 50 percent of children and youth served under IDEA.

The percentage distribution of children and youth ages 3–21 who received various types of special education services in 2011–12 varied by race/ethnicity. For example,

Reference table: Digest of Education Statistics 2013, tables 204.30, 204.50, 204.60

the percentage of students with disabilities served under IDEA for specific learning disabilities was lower among Asian children (23 percent) than among children overall (36 percent). However, the percentage of students with disabilities who were served for autism was higher among Asian children (17 percent) than among children overall (7 percent). Additionally, students who received services for emotional disturbances accounted for 8 percent of Black children served under IDEA, compared with 6 percent of children overall. Among children and youth that received services, the percentages of American Indians/Alaska Natives (9 percent), Pacific Islanders (9 percent), and students of two or more races (10 percent) who received services for developmental delay under IDEA were higher than the percentage of children overall (6 percent).

Glossary: Disabilities, Individuals with Disabilities Education Act (IDEA), Regular school

This page intentionally left blank.

**Chapter:** 2/Participation in Education **Section:** Postsecondary Enrollment

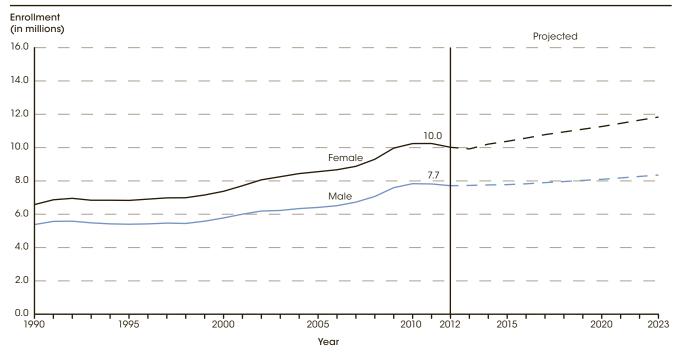
#### **Undergraduate Enrollment**

Total undergraduate enrollment in degree-granting postsecondary institutions was 17.7 million in fall 2012, an increase of 48 percent from 1990 when total undergraduate enrollment was 12.0 million students. By 2023, undergraduate enrollment is projected to increase to 20.2 million.

In fall 2012, total undergraduate enrollment in degreegranting postsecondary institutions was 17.7 million students, an increase of 48 percent from 1990 when enrollment was 12.0 million students. The rate of growth was 10 percent between 1990 and 2000 and 37 percent

between 2000 and 2010. While total enrollment increased overall between 1990 and 2012, enrollment in 2012 was nearly 2 percent lower than in 2010. Undergraduate enrollment is projected to increase from 17.7 million to 20.2 million students between 2012 and 2023.

Figure 1. Actual and projected undergraduate enrollment in degree-granting postsecondary institutions, by sex: Fall 1990-2023



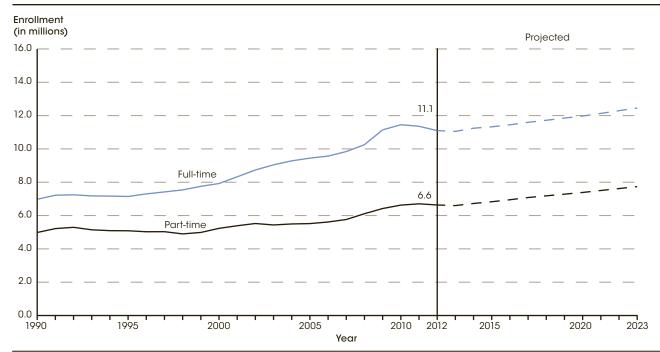
NOTE: Data include unclassified undergraduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Projections are based on data through 2012. Some data have been revised from previously published figures. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment Survey" (IPEDS-EF:90-99); IPEDS Spring 2001 through Spring 2013, Enrollment component. See *Digest of Education Statistics 2013*, tables 105.20 and 303.70.

In fall 2012, there were 10.0 million female undergraduate students (56 percent of total enrollment) and 7.7 million male undergraduate students (44 percent of total enrollment). Since 1990, female enrollment increased by 52 percent (from 6.6 million to 10.0 million students), while male enrollment increased by 43 percent (from 5.4 million to 7.7 million students). Between 1990 and 2000. female enrollment increased by 12 percent and male enrollment increased by 7 percent. Most of the increase

in enrollment occurred between 2000 and 2010, when female enrollment increased by 39 percent and male enrollment increased by 36 percent. However, both female and male enrollments were 2 percent lower in 2012 than in 2010. Between 2012 and 2023, female enrollment is projected to increase by 18 percent (from 10.0 million to 11.8 million students), while male enrollment is projected to increase by 8 percent (from 7.7 million to 8.4 million students).

**Chapter:** 2/Participation in Education **Section:** Postsecondary Enrollment

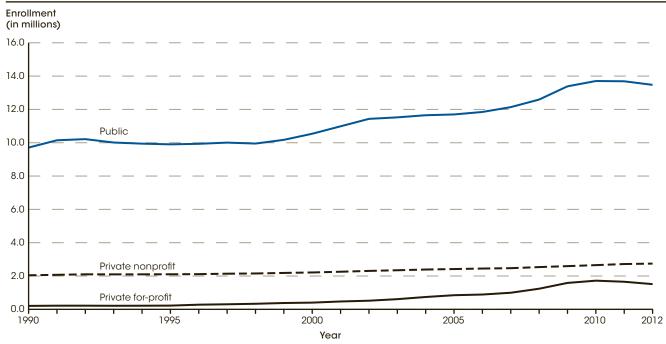
Actual and projected undergraduate enrollment in degree-granting postsecondary institutions, by Figure 2. attendance status: Fall 1990-2023



NOTE: Data include unclassified undergraduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Projections are based on data through 2012. Some data have been revised from previously published figures. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Survey" (IPEDS-EF:90-99); IPEDS Spring 2001 through Spring 2013, Enrollment component. See Digest of Education Statistics 2013, tables 105.20 and 303.70.

In fall 2012, there were 11.1 million full-time undergraduate students and 6.6 million part-time undergraduate students in degree-granting postsecondary institutions. Between 1990 and 2000, full-time undergraduate enrollment increased by 14 percent, while part-time enrollment increased by 5 percent. Between 2000 and 2010, full-time undergraduate enrollment increased by 45 percent, whereas part-time undergraduate enrollment increased by 27 percent. Full-time undergraduate enrollment was 3 percent lower in 2012 than in 2010, and part-time enrollment was less than 1 percent higher in 2012 than in 2010. Between 2012 and 2023, part-time undergraduate enrollment is projected to increase by 17 percent (from 6.6 million to 7.7 million students), a faster increase than the 12-percent increase (from 11.1 million to 12.5 million students) projected for full-time undergraduate enrollment.

Undergraduate enrollment in degree-granting postsecondary institutions, by control of institution: Fall Figure 3. 1990-2012



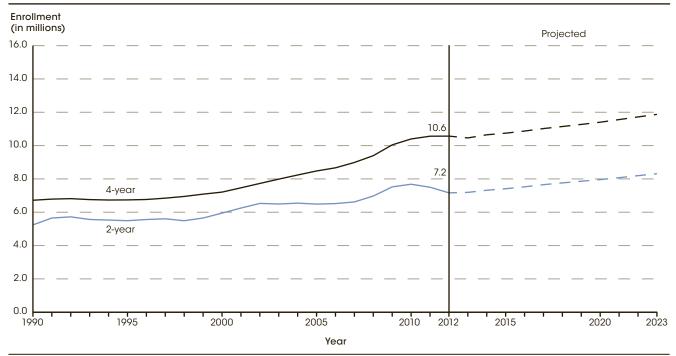
NOTE: Data include unclassified undergraduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Some data have been revised from previously published figures SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment Survey" (IPEDS-EF:90-99); and IPEDS Spring 2001 through Spring 2013, Enrollment component. See *Digest of Education Statistics 2013*, table 303.70.

Between fall 1990 and fall 2012, undergraduate enrollment at private nonprofit institutions increased by 34 percent (from 2.0 million to 2.7 million students) and undergraduate enrollment at public institutions increased by 39 percent (from 9.7 million to 13.5 million students). Since 1990, undergraduate enrollment at private for-profit institutions grew at a faster rate than did enrollments at private nonprofit and public institutions, but there was a relatively small number of undergraduate students enrolled at private for-profit institutions in 1990. Between 1990 and 2012, undergraduate enrollment at private for-profit institutions increased by 634 percent, from 0.2 million students in 1990 to 1.5 million in 2012. Most of this growth occurred between 2000 and 2010 when undergraduate enrollment at private for-profit institutions quadrupled (from 0.4 million to 1.7 million students);

in comparison, enrollment increased by 20 percent at private nonprofit institutions and by 30 percent at public institutions during this period. As a result of these different rates of enrollment growth, the proportion of all undergraduate students enrolled at private for-profit institutions increased from 3 percent in 2000 to 10 percent in 2010, while the proportion of all undergraduate students enrolled at private nonprofit institutions and public institutions decreased from 17 to 15 percent and from 80 to 76 percent, respectively. More recently, the pattern of undergraduate enrollment at private for-profit institutions changed. Enrollment at private for-profit institutions was 12 percent lower in 2012 than in 2010 and enrollment at public institutions was 2 percent lower, while enrollment at private nonprofit institutions was 3 percent higher.

**Chapter:** 2/Participation in Education **Section:** Postsecondary Enrollment

Figure 4. Actual and projected undergraduate enrollment in degree-granting postsecondary institutions, by level of institution: Fall 1990–2023



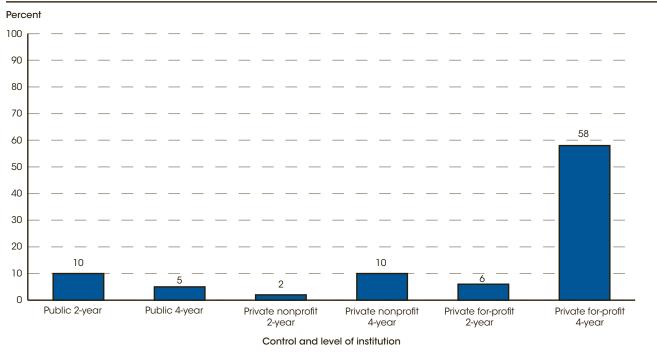
NOTE: Data include unclassified undergraduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Projections are based on data through 2012. Some data have been revised from previously published figures. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS). 'Fall Enrollment Survey' (IPEDS-EF:90-99); IPEDS Spring 2001 through Spring 2013, Enrollment component. See Digest of Education Statistics 2013, tables 105.20 and 303.70.

In fall 2012, there were 7.2 million undergraduate students, or 40 percent, enrolled in 2-year institutions and 10.6 million students, or 60 percent, enrolled in 4-year institutions. The growth rate of undergraduate enrollment at 2-year institutions (14 percent) outpaced the rate at 4-year institutions (7 percent) between 1990 and 2000. However, the pattern shifted between 2000 and 2010, when 4-year institutions had a larger percentage increase in undergraduate enrollment (44 percent) than did 2-year institutions (29 percent). Between 2000 and 2010, private for-profit 4-year institutions had the highest percentage increase in undergraduate enrollment among all types of institutions (513 percent, from 0.2 million to 1.3 million students). Undergraduate enrollment increased by 34 percent at public 4-year institutions and by 22 percent at private nonprofit 4-year institutions. Private for-profit 2-year institutions had the second largest increase in undergraduate enrollment (124 percent, from 0.2 million to 0.4 million students) among all types of institutions after private for-profit 4-year institutions. Undergraduate

enrollment increased by 27 percent at public 2-year institutions. In contrast, undergraduate enrollment at private nonprofit 2-year institutions decreased by 44 percent during the same period.

Enrollment at 2-year institutions in 2012 was 7 percent lower than in 2010, while enrollment at 4-year institutions was 2 percent higher. In 2012, enrollment was 21 percent lower at private for-profit 2-year institutions and 6 percent lower at public 2-year institutions than in 2010; however, enrollment at private nonprofit 2-year institutions was 15 percent higher in 2012 than in 2010. At 4-year institutions, enrollment was 3 percent higher in 2012 than in 2010 at both public and private nonprofit institutions, while enrollment at private for-profit institutions was 9 percent lower. Between 2012 and 2023, undergraduate enrollment at 4-year institutions is projected to increase by 12 percent to 11.9 million students, while enrollment at 2-year institutions is projected to increase by 16 percent to 8.3 million students.

Figure 5. Percentage of undergraduate students at degree-granting postsecondary institutions who participated exclusively in distance education courses, by control and level of institution: Fall 2012



SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Enrollment component. See Digest of Education Statistics 2013, table 311.15

Distance education courses and programs provide flexible learning opportunities to undergraduate students. In fall 2012, about 4.6 million undergraduate students participated in distance education, with 2.0 million students (11 percent of total undergraduate enrollment) exclusively taking distance education courses. Of the 2.0 million undergraduate students that exclusively took distance education courses, 1.1 million students (6 percent of all undergraduate students) were enrolled in programs located in the same state in which they resided, and 0.8 million (5 percent of all undergraduate students) were enrolled in a different state.

There were differences by institutional control and level in the percentage of undergraduate students participating exclusively in distance education programs. In 2012, a higher percentage of students at private for-profit institutions (46 percent) exclusively took distance education courses than did students at public institutions (8 percent) and private nonprofit institutions (10 percent). Additionally, a higher percentage of students at private for-profit 4-year institutions exclusively took distance education courses (58 percent) than did students at any other control and level of institution (percentages at these institutions ranged from 2 percent at private nonprofit 2-year institutions to 10 percent at both public 2-year and private nonprofit 4-year institutions).

Reference tables: Digest of Education Statistics 2013, tables 105.20, 303.70, and 311.15

Glossary: For-profit institution, Full-time enrollment, Higher education institutions, Nonprofit institution, Part-time enrollment, Private institution, Public school or institution, Undergraduate students

<sup>&</sup>lt;sup>1</sup> Distance education is education that uses one or more technologies to deliver instruction to students who are separated from the instructor as well as to support regular and substantive interaction between the students and the instructor synchronously or asynchronously. Technologies used for instruction may include the following: Internet; one-way and two-way transmissions through open broadcasts, closed circuit, cable, microwave, broadband lines, fiber optics, satellite or wireless communication devices; audio conferencing; and videocassettes, DVDs, and CD-ROMs, if the videocassettes, DVDs, and CD-ROMs are used in a course in conjunction with the technologies listed above.

This page intentionally left blank.

Chapter: 2/Participation in Education **Section:** Postsecondary Enrollment

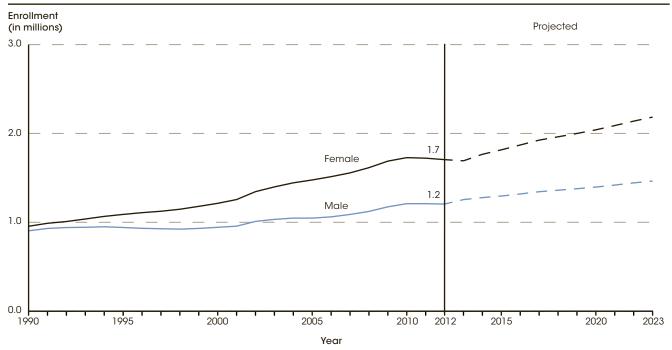
#### **Postbaccalaureate Enrollment**

Total enrollment in postbaccalaureate degree programs was 2.9 million in 2012, an increase of 57 percent since 1990. Postbaccalaureate enrollment is projected to increase to 3.6 million by 2023.

In 2012, some 2.9 million students were enrolled in postbaccalaureate degree programs. Postbaccalaureate degree programs include master's and doctoral programs as well as programs such as law, medicine, and dentistry. Postbaccalaureate enrollment increased at a faster rate

between 2000 and 2010 (36 percent) than between 1990 and 2000 (16 percent). In 2012, total enrollment was 1 percent lower than in 2010. Between 2012 and 2023, postbaccalaureate enrollment is projected to increase to 3.6 million students.

Figure 1. Actual and projected postbaccalaureate enrollment in degree-granting postsecondary institutions, by sex: Fall 1990-2023



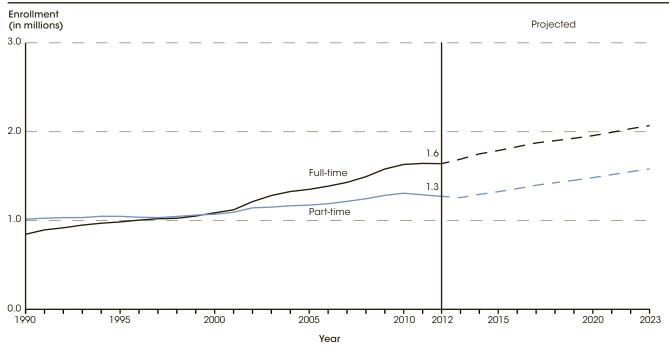
NOTE: Data include unclassified graduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Projections are based on data through 2012. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment

Survey" (IPEDS-EF:90-99); IPEDS Spring 2001 through Spring 2013, Enrollment component. See Digest of Education Statistics 2013, tables 105.20 and 303.80.

In 2012, some 1.7 million postbaccalaureate students were female (59 percent of enrollment) and 1.2 million were male (41 percent). From 1990 to 2000, female enrollment increased by 27 percent, while male enrollment was 4 percent higher in 2000 than in 1990. In more recent years, female enrollment continued to increase at a faster rate than male enrollment. Between 2000 and 2010, female enrollment increased by 42 percent, while male

enrollment increased by 28 percent. Postbaccalaureate enrollment was 1 percent lower in 2012 than in 2010 for female students and less than 1 percent lower in 2012 than in 2010 for male students. Female enrollment is projected to increase by 28 percent between 2012 and 2023, from 1.7 to 2.2 million students, while male enrollment is projected to increase by 21 percent, from 1.2 to 1.5 million students.

Actual and projected postbaccalaureate enrollment in degree-granting postsecondary institutions, by Figure 2. attendance status: Fall 1990-2023



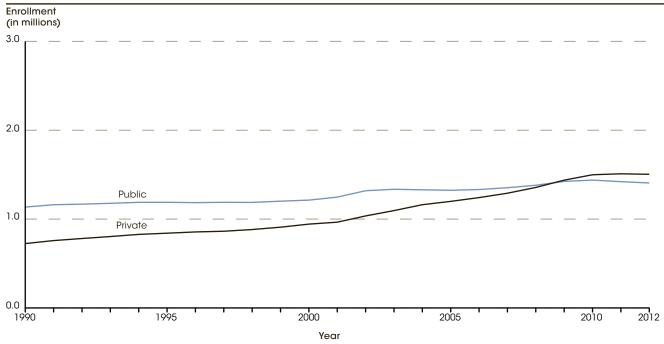
NOTE: Data include unclassified graduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees. Projections are based on data through 2012. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment Survey" (IPEDS-EF:90-99); IPEDS Spring 2001 through Spring 2013, Enrollment componen. See Digest of Education Statistics 2013, tables 105.20 and 303.80.

In 2012, there were 1.6 million full-time postbaccalaureate students and 1.3 million part-time students. Since 1990, full-time enrollment has consistently increased at a higher rate than part-time enrollment. Between 1990 and 2000, full-time enrollment increased by 29 percent, while part-time enrollment increased by 5 percent. Between 2000 and 2010, full-time enrollment

increased by 50 percent, while part-time enrollment increased by 22 percent. Most recently, full-time enrollment was less than 1 percent higher in 2012 than in 2010, but part-time enrollment in 2012 was 3 percent lower than in 2010. Between 2012 and 2023, full-time and part-time enrollments are projected to increase at about the same rate (26 and 24 percent, respectively).

**Chapter:** 2/Participation in Education **Section:** Postsecondary Enrollment

Figure 3. Postbaccalaureate enrollment in degree-granting postsecondary institutions, by control of institution: Fall 1990-2012



NOTE: Data include unclassified graduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees

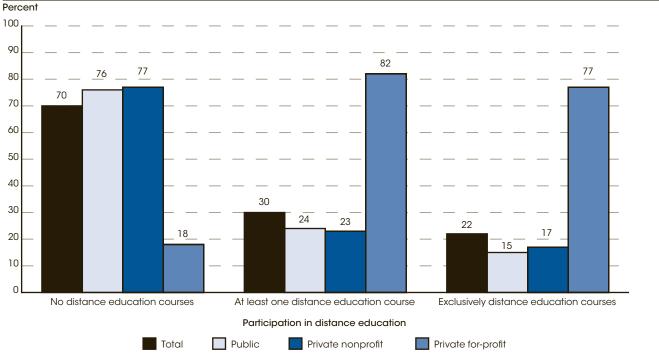
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment Survey" (IPEDS-EF:90-99); and IPEDS Spring 2001 through Spring 2013, Enrollment component. See Digest of Education Statistics 2013, table 303.80.

Between 1990 and 2012, postbaccalaureate degree enrollment increased by 108 percent at private institutions, while it increased by 24 percent at public institutions. During this period, enrollment at private institutions increased from 0.7 to 1.5 million students, and enrollment at public institutions increased from 1.1 to 1.4 million. Since 1990, enrollment has grown at a faster rate at private institutions than at public institutions. Between 1990 and 2000, enrollment at private institutions increased by 30 percent, while enrollment at public institutions increased by 7 percent. Between 2000 and 2010, enrollment at

private institutions increased by 59 percent, while enrollment at public institutions increased by 19 percent. In 2009, for the first time, a majority of postbaccalaureate students were enrolled at private institutions. Enrollment at private institutions was less than 1 percent higher in 2012 than in 2010. During this period, enrollment at public institutions decreased by 2 percent. In 2012, some 52 percent of students were enrolled at private institutions (including 42 percent at private nonprofit institutions and 10 percent at private for-profit institutions), and 48 percent were enrolled at public institutions.

**Chapter:** 2/Participation in Education **Section:** Postsecondary Enrollment

Figure 4. Percentage of postbaccalaureate students enrolled in degree-granting postsecondary institutions who took distance education courses, by control of institution: Fall 2012



NOTE: Data include unclassified graduate students. Data through 1995 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The degree-granting classification is very similar to the earlier higher education classification, but it includes more 2-year colleges and excludes a few higher education institutions that did not grant degrees.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Enrollment component. See Digest of Education Statistics 2013, table 311.15.

Distance education¹ courses and programs provide flexible learning opportunities to postbaccalaureate students. In 2012, about 867,000 postbaccalaureate students participated in distance education, with 639,000 students (22 percent of total postbaccalaureate enrollment) exclusively taking distance education courses. Of the students who exclusively took distance education courses, 253,000 (or 9 percent of total postbaccalaureate enrollment) were enrolled in programs located in the same state in which they resided, and 353,000 (or 12 percent of total postbaccalaureate enrollment) were enrolled in a different state.

There were differences by institutional control in the percentage of students participating exclusively in distance education programs. In 2012, the percentage of students who exclusively took distance education courses was higher for those enrolled at private for-profit institutions (77 percent) than for those at either public (15 percent) or private nonprofit institutions (17 percent). The percentages of students who took at least one distance education course followed a similar pattern: the percentage of students was higher at private for-profit institutions (82 percent) than at public (24 percent) and private nonprofit institutions (23 percent). Percentages of students who did not take any distance education courses were higher for those enrolled at private nonprofit institutions (77 percent) and public institutions (76 percent) than for those at private for-profit institutions (18 percent).

**Reference tables:** Digest of Education Statistics 2013, tables 105.20, 303.60, 303.80, and 311.15

**Glossary:** For-profit institution, Full-time enrollment, Nonprofit institution, Part-time enrollment, Postbaccalaureate enrollment, Private institution, Public school or institution

Distance education uses one or more technologies to deliver instruction to students who are separated from the instructor as well as to support regular and substantive interaction between the students and the instructor synchronously or asynchronously. Technologies used for instruction may include the following: Internet; one-way and two-way transmissions through open broadcasts, closed circuit, cable, microwave, broadband lines, fiber optics, satellite or wireless communication devices; audio conferencing; and videocassettes, DVDs, and CD-ROMs are used in a course in conjunction with the technologies listed above.

The indicators in this section of *The Condition of Education* measure aspects of elementary and secondary education in the United States. The indicators examine school characteristics and climate; principals, teachers and staff; elementary and secondary financial resources; student assessments; and other measures of the progress students make as they move through the education system, such as graduation rates.

In this section, particular attention is given to how various subgroups in the population proceed through school and attain different levels of education, as well as the factors that are associated with their progress along the way. The indicators on student achievement illustrate how students are performing on assessments in reading, mathematics, science, and other academic subject areas. Others examine aspects of the context of learning in elementary and secondary schools.

Indicators on elementary and secondary education and outcomes from previous editions of *The Condition of Education* not included in this volume are available at <a href="http://nces.ed.gov/programs/coe">http://nces.ed.gov/programs/coe</a>.



# **Chapter 3**

### **Elementary and Secondary Education**

| School Char   | acteristics and Climate  |     |
|---------------|--|-----|
| Indicator 16. | Characteristics of Traditional Public and Public Charter Schools | 70  |
| Indicator 17. | Concentration of Public School Students Eligible for Free or     |     |
|               | Reduced-Price Lunch  |     |
| Indicator 18. | Rates of School Crime  | 76  |
| Indicator 19. | Teachers and Pupil/Teacher Ratios                                | 82  |
| Finance       |  |     |
| Indicator 20. | Public School Revenue Sources                                    | 84  |
| Indicator 21. | Public School Expenditures                                       | 88  |
| Indicator 22. | Education Expenditures by Country                                | 92  |
| Assessments   | 5  |     |
| Indicator 23. | Reading Performance  | 96  |
|               | Mathematics Performance  |     |
|               | Reading and Mathematics Score Trends                             |     |
| Indicator 26. | International Assessments  | 116 |
| Student Effor | rt, Persistence, and Progress                                    |     |
| Indicator 27. | High School Coursetaking   | 134 |
| Indicator 28. | Public High School Graduation Rates                              | 138 |
| Indicator 29. | Status Dropout Rates   | 142 |
| Transition to | College  |     |
| Indicator 30. | Immediate Transition to College                                  | 148 |
|               |  |     |

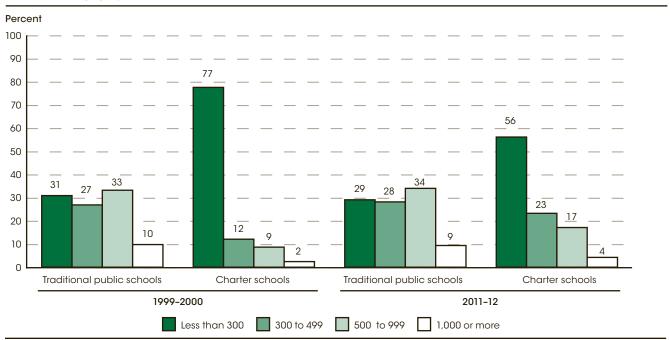
#### **Characteristics of Traditional Public and Public Charter Schools**

In school year 2011-12, about one third of traditional public schools (34 percent) were in rural areas, compared with 16 percent of charter schools. In contrast, 24 percent of traditional public schools and the majority of charter schools (55 percent) were in cities.

In school year 2011–12, there were 98,328 public schools in the United States, including 92,632 traditional public schools and 5,696 charter schools. These numbers are higher than those in school year 1999-2000, when there were a total of 92,012 public schools, with 90,488 traditional public schools and 1,524 charter schools. Over two-thirds of traditional public schools (69 percent)

were elementary schools in 2011-12, versus 55 percent of charter schools. By contrast, 20 percent of charter schools in that year were combined schools, meaning that they began with grade 6 or below and extended to grade 9 or above, compared with 6 percent of traditional public schools.

Figure 1. Percentage distribution of public schools, by school status and enrollment size: School years 1999-2000 and 2011-12



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 1999–2000 and 2011–12. See *Digest of Education Statistics 2013*, table 216.30.

Charter schools tend to be smaller, in terms of enrollment, than traditional public schools. In 2011–12, some 56 percent of charter schools were small (enrollment of fewer than 300 students), compared with 29 percent of traditional public schools. However, the percentage of small charter schools has decreased over time, from

77 percent in 1999–2000 to 56 percent in 2011–12. Over the same period, the percentage of charter schools that were large (1,000 or more students) increased from 2 to 4 percent. In 2011–12, about 9 percent of traditional public schools were large.

Percent 100 90 80 70 61 60 50 37 40 27 30 20 -15 11 11 9 10 0 Traditional public schools Charter schools Traditional public schools Charter schools 1999-2000 2011-12 More than 50 percent Hispanic More than 50 percent White More than 50 percent Black

Figure 2. Percentage of public schools, by school status and racial/ethnic concentration: School years 1999–2000 and 2011–12

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 1999-2000 and 2011-12. See *Digest of Education Statistics 2013*, table 216.30.

In 2011–12, a majority (61 percent) of traditional public schools had enrollment in which more than half of the students were White, while 9 percent had enrollment in which more than half of the students were Black and 15 percent had enrollment in which more than half of the students were Hispanic. In comparison, 37 percent of charter schools had more than 50 percent White enrollment, 25 percent had more than 50 percent Black enrollment, and 22 percent had more than 50 percent Hispanic enrollment. For both traditional public and charter schools, the percentages of schools that had

more than 50 percent White enrollment or more than 50 percent Black enrollment were lower in 2011–12 than in 1999–2000, while the percentages of schools that had more than 50 percent Hispanic enrollment were higher in 2011–12 than in 1999–2000. These shifts reflect, in part, changes in student demographics overall. Between 2000 and 2012, the percentage of children ages 5 to 17 who were White decreased from 62 to 54 percent, the percentage who were Black decreased from 15 to 14 percent, and the percentage who were Hispanic increased from 16 to 23 percent.

Percent 100 90 80 70 60 50 40 26 30 21 20 20 20 20 19 18 20 10 10 0 Total, all public schools Traditional public schools Charter schools **School status** 0 to 25.0 25.1 to 50.0 50.1 to 75.0 More than 75.0 Missing/school does not participate percent eligible percent eligible percent eligible percent eligible

Percentage distribution of public schools, by school status and percentage of students eligible for free or Figure 3. reduced-price lunch: School year 2011-12

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2011–12. See *Digest of Education Statistics 2013*, table 216.30.

High-poverty schools, in which more than 75 percent of the students qualify for free or reduced-price lunch (FRPL) under the National School Lunch Program (NSLP), accounted for 21 percent of all public schools in 2011-12, compared with 12 percent in 1999-2000. In 2011–12, some 20 percent of traditional public schools were high poverty, compared with 34 percent of charter schools.

**Chapter:** 3/Elementary and Secondary Education **Section:** School Characteristics and Climate

Percent 100 90 80 70 60 50 40 31 30 23 21 20 14 10 10 City Suburban Midwest South West Town Rural Northeast Locale Region Charter schools Traditional public schools

Figure 4. Percentage distribution of public schools, by school locale, region, and status: School year 2011–12

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2011–12. See *Digest of Education Statistics 2013*, table 216.30.

In 2011–12, about one third of traditional public schools (34 percent) were in rural areas, versus 16 percent of charter schools. In contrast, 24 percent of traditional schools and the majority of charter schools (55 percent) were in cities.

Regionally, the highest percentage of traditional public schools was in the South (35 percent) in 2011–12,

followed by the Midwest (26 percent), the West (23 percent), and the Northeast (16 percent). Charter schools followed a different pattern. In 2011–12, some 37 percent of charter schools were in the West, 31 percent were in the South, 22 percent were in the Midwest, and 10 percent were in the Northeast.

**Reference table:** *Digest of Education Statistics 2013*, tables 101.20 and 216.30

**Glossary:** Charter school, Combined school, Elementary school, Free or reduced-price lunch, National School Lunch Program, Private school, Secondary school, Traditional public school

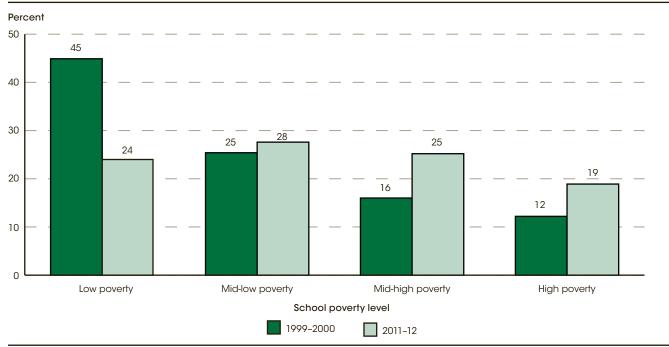
## Concentration of Public School Students Eligible for Free or Reduced-Price Lunch

In school year 2011–12, some 19 percent of public school students attended a high-poverty school, compared with 12 percent in 1999–2000. In 2011–12, some 28 percent of public school students attended a low-poverty school, compared with 45 percent in 1999–2000.

The percentage of students eligible for free or reduced-price lunch (FRPL) under the National School Lunch Program provides a proxy measure for the concentration of low-income students within a school. Children from families with incomes at or below 130 percent of the poverty level are eligible for free meals. Those from families with incomes that are above 130 and up to 185 percent of the poverty level are eligible for reduced-price

meals. In this indicator, public schools (including both traditional and charter) are divided into categories by FRPL eligibility. A low-poverty school is defined as a public school where 25 percent or less of the students are eligible for FRPL, and a high-poverty school is defined as a school where more than 75 percent of the students are eligible.

Figure 1. Percentage distribution of public school students, by school poverty level: School years 1999–2000 and 2011–12



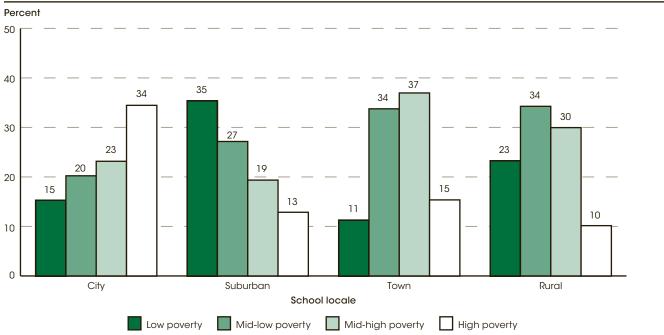
NOTE: This figure does not include schools for which information on free or reduced-price lunch (FRPL) is missing or schools that did not participate in the National Student Lunch Program (NSLP). The National School Lunch Program is a federally assisted meal program. To be eligible for free lunch under the program, a student must be from a household with an income at or below 130 percent of the poverty threshold; to be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. High-poverty schools are defined as public schools where more than 75.0 percent of the students are eligible for FRPL, and mid-high poverty schools are those schools where 50.1 to 75.0 percent of the students are eligible for FRPL. Low-poverty schools are defined as public schools where 25.0 percent or less of the students are eligible for FRPL, and mid-low poverty schools are those schools where 25.1 to 50.0 percent of the students are eligible for FRPL. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 1999–2000 and 2011–12. See *Digest of Education Statistics 2013*, table 216.30.

Among public school students, the percentage of those attending high-poverty schools was greater in 2011–12 than it was over a decade ago: 19 percent of public schools students attended a high-poverty school in 2011–12, compared with 12 percent in 1999–2000. The increase in the percentage of children who are eligible to participate in the National School Lunch Program may have been influenced by a number of factors, including

more systematic identification of eligible children as well as an increase in the actual rate of child poverty. In 2011, some 21 percent of children under the age of 18 were living in poverty, compared with 16 percent in 2000. In addition, a smaller percentage of public school students attended a low-poverty school in 2011–12 (24 percent) than in 1999–2000 (45 percent).

For more information, see the Reader's Guide and the Guide to Sources.

Figure 2. Percentage distribution of public school students, by school locale and school poverty level: School year 2011–12



NOTE: This figure does not include schools for which information on free or reduced-price lunch (FRPL) is missing or schools that did not participate in the National Student Lunch Program (NSLP). The National School Lunch Program is a federally assisted meal program. To be eligible for free lunch under the program, a student must be from a household with an income at or below 130 percent of the poverty threshold; to be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. High-poverty schools are defined as public schools where more than 75.0 percent of the students are eligible for FRPL, and mid-high poverty schools are those schools where 50.1 to 75.0 percent of the students are eligible for FRPL. Low-poverty schools are those schools where 25.1 to 50.0 percent of the students are eligible for FRPL. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2011–12. See Digest of Education Statistics 2013, table 216.60.

The distribution of schools across poverty concentration varied by school locale (i.e., city, suburb, town, or rural). In school year 2011–12, over one-third (34 percent) of students attending city schools were in a high-poverty school, compared with 10 percent of students attending rural schools, 13 percent of students attending suburban schools, and 15 percent of students attending town schools. On the other hand, the percentage of students

attending suburban schools who were in a low-poverty school (35 percent) was more than three times as large as the percentage of students attending town schools who were in a low-poverty school (11 percent). The percentage of students attending suburban schools who were in a low-poverty school was also higher than the percentages of students attending city and rural schools who were in a low-poverty school (15 and 23 percent, respectively).

**Reference tables:** *Digest of Education Statistics 2013*, tables 102.50, 216.30, and 216.60

**Glossary:** Free or reduced-price lunch, National School Lunch Program, Public school or institution

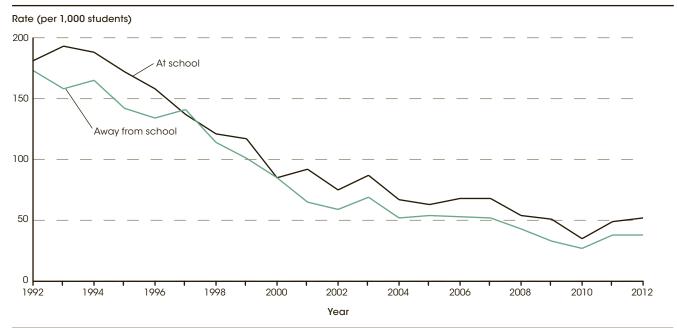
#### **Rates of School Crime**

Through nearly two decades of steady decline, the nonfatal victimization rate for 12- to 18-year-old students at school fell from 181 per 1,000 students in 1992 to 35 per 1,000 in 2010; however, the rate was higher in 2012 (52 per 1,000). The victimization rate away from school for these students followed a similar pattern.

Between 1992 and 2012, the total nonfatal victimization rate for students ages 12-18 declined both at school<sup>1</sup> and away from school; victimization rates for all specific types of crimes declined during this period as well.

Included in nonfatal victimizations are theft and all violent crime; included in violent crime are serious violent crime (rape, sexual assault, robbery, and aggravated assault) and simple assault.

Figure 1. Rate of total nonfatal victimizations against students ages 12–18 per 1,000 students, by location: 1992-2012



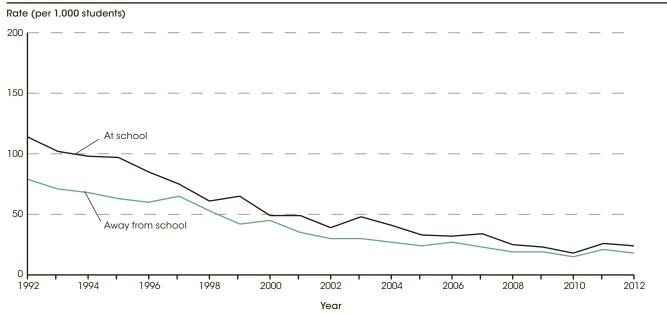
NOTE: Due to methodological changes, use caution when comparing 2006 estimates to other years. "Total victimization" includes theft and violent crimes. "At school" includes inside the school building, on school property, or on the way to or from school. SOURCE: U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey (NCVS), 1992-2012. See Digest of Education Statistics 2013, table 228.20

In 2012, students ages 12–18 reported more total nonfatal victimizations at school than away from school. Students ages 12-18 experienced 1,365,000 nonfatal victimizations (theft and violent crime) at school, compared with 991,000 nonfatal victimizations away from school. These data represent total victimization rates of 52 crimes per 1,000 students at school and 38 per 1,000 students away from school. From 1992 to 2012, the rate of nonfatal crime against students at school declined from 181 to 52 crimes per 1,000 students, or from nearly 1 in 5 students

in 1992 to about 1 in 20 students in 2012. Away from school, the rate of nonfatal crime against students also declined, from 173 to 38 crimes per 1,000 students. Between the two most recent survey years, 2011 and 2012, the total nonfatal victimization rate for students ages 12-18 did not change measurably at or away from school; however, the total victimization rate at school was higher in 2012 than in 2010 (52 vs. 35 per 1,000 students) and away from school (38 vs. 27 per 1,000 students).

<sup>&</sup>lt;sup>1</sup> At school includes inside the school building, on school property, or on the way to or from school.

Figure 2. Rate of thefts against students ages 12-18 per 1,000 students, by location: 1992-2012

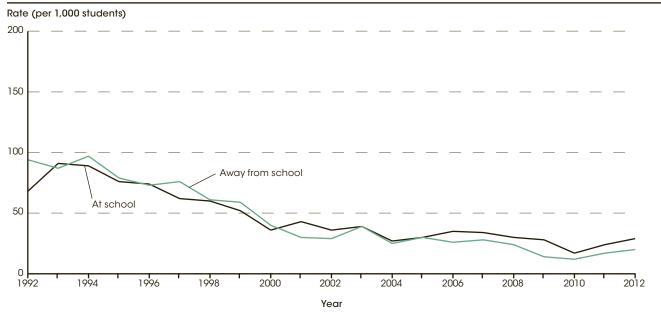


NOTE: Due to methodological changes, use caution when comparing 2006 estimates to other years. "Theff" includes purse-snatching, pickpocketing, and all attempted and completed thefts, with the exception of motor vehicle thefts. Theft does not include robbery, which involves the threat or use of force and is classified as a violent crime. "At school" includes inside the school building, on school property, or on the way to or from school. SOURCE: U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey (NCVS), 1992–2012. See *Digest of Education Statistics* 2013, table 228.20.

Theft declined both at and away from school between 1992 and 2012. During this period, theft rates declined from 114 to 24 thefts per 1,000 students at school and from 79 to 18 thefts per 1,000 students away from school. The difference between theft rates at school and away from school narrowed from 35 more thefts per 1,000 students at school than away from school in 1992 to 6 more thefts per 1,000 students at school than away from

school in 2012. In the most recent period between 2011 and 2012, the rate of theft both at and away from school showed no measurable change. However, the theft rate was higher in 2012 than in 2010 at school (24 vs. 18 thefts per 1,000 students). Away from school, there was no measurable difference between the theft rate in 2012 and the rate in 2010.

Rate of all violent victimizations against students ages 12-18 per 1,000 students, by location: 1992-2012 Figure 3.

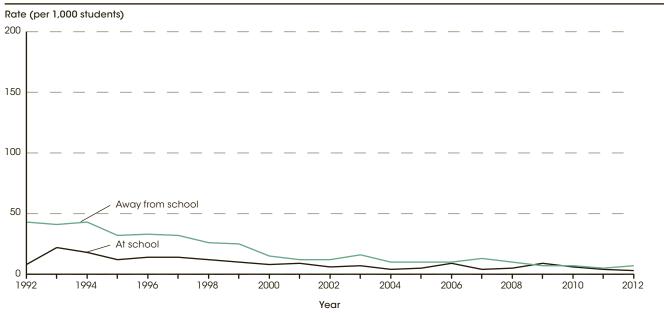


NOTE: Due to methodological changes, use caution when comparing 2006 estimates to other years. "All violent victimization" includes serious violent crimes and simple assault. "At school" includes inside the school building, on school property, or on the way to or from school SOURCE: U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey (NCVS), 1992-2012. See Digest of Education Statistics 2013, table 228.20.

Between 1992 and 2012, violent victimization rates decreased both at and away from school. During this period, violent crime declined from 68 to 29 violent victimizations per 1,000 students at school and from 94 to 20 violent victimizations per 1,000 students away from school. In 1992, more violent victimizations occurred away from school (94 per 1,000 students) than at school (68 per 1,000 students); by contrast, in 2012 more violent

victimizations occurred at school (29 per 1,000 students) than away from school (20 per 1,000 students). Between 2011 and 2012, the rate of violent victimization against students did not change measurably at or away from school; however, the violent victimization rate was higher in 2012 than in 2010 both at school (29 vs. 17 per 1,000 students) and away from school (20 vs. 12 per 1,000 students).

Figure 4. Rate of serious violent victimizations against students ages 12–18 per 1,000 students, by location: 1992–2012

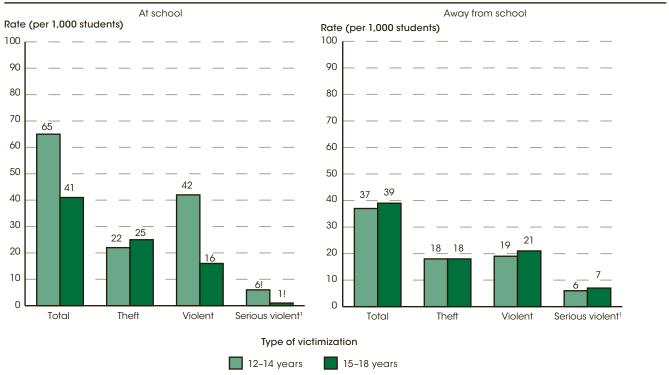


NOTE: Due to methodological changes, use caution when comparing 2006 estimates to other years. "Serious violent victimization" includes rape, sexual assault, robbery, and aggravated assault. "At school" includes inside the school building, on school property, or on the way to or from school. SOURCE: U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey (NCVS), 1992-2012. See *Digest of Education Statistics* 2013, table 228.20.

Serious violent victimization rates decreased between 1992 and 2012 both at and away from school. During this period, serious violent crime rates at school showed an increase, from 8 per 1,000 students at school in 1992 to a peak of 22 per 1,000 students in 1993, then decreased to 3 serious violent crimes at school per 1,000 students in 2012. Serious violent crime rates away from school decreased from 43 to 7 crimes per 1,000 students between 1992 and 2012. The difference between serious violent

crime rates at school and away from school also narrowed over the past two decades from 35 more serious violent crimes per 1,000 students away from school than at school in 1992 to no measurable difference in the rates of serious violent crimes at school and away from school in 2012. The rates of serious violent victimization at and away from school in 2012 were not measurably different from the rates at and away from school in 2010 or 2011.

Figure 5. Rate of nonfatal victimizations against students ages 12-18 at and away from school per 1,000 students, by type of victimization and age: 2012



! Interpret with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

Serious violent victimization is also included in violent victimization.

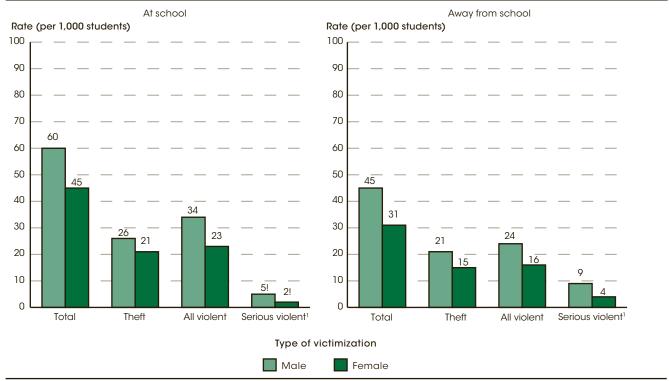
NOTE: "Total victimization" includes theft and violent crimes. "Theft" includes purse-snatching, pickpocketing, and all attempted and completed thefts, with the exception of motor vehicle thefts. "All violent victimization" includes serious violent crimes and simple assault. "Serious violent victimization" includes rape, sexual assault, robbery, and aggravated assault. "At school" includes inside the school building, on school property, or on the way to or from school. Detail may not sum to totals because of rounding

SOURCE: U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey (NCVS), 2012. See Digest of Education Statistics 2013,

Victimization rates for students in 2012 varied according to student characteristics. At school, rates of violent victimization and serious violent victimization were higher for younger students (ages 12-14) than for older students (ages 15-18). For example, the rate of violent victimization at school was 42 per 1,000 students for

those ages 12-14, compared with 16 per 1,000 students for those ages 15-18. No measurable differences were found by age group in the rates of theft at school. Away from school, no measurable differences were found by age group in the rates of theft or violent victimization.

Figure 6. Rate of nonfatal victimizations against students ages 12-18 at and away from school per 1,000 students, by type of victimization and sex: 2012



! Interpret with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

Serious violent victimization is also included in violent victimization.

NOTE: "Total victimization" includes theft and violent crimes. "Theft" includes purse-snatching, pickpocketing, and all attempted and completed thefts, with the exception of motor vehicle thefts. "All violent victimization" includes serious violent crimes and simple assault. "Serious violent victimization" includes rape, sexual assault, robbery, and aggravated assault. "At school" includes inside the school building, on school property, or on the way to or from school. Detail may not sum to totals because of rounding

SOÚRCE: U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey (NCVS), 2012. See Digest of Education Statistics 2013, table 228.25

Both at school and away from school, the rate of total nonfatal victimization was higher for males than females in 2012. The total victimization rate at school was 60 per 1,000 students for males, compared with 45 per 1,000 students for females. The total victimization rate away from school was 45 per 1,000 male students vs. 31 per 1,000 female students. At school, the rate of

serious violent victimization was higher for males (5 per 1,000 students) than for females (2 per 1,000 students); however, the rates away from school were not measurably different between sexes. In addition, no measurable differences were detected by sex for theft or violent victimization rates, either at school or away from school.

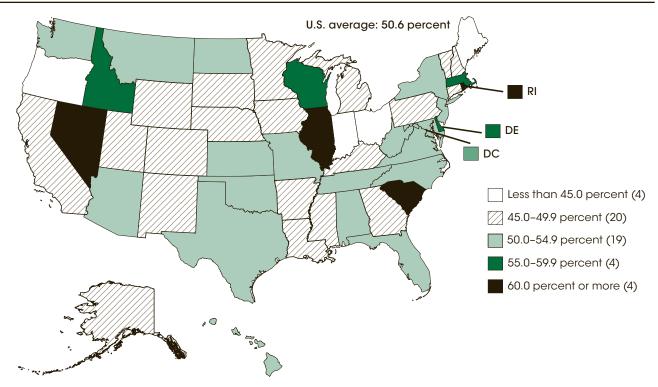
Reference tables: Digest of Education Statistics 2013, tables 228.20 and 228.25

#### **Teachers and Pupil/Teacher Ratios**

Of the 6.1 million staff members in public elementary and secondary schools in fall 2011, some 3.1 million, or 51 percent, were teachers. For public schools, the pupil/ teacher ratio fell from 26.9 pupils per teacher in 1955 to 17.9 in 1985, and then further declined to 15.3 in 2008. In the most recent years, the pupil/teacher ratios in 2010 and 2011 (both at 16.0) were higher than the ratio in 2009 (15.4).

Of the 6.1 million staff members in public elementary and secondary schools in fall 2011, some 3.1 million, or 51 percent, were teachers. In addition, there were 0.7 million instructional aides, who made up about 12 percent of total staff. Between fall 2001 and fall 2011, there was not a significant increase in the percentage of staff who were teachers. The share of staff that were teachers was about half (51 percent), while the percentage of staff who were instructional aides increased slightly, from 11 to 12 percent. By comparison, in fall 1969 teachers represented 60 percent of public school staff, and instructional aides represented 2 percent of public school staff.

Figure 1. Teachers as a percentage of staff in public elementary and secondary school systems, by state: Fall 2011

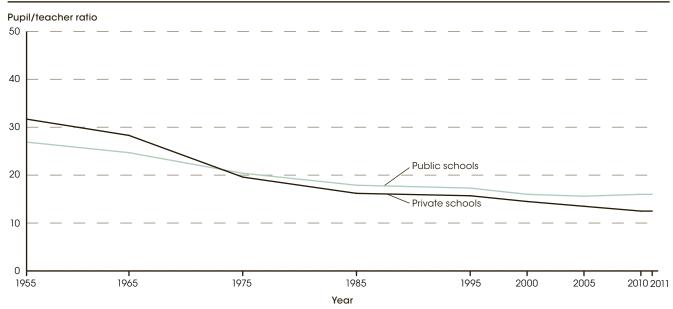


NOTE: The U.S. average includes imputations for underreporting and nonreporting states. The calculations of teachers as a percentage of staff for Alaska, California, Illinois, Maine, Montana, Nevada, New Jersey, and West Virginia include imputations for underreporting SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/ Secondary Education," 2011-12. See Digest of Education Statistics 2013, table 213.40.

In most states, between 45 and 55 percent of public school staff were teachers in 2011. There were, however, four states where teachers made up less than 45 percent of public school staff (Maine, Indiana, Oregon, and

Ohio) and eight states where they made up more than 55 percent of public school staff (Wisconsin, Delaware, Massachusetts, Idaho, Rhode Island, Illinois, Nevada, and South Carolina).

Figure 2. Public and private elementary and secondary school pupil/teacher ratios: Selected years, fall 1955 through fall 2011



NOTE: Data for teachers are expressed in full-time equivalents (FTE). Data for private schools include prekindergarten through grade 12 in schools offering kindergarten or higher grades. Data for public schools include prekindergarten through grade 12. The pupil/teacher ratio includes teachers for students with disabilities and other special teachers. Ratios for public schools reflect totals reported by states and differ from totals reported for schools or school districts. Some data have been revised from previously published figures. Data for private schools are estimated for 2010.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Statistics of Public Elementary and Secondary Day Schools, 1955–56 through 1980–81; Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education," 1981–82 through 2011–12; and Private School Universe Survey (PSS), 1989–90 through 2011–12. See Digest of Education Statistics 2013, table 208.20.

The number of students per teacher, or the pupil/teacher ratio, has been generally decreasing for more than 50 years at both public and private schools. In fall 1955, there were 1.1 million public and 145,000 private elementary and secondary school teachers in the United States. By fall 2011, these numbers had nearly tripled for both public school teachers (to 3.1 million) and private school teachers (to 421,000). However, proportional increases in student enrollment were smaller over this period: from 31 million to 50 million public school students (a 61 percent increase) and from 4.6 million to 5.3 million private school students (a 15 percent increase).

For public schools, the resulting decline in the pupil/teacher ratio was concentrated in the period between 1955 and 1985. During this period, the public school pupil/teacher ratio fell from 26.9 to 17.9. Over the next 23 years, the public school pupil/teacher ratio declined to 15.3 in 2008. In the most recent years, the pupil/teacher ratios in 2010 and 2011 (both at 16.0) were higher than the ratio in 2009 (15.4). The private school pupil/teacher ratio decreased more steeply over the period of 1955 to 2011, from 31.7 teachers per pupil to 12.5. Consequently, the pupil/teacher ratio has been lower for private schools than for public schools since 1972.

**Reference tables:** *Digest of Education Statistics 2013*, tables 208.20, 213.10, and 213.40

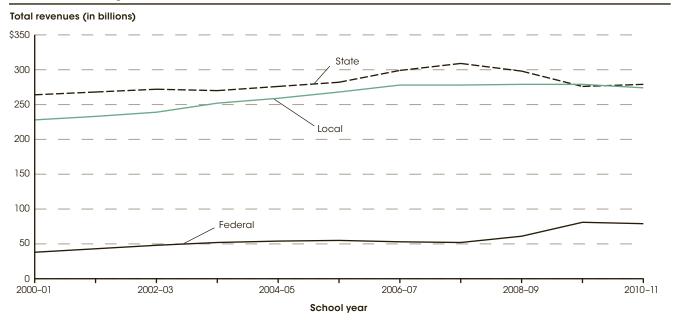
#### **Public School Revenue Sources**

From school years 2000-01 through 2010-11, total elementary and secondary public school revenues increased from \$530 billion to \$632 billion (in constant 2012-13 dollars). During the most recent period from 2009-10 through 2010-11, total revenues for public elementary and secondary schools decreased by about \$4 billion, or less than 1 percent.

From school years 2000–01 through 2010–11, total elementary and secondary public school revenues increased from \$530 billion to \$632 billion (in constant 2012–13 dollars), a 19 percent increase, adjusting for inflation using the Consumer Price Index (CPI). This increase was accompanied by a 5 percent increase in total elementary and secondary public school enrollment, from 47 million students in 2000-01 to 49 million students in 2010–11 (See Digest of Education Statistics 2013, table 105.30). During this period, the total amounts from federal and local sources increased. Federal revenues,

traditionally the smallest of the three revenue sources, increased by 106 percent (to \$79 billion in 2010-11), and local revenues increased by 20 percent (to \$274 billion in 2010–11). State revenues fluctuated between \$264 billion and \$309 billion during this period, and they were 6 percent higher in 2010-11 than in 2000-01 (\$279 billion vs. \$264 billion). During this period, federal revenues peaked in 2009-10 at \$81 billion, while local revenues peaked in 2008-09 at \$279 billion and state revenues peaked in 2007-08 at \$309 billion.

Figure 1. Total revenues for public elementary and secondary schools, by revenue source: School years 2000-01 through 2010-11



NOTE: Revenues are in constant 2012-13 dollars, adjusted using the Consumer Price Index (CPI). SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2000-01 through 2010-11. See Digest of Education Statistics 2013, table 235.10.

**Chapter:** 3/Elementary and Secondary Education **Section:** Finance

The percentage of total revenues for public elementary and secondary education that came from federal sources increased from 7 percent in school year 2000–01 to 13 percent in 2010–11. The American Recovery and Reinvestment Act<sup>1</sup> directed spending toward education and may have contributed to the increase in revenues beginning in school year 2008–09. Between school years 2000–01 and 2010–11, the percentage coming from local sources fluctuated between 43 and 44 percent, accounting for 43 percent of total revenues in 2010–11. The percentage of total revenues from state sources decreased from 50 percent in school year 2000–01 to a low of 43 percent in school year 2009–10. The percentage of revenues from state sources was higher in 2010–11 (44 percent) than in 2009–10 (43 percent).

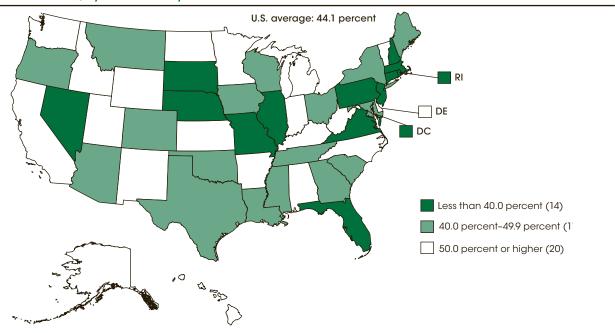
More recently, from school years 2009–10 through 2010–11, total revenues for public elementary and secondary

recovery.

schools decreased by about \$4 billion in constant 2012–13 dollars (0.7 percent). During this period, federal revenues declined by \$2 billion, or 2.6 percent. Local revenues declined by \$5 billion (1.8 percent), reflecting a \$4 billion decrease in revenues from local property taxes and a \$1 billion decrease in other local public revenues. State revenues were the only source that increased from 2009–10 through 2010–11 (by \$3 billion, or 1.0 percent).

In school year 2010–11, there were significant variations across the states in the percentages of public school revenues coming from each source. In 20 states, at least half of education revenues came from state governments, while in 13 states and the District of Columbia half or more came from local revenues. In the remaining 17 states, no single revenue source made up more than half of education revenues.

Figure 2. State revenues for public elementary and secondary schools as a percentage of total public school revenues, by state: School year 2010–11



NOTE: All 50 states and the District of Columbia are included in the U.S. average, even though the District of Columbia does not receive any state revenue. The District of Columbia and Hawaii have only one school district each; therefore, neither is comparable to the other states. Excludes revenues for state education agencies.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2010–11. See Digest of Education Statistics 2013, table 235.20.

In school year 2010–11, the percentages of public school revenues coming from state sources were highest in Hawaii and Vermont (83 and 82 percent, respectively). The percentages of revenues coming from state sources were lowest in Nebraska, Missouri (30 percent each), and South Dakota (29 percent). The percentage of revenues coming from federal sources was highest in Mississippi (22 percent), followed by South Dakota (20 percent); the percentage was lowest in New Jersey (5 percent), followed

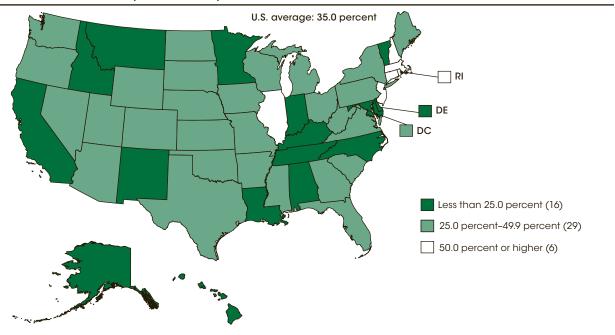
by New Hampshire (7 percent). Among all states, the percentage of revenues coming from local sources was highest in Illinois and Connecticut (58 and 57 percent, respectively) and lowest in Vermont and Hawaii (8 and 3 percent, respectively). Most of the revenues for the District of Columbia (88 percent) were from local sources; the remaining 12 percent of revenues were from federal sources.

For more information, see the Reader's Guide and the Guide to Sources.

<sup>&</sup>lt;sup>1</sup> For more information on the Ed Recovery Plan and the American Recovery and Reinvestment Act, please go to <a href="http://www.ed.gov/">http://www.ed.gov/</a>

**Section:** Finance

Figure 3. Property tax revenues for public elementary and secondary schools as a percentage of total public school revenues, by state: School year 2010-11



NOTE: All 50 states and the District of Columbia are included in the U.S. average. The District of Columbia and Hawaii have only one school district each; therefore, neither is comparable to the other states. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2010-11. See Digest of Education Statistics 2013, table 235.20.

In school year 2010–11, local property taxes constituted 81 percent of total local revenues and 35 percent of total revenues for elementary and secondary schools. The percentages of total revenues from local property taxes differed by state. In 2010-11, Connecticut had the highest percentage of revenues from property taxes, at 56 percent. Five other states had percentages of revenues from property taxes of 50 percent or more (in descending order): New Jersey, New Hampshire, Rhode Island,

Massachusetts, and Illinois. Vermont and Hawaii<sup>2</sup> had the lowest percentages of revenues from property taxes (0.1 percent and 0 percent, respectively). In 14 other states, property taxes made up less than 25 percent of education revenues (in descending order): Delaware, Montana, Indiana, California, Maryland, Minnesota, Kentucky, North Carolina, Tennessee, Idaho, Louisiana, Alabama, New Mexico, and Alaska.

Reference tables: Digest of Education Statistics 2013, tables 105.30, 235.10, and 235.20

Glossary: Consumer Price Index (CPI), Elementary school, Property tax, Public school or institution, Revenue, Secondary school

<sup>&</sup>lt;sup>2</sup> Hawaii has only one school district, which receives no funding from property taxes.

This page intentionally left blank.

#### Indicator 21

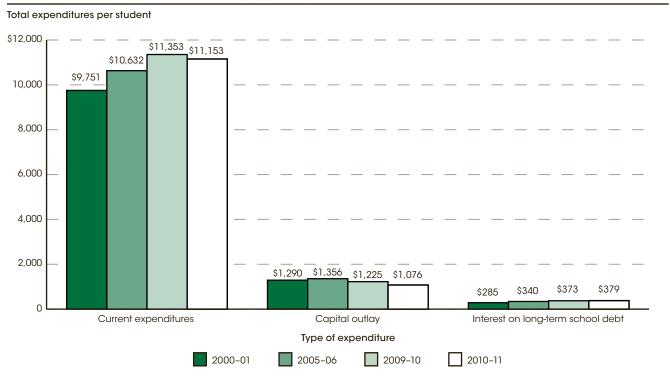
#### **Public School Expenditures**

From 2000-01 to 2010-11, current expenditures per student in public elementary and secondary schools increased by 14 percent, after adjusting for inflation. Current expenditures per student in 2010-11 (\$11,153) decreased from the amount expended per student in 2009-10 (\$11,353).

Total expenditures for public elementary and secondary schools in the United States amounted to \$632 billion in 2010–11, or \$12,608 per public school student (in constant 2012-13 dollars, based on the Consumer Price Index). These expenditures include \$11,153 per student

in current expenditures for operation of schools; \$1,076 for capital outlay (i.e., expenditures for property and for buildings and alterations completed by school district staff or contractors); and \$379 for interest on school debt.

Figure 1. Total expenditures per student in fall enrollment in public elementary and secondary schools nationwide, in constant 2012-13 dollars, by type of expenditure: 2000-01, 2005-06, 2009-10, and 2010-11



NOTE: "Current expenditures," "Capital outlay," and "Interest on school debt" are subcategories of "Total expenditures." "Capital outlay," includes expenditures for property and for buildings and alterations completed by school district staff or contractors. Expenditures are reported in constant 2012-13 dollars, based on the Consumer Price Index (CPI).

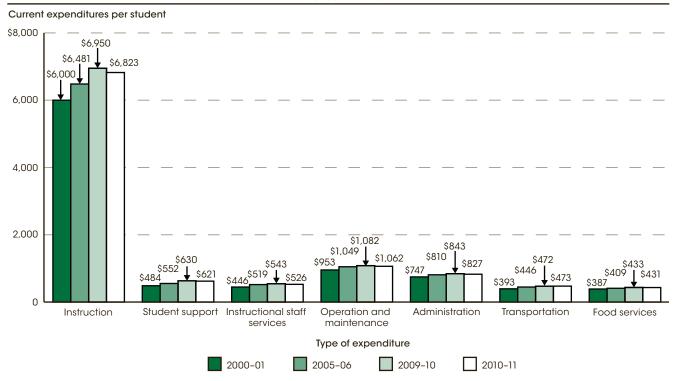
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," selected years 2000–01, 2005–06, 2009–10, and 2010–11. See *Digest of Education Statistics 2013*, table 236.60.

From 2000–01 to 2010–11, current expenditures per student enrolled in the fall in public elementary and secondary schools increased by 14 percent (from \$9,751 to \$11,153 in constant 2012–13 dollars). The amount for 2010-11, however, was lower than the amount for 2009-10 (\$11,353).

Interest payments on school debt per student in fall enrollment increased by 33 percent (from \$285 to \$379 in constant 2012–13 dollars) during the same period of 2000-01 to 2010-11, and the amount for 2009-10 (\$373) was lower than the amount for 2010-11. Capital outlay expenditures per student in 2010–11 (\$1,076) were 17 percent lower than the 2000-01 amount (\$1,290) and 12 percent lower than the 2009–10 amount (\$1,225); however, there were some fluctuations during this period.

**Section:** Finance

Figure 2. Current expenditures per student in fall enrollment in public elementary and secondary schools nationwide, in constant 2012–13 dollars, by type of expenditure: 2000–01, 2005–06, 2009–10, and 2010–11



NOTE: "Instruction," "Student support," "Instructional staff services," "Operation and maintenance," "Administration," "Transportation," and "Food services" are subcategories of "Current expenditures." "Student support" includes expenditures for guidance, health, attendance, and speech pathology services. "Instructional staff services" include expenditures for curriculum development, staff training, libraries, and media and computer centers. "Administration" includes both general administration and school administration. "Transportation" refers to student transportation. Expenditures are reported in constant 2012–13 dollars, based on the Consumer Price Index (CPI).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey,"

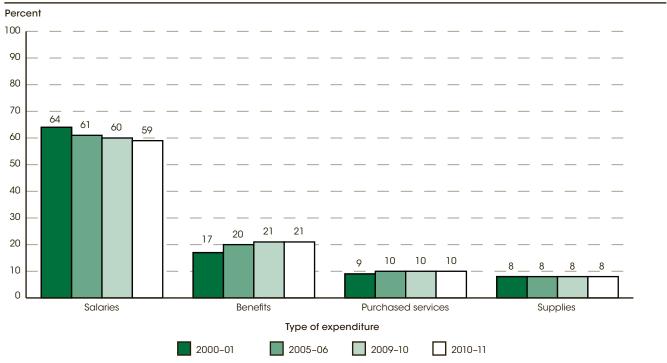
selected years 2000-01, 2005-06, 2009-10, and 2010-11. See Digest of Education Statistics 2013, table 236.60.

In addition to being reported by type, expenditures are also reported by function, which refers to costs associated with different operational aspects of the reported current expenditures. Per student current expenditures (in constant 2012–13 dollars) increased for most functions between 2000–01 and 2010–11, although expenditures for most functions were lower in 2010–11 than in 2009–10. Instruction—the single largest component of current expenditures—made up about 61 percent of the total, or \$6,823, per student in 2010–11. Instruction expenditures include salaries and benefits of teachers and teaching assistants as well as costs for instructional materials and instructional services provided under contract. Between 2000–01 and 2010–11, expenditures per student for

instruction increased by 14 percent (from \$6,000 to \$6,823), though they were lower in 2010–11 than in 2009–10 (\$6,950). Expenditures between 2000–01 and 2010–11 for many major school functions increased more rapidly. For example, expenditures per student for student support services, such as guidance and health personnel, increased by 28 percent (from \$484 to \$621). Expenditures per student for instructional staff services, including curriculum development, staff training, libraries, and media and computer centers, increased by 18 percent, reaching \$526 in 2010–11, although they were lower than in 2009–10 (\$543). In general, expenditures in other categories also increased between 2000–01 and 2010–11.

**Section:** Finance

Figure 3. Percentage of current expenditures per student in fall enrollment in public elementary and secondary schools nationwide, by type of expenditure: 2000–01, 2005–06, 2009–10, and 2010–11



NOTE: All percentages are based on constant 2012-13 dollars, adjusted using the Consumer Price Index (CPI). Detail may not sum to totals because of

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," selected years 2000-01, 2005-06, 2009-10, and 2010-11. See Digest of Education Statistics 2013, table 236.60.

Current expenditures for education can also be expressed in terms of the percentage of funds going toward salaries and benefits for all staff or for supplies for all activities. On a national basis in 2010–11, approximately 80 percent of current expenditures were for salaries and benefits for staff. Approximately 10 percent of current expenditures were for purchased services, which include a wide variety of items, such as contracts for food, transportation, or janitorial services, or for professional development for teachers. Generally speaking, this expenditure distribution shifted only slightly from 2000-01 to 2010-11, when expenditures for purchased

services increased from 9 to 10 percent. Eight percent of school expenditures were for supplies, ranging from books to heating oil. The percentages of expenditures for tuition and for supplies changed less than one percentage point. For expenditures on supplies, there were small fluctuations in this percentage during the period. There were, however, shifts within the distribution of the labor costs for staff, as the proportion of school budgets for staff salaries decreased from 64 percent in 2000-01 to 59 percent in 2010–11, and the proportion of staff benefits increased from 17 to 21 percent during this period.

Reference tables: Digest of Education Statistics 2013, tables 236.10, 236.55, and 236.60

Glossary: Consumer Price Index (CPI); Current expenditures (elementary/secondary); Expenditures, total; Public school or institution; Salary

This page intentionally left blank.

#### Indicator 22

### **Education Expenditures by Country**

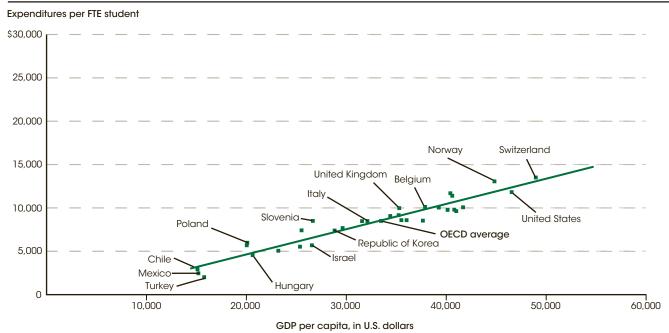
In 2010, the United States spent \$11,826 per full-time-equivalent (FTE) student on elementary and secondary education, an amount 39 percent higher than the OECD average of \$8,501. At the postsecondary level, U.S. expenditures per FTE student were \$25,576, almost twice as high as the OECD average of \$13,211.

This indicator uses material from the Organization for Economic Cooperation and Development (OECD) report Education at a Glance 2013 to compare countries' expenditures on education using the measures expenditures per full-time-equivalent (FTE) student from both public and private sources and total education expenditures as a percentage of gross domestic product (GDP). The OECD is an organization of 34 countries whose purpose is to promote trade and economic growth. Education expenditures are from public revenue sources (governments) and private revenue sources, and include current and capital expenditures. Private sources include payments from households for school-based expenses such as tuition, transportation fees, book rentals, or food services, as well as public funding via subsidies to households, private fees for education services, or other private spending that goes through the educational institution. The total education expenditures as a percentage of GDP measure allows a comparison of countries' expenditures relative to their ability to finance education. Purchasing power parity (PPP) indexes are used to convert other currencies to U.S. dollars (i.e., absolute terms).

A country's wealth (defined as GDP per capita) is positively associated with expenditures per FTE student on education at the elementary and secondary level as well as at the postsecondary level. In terms of OECD countries that reported expenditures per FTE student in 2010 at both the elementary/secondary level and the postsecondary level, each of the 10 countries with the highest GDP per capita (Switzerland, the United States, Norway, the Netherlands, Ireland, Australia, Denmark, Austria, Sweden, and Belgium) had education expenditures per FTE student higher than the OECD average at both the elementary/secondary level and the postsecondary level, and each of the 9 countries with the lowest GDP per capita (Chile, Mexico, Poland, Estonia, Hungary, Slovak Republic, Czech Republic, Portugal, and Israel) had education expenditures per FTE student lower than the OECD average at both the elementary/ secondary level and the postsecondary level.

**Section:** Finance

Figure 1. Annual expenditures per full-time-equivalent (FTE) student for elementary and secondary education in selected Organization for Economic Cooperation and Development (OECD) countries, by gross domestic product (GDP) per capita: 2010



Linear relationship between spending and country wealth for 32 OECD countries reporting data (elementary/secondary): r2 = .91; slope = 0.29; intercept

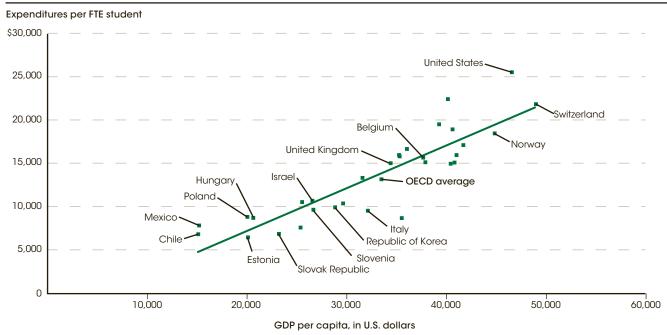
NOTE: Data for Luxembourg are excluded from the figure because of anomalies in that country's GDP per capita data. (Large revenues from international finance institutions in Luxembourg distort the wealth of that country's population.) Data for Greece are excluded because expenditure data are not available for 2007 through 2010. Expenditure and GDP data for Canada and expenditure data for Germany are for 2009. Expenditures for International Standard Classification of Education (ISCED) level 4 (postsecondary non-higher-education) are included in elementary and secondary education unless otherwise noted. Expenditure data for Canada, France, Italy, Portugal, and the United States do not include postsecondary non-higher education. SOURCE: Organization for Economic Cooperation and Development (OECD), Center for Educational Research and Innovation. (2013). Education at a Glance 2013. See Digest of Education Statistics 2013, table 605.10.

Expenditures per FTE student varied widely across OECD countries. At the elementary and secondary level, expenditures per FTE student in 2010 ranged from \$2,020 for Turkey, \$2,464 for Mexico, and \$2,935 for Chile to \$19,050 for Luxembourg. Expenditures per FTE

for elementary and secondary students for the United States were \$11,826, an amount 39 percent higher than the average of \$8,501 for OECD member countries reporting data.

**Section:** Finance

Figure 2. Annual expenditures per full-time-equivalent (FTE) student for postsecondary education in selected Organization for Economic Cooperation and Development (OECD) countries, by gross domestic product (GDP) per capita: 2010



Linear relationship between spending and country wealth for 31 OECD countries reporting data (postsecondary): r2 = .78; slope = 0.49; intercept =

NOTE: Data for Luxembourg are excluded because that country does not report expenditure data for postsecondary institutions. Data for Greece and Turkey are excluded because expenditure data are not available for 2008, 2009, or 2010. Expenditure and GDP data for Canada and expenditure data for Germany

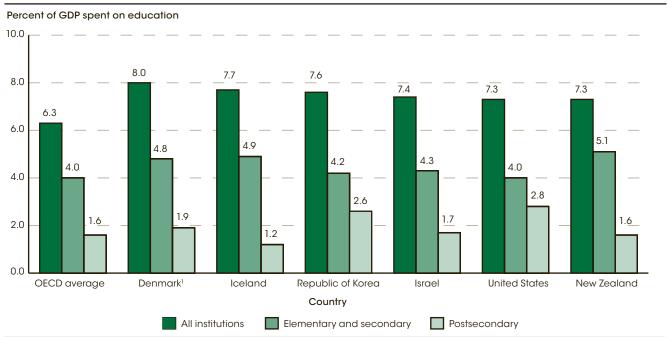
SOURCE: Organization for Economic Cooperation and Development (OECD), Center for Educational Research and Innovation. (2013). Education at a Glance 2013. See Digest of Education Statistics 2013, table 605.10.

At the postsecondary level, expenditures per FTE student in 2010 ranged from \$6,501 for Estonia, \$6,863 for Chile, and \$6,904 for Slovak Republic to \$25,576 for the United

States. U.S. expenditures per FTE student were almost twice as high as the OECD average of \$13,211.

**Section:** Finance

Direct expenditures on education as a percentage of gross domestic product (GDP) for Organization Figure 3. for Economic Cooperation and Development (OECD) countries with the highest percentages, by level of education: 2010



<sup>1</sup> Postsecondary non-higher-education included in both secondary and higher education NOTE: Postsecondary non-higher-education is included in elementary and secondary education unless otherwise noted. All institutions total includes expenditures that could not be reported by level of education. SOURCE: Organization for Economic Cooperation and Development (OECD), Center for Educational Research and Innovation. (2013). Education at a Glance 2013. See Digest of Education Statistics 2013, table 605.20.

Among the OECD countries reporting data in 2010, six countries spent over 7 percent of their GDP on total education expenditures for all institutions combined: Denmark (8.0 percent), Iceland (7.7 percent), the Republic of Korea (7.6 percent), Israel (7.4 percent), the United States (7.3 percent), and New Zealand (7.3 percent). In terms of countries' expenditures by education level, the percentage of GDP the United States spent on elementary and secondary education was similar to the OECD average percentage of GDP spent on elementary and secondary education (4.0 percent each). Ten OECD

countries spent less than 3.9 percent of their GDP on elementary and secondary education, 8 countries spent between 3.9 and 4.1 percent, and 10 countries spent more than 4.1 percent. New Zealand (5.1 percent) was the OECD country that spent the highest percentage of GDP on elementary and secondary education. At the postsecondary level, spending as a percentage of GDP for the United States (2.8 percent) was higher than the OECD average (1.6 percent) and higher than spending as a percentage of GDP for any other OECD country reporting data.

Reference tables: Digest of Education Statistics 2013, tables 605.10, 605.20

**Glossary:** Expenditures per pupil, Full-time-equivalent (FTE) enrollment, Gross domestic product (GDP), Organization for Economic Cooperation and Development (OECD), Postsecondary education, Purchasing Power Parity (PPP) indexes

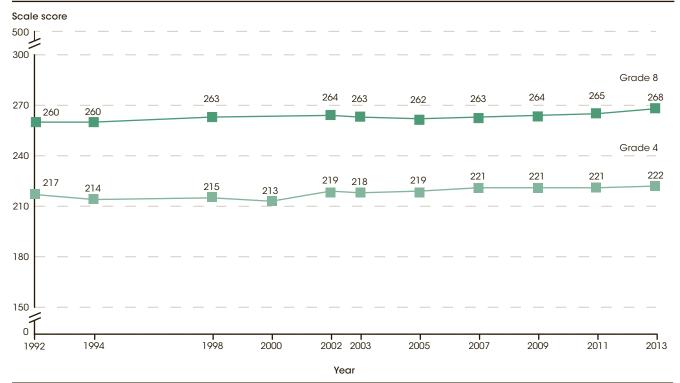
# **Reading Performance**

The average grade 8 reading score was higher in 2013 than in 2011 according to data from the National Assessment of Educational Progress. The average grade 4 reading score in 2013 was not measurably different from that in 2011.

The National Assessment of Educational Progress (NAEP) assesses student performance in reading at grades 4, 8, and 12. NAEP reading scores range from 0 to 500. NAEP achievement levels define what students should know and be able to do: *Basic* indicates partial mastery of fundamental skills, and *Proficient* indicates demonstrated competency over challenging subject

matter. This indicator presents data on NAEP reading scale scores and achievement levels for various student subgroups as well as highlights achievement gaps between English Language Learner (ELL) and non-ELL students. NAEP reading assessments are administered periodically: the most recent reading assessment data were collected at grades 4 and 8 in 2013 and at grade 12 in 2009.

Figure 1. Average reading scale scores of 4th- and 8th-grade students: Selected years, 1992–2013



NOTE: The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. The 8th-grade NAEP reading assessment was not administered in 2000.

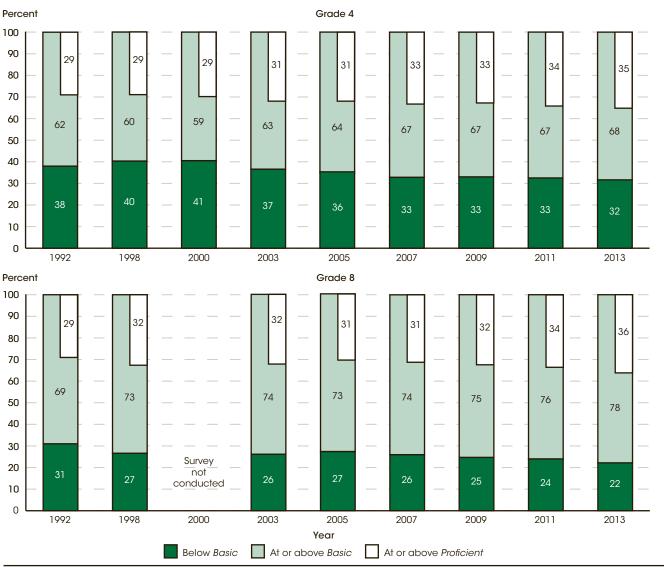
SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1992–2013 Reading Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2013*, table 221.10.

In 2013, the average reading score for 4th-grade students (222) was not measurably different from the 2011 score, but it was higher than the scores on assessments between 1992 (217) and 2009 (221). For 8th-grade students, the average reading score in 2013 (268) was more than 2

points higher than in 2011 (265), was 8 points higher than in 1992 (260), and was higher than the average scores in all previous years. In 2009, the average reading score for 12th-grade students (288) was 2 points higher than in 2005 (286) but 4 points lower than in 1992 (292).

**Section:** Assessments

Figure 2. Percentage distribution of 4th- and 8th-grade students across National Assessment of Educational Progress (NAEP) reading achievement levels: Selected years, 1992–2013



NOTE: Achievement levels define what students should know and be able to do: Basic indicates partial mastery of fundamental skills, and Proficient indicates demonstrated competency over challenging subject matter. Detail may not sum to totals because of rounding. Survey not conducted for grade 8 in 2000. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1992–2013 Reading Assessments, NAEP Data Explorer. See The Condition of Education 2012, table A-23-1; and Digest of Education Statistics 2013, table 221.20.

In 2013, the percentage of 4th-grade students performing at or above the *Basic* achievement level (68 percent) was not measurably different from the percentage in 2011 but was higher than the percentage in 1992 (62 percent). A higher percentage of 4th-grade students performed at or above the *Proficient* achievement level in 2013 (35 percent) than in 2011 (34 percent) and 1992 (29 percent). Among 8th-grade students, the percentage performing at or above *Basic* in 2013 (78 percent) was higher than in 2011 (76 percent) and 1992 (69 percent). A higher percentage

of 8th-grade students performed at or above *Proficient* in 2013 (36 percent) than in 2011 (34 percent) and 1992 (29 percent). Among 12th-grade students, the percentage performing at or above *Basic* (74 percent) in 2009 was not significantly different from the percentage in 2005 but was lower than the percentage in 1992 (80 percent). The percentage of 12th-graders performing at or above *Proficient* was higher in 2009 (38 percent) than in 2005 (35 percent) but was not significantly different from the percentage in 1992.

Grade 4 Scale score 500 300 270 231 232 235 235 240 224 216 207 205 206 206 210 197 192 180 150 0 White Black Hispanic Asian/Pacific Islander Scale score Grade 8 500 300 280 276 275 274 268 267 270 256 252 249 250 241 237 240 210 180 150 0 White Black Hispanic Asian/Pacific Islander Race/ethnicity

Figure 3. Average reading scale scores of 4th- and 8th-grade students, by race/ethnicity: 1992, 2011, and 2013

NOTE: The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1992. Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 2011, and 2013 Reading Assessments, NAEP Data Explorer. See Digest of Education Statistics 2013, table 221.10.

1990 2011 2013

At grade 4, only the average reading scores for White students were higher in 2013 (232) than in both 2011 (231) and 1992 (224). The 2013 scores for Black (206), Hispanic (207), and Asian/Pacific Islander (235) 4th-graders were not measurably different from the 2011 scores, but the 2013 scores were higher than the 1992 scores (192, 197, and 216, respectively). At grade 8,

the average reading scores for White (276), Black (250), Hispanic (256), and Asian/Pacific Islander (280) students were higher in 2013 than in 2011 and 1992. At grade 12, average scores did not change measurably from 1992 to 2009 for White, Black, Hispanic, Asian/Pacific Islander, or American Indian/Alaska Native students.

Scale score Grade 4 Scale score Grade 8 

Figure 4. Average reading scale scores of 4th- and 8th-grade students, by English language learner (ELL) status: Selected years, 1998–2013

NOTE: The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. The 8th-grade NAEP reading assessment was not administered in 2000.

- Non-ELL students

Year

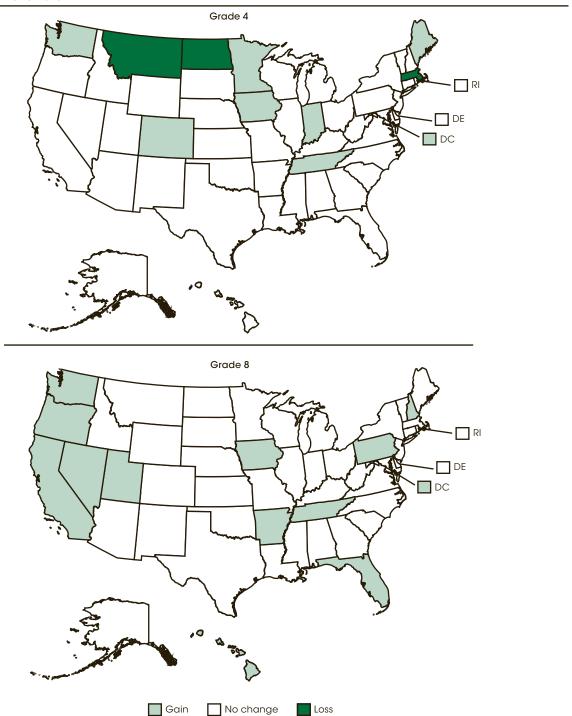
ELL students

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1998–2013 Reading Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2013*, table 221.10.

Since 1998, NAEP has collected data regarding student English language learner (ELL) status. In 2013 and in all previous assessment years since 1998, the NAEP reading scale scores for non-ELL 4th- and 8th-graders were higher than their ELL peers' scores. This disparity is known as an achievement gap—in NAEP reading scores, the achievement gap is the difference between

the average scores of two student subgroups on the standardized assessment. In 2013, the achievement gap between non-ELL and ELL students was 38 points at the 4th-grade level and 45 points at the 8th-grade level. At both grade levels, the 2013 reading achievement gap was not measurably different from the gap in either 2011 or 1998.

Figure 5. Change in average reading scale scores for 4th- and 8th-grade public school students, by state: Between 2011 and 2013



NOTE: The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2011 and 2013 Reading Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2013*, tables 221.40 and 221.60.

Chapter: 3/Elementary and Secondary Education **Section:** Assessments

NAEP results also permit state-level comparisons of the reading abilities of 4th- and 8th-grade students in public schools. While there was no measurable change from 2011 to 2013 in the average score for 4th-grade public school students nationally, average scores were higher in 2013 than in 2011 in Colorado, the Department of Defense dependents schools, Indiana, Iowa, Maine, Minnesota, Tennessee, Washington, and the District of Columbia; scores were lower in 2013 than in 2011 in Massachusetts, Montana, and North Dakota. At grade 8, although the average reading score for public school students nationally was 2 points higher in 2013 than in 2011, only 12 states (Arkansas, California, Florida, Hawaii, Iowa, Nevada, New Hampshire, Oregon, Pennsylvania, Tennessee, Utah, and Washington)

plus the District of Columbia and the Department of Defense dependents schools had higher scores in 2013 than in 2011. In the other states, scores did not change measurably from 2011 to 2013.

NAEP also collects data for some urban districts. The Trial Urban District Assessment (TUDA) is intended to focus attention on urban education and measures the educational progress of participating large urban districts. The results of the 21 urban districts are based on the same mathematics and reading assessments used to report national and state results. This allows each district to compare its performance to the performance of its home state as well as to that of other states and other participating districts.

Figure 6. Comparison of average reading scale scores for 4th- and 8th-grade students, by jurisdiction: 2013

|                             | Rea          | ding          |
|-----------------------------|--------------|---------------|
| Jurisdiction                | Grade 4      | Grade 8       |
| Nation (public)             | 221          | 266           |
| Large city                  | 212          | 258           |
| Albuquerque                 | <b>4</b> 207 | <b>256</b>    |
| Atlanta                     | <b>214</b>   | <b>255</b>    |
| Austin                      | <b>1</b> 221 | <b>1</b> 261  |
| Baltimore City              | <b>3</b> 204 | <b>4</b> 252  |
| Boston                      | <b>214</b>   | <b>257</b>    |
| Charlotte                   | <b>1</b> 226 | <b>1</b> 266  |
| Chicago                     | <b>4</b> 206 | <b>4</b> 253  |
| Cleveland                   | <b>190</b>   | <b>3</b> 239  |
| Dallas                      | <b>205</b>   | <b>251</b>    |
| Detroit                     | <b>190</b>   | <b>3</b> 239  |
| District of Columbia (DCPS) | <b>4</b> 206 | <b>4</b> 245  |
| Fresno                      | <b>1</b> 96  | <b>4</b> 245  |
| Hillsborough County (FL)    | <b>1</b> 228 | <b>1</b> 267  |
| Houston                     | <b>208</b>   | <b>\$</b> 252 |
| Jefferson County (KY)       | <b>1</b> 221 | <b>1</b> 261  |
| Los Angeles                 | <b>4</b> 205 | <b>\$</b> 250 |
| Miami-Dade                  | <b>1</b> 223 | <b>259</b>    |
| Milwaukee                   | <b>199</b>   | <b>4</b> 242  |
| New York City               | <b>1</b> 216 | <b>256</b>    |
| Philadelphia                | <b>4</b> 200 | <b>4</b> 249  |
| San Diego                   | <b>1</b> 218 | <b>260</b>    |

NOTE: The National Assessment of Educational Progress (NAEP) reading scale ranges from 0 to 500. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 Reading Assessment, NAEP Data Explorer. See Digest of Education Statistics 2013, table 221.80.

**Section:** Assessments

In 2013, seven urban districts (Austin, Charlotte, Hillsborough County-FL, Jefferson County-KY, Miami-Dade, New York City, and San Diego) had scores higher than the large city<sup>1</sup> average grade 4 reading score of 212, while 12 urban districts had scores lower than the large city average and 2 had scores that were not measurably different (Atlanta and Boston). At the 8th-grade level, 4 urban districts (Austin, Charlotte, Hillsborough County-FL, and Jefferson County-KY) had scores higher than the large city average reading score of 258, while 12 urban districts had scores lower than the large city average and 5 urban districts had scores that were not measurably different.

Two of the urban districts (the District of Columbia and Los Angeles) had higher average 4th-grade reading scores in 2013 than they did in 2011, and the Houston urban district's score decreased between 2011 and 2013. There were no other measurable score changes at the 4th-grade level for other urban districts during this period. In 8th-grade reading, five urban districts (Baltimore, Dallas, Fresno, Los Angeles, and the District of Columbia) had higher average reading scores in 2013 than in 2011. No other urban district showed a measurable change in average 8th-grade reading scores between 2011 and 2013.

<sup>1</sup> A large city is a territory inside an urbanized area and inside a principal city with a population of 250,000 or more. NAEP uses large city as a comparison group for the Trial Urban District Assessment (TUDA). In order to make comparisons between the urban districts that participate and large cities, the NAEP large city jurisdiction also includes those portions of the participating urban districts which fall outside of the city limits. Large city is not synonymous with the term inner city.

Reference tables: Digest of Education Statistics 2013, tables 221.10, 221.20, 221.40, 221.60, and 221.80; The Condition of Education 2012, table A-23-1

Glossary: Achievement levels

This page intentionally left blank.

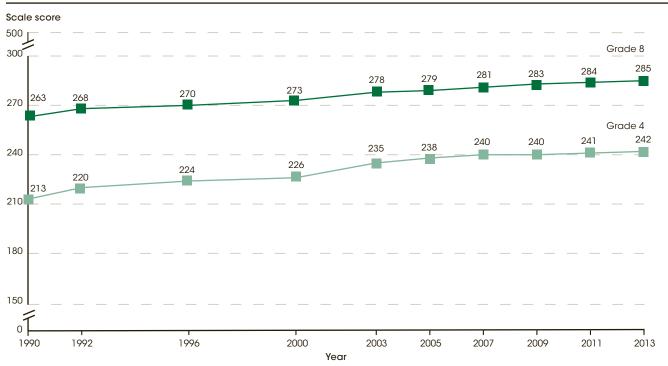
### **Mathematics Performance**

At grades 4 and 8, the average mathematics scores in 2013 were higher than the average scores for those grades in all previous assessment years according to data from the National Assessment of Educational Progress.

The National Assessment of Educational Progress (NAEP) assesses student performance in mathematics at grades 4, 8, and 12. NAEP mathematics scores range from 0 to 500 for grades 4 and 8. The framework for the 12th-grade mathematics assessment was revised in 2005; as a result, the 2005 and 2009 results cannot be compared with those from previous years. At grade 12, mathematics scores on the revised assessment range from 0 to 300. NAEP achievement levels define what students should

know and be able to do: Basic indicates partial mastery of fundamental skills, and *Proficient* indicates demonstrated competency over challenging subject matter. This indicator presents data on NAEP mathematics achievement levels as well as achievement gaps between various subgroups in the population of students. The most recent mathematics assessment data were collected at grades 4 and 8 in 2013 and at grade 12 in 2009.

Figure 1. Average mathematics scale scores of 4th- and 8th-grade students: Selected years, 1990-2013



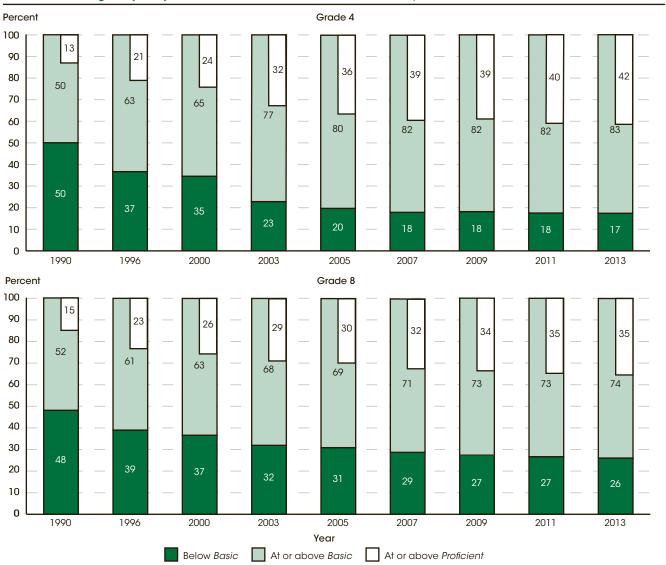
NOTE: At grades 4 and 8, the National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 500. Testing accommodations (e.g., extended time, small group testing) for children with disabilities and English language learners were not permitted in 1990 and 1992. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1990-2013 Mathematics Assessments, NAEP Data Explorer. See Digest of Education Statistics 2013, table 222.10; and The Nation's Report Card (http://nationsreportcard.gov/reading\_math\_2013/#/performance-overview)

**Section:** Assessments

In 2013, the average NAEP mathematics scores for 4th-grade and 8th-grade students were higher than the average scores in all previous assessment years. From 1990 to 2013, the average 4th-grade NAEP mathematics score increased by 28 points, from 213 to 242. During that same period, the average 8th-grade score increased

by 22 points, from 263 to 285. Twelfth-graders were most recently assessed in 2009; in that year, the average 12th-grade mathematics score was 3 points higher than in 2005, the first year that the revised assessment was administered.

Figure 2. Percentage distribution of 4th- and 8th-grade students across National Assessment of Educational Progress (NAEP) mathematics achievement levels: Selected years, 1990–2013



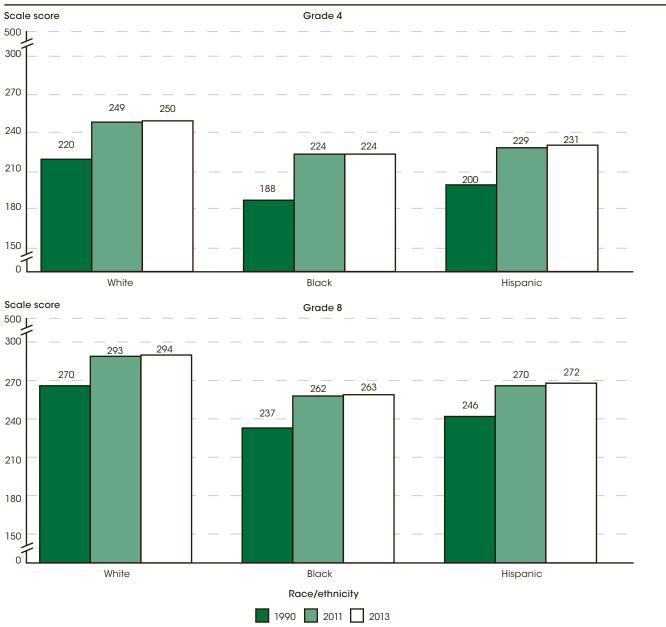
NOTE: Achievement levels define what students should know and be able to do: Basic indicates partial mastery of fundamental skills, and Proficient indicates demonstrated competency over challenging subject matter. Detail may not sum to totals because of rounding SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1990-2013 Mathematics Assessments, NAEP Data Explorer. See Digest of Education Statistics 2013, table 222.20; and The Nation's Report Ćard (http://nationsreportcard.gov/reading\_math\_2013/#/what-knowledge)

In 2013, some 83 percent of 4th-grade students performed at or above the Basic achievement level and 42 percent performed at or above the Proficient level in mathematics. While the percentage of students at or above the Basic level in 2013 was not measurably different from that in 2011 (82 percent), it was higher than the percentage in 1990 (50 percent). A higher percentage of 4th-grade students performed at or above *Proficient* in 2013 than in all previous assessment years. In 2013, some 74 percent of 8th-grade students performed at or above

Basic and 35 percent performed at or above Proficient in mathematics. The percentages at or above Basic and at or above Proficient in 2013 showed no measurable change from 2011, but they were higher than the percentages in all assessment years prior to 2011. The percentages of 12th-grade students performing at or above Basic (64 percent) and at or above Proficient (26 percent) in mathematics were each 3 percentage points higher in 2009 than in 2005.

For more information, see the Reader's Guide and the Guide to Sources.

Figure 3. Average mathematics scale scores of 4th- and 8th-grade students, by race/ethnicity: 1990, 2011, and 2013



NOTE: At grades 4 and 8, the National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 500. Testing accommodations (e.g. extended time, small group testing) for children with disabilities and English language learners were not permitted in 1990. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 2011, and 2013 Mathematics Assessments, NAEP Data Explorer. See Digest of Education Statistics 2013, table 222.10.

At grade 4, the average mathematics scores in 2013 for White (250) and Hispanic students (231) were higher than the scores in both 2011 and 1990. The 2013 score for Black 4th-graders (224) was not measurably different from the 2011 score, but it was higher than the 1990 score. Prior to 2011, separate data on Asians were not available; the 2013 score for Asian 4th-graders (259) was also not measurably different from the 2011 score. At grade 8, the average mathematics scores in 2013 for all

racial/ethnic groups were not measurably different from the 2011 scores. However, the 2013 scores for White (294), Black (263), and Hispanic (272) 8th-graders were higher than the scores in 1990. At grade 12, average mathematics scores were higher in 2009 than in 2005 for all racial/ethnic groups. For example, the average score for American Indian/Alaska Native students increased by 10 points (134 to 144).

Scale score Grade 4 Scale score Grade 8 Year

Figure 4. Average mathematics scale scores of 4th- and 8th-grade students, by English language learner (ELL) status: Selected years, 1996-2013

NOTE: At grades 4 and 8, the National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 500. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1996-2013 Mathematics Assessments, NAEP Data Explorer. See Digest of Education Statistics 2013, table 222.10.

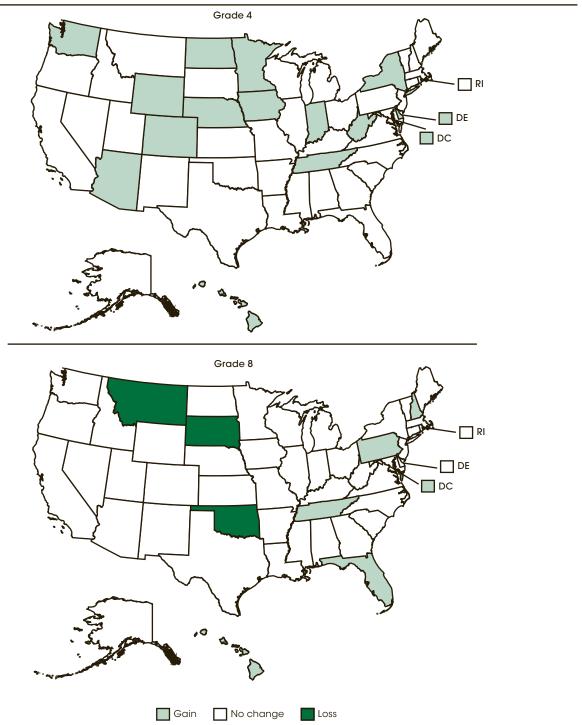
ELL students

— Non-ELL students

Since 1996, NAEP has collected data regarding student English language learner (ELL) status. In 2013 and in all previous assessment years since 1996, the NAEP mathematics scale scores for non-ELL 4th- and 8th-grade students were higher than their ELL peers' scores. This disparity is known as an achievement gap: in NAEP math scores, the achievement gap is the difference between the average scores of two student subgroups on the standardized assessment. In 2013, the achievement gap

between non-ELL and ELL students was 25 points at the 4th-grade level and 41 points at the 8th-grade level. At grade 4, this achievement gap was not measurably different from that in any assessment year since 1996. At grade 8, the achievement gap between non-ELL and ELL students in mathematics scores in 2013 was not measurably different from the achievement gaps in 2011, 2009, 2000, or 1996.

Change in average mathematics scale scores for 4th- and 8th-grade public school students, by state: Between 2011 and 2013 Figure 5.



NOTE: At grades 4 and 8, the National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 500. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2011 and 2013 Mathematics Assessments, NAEP Data Explorer. See *Digest of Education Statistics 2013*, tables 222.50 and 222.60.

**Chapter:** 3/Elementary and Secondary Education **Section:** Assessments

NAEP results also permit state-level comparisons of the mathematics achievement of 4th- and 8th-grade students in public schools. The average mathematics scores for 4th-grade public school students increased from 2011 to 2013 in 14 states and the District of Columbia (Arizona, Colorado, Delaware, Hawaii, Indiana, Iowa, Minnesota, Nebraska, New York, North Dakota, Tennessee, Washington, West Virginia, and Wyoming) and did not decrease for any states. At grade 8, scores were higher in 2013 than in 2011 in five states (Florida, Hawaii, New Hampshire, Pennsylvania, and Tennessee), the District of Columbia, and the Department of Defense dependents schools, and scores decreased in three states (Montana, Oklahoma, and South Dakota).

NAEP also collects data for Trial Urban Districts. The Trial Urban District Assessment (TUDA) is intended to focus attention on urban education and measure the educational progress of participating large urban districts. The results of the 21 urban districts are based on the same mathematics and reading assessment used to report national and state results. This allows each district to compare its performance to the performance of its home state as well as to that of other states and other participating urban districts.

Change in average mathematics scale scores for 4th- and 8th-grade public school students, by Figure 6. jurisdiction: Between 2011 and 2013

| junsaiction. Between 2011 and 2013 |                     |             |                                    |
|------------------------------------|---------------------|-------------|------------------------------------|
| -                                  | Mathematics         |             | -                                  |
| Jurisdiction                       | Grade 4             | Grade 8     | -                                  |
| Nation (public)                    | <b>1</b>            | <b>1</b>    |                                    |
| Large city                         | <b>1</b> 2          | • 2         | -                                  |
| Albuquerque                        | → -1                |             |                                    |
| Atlanta                            | <b>1</b> 5          | <b>♦</b> 1  |                                    |
| Austin                             | <b>#</b>            | <b>♦</b> −2 |                                    |
| Baltimore City                     | <b>♦</b> −3         | <b>♦</b> −2 |                                    |
| Boston                             | <b>#</b>            | <b>2</b>    |                                    |
| Charlotte                          | <b>#</b>            | <b>1</b> 4  |                                    |
| Chicago                            | <b>1</b> 7          | <b>♦</b> −1 |                                    |
| Cleveland                          | <b>#</b>            | <b>♦</b> −3 |                                    |
| Dallas                             | 1                   | <b>#</b>    |                                    |
| Detroit                            | 1                   | <b>₽</b> -6 |                                    |
| District of Columbia (DCPS)        | <b>1</b> 7          | <b>1</b> 5  |                                    |
| Fresno                             | <b>2</b>            | <b>1</b> 4  |                                    |
| Hillsborough County (FL)           | <b>♦ –1</b>         | <b>2</b>    |                                    |
| Houston                            |                     | <b>♦</b> 1  |                                    |
| Jefferson County (KY)              | <b>♦ –2</b>         | <b>♦</b> −1 |                                    |
| Los Angeles                        | <b>1</b> 5          | <b>4</b>    |                                    |
| Miami-Dade                         | <b>2</b>            | <b>2</b>    |                                    |
| Milwaukee                          | 2                   | ♦ 3         |                                    |
| New York City                      | 1                   | <b>2</b>    |                                    |
| Philadelphia                       | <b>♦ –2</b>         | <b>2</b>    |                                    |
| San Diego                          | <b>2</b>            | <b>♦</b> –2 |                                    |
|                                    | ver average<br>2013 | score • N   | o significant difference<br>a 2013 |

NOTE: At grades 4 and 8, the National Assessment of Educational Progress (NAEP) mathematics scale ranges from 0 to 500. SOURCE: National Center for Education Statistics (2013). The Nation's Report Card: A First Look: 2013 Mathematics and Reading Trial Urban District Assessment (NCES 2014-466). Institute of Education Sciences, U.S. Department of Education, Washington, D.C. See Digest of Education Statistics 2013, table 222.80.

**Section:** Assessments

In 2013, four urban districts (Atlanta, Chicago, the District of Columbia, and Los Angeles) performed better in 4th-grade mathematics than they did in 2011. All of the other participating urban districts reported no change. In 8th-grade mathematics, three urban districts (Charlotte, the District of Columbia, and Fresno) improved from their 2011 performance. Detroit saw a decline, while all other participating urban districts showed no change. When looking at proficiency, 41 percent of the Nation's 4th-grade public school students were at or above the

Proficient level in mathematics. Four urban districts (Austin, Charlotte, Hillsborough County-FL, and San Diego) had 40 percent or more of students performing at or above the Proficient achievement level. At grade 8, about 34 percent of public school students nationwide performed at or above the Proficient level. Five urban districts (Austin, Boston, Charlotte, Hillsborough County-FL, and San Diego) had at least 30 percent of their students perform at or above the *Proficient* level.

Reference tables: Digest of Education Statistics 2013, tables 222.10, 222.20, 222.50, 222.60, and 222.80; The Nation's Report Card (http://nationsreportcard.gov/ reading math 2013/#/)

Glossary: Achievement levels

This page intentionally left blank.

## **Reading and Mathematics Score Trends**

NAEP long-term trend results indicate that the average reading and mathematics achievement of 9- and 13-year-olds improved between the early 1970s and 2012; however, only 13-year-olds made score gains from 2008 to 2012, and they did so in both subject areas. Average reading and mathematics achievement for 17-yearolds did not change significantly between the early 1970s and 2012 or between 2008 and 2012.

Since the 1970s, the long-term trend National Assessment of Educational Progress (NAEP) has collected periodic information on the reading and mathematics achievement of 9-, 13-, and 17-year-olds enrolled in public and private schools. Long-term trend NAEP results may differ from the main NAEP results presented in other National Center for Education Statistics (NCES) publications since the long-term trend assessment measures a consistent body of knowledge and skills over an extended period, while the

main NAEP undergoes changes periodically to reflect current curricula and emerging standards.1

Figure 1. Average reading scale scores on the long-term trend National Assessment of Educational Progress (NAEP), by age: Selected years, 1971 through 2012



NOTE: Includes public and private schools. NAEP scores range from 0 to 500. Several administrative changes were initiated beginning with the 2004 assessment, including allowing accommodations for students with disabilities and for English language learners. To assess the impact of these revisions, two assessments were conducted in 2004, one based on the original assessment and one based on the revised assessment. In 2008 and 2012, only the revised assessment was used.

SOURCE: National Center for Education Statistics (2013). The Nation's Report Card: Trends in Academic Progress 2012 (NCES 2013-456). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C. See Digest of Education Statistics 2013, table 221.85.

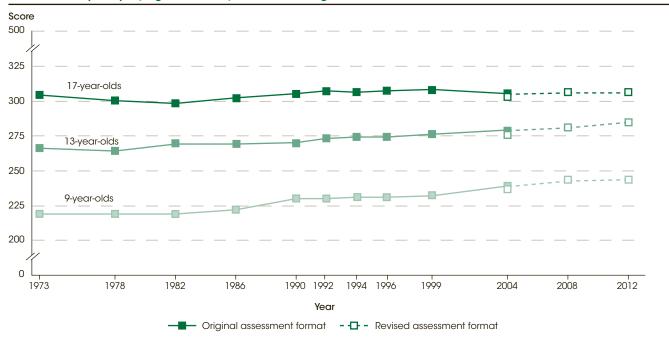
<sup>&</sup>lt;sup>1</sup>Several administrative changes, including the addition of allowing accommodations for students with disabilities and for English language learners, were initiated in the 2004 long-term trend assessment and have been carried forward in more recent data collections. Despite these changes to the assessment, the trend analysis is still valid.

**Chapter:** 3/Elementary and Secondary Education **Section:** Assessments

The national trend in reading achievement shows improvement at ages 9 and 13, but not at age 17, between the early 1970s and 2012. The average scores for 9- and 13-year-olds in 2012 were higher than those in 1971 (13 and 8 points higher, respectively), but the average score for 17-year-olds in 2012 was not measurably different from the score in 1971. For 9-year-olds, the average score did not change measurably between 2008 and 2012, but it was higher in each of these years than in all previous

assessment years.2 Thirteen-year-olds scored higher in 2012 than in all previous assessment years, including 3 points higher than in 2008. The average score for 17-yearolds in 2012 was not measurably different from the score in 2008.

Figure 2. Average mathematics scale scores on the long-term trend National Assessment of Educational Progress (NAEP), by age: Selected years, 1973 through 2012



NOTE: Includes public and private schools. NAEP scores range from 0 to 500. Several administrative changes were initiated beginning with the 2004 assessment, including allowing accommodations for students with disabilities and for English language learners. To assess the impact of these revisions, two assessments were conducted in 2004, one based on the original assessment and one based on the revised assessment. In 2008 and 2012, only the revised assessment was used.

SOURCE: National Center for Education Statistics (2013). The Nation's Report Card: Trends in Academic Progress 2012 (NCES 2013-456). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C. See Digest of Education Statistics 2013, table 222.85.

The national trend in mathematics achievement shows improvement at ages 9 and 13, but not at age 17, between the early 1970s and 2012. The average scores for 9- and 13-year-olds in 2012 were higher than those in 1973 (25 and 19 points higher, respectively), but the average score for 17-year-olds in 2012 was not measurably different from the score in 1973. For 9-year-olds, the average score did

not change measurably between 2012 and 2008, but it was higher in each of these two years than in all previous assessment years.2 Thirteen-year-olds scored higher in 2012 than in all previous assessment years, including 4 points higher than in 2008. The average score for 17-yearolds in 2012 was not measurably different from the score in 2008.

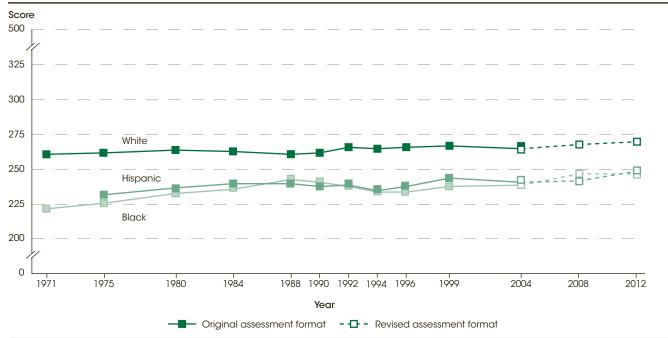
<sup>&</sup>lt;sup>2</sup> Except in 2004 for the original unrevised assessment. Scores from the original and revised assessments are not directly comparable, and comparisons should be made with caution.

**Section:** Assessments

Closing achievement gaps is a goal of both national and state education policies. The results from the 2012 NAEP long-term trend assessments show some progress toward meeting that goal. For example, from the 1970s

to 2012 the White-Black and White-Hispanic score gaps in reading and mathematics narrowed as a result of Black and Hispanic students making larger gains in achievement during that period than White students.

Figure 3. Average reading scale scores on the long-term trend National Assessment of Educational Progress (NAEP) for 13-year-olds, by race/ethnicity: Selected years, 1971 through 2012



NOTE: Includes public and private schools. NAEP scores range from 0 to 500. Several administrative changes were initiated beginning with the 2004 assessment, including allowing accommodations for students with disabilities and for English language learners. To assess the impact of these revisions, two assessments were conducted in 2004, one based on the original assessment and one based on the revised assessment. In 2008 and 2012, only the revised assessment was used.

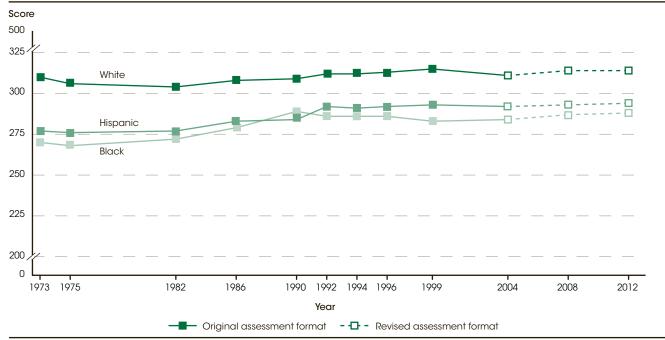
SOURCE: National Center for Education Statistics (2013). The Nation's Report Card: Trends in Academic Progress 2012 (NCES 2013-456). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C. See Digest of Education Statistics 2013, table 222.85.

In reading, the White-Black and White-Hispanic reading gaps narrowed from the 1970s to 2012 at ages 9, 13, and 17, even though the average reading score of White students remained 21 or more points higher than the average scores for Black and Hispanic students in 2012. At age 13, Blacks and Hispanics both made larger gains in reading scores from the 1970s to 2012 than did White students, leading to a narrowing of the White-Black and White-Hispanic score gaps in 2012. From 1971 to 2012, White 13-year-olds had a 9-point gain, and Black 13-year-

olds had a 24-point gain. Larger gains for Black than for White 13-year-olds during the period narrowed the White-Black gap from 39 points in 1971 to 23 points in 2012. Similarly, Hispanic students age 13 had a 17-point gain in reading from 1975 to 2012, which narrowed the White-Hispanic gap from 30 points in 1975 to 21 points in 2012. Hispanic 13-year-olds were the only racial/ethnic group to make reading score gains from 2008 to 2012. The White-Hispanic gap for 13-year-olds narrowed 5 points from 2008 to 2012.

**Section:** Assessments

Figure 4. Average mathematics scale scores on the long-term trend National Assessment of Educational Progress (NAEP) for 17-year-olds, by race/ethnicity: Selected years, 1973 through 2012



NOTE: Includes public and private schools. NAEP scores range from 0 to 500. Several administrative changes were initiated beginning with the 2004 assessment, including allowing accommodations for students with disabilities and for English language learners. To assess the impact of these revisions, two assessments were conducted in 2004, one based on the original assessment and one based on the revised assessment. In 2008 and 2012, only the revised assessment was used.

SOURCE: National Center for Education Statistics (2013). The Nation's Report Card: Trends in Academic Progress 2012 (NCES 2013-456). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C. See Digest of Education Statistics 2013, table 222.85.

In mathematics, the White-Black gap narrowed from the 1970s to 2012 at ages 9, 13, and 17, even though the average mathematics score of White students remained 25 or more points higher than the average score for Black students in 2012. The White-Hispanic mathematics gap also narrowed from 1973 to 2012 at ages 13 and 17, but it did not change significantly at age 9. For example, average mathematics scores for 17-year-olds increased 4 points for White students, 18 points for Black students, and 17 points for Hispanic students from 1973 to 2012.

As a result, both the White-Black score gap and the White-Hispanic score gap for 17-year-olds narrowed 14 points during this period. For 17-year-old students, the White-Black score gap narrowed from 40 points in 1973 to 26 points in 2012, and the White-Hispanic score gap narrowed from 33 to 19 points over the same period. There were no significant changes, however, from 2008 to 2012 in the White-Black or White-Hispanic score gaps for 17-year-olds.

**Reference tables:** Digest of Education Statistics 2013, tables 221.85 and 222.85

#### Indicator 26

**Chapter:** 3/Elementary and Secondary Education

**Section:** Assessments

### **International Assessments**

Among 15-year-old students, 29 education systems had higher average scores than the United States in mathematics literacy, 22 had higher average scores in science literacy, and 19 had higher average scores in reading literacy, according to the 2012 Program for International Student Assessment (PISA).

The Program for International Student Assessment (PISA), coordinated by the Organization for Economic Cooperation and Development (OECD), has measured the performance of 15-year-old students in mathematics, science, and reading literacy every 3 years since 2000. In 2012, PISA was administered in 65 countries and education systems, including all 34 member countries of the OECD. In addition to participating in the U.S. national sample, three states—Connecticut, Florida, and Massachusetts—opted to participate as individual

education systems and had separate samples of public schools and public-school students included in PISA to obtain state-level results. PISA 2012 results are reported by average scale score (from 0 to 1,000) as well as by the percentage of students reaching particular proficiency levels. Proficiency results are presented in terms of the percentages of students reaching proficiency level 5 or above (i.e., percentages of top performers) and the percentages of students performing below proficiency level 2 (i.e., percentages of low performers).

**Section:** Assessments

Table 1. Average scores of 15-year-old students on the Program for International Student Assessment (PISA) mathematics literacy scale, by education system: 2012

| Education system   | Average score | Education system        | Average score |
|--------------------|---------------|-------------------------|---------------|
| OECD average       | 494 🔾         |                         |               |
| Shanghai-CHN       | 613 🖸         | Lithuania               | 479           |
| Singapore          | 573 🖸         | Sweden                  | 478           |
| Hong Kong-CHN      | 561 🛇         | Hungary                 | 477           |
| Chinese Taipei     | 560 🛇         | Croatia                 | 471 🛡         |
| Korea, Republic of | 554 <b>O</b>  | Israel                  | 466 🛡         |
| Macao-CHN          | 538 🛇         | Greece                  | 453 🛡         |
| Japan              | 536 🖸         | Serbia, Republic of     | 449 🛡         |
| Liechtenstein      | 535 🛇         | Turkey                  | 448 🛡         |
| Switzerland        | 531 <b>O</b>  | Romania                 | 445 🛡         |
| Netherlands        | 523 <b>O</b>  | Cyprus                  | 440 🛡         |
| Estonia            | 521 <b>O</b>  | Bulgaria                | 439 🛡         |
| Finland            | 519 🛇         | United Arab Emirates    | 434 🛡         |
| Canada             | 518 🛇         | Kazakhstan              | 432 🛡         |
| Poland             | 518 🛇         | Thailand                | 427 🛡         |
| Belgium            | 515 🖸         | Chile                   | 423 🛡         |
| Germany            | 514 🛇         | Malaysia                | 421 🛡         |
| Vietnam            | 511 🛇         | Mexico                  | 413 🛡         |
| Austria            | 506 <b>O</b>  | Montenegro, Republic of | 410 🛡         |
| Australia          | 504 <b>O</b>  | Uruguay                 | 409 🛡         |
| Ireland            | 501 <b>O</b>  | Costa Rica              | 407 🛡         |
| Slovenia           | 501 <b>O</b>  | Albania                 | 394 🛡         |
| Denmark            | 500 <b>O</b>  | Brazil                  | 391 🛡         |
| New Zealand        | 500 <b>O</b>  | Argentina               | 388 🛡         |
| Czech Republic     | 499 🛕         | Tunisia                 | 388 👽         |
| France             | 495 🐧         | Jordan                  | 386 🛡         |
| United Kingdom     | 494 <b>O</b>  | Colombia                | 376 👽         |
| Iceland            | 493 <b>O</b>  | Qatar                   | 376 👽         |
| Latvia             | 491 <b>O</b>  | Indonesia               | 375 👽         |
| Luxembourg         | 490 🛇         | Peru                    | 368 ♥         |
| Norway             | 489           |                         |               |
| Portugal           | 487           |                         |               |
| Italy              | 485           | U.S. state              |               |
| Spain              | 484           | education systems       |               |
| Russian Federation | 482           | Massachusetts           | 514 🗘         |
| Slovak Republic    | 482           | Connecticut             | 506 🗘         |
| United States      | 481           | Florida                 | 467 🐨         |

<sup>•</sup> Average score is higher than U.S. average score.

Average score is lower than U.S. average score.

NOTE: Education systems are ordered by 2012 average score. The Organization for Economic Cooperation and Development (OECD) average is the average of the national averages of the OECD member countries, with each country weighted equally. Scores are reported on a scale from 0 to 1,000. All average scores reported as higher or lower than the U.S. average score are different at the .05 level of statistical significance. Italics indicate non-OECD countries and education systems. Results for Connecticut, Florida, and Massachusetts are for public school students only.

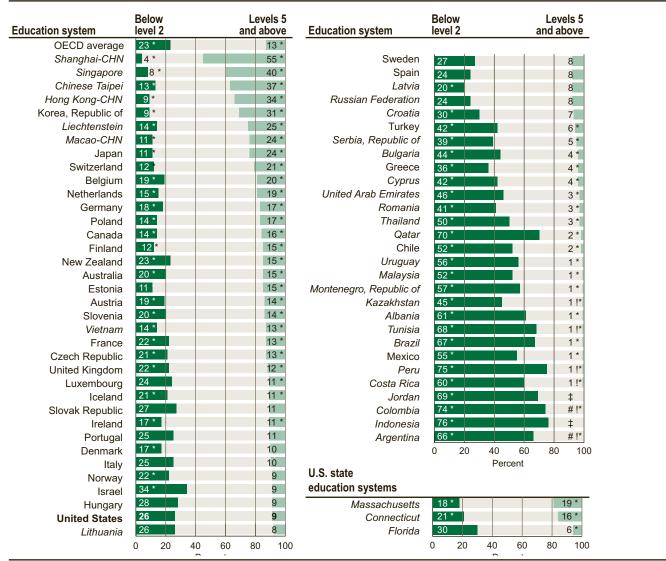
SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2012. See Digest of Education Statistics 2013, table 602.60.

In 2012, average scores in mathematics literacy ranged from 368 in Peru to 613 in Shanghai-CHN. The U.S. average mathematics score (481) was lower than the average for all OECD countries (494). Twenty-nine education systems and two U.S. states had higher average mathematics scores than the U.S. average score and nine had scores not measurably different from the U.S. score. The 29 education systems with scores higher than the U.S. average score were Shanghai-CHN, Singapore, Hong Kong-CHN, Chinese Taipei-CHN, the Republic of Korea, Macao-CHN, Japan, Liechtenstein, Switzerland, the Netherlands, Estonia, Finland, Canada, Poland, Belgium, Germany, Vietnam, Austria, Australia, Ireland,

Slovenia, Denmark, New Zealand, the Czech Republic, France, the United Kingdom, Iceland, Latvia, and Luxembourg. Within the United States, Massachusetts (514) and Connecticut (506) had scores higher than the U.S. average.

In addition to scoring above the U.S. average, Massachusetts scored above the OECD average. Connecticut scored above the U.S. national average, but its score was not measurably different from the OECD average. Florida's average score (467) was below the U.S. national average.

Figure 1. Percentage of 15-year-old students performing on the Program for International Student Assessment (PISA) mathematics literacy scale, by selected proficiency level and education system: 2012



Below level 2

Levels 5 and above # Rounds to zero.

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater.

\* p < .05. Significantly different from the U.S. percentage at the .05 level of statistical significance.

SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2012. See Digest of Education Statistics 2013, table 602.60.

PISA reports mathematics literacy in terms of six proficiency levels, with level 1 being the lowest and level 6 being the highest. Students scoring at proficiency levels 5 and above are considered to be top performers since they have demonstrated advanced mathematical thinking and reasoning skills required to solve problems of greater complexity. The percentage of top performers in the United States was lower than the average of the OECD countries' percentages of top performers (9

vs. 13 percent). Percentages of top performers ranged from near 0 percent in Colombia and Argentina to 55 percent in Shanghai-CHN. Twenty-seven education systems and two U.S. states had higher percentages of top performers in mathematics literacy than the United States. Massachusetts and Connecticut both had higher percentages of top performers (19 and 16 percent, respectively) than the United States (9 percent), while Florida had a lower percentage (6 percent).

<sup>!</sup> Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

NOTE: Education systems are ordered by 2012 percentages of 15-year-olds in levels 5 and above. To reach a particular proficiency level, a student must correctly answer a majority of items at that level. Students were classified into mathematics proficiency levels according to their scores. Exact cut scores are as follows: below level 1 (a score less than or equal to 357.77); level 1 (a score greater than 357.77 and less than or equal to 420.07); level 2 (a score greater than 420.07 and less than or equal to 482.38); level 3 (a score greater than 482.38 and less than or equal to 544.68); level 4 (a score greater than 544.68 and less than or equal to 606.99); level 5 (a score greater than 606.99 and less than or equal to 669.30); and level 6 (a score greater than 669.30). Scores are reported on a scale from 0 to 1,000. The Organization for Economic Cooperation and Development (OECD) average is the average of the national percentages of the OECD member countries, with each country weighted equally, Italics indicate non-OECD countries and education systems. Results for Connecticut, Florida, and Massachusetts are for public school students only.

Section: Assessments

A higher percentage (26 percent) of 15-year-olds in the United States scored below proficiency level 2 in mathematics literacy than the average of the OECD countries' percentages (23 percent). Percentages of low performers ranged from 4 percent in Shanghai-CHN to 76 percent in Indonesia. Twenty-nine education systems and two U.S. states had lower percentages of

low performers than the United States in mathematics literacy. The U.S. percentage of low performers was higher than the percentages for both Massachusetts (18 percent) and Connecticut (21 percent). The percentage of low performers in Florida (30 percent) was not measurably different from the U.S. percentage.

Table 2. Average scores of 15-year-old students on the Program for International Student Assessment (PISA) science literacy scale, by education system: 2012

| Education system   | Average score | Education system        | Average score |
|--------------------|---------------|-------------------------|---------------|
| OECD average       | 501           |                         |               |
| Shanghai-CHN       | 580 🖸         | Russian Federation      | 486 🗑         |
| Hong Kong-CHN      | 555 🛇         | Sweden                  | 485 🐨         |
| Singapore          | 551 🛇         | Iceland                 | 478 🐨         |
| Japan              | 547 <b>O</b>  | Slovak Republic         | 471 🐨         |
| Finland            | 545 <b>O</b>  | Israel                  | 470 🐨         |
| Estonia            | 541 <b>O</b>  | Greece                  | 467 🐨         |
| Korea, Republic of | 538 🛇         | Turkey                  | 463 ♥         |
| Vietnam            | 528 <b>O</b>  | United Arab Emirates    | 448 🐨         |
| Poland             | 526 <b>O</b>  | Bulgaria                | 446 🐨         |
| Canada             | 525 <b>O</b>  | Chile                   | 445 🐨         |
| Liechtenstein      | 525 🛇         | Serbia, Republic of     | 445 🐨         |
| Germany            | 524 <b>O</b>  | Thailand                | 444 🐨         |
| Chinese Taipei     | 523 <b>O</b>  | Romania                 | 439 🐨         |
| Netherlands        | 522 <b>O</b>  | Cyprus                  | 438 🐨         |
| Ireland            | 522 <b>O</b>  | Costa Rica              | 429 🐨         |
| Australia          | 521 <b>O</b>  | Kazakhstan              | 425 🐨         |
| Macao-CHN          | 521 <b>O</b>  | Malaysia                | 420 ♥         |
| New Zealand        | 516 🛇         | Uruguay                 | 416 🐨         |
| Switzerland        | 515 🛇         | Mexico                  | 415 🐨         |
| Slovenia           | 514 🛇         | Montenegro, Republic of | 410 🐨         |
| United Kingdom     | 514 🛇         | Jordan                  | 409 ♥         |
| Czech Republic     | 508 🖸         | Argentina               | 406 🐨         |
| Austria            | 506           | Brazil                  | 405 🐨         |
| Belgium            | 505           | Colombia                | 399 ♥         |
| Latvia             | 502           | Tunisia                 | 398 🐨         |
| France             | 499           | Albania                 | 397 ♥         |
| Denmark            | 498           | Qatar                   | 384 ♥         |
| United States      | 497           | Indonesia               | 382 🐨         |
| Spain              | 496           | Peru                    | 373 🐨         |
| Lithuania          | 496           |                         |               |
| Norway             | 495           |                         |               |
| Hungary            | 494           | U.S. state              |               |
| Italy              | 494           | education systems       |               |
| Croatia            | 491           | Massachusetts           | 527 🔾         |
| Luxembourg         | 491           | Connecticut             | 521 🔿         |
| Portugal           | 489           | Florida                 | 485           |

<sup>•</sup> Average score is higher than U.S. average score.

NOTE: Education systems are ordered by 2012 average score. The Organization for Economic Cooperation and Development (OECD) average is the average of the national averages of the OECD member countries, with each country weighted equally. Scores are reported on a scale from 0 to 1,000. All average scores reported as higher or lower than the U.S. average score are different at the .05 level of statistical significance. Italics indicate non-OECD countries and education systems. Results for Connecticut, Florida, and Massachusetts are for public school students only.

SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2012. See Digest of Education Statistics 2013, table 602.70.

In science literacy, average scores ranged from 373 in Peru to 580 in Shanghai-CHN. The U.S. average science score (497) was not measurably different from the OECD average (501). Twenty-two education systems and 2 U.S. states had higher average science scores than the United States and 13 systems and 1 U.S. state had scores that were not measurably different. The 22 education systems with higher scores than the U.S. average score

were Shanghai-CHN, Hong Kong-CHN, Singapore, Japan, Finland, Estonia, the Republic of Korea, Vietnam, Poland, Canada, Liechtenstein, Germany, Chinese Taipei-CHN, the Netherlands, Ireland, Australia, Macao-CHN, New Zealand, Switzerland, Slovenia, the United Kingdom, and the Czech Republic. Within the United States, Massachusetts and Connecticut scored above the U.S. average.

Average score is lower than U.S. average score.

**Section:** Assessments

In addition to scoring above the U.S. national average, Massachusetts (527) and Connecticut (521) also scored above the OECD average. Florida (485) had an average score not measurably different from the U.S. average and lower than the OECD average.

Percentage of 15-year-old students performing on the Program for International Student Assessment (PISA) Figure 2. science literacy scale, by selected proficiency level and education system: 2012

| cation system        | Below<br>level 2 | Levels 5 and above      | Education system        | Below level 2 |                     | vels 5<br>above |
|----------------------|------------------|-------------------------|-------------------------|---------------|---------------------|-----------------|
| OECD average         | 18               | 8                       | Eddodion System         | ICVCI Z       | una                 | ADOVC           |
| Shanghai-CHN         | 3 *              | 27 *                    | Spain                   | 16            |                     | 5 *             |
| Singapore            | 10 *             | 23 *                    | Croatia                 | 17            |                     | 5 *             |
| Japan                | 8 *              | 18 *                    | Portugal                | 19            |                     | 5 *             |
| Finland              | 8 *              | 17 *                    | Latvia                  | 12 *          |                     | 4 *             |
| Hong Kong-CHN        | 6*               | 17 *                    | Russian Federation      | 19            |                     | 4 *             |
| Australia            | 14 *             | 14 *                    | Bulgaria                | 37 *          |                     | 3 *             |
| New Zealand          | 16               | 13 *                    | United Arab Emirates    | 35 *          |                     | 3 *             |
| Estonia              | 5 *              | 13 *                    | Greece                  | 26 *          |                     | 2 *             |
| Germany              | 12 *             | 12 *                    | Cyprus                  | 38 *          |                     | 2 *             |
| Netherlands          | 13 *             | 12 *                    | Turkey                  | 26 *          |                     | 2 *             |
| Korea, Republic of   | 7 *              | 12 *                    | Serbia, Republic of     | 35 *          |                     | 2 *             |
| Canada               | 10 *             | 11 *                    | Qatar                   | 63 *          |                     | 1 *             |
| United Kingdom       | 15               | 11 *                    | Uruquay                 | 47 *          |                     | 1 *             |
| Poland               | 9 *              | 11 *                    | Chile                   | 34 *          |                     | 1 *             |
| Ireland              | 11 *             | 11 *                    | Thailand                | 34 *          |                     | 1 *             |
| Liechtenstein        | 10 *             | 10                      | Romania                 | 37 *          |                     | 1!*             |
| Slovenia             | 13 *             | 10 *                    | Albania                 | 53 *          |                     | #!*             |
| Switzerland          | 13 *             | 9                       | Montenegro, Republic of | 51 *          |                     | #!*             |
| Belgium              | 18               | 9                       | Malaysia                | 46 *          |                     | #!*             |
| Chinese Taipei       | 10 *             | 8                       | Brazil                  | 54 *          |                     | #!*             |
| Luxembourg           | 22 *             | 8                       | Jordan                  | 50 *          |                     | ‡               |
| Vietnam              | 7 *              | 8                       | Argentina               | 51 *          |                     | #!*             |
| France               | 19               | 8                       | Costa Rica              | 39 *          |                     | #!*             |
| Austria              | 16               | 8                       | Kazakhstan              | 42 *          |                     | #!*             |
| Czech Republic       | 14 *             | 8                       | Mexico                  | 47 *          |                     | #!*             |
| Norway               | 20               | 8                       | Colombia                | 56 *          |                     | ‡               |
| <b>United States</b> | 18               | 7                       | Tunisia                 | 55 *          |                     | ‡               |
| Denmark              | 17               | 7                       | Indonesia               | 67 *          |                     | ‡               |
| Macao-CHN            | 9 *              | 7                       | Peru                    | 68 *          |                     | ‡               |
| Sweden               | 22 *             | 6                       |                         | 0 20          | 40 60 80            | 100             |
| Italy                | 19               | 6                       | U.S. state              |               | Percent             |                 |
| Hungary              | 18               | 6                       |                         |               |                     |                 |
| Israel               | 29 *             | 6                       | education systems       |               |                     |                 |
| Iceland              | 24 *             | 5 *                     | Massachusetts           | 11 *          |                     | 14 *            |
| Lithuania            | 16               | 5 *                     | Connecticut             | 13 *          |                     | 13 *            |
| Slovak Republic      | 27 *             | 5 *                     | Florida                 | 21            |                     | 5               |
|                      | 0 20             | 40 60 80 100<br>Percent |                         | 0 20          | 40 60 80<br>Percent | 100             |

Below level 2

SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2012. See Digest of Education Statistics 2013, table 602.70

Levels 5 and above

<sup>#</sup> Rounds to zero.

<sup>!</sup> Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

<sup>‡</sup> Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater.

<sup>\*</sup> p < .05. Significantly different from the U.S. percentage at the .05 level of statistical significance.

NOTE: Education systems are ordered by 2012 percentages of 15-year-olds in levels 5 and above. To reach a particular proficiency level, a student must correctly answer a majority of items at that level. Students were classified into science proficiency levels according to their scores. Exact cut scores are as follows: below level 1 (a score less than or equal to 334.94); level 1 (a score greater than 334.94 and less than or equal to 499.54); level 2 (a score greater than 409.54 and less than or equal to 484.14); level 3 (a score greater than 484.14 and less than or equal to 558.73); level 4 (a score greater than 558.73) and less than or equal to 633.33); level 5 (a score greater than 633.33 and less than or equal to 707.93); and level 6 (a score) greater than 707.93). Scores are reported on a scale from 0 to 1,000. The Organization for Economic Cooperation and Development (OECD) average is the average of the national percentages of the OECD member countries, with each country weighted equally. Italics indicate non-OECD countries and education systems. Results for Connecticut, Florida, and Massachusetts are for public school students only.

**Chapter:** 3/Elementary and Secondary Education **Section:** Assessments

Similar to PISA's reporting of mathematics literacy, PISA also reports science literacy by six proficiency levels, with level 1 being the lowest and level 6 being the highest. Students performing at levels 5 and 6 can apply scientific knowledge in a variety of complex life situations. The percentage of U.S. top performers on the science literacy scale (7 percent) was not measurably different from the average of the OECD countries' percentages of top performers (8 percent). Percentages of top performers ranged from near 0 percent in eight education systems to 27 percent in Shanghai-CHN. Sixteen education systems and two U.S. states had percentages of top performers higher than the United States in science literacy. Massachusetts and Connecticut both had higher percentages of top performers (14 and 13 percent,

respectively) than the United States, while Florida had a percentage that was not measurably different (5 percent).

The percentage of U.S. students who scored below proficiency level 2 in science literacy was not measurably different from the average of the OECD countries' percentages (both 18 percent). Percentages of low performers ranged from 3 percent in Shanghai-CHN to 68 percent in Peru. Twenty-one education systems and two U.S. states, Massachusetts and Connecticut (11 and 13 percent, respectively), had lower percentages of low performers than the United States in science literacy. The percentage of low performers for Florida (21 percent) was not measurably different from the percentage for the United States.

Table 3. Average scores of 15-year-old students on the Program for International Student Assessment (PISA)

| reading            | reading literacy scale, by education system: 2012 |                         |               |  |  |
|--------------------|---|-------------------------|---------------|--|--|
| Education system   | Average score                                     | Education system        | Average score |  |  |
| OECD average       | 496   | -                       |               |  |  |
| Shanghai-CHN       | 570 🔷   | Iceland                 | 483 🛡         |  |  |
| Hong Kong-CHN      | 545 🛕   | Slovenia                | 481 🛡         |  |  |
| Singapore          | 542 🛇   | Lithuania               | 477 🐨         |  |  |
| Japan              | 538 🛇   | Greece                  | 477 🐨         |  |  |
| Korea, Republic of | 536 🛇   | Turkey                  | 475 🛡         |  |  |
| Finland            | 524 <b>O</b>                                      | Russian Federation      | 475 🛡         |  |  |
| Ireland            | 523 🛇   | Slovak Republic         | 463 🛡         |  |  |
| Chinese Taipei     | 523 🛇   | Cyprus                  | 449 🛡         |  |  |
| Canada             | 523 🛇   | Serbia, Republic of     | 446 🛡         |  |  |
| Poland             | 518 🛇   | United Arab Emirates    | 442 🛡         |  |  |
| Estonia            | 516 🔷   | Chile                   | 441 🛡         |  |  |
| Liechtenstein      | 516 🛇   | Thailand                | 441 🛡         |  |  |
| New Zealand        | 512 🛇   | Costa Rica              | 441 🛡         |  |  |
| Australia          | 512 🛇   | Romania                 | 438 🛡         |  |  |
| Netherlands        | 511 🛇   | Bulgaria                | 436 🛡         |  |  |
| Switzerland        | 509 🛇   | Mexico                  | 424 🛡         |  |  |
| Macao-CHN          | 509 <b>O</b>                                      | Montenegro, Republic of | 422 🐨         |  |  |
| Belgium            | 509 🔷   | Uruguay                 | 411 🐨         |  |  |
| Vietnam            | 508   | Brazil                  | 410 🐨         |  |  |
| Germany            | 508 🛇   | Tunisia                 | 404 🐨         |  |  |
| France             | 505   | Colombia                | 403 🛡         |  |  |
| Norway             | 504   | Jordan                  | 399 ♥         |  |  |
| United Kingdom     | 499   | Malaysia                | 398 🛡         |  |  |
| United States      | 498   | Indonesia               | 396 🐨         |  |  |
| Denmark            | 496   | Argentina               | 396 ♥         |  |  |
| Czech Republic     | 493   | Albania                 | 394 ♥         |  |  |
| Italy              | 490   | Kazakhstan              | 393 🐨         |  |  |
| Austria            | 490   | Qatar                   | 388 ♥         |  |  |
| Latvia             | 489 🐨   | Peru                    | 384 🐨         |  |  |
| Hungary            | 488   |                         |               |  |  |
| Spain              | 488 🐨   |                         |               |  |  |
| Luxembourg         | 488 🐨   | U.S. state              |               |  |  |
| Portugal           | 488   | education systems       |               |  |  |
| Israel             | 486   | Massachusetts           | 527 🗘         |  |  |
| Croatia            | 485 ♥   | Connecticut             | 521 <b>Q</b>  |  |  |
| Sweden             | 483 🐨   | Florida                 | 492           |  |  |
|                    | .55 ⊕   |                         |               |  |  |

<sup>•</sup> Average score is higher than U.S. average score. Average score is lower than U.S. average score.

NOTE: Education systems are ordered by 2012 average score. The Organization for Economic Cooperation and Development (OECD) average is the average of the national averages of the OECD member countries, with each country weighted equally. Scores are reported on a scale from 0 to 1,000. All average scores reported as higher or lower than the U.S. average score are different at the .05 level of statistical significance. Italics indicate non-OECD countries and

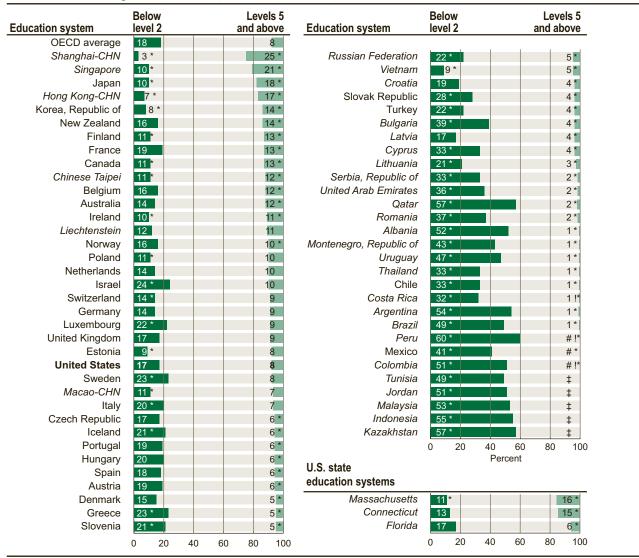
education systems. Results for Connecticut, Florida, and Massachusetts are for public school students only. SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2012. See *Digest of* Education Statistics 2013, table 602.50.

**Section:** Assessments

In reading literacy, average scores ranged from 384 in Peru to 570 in Shanghai-CHN. The U.S. average score (498) was not measurably different from the OECD average (496). Nineteen education systems and 2 U.S. states had higher average reading scores and 11 education systems and 1 U.S. state had scores that were not measurably different. The 19 education systems with higher average scores than the United States in

reading literacy were Shanghai-CHN, Hong Kong-CHN, Singapore, Japan, the Republic of Korea, Finland, Ireland, Chinese Taipei-CHN, Canada, Poland, Estonia, Liechtenstein, New Zealand, Australia, the Netherlands, Switzerland, Macao-CHN, Belgium, and Germany. Within the United States, Massachusetts and Connecticut, scored above the US. average.

Figure 3. Percentage of 15-year-old students performing on the Program for International Student Assessment (PISA) reading literacy scale, by selected proficiency level and education system: 2012



Below level 2

Levels 5 and above

<sup>#</sup> Rounds to zero.

<sup>!</sup> Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

<sup>‡</sup> Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is 50 percent or greater. p < .05. Significantly different from the U.S. percentage at the .05 level of statistical significance.

NOTE: Education systems are ordered by 2012 percentages of 15-year-olds in levels 5 and above. To reach a particular proficiency level, a student must correctly answer a majority of items at that level. Students were classified into reading proficiency levels according to their scores. Exact cut scores are as follows: below level 1b (a score less than or equal to 262.04); level 1b (a score greater than 262.04 and less than or equal to 334.75); level 3 (a score greater than 334.75 and less than or equal to 407.47); level 2 (a score greater than 407.47 and less than or equal to 480.18); level 3 (a score greater than 480.18 and less than or equal to 552.98); level 4 (a score greater than 552.98 and less than or equal to 625.61); level 5 (a score greater than 625.61 and less than or equal to 625.61); level 5 (a score greater than 625.61). or equal to 698.32), and level 6 (a score greater than 698.32). Scores are reported on a scale from 0 to 1,000. The Organization for Economic Cooperation and Development (OECD) average is the average of the national percentages of the OECD member countries, with each country weighted equally. Italics indicate non-OECD countries and education systems. Results for Connecticut, Florida, and Massachusetts are for public school students only SOURCE: Organization for Economic Cooperation and Development (OECD), Program for International Student Assessment (PISA), 2012. See Digest of Education Statistics 2013, table 602.50

In reading, Massachusetts (527) and Connecticut (521) scored above both the U.S. national average and the OECD average. Florida had an average reading score (492) that was not measurably different from either the U.S. average or the OECD average.

PISA reports reading literacy by seven proficiency levels, with level 1b being the lowest and level 6 being the highest. At levels 5 and 6, students have mastered sophisticated reading skills required to interpret and evaluate deeply embedded or abstract text. The percentage of U.S. top performers on the reading literacy scale was not measurably different from the average of the OECD countries' percentages of top performers (both 8 percent). Percentages of top performers ranged from near 0 percent in three education systems to 25 percent in Shanghai-CHN. Fourteen education systems and two U.S. states had percentages of top performers higher than the United States in reading literacy. Massachusetts and Connecticut both had higher percentages of top performers (16 and 15 percent, respectively) than the United States, while Florida had a lower percentage (6 percent).

The percentage of U.S. students who were low performers in reading literacy was not measurably different from the average of the OECD countries' percentages of low performers (17 and 18 percent, respectively). Percentages of low performers ranged from 3 percent in Shanghai-CHN to 60 percent in Peru. Fourteen education systems and one U.S. state had lower percentages of low performers than the United States in reading literacy. Massachusetts had a lower percentage (11 percent) than the United States, while Connecticut and Florida both

**Chapter:** 3/Elementary and Secondary Education **Section:** Assessments

had percentages that were not measurably different (13 and 17 percent, respectively).

The United States also participates in the Trends in International Mathematics and Science Study (TIMSS) and the Progress in International Reading Literacy Study (PIRLS). Both assessments are coordinated by the TIMSS & PIRLS International Study Center at Boston College, under the auspices of the International Association for the Evaluation of Educational Achievement (IEA), an international organization of national research institutions and governmental research agencies. TIMSS assesses mathematics and science knowledge and skills at grades 4 and 8, and PIRLS assesses reading literacy at grade 4.

In 2011, there were 57 education systems that had TIMSS mathematics and science data at grade 4 and 56 education systems that had these data at grade 8. Education systems include countries (complete, independent, and political entities) and other benchmarking education systems (portions of a country, nation, kingdom, or emirate, or other non-national entities). These benchmarking systems are able to participate in TIMSS even though they may not be members of the IEA. Participating allows them the opportunity to assess their students' achievement and to view their curricula in an international context. In addition to participating in the U.S. national sample, several U.S. states participated individually and are included as education systems. At the 4th-grade level, two U.S. states (Florida and North Carolina-USA) participated; at the 8th-grade level, nine U.S. states (Alabama-USA, California-USA, Colorado-USA, Connecticut, Florida, Indiana-USA, Massachusetts, Minnesota-USA, and North Carolina-USA) participated.

**Section:** Assessments

Average TIMSS mathematics assessment scale scores of 4th-grade students, by education system: 2011 Table 4.

| Grade 4                           |               | Grade 4                           |               |  |
|-----------------------------------|---------------|-----------------------------------|---------------|--|
| Education system                  | Average score | Education system                  | Average score |  |
| TIMSS scale average               | 500           | New Zealand                       | 486 ♥         |  |
| Singapore <sup>1</sup>            | 606 🕭         | Spain                             | 482 🗑         |  |
| Korea, Rep. of                    | 605 🕭         | Romania                           | 482 🗑         |  |
| Hong Kong-CHN <sup>1</sup>        | 602 🕲         | Poland                            | 481 🗑         |  |
| Chinese Taipei-CHN                | 591 🕭         | Turkey                            | 469 🛡         |  |
| Japan                             | 585 🕲         | Azerbaijan <sup>1,5</sup>         | 463 🛡         |  |
| Northern Ireland-GBR <sup>2</sup> | 562 🕭         | Chile                             | 462 🛡         |  |
| Belgium (Flemish)-BEL             | 549 🖎         | Thailand                          | 458 🛡         |  |
| Finland                           | 545           | Armenia                           | 452 🗑         |  |
| England-GBR                       | 542           | Georgia <sup>3,5</sup>            | 450 🛡         |  |
| Russian Federation                | 542           | Bahrain                           | 436 🛡         |  |
| United States <sup>1</sup>        | 541           | United Arab Emirates              | 434 👽         |  |
| Netherlands <sup>2</sup>          | 540           | Iran, Islamic Rep. of             | 431 🗑         |  |
| Denmark <sup>1</sup>              | 537           | Qatar <sup>1</sup>                | 413 🛡         |  |
| Lithuania <sup>1,3</sup>          | 534 ♥         | Saudi Arabia                      | 410 🐨         |  |
| Portugal                          | 532 👽         | Oman <sup>6</sup>                 | 385 🛡         |  |
| Germany                           | 528 👽         | Tunisia <sup>6</sup>              | 359 ♥         |  |
| Ireland                           | 527 🐨         | Kuwait <sup>3,7</sup>             | 342 🗑         |  |
| Serbia <sup>1</sup>               | 516 ♥         | Morocco <sup>7</sup>              | 335 🗑         |  |
| Australia                         | 516 ♥         | Yemen <sup>7</sup>                | 248 🛡         |  |
| Hungary                           | 515 ♥         |                                   |               |  |
| Slovenia                          | 513 ♥         | Benchmarking                      |               |  |
| Czech Republic                    | 511 ♥         | education systems                 |               |  |
| Austria                           | 508 ♥         | North Carolina-USA <sup>1,3</sup> | 554 (4)       |  |
| Italy                             | 508 ♥         | Florida-USA <sup>3,8</sup>        | 545           |  |
| Slovak Republic                   | 507 ♥         | Quebec-CAN                        | 533 ♥         |  |
| Sweden                            | 504 ♥         | Ontario-CAN                       | 518 🛡         |  |
| Kazakhstan <sup>1</sup>           | 501 ♥         | Alberta-CAN <sup>1</sup>          | 507 ♥         |  |
| Malta                             | 496 🐨         | Dubai-UAE                         | 468 🛡         |  |
| Norway <sup>4</sup>               | 495 🐨         | Abu Dhabi-UAE                     | 417 🗑         |  |
| Croatia <sup>1</sup>              | 490 🐨         |                                   |               |  |

Average score is higher than U.S. average score.

Average score is lower than U.S. average score.

NOTE: Education systems are ordered by 2011 average score. Italics indicate participants identified and counted in this report as an education system and not as a separate country. Trends in International Mathematics and Science Study (TIMSS) scores are reported on a scale from 0 to 1,000, with the scale average set at 500 and the standard deviation set at 100. The TIMSS average includes only education systems that are members of the International Association for the Evaluation of Educational Achievement (IEA), which develops and implements TIMSS at the international level. Benchmarking' education systems are not members of the IEA and are therefore not included in the average. All U.S. state data are based on public school students only. SOURCE: Provasnik, S., Kastberg, D., Ferraro, D., Lemanski, N., Roey, S., and Jenkins, F. (2012). Highlights From TIMSS 2011: Mathematics and Science Achievement of U.S. Fourth- and Eighth-Grade Students in an International Context (NCES 2013-009), table 3, data from the International Association for the Evaluation of Educational Achievement (IEA), Trends in International Mathematics and Science Study (TIMSS), 2011. See Digest of Education Statistics 2013, table 602.20.

At grade 4, the U.S. average mathematics score (541) in 2011 was higher than the TIMSS scale average (500). The United States was among the top 15 education systems in mathematics (8 education systems had higher average scores, and 6 had scores that were not measurably different), and the United States scored higher, on average, than 42 education systems. Seven education systems with average mathematics scores above the U.S. score were Belgium (Flemish)-BEL,

Chinese Taipei-CHN, Hong Kong-CHN, Japan, Northern Ireland-GBR, the Republic of Korea, and Singapore. Among the U.S. states that participated at grade 4, both North Carolina-USA and Florida had average mathematics scores above the TIMSS scale average. North Carolina-USA's score was higher than the U.S. national average; however, Florida's score was not measurably different from the U.S. national average in mathematics.

<sup>&</sup>lt;sup>1</sup> National Defined Population covers 90 to 95 percent of National Target Population defined by TIMSS.

Met guidelines for sample participation rates only after replacement schools were included.
 National Target Population does not include all of the International Target Population defined by TIMSS.

<sup>&</sup>lt;sup>4</sup> Nearly satisfied guidelines for sample participation rates after replacement schools were included.

<sup>&</sup>lt;sup>5</sup> Exclusion rates for Azerbaijan and Georgia are slightly underestimated as some conflict zones were not covered and no official statistics were available. <sup>6</sup> The TIMSS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 15 percent, though it is less than 25 percent.

<sup>7</sup> The TIMSS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 25 percent.

<sup>8</sup> National Defined Population covers less than 90 percent, but at least 77 percent, of National Target Population defined by TIMSS.

**Section:** Assessments

Average TIMSS science assessment scale scores of 4th-grade students, by education system: 2011 Table 5.

| Grade 4 Grade 4  |
|--|
| Education system Average score Education system Average scor           |
| TIMSS scale average 500 New Zealand 497 (                              |
| Korea, Rep. of 587 🐧 Kazakhstan <sup>1</sup> 495 (                     |
| Singapore <sup>1</sup> 583 <b>◊</b> Norway <sup>4</sup> 494 (          |
| Finland 570 <b>O</b> Chile 480 (                                       |
| Japan 559 🐧 Thailand 472 0   |
| Russian Federation 552 <b>O</b> Turkey 463 (                           |
| Chinese Taipei-CHN 552 <b>O</b> Georgia <sup>3,5</sup> 455 (           |
| Jnited States <sup>1</sup> 544 Iran, Islamic Rep. of 453 (             |
| Czech Republic 536 ♥ Bahrain 449 0                                     |
| Hong Kong-CHN¹ 535 ♥ Malta 446 0                                       |
| Hungary 534 ♥ Azerbaijan <sup>1,5</sup> 438 €                          |
| Sweden 533 🔊 Saudi Arabia 429 (  |
| Slovak Republic 532 ♥ United Arab Emirates 428 €                       |
| Austria 532 🕏 Armenia 416 0  |
| Netherlands <sup>2</sup> 531 ♥ Qatar <sup>1</sup> 394 0                |
| England-GBR 529 ♥ Oman 377 (   |
| Denmark <sup>1</sup> 528 <b>♥</b> Kuwait <sup>3,6</sup> 347 (          |
| Germany 528 ♥ Tunisia <sup>6</sup> 346 ©                               |
| taly 524 ® Morocco <sup>7</sup> 264 ©                                  |
| Portugal 522 ♥ Yemen <sup>7</sup> 209 (                                |
| Slovenia 520 ♥   |
| Northern Ireland-GBR <sup>2</sup> 517 <b>® Benchmarking</b>            |
| reland 516 🕏 education systems   |
| Croatia <sup>1</sup> 516 <b>♥</b> Florida-USA <sup>3,8</sup> 545       |
| Australia 516 <b>♥</b> <i>Alberta-CAN</i> <sup>1</sup> 541             |
| Serbia <sup>1</sup> 516 <b>♥</b> North Carolina-USA <sup>1,3</sup> 538 |
| ithuania <sup>1,3</sup> 515 <b>♥</b> <i>Ontario-CAN</i> 528 0          |
| Belgium (Flemish)-BEL 509 ♥ Quebec-CAN 516 €                           |
| Romania 505 ♥ <i>Dubai-UAE</i> 461 0                                   |
| Spain 505 ♥ Abu Dhabi-UAE 411 0  |
| Poland 505 ♥   |

Average score is higher than U.S. average score.

8 National Defined Population covers less than 90 percent, but at least 77 percent, of National Target Population defined by TIMSS.
NOTE: Education systems are ordered by 2011 average score. Italics indicate participants identified and counted in this report as an education system and not as a separate country. Trends in International Mathematics and Science Study (TIMSS) scores are reported on a scale from 0 to 1,000, with the scale average set at 500 and the standard deviation set at 100. The TIMSS average includes only education systems that are members of the International Association for the Evaluation of Educational Achievement (IEA), which develops and implements TIMSS at the international level. "Benchmarking" education systems are not members of the IEA and are therefore not included in the average. All U.S. state data are based on public school students only. SOURCE: Provasnik, S., Kastberg, D., Ferraro, D., Lemanski, N., Roey, S., and Jenkins, F. (2012). Highlights From TIMSS 2011: Mathematics and Science Achievement of U.S. Fourth- and Eighth-Grade Students in an International Context (NCES 2013-009), table 26, data from the International Association for the Evaluation of Educational Achievement (IEA), Trends in International Mathematics and Science Study (TIMSS), 2011. See Digest of Education Statistics 2013, table 602.20.

At grade 4, the U.S. average science score (544) was higher than the TIMSS scale average of 500. The United States was among the top 10 education systems in science (6 education systems had higher average science scores, and 3 had scores that were not measurably different). The United States also scored higher, on average, than 47 education systems in 2011. The six education systems

with average science scores above the U.S. score were Chinese Taipei-CHN, Finland, Japan, the Republic of Korea, the Russian Federation, and Singapore. Of the participating education systems within the United States, both Florida and North Carolina-USA scored above the TIMSS scale average, but their science scores were not measurably different from the U.S. national average.

Average score is lower than U.S. average score.

<sup>&</sup>lt;sup>1</sup> National Defined Population covers 90 to 95 percent of National Target Population defined by TIMSS.

<sup>&</sup>lt;sup>2</sup> Met guidelines for sample participation rates only after replacement schools were included.

<sup>3</sup> National Target Population does not include all of the International Target Population defined by TIMSS

<sup>&</sup>lt;sup>4</sup> Nearly satisfied guidelines for sample participation rates after replacement schools were included.

Exclusion rates for Azerbaijan and Georgia are slightly underestimated as some conflict zones were not covered and no official statistics were available. <sup>6</sup>The TIMSS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 15 percent, though it is less than 25 percent.

<sup>&</sup>lt;sup>7</sup> The TIMSS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 25 percent.

**Section:** Assessments

Table 6. Average TIMSS mathematics assessment scale scores of 8th-grade students, by education system: 2011

| Grade 8                         |               | Grade 8                              |               |  |
|---------------------------------|---------------|--------------------------------------|---------------|--|
| Education system                | Average score | Education system                     | Average score |  |
| TIMSS scale average             | 500           | Chile                                | 416           |  |
| Korea, Rep. of                  | 613 🛕         | Iran, Islamic Rep. of <sup>6</sup>   | 415 🤄         |  |
| Singapore <sup>1</sup>          | 611 🛕         | Qatar <sup>6</sup>                   | 410 🤄         |  |
| Chinese Taipei-CHN              | 609 🔷         | Bahrain <sup>6</sup>                 | 409 🤄         |  |
| Hong Kong-CHN                   | 586 🛆         | Jordan <sup>6</sup>                  | 406 🤄         |  |
| Japan                           | 570 🔷         | Palestinian Nat'l Auth. <sup>6</sup> | 404 (         |  |
| Russian Federation <sup>1</sup> | 539 🐧         | Saudi Arabia <sup>6</sup>            | 394 🤄         |  |
| Israel <sup>2</sup>             | 516           | Indonesia <sup>6</sup>               | 386 🤄         |  |
| Finland                         | 514           | Syrian Arab Republic <sup>6</sup>    | 380 🤄         |  |
| United States <sup>1</sup>      | 509           | Morocco <sup>7</sup>                 | 371 🤄         |  |
| England-GBR <sup>3</sup>        | 507           | Oman <sup>6</sup>                    | 366 🤄         |  |
| Hungary                         | 505           | Ghana <sup>7</sup>                   | 331 🤄         |  |
| Australia                       | 505           |                                      |               |  |
| Slovenia                        | 505           | Benchmarking                         |               |  |
| Lithuania <sup>4</sup>          | 502           | education systems                    |               |  |
| Italy                           | 498 🐨         | Massachusetts-USA <sup>1,4</sup>     | 561           |  |
| New Zealand                     | 488 👽         | Minnesota-USA <sup>4</sup>           | 545           |  |
| Kazakhstan                      | 487 🐨         | North Carolina-USA <sup>2,4</sup>    | 537           |  |
| Sweden                          | 484 🐨         | Quebec-CAN                           | 532 🕻         |  |
| Ukraine                         | 479 🐨         | Indiana-USA <sup>1,4</sup>           | 522 🤇         |  |
| Norway                          | 475 🐨         | Colorado-USA <sup>4</sup>            | 518           |  |
| Armenia                         | 467 ♥         | Connecticut-USA <sup>1,4</sup>       | 518           |  |
| Romania                         | 458 🐨         | Florida-USA <sup>1,4</sup>           | 513           |  |
| United Arab Emirates            | 456 ♥         | Ontario-CAN <sup>1</sup>             | 512           |  |
| Turkey                          | 452 🐨         | Alberta-CAN <sup>1</sup>             | 505           |  |
| Lebanon                         | 449 🐨         | California-USA <sup>1,4</sup>        | 493 (         |  |
| Malaysia                        | 440 🐨         | Dubai-UAE                            | 478 🤄         |  |
| Georgia <sup>4,5</sup>          | 431 🐨         | Alabama-USA⁴                         | 466           |  |
| Thailand                        | 427 🐨         | Abu Dhabi-UAE                        | 449 (         |  |
| Macedonia, Rep. of <sup>6</sup> | 426 🐨         |                                      |               |  |
| Tunisia                         | 425 🛡         |                                      |               |  |

Average score is higher than U.S. average score.

Average score is lower than U.S. average score.

NOTE: Education systems are ordered by 2011 average score. Italics indicate participants identified and counted in this report as an education system and not as a separate country. Trends in International Mathematics and Science Study (TIMSS) scores are reported on a scale from 0 to 1,000, with the scale average set at 500 and the standard deviation set at 100. The TIMSS average includes only education systems that are members of the International Association for the Evaluation of Educational Achievement (IEA), which develops and implements TIMSS at the international level. "Benchmarking" education systems are not members of the IEA and are therefore not included in the average. All U.S. state data are based on public school students only. SOURCE: Provasnik, S., Kastberg, D., Ferraro, D., Lemanski, N., Roey, S., and Jenkins, F. (2012). Highlights From TIMSS 2011: Mathematics and Science Achievement of U.S. Fourth- and Eighth-Grade Students in an International Context (INCES 2013-009), table 4, data from the International Association for the Evaluation of Educational Achievement (IEA), Trends in International Mathematics and Science Study (TIMSS), 2011. See Digest of Education Statistics 2013, table 602.30.

At grade 8, the U.S. average mathematics score (509) was higher than the TIMSS scale average of 500. The United States was among the top 24 education systems in mathematics in 2011 (11 education systems had higher average scores, and 12 had scores that were not measurably different). In addition, the United States scored higher, on average, than 32 education systems. The 11 education systems with average mathematics scores above the U.S. score were Chinese Taipei-CHN, Hong Kong-CHN, Japan, Quebec-CAN, the Republic of Korea, the Russian Federation, Singapore, and, within the United States, Indiana-USA, Massachusetts, Minnesota-USA, and North Carolina-USA.

In addition to scoring above the U.S. average in 8th-grade mathematics, Indiana-USA, Massachusetts, Minnesota-USA, and North Carolina-USA also scored above the TIMSS scale average. Colorado-USA, Connecticut, and Florida scored above the TIMSS scale average, but their scores were not measurably different from the U.S. national average. California-USA's score was not measurably different from the TIMSS scale average, but it was below the U.S. national average; Alabama-USA scored below both the TIMSS scale average and the U.S. national average in mathematics.

National Defined Population covers 90 to 95 percent of National Target Population defined by TIMSS

<sup>&</sup>lt;sup>2</sup> National Defined Population covers less than 90 percent, but at least 77 percent, of National Target Population defined by TIMSS.

<sup>&</sup>lt;sup>3</sup> Nearly satisfied guidelines for sample participation rates after replacement schools were included.

<sup>4</sup> National Target Population does not include all of the International Target Population defined by TIMSS.

5 Exclusion rates for Georgia are slightly underestimated as some conflict zones were not covered and no official statistics were available.

<sup>&</sup>lt;sup>6</sup>The TIMSS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 15 percent, though it is less than 25 percent.

<sup>&</sup>lt;sup>7</sup> The TIMSS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 25 percent.

**Section:** Assessments

Table 7. Average TIMSS science assessment scale scores of 8th-grade students, by education system: 2011

| Grade                           | 8             | Grade 8                           |               |  |
|---------------------------------|---------------|-----------------------------------|---------------|--|
| Education system                | Average score | Education system                  | Average score |  |
| TIMSS scale average             | 500           | Saudi Arabia                      | 436           |  |
| Singapore <sup>1</sup>          | 590 🔷         | Malaysia                          | 426           |  |
| Chinese Taipei-CHN              | 564 🛇         | Syrian Arab Republic              | 426           |  |
| Korea, Rep. of                  | 560 🔷         | Palestinian Nat'l Auth.           | 420 🤄         |  |
| Japan                           | 558 🛇         | Georgia <sup>4,5</sup>            | 420 🤄         |  |
| Finland                         | 552 🛇         | Oman                              | 420 🤄         |  |
| Slovenia                        | 543 🛇         | Qatar                             | 419 🤄         |  |
| Russian Federation <sup>1</sup> | 542 🛇         | Macedonia, Rep. of                | 407 🤄         |  |
| Hong Kong-CHN                   | 535 🔾         | Lebanon                           | 406           |  |
| England-GBR <sup>2</sup>        | 533           | Indonesia                         | 406           |  |
| United States <sup>1</sup>      | 525           | Morocco                           | 376           |  |
| Hungary                         | 522           | Ghana <sup>6</sup>                | 306           |  |
| Australia                       | 519           |                                   |               |  |
| Israel <sup>3</sup>             | 516           | Benchmarking                      |               |  |
| Lithuania <sup>4</sup>          | 514 🗑         | education systems                 |               |  |
| New Zealand                     | 512 🗑         | Massachusetts-USA <sup>1,4</sup>  | 567 <b>C</b>  |  |
| Sweden                          | 509 🛡         | Minnesota-USA <sup>4</sup>        | 553 <b>C</b>  |  |
| Italy                           | 501 🗑         | Alberta-CAN1                      | 546 <b>C</b>  |  |
| Ukraine                         | 501 🐨         | Colorado-USA <sup>4</sup>         | 542 🕻         |  |
| Norway                          | 494 🐨         | Indiana-USA <sup>1,4</sup>        | 533           |  |
| Kazakhstan                      | 490 🐨         | Connecticut-USA <sup>1,4</sup>    | 532           |  |
| Turkey                          | 483 🛡         | North Carolina-USA <sup>3,4</sup> | 532           |  |
| Iran, Islamic Rep. of           | 474 🐨         | Florida-USA <sup>1,4</sup>        | 530           |  |
| Romania                         | 465 🐨         | Ontario-CAN1                      | 521           |  |
| United Arab Emirates            | 465 🛡         | Quebec-CAN                        | 520           |  |
| Chile                           | 461 🐨         | California-USA <sup>1,4</sup>     | 499           |  |
| Bahrain                         | 452 🗑         | Alabama-USA <sup>4</sup>          | 485 (         |  |
| Thailand                        | 451 🗑         | Dubai-UAE                         | 485 (         |  |
| Jordan                          | 449 🐨         | Abu Dhabi-UAE                     | 461 6         |  |
| Tunisia                         | 439 🐨         |                                   |               |  |
| Armenia                         | 437 🐨         |                                   |               |  |

• Average score is higher than U.S. average score.

Average score is lower than U.S. average score.

NOTE: Education systems are ordered by 2011 average score. Italias indicate participants identified and counted in this report as an education system and not as a separate country. Trends in International Mathematics and Science Study (TIMSS) scores are reported on a scale from 0 to 1,000, with the scale average set at 500 and the standard deviation set at 100. The TIMSS average includes only education systems that are members of the International Association for the Evaluation of Educational Achievement (IEA), which develops and implements TIMSS at the international level. "Benchmarking" education systems are not members of the IEA and are therefore not included in the average. All U.S. state data are based on public school students only. SOURCE: Provasnik, S., Kastberg, D., Ferraro, D., Lemanski, N., Roey, S., and Jenkins, F. (2012). Highlights From TIMSS 2011: Mathematics and Science Achievement of U.S. Fourth- and Eighth-Grade Students in an International Context (NCES 2013-009), table 27, data from the International Association for the Evaluation of Educational Achievement (IEA), Trends in International Mathematics and Science Study (TIMSS), 2011. See Digest of Education Statistics 2013, table 602.30.

At grade 8, the U.S. average science score (525) was higher than the TIMSS scale average of 500. The United States was among the top 23 education systems in science in 2011 (12 education systems had higher average scores, and 10 had scores that were not measurably different). The United States scored higher, on average, than 33 education systems. The 12 education systems with average science scores above the U.S. score were Alberta-CAN, Chinese Taipei-CHN, Finland, Hong Kong-CHN, Japan, the Republic of Korea, the Russian Federation, Singapore, Slovenia, and, within the United States, Colorado-USA, Massachusetts, and Minnesota-USA.

Aside from scoring above the U.S. average in 8th-grade science, Colorado-USA, Massachusetts, and Minnesota-USA also scored above the TIMSS scale average of 500. Connecticut, Florida, Indiana-USA, and North Carolina-USA scored above the TIMSS scale average, but their scores were not measurably different from the U.S. national average. California-USA's score was not measurably different from the TIMSS scale average, but it was below the U.S. national average; Alabama-USA scored below both the TIMSS scale average and the U.S. national average in science.

<sup>&</sup>lt;sup>1</sup> National Defined Population covers 90 to 95 percent of National Target Population defined by TIMSS.

<sup>&</sup>lt;sup>2</sup> Nearly satisfied guidelines for sample participation rates after replacement schools were included.

<sup>3</sup> National Defined Population covers less than 90 percent, but at least 77 percent, of National Target Population defined by TIMSS.

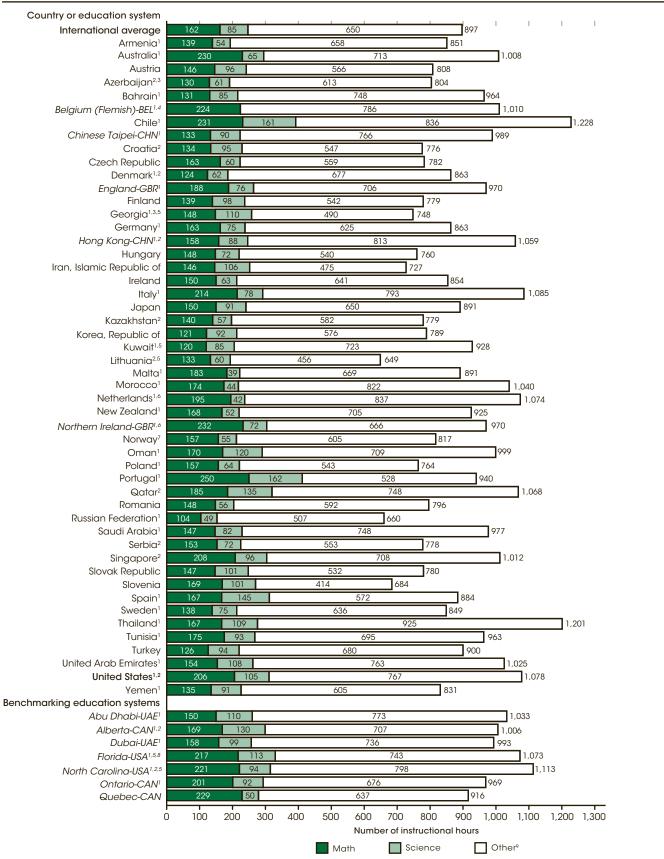
<sup>&</sup>lt;sup>4</sup> National Target Population does not include all of the International Target Population defined by TIMSS.

<sup>&</sup>lt;sup>5</sup> Exclusion rates for Georgia are slightly underestimated as some conflict zones were not covered and no official statistics were available.

<sup>&</sup>lt;sup>6</sup>The TIMSS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 15 percent, though it is less than 25 percent.

**Section:** Assessments

Figure 4. Number of instructional hours per year for 4th-grade students, by country or education system and subject: 2011



See notes on next page.

**Section:** Assessments

National Defined Population covers 90 to 95 percent of National Target Population defined by TIMSS.

 $^{5}$  National Target Population does not include all of the International Target Population defined by TIMSS

Nearly satisfied guidelines for sample participation rates only after replacement schools were included.

NOTE: Italics indicate participants identified and counted in this report as an education system and not as a separate country. Instructional times shown in this table are actual or implemented times (as opposed to intended times prescribed by the curriculum). Principals reported total instructional hours per day and school days per year. Total instructional hours per year were calculated by multiplying the number of school days per year by the number of instructional hours per day. Teachers reported instructional hours per week in mathematics and science. Instructional hours per year in mathematics and science were calculated by dividing weekly instructional hours by the number of school days per week and then multiplying by the number of school days per year International average instructional hours includes only education systems that are members of the International Association for the Evaluation of Educational Achievement (IAE), which develops and implements TIMSS at the international level. "Benchmarking" education systems are not members of the IEA and are

therefore not included in the average. All U.S. state data are based on public school students only.

SOURCE: Mullis, I.V.S., Martin, M.O., Foy, P., and Arora, A. (2012). TIMSS 2011 International Results in Mathematics, exhibit 8.6, and Martin, M.O., Mullis, I.V.S., Foy, P., and Stanco, G.M. (2012). TIMSS 2011 International Results in Science, exhibit 8.6. See Digest of Education Statistics 2013, table 602.20.

In addition to assessing achievement in mathematics and science, TIMSS collects information from principals on the total number of annual instructional hours in school. TIMSS also collects information from teachers on the number of annual instructional hours spent on mathematics and science instruction at grades 4 and 8. In 2011, education systems (excluding the benchmarking participants) participating in TIMSS at grade 4 spent an average of 897 total hours on instructional time, of which an average of 162 hours (18 percent) were spent on mathematics instruction and 85 hours (9 percent) were spent on science instruction. In 2011, the average number of total instructional hours (1,078 hours) spent in the United States at grade 4 was higher than the international average (897 hours). The average numbers of instructional hours spent on grade 4 mathematics instruction (206 hours) and science instruction (105 hours) in the United States were also higher than the international averages (162 and 85 hours, respectively).

Data for number of math, science, and/or total instructional hours are available for at least 50 percent but less than 85 percent of students.

<sup>&</sup>lt;sup>3</sup> Exclusion rates for Azerbaijan and Georgia are slightly underestimated as some conflict zones were not covered and no official statistics were available. Data for instructional hours in science are not available. Other instructional hours calculated by subtracting instruction hours in mathematics from total instructional hours

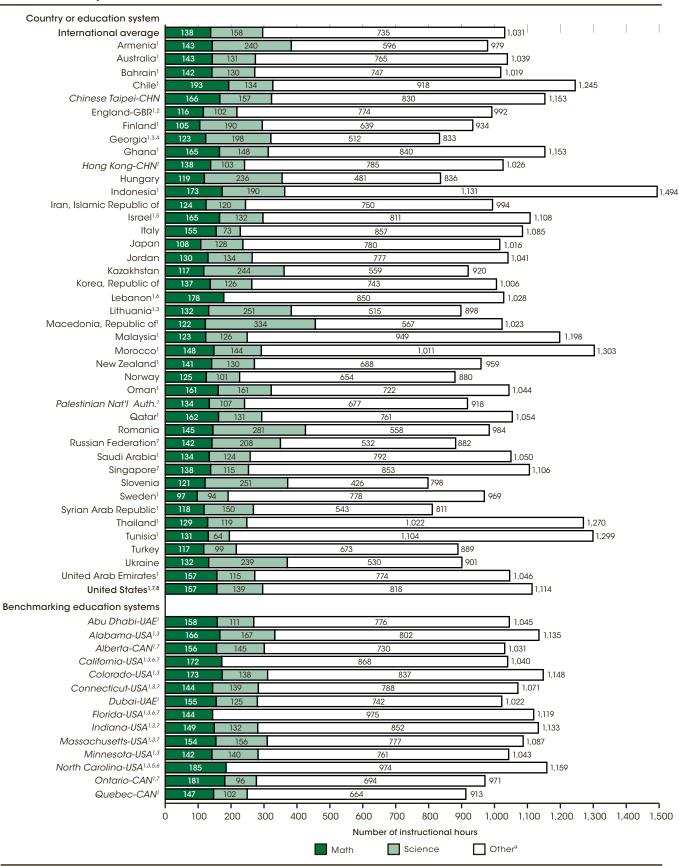
Met guidelines for sample participation rates only after replacement schools were included.

National Defined Population covers less than 90 percent, but at least 77 percent, of National Target Population defined by TIMSS.

<sup>9</sup> Other instructional hours calculated by adding instructional hours in mathematics to instructional hours in science and then subtracting from total instructional hours

**Section:** Assessments

Figure 5. Number of instructional hours per year for 8th-grade students, by country or education system and subject: 2011



See notes on next page.

**Section:** Assessments

National Defined Population covers 90 to 95 percent of National Target Population defined by TIMSS.

NOTE: Instructional times shown in this table are actual or implemented times (as opposed to intended times prescribed by the curriculum). Principals reported total instructional hours per day and school days per year. Total instructional hours per year were calculated by multiplying the number of school days per year by the number of instructional hours per day. Teachers reported instructional hours per week in mathematics and science. Instructional hours per year in mathematics and science were calculated by dividing weekly instructional hours by the number of school days per week and then multiplying by the number of school days per year. International average instructional hours includes only education systems that are members of the International Association for the Evaluation of Educational Achievement (IAE), which develops and implements TIMSS at the international level. "Benchmarking" education systems are not members of the IEA and are therefore not included in the average. All U.S. state data are based on public school students only. SOURCE: Mullis, I.V.S., Martin, M.O., Foy, P., and Arora, A. (2012). TIMSS 2011 International Results in Mathematics, exhibit 8.7, and Martin, M.O., Mullis, I.V.S., Foy, P., and Stanco, G.M. (2012). TIMSS 2011 International Results in Science, exhibit 8.7. See Digest of Education Statistics 2013, table 602.30.

At grade 8, education systems (excluding the benchmarking participants) participating in TIMSS spent an average of 1,031 total annual hours on instructional time in 2011, of which 138 hours (13 percent) were spent on mathematics instruction and 158 hours (15 percent) were spent on science instruction. Similar to the findings

at grade 4, the United States' average number of total instructional hours at grade 8 (1,114 hours) was higher than the international average (1,031 hours). The average hours spent on grade 8 mathematics instruction (157 hours) in the United States was also higher than the international average (138 hours).

Data for number of math and/or science instructional hours are available for at least 50 percent but less than 85 percent of students.

Nearly satisfied auidelines for sample participation rate after replacement schools were included

<sup>&</sup>lt;sup>3</sup> Target Population does not include all of the International Target Population defined by TIMSS

Exclusion rates for Georgia are slightly underestimated as some conflict zones were not covered and no official statistics were available.

<sup>&</sup>lt;sup>5</sup> National Defined Population covers less than 90 percent, but at least 77 percent, of National Target Population defined by TIMSS

<sup>6</sup> Data for instructional hours in science were not available. Other instructional hours calculated by subtracting instruction hours in mathematics from total instructional hours

Data for science are for 2007 and are from TIMSS 2007 International Results in Science. Met guidelines for sample participation rates only after substitute schools were included. Data for number of math instructional hours are available for at least 50 percent but less than 70 percent of students

<sup>9</sup> Other instructional hours calculated by adding instructional hours in mathematics to instructional hours in science and then subtracting from total instructional hours

**Section:** Assessments

Average PIRLS reading literacy assessment scale scores of 4th-grade students, by education system: 2011 Table 8.

| Education system                  | Overall<br>reading<br>average<br>scale score | Education system                    | Overall reading average scale score |
|-----------------------------------|--|-------------------------------------|-------------------------------------|
| PIRLS scale average               | 500  | PIRLS scale average                 | 500                                 |
| Hong Kong-CHN <sup>1</sup>        | 571 🔾  | France                              | 520 ♥                               |
| Russian Federation                | 568 🛇  | Spain                               | 513 🐨                               |
| Finland                           | 568 🔿  | Norway <sup>5</sup>                 | 507 🐨                               |
| Singapore <sup>2</sup>            | 567 🔿  | Belgium (French)-BEL <sup>2,3</sup> | 506 €                               |
| Northern Ireland-GBR <sup>3</sup> | 558  | Romania                             | 502 🐨                               |
| United States <sup>2</sup>        | 556  | Georgia <sup>4,6</sup>              | 488 🐨                               |
| Denmark <sup>2</sup>              | 554  | Malta                               | 477 🐨                               |
| Croatia <sup>2</sup>              | 553  | Trinidad and Tobago                 | 471 🐨                               |
| Chinese Taipei-CHN                | 553  | Azerbaijan <sup>2,6</sup>           | 462 🐨                               |
| Ireland                           | 552  | Iran, Islamic Rep. of               | 457 🐨                               |
| England-GBR <sup>3</sup>          | 552  | Colombia                            | 448 🐨                               |
| Canada <sup>2</sup>               | 548 ♥  | United Arab Emirates                | 439 🐨                               |
| Netherlands <sup>3</sup>          | 546 ♥  | Saudi Arabia                        | 430 🐨                               |
| Czech Republic                    | 545 🛡  | Indonesia                           | 428 🐨                               |
| Sweden                            | 542 ♥  | Qatar <sup>2</sup>                  | 425 🐨                               |
| Italy                             | 541 ♥  | Oman <sup>7</sup>                   | 391 🐨                               |
| Germany                           | 541 ♥  | Morocco <sup>8</sup>                | 310 🐨                               |
| Israel <sup>1</sup>               | 541 ♥  |                                     |                                     |
| Portugal                          | 541 ♥  | Benchmarking educatio               | n systems                           |
| Hungary                           | 539 ♥  | Florida-USA <sup>1,4</sup>          | 569 🔿                               |
| Slovak Republic                   | 535 ♥  | Ontario-CAN <sup>2</sup>            | 552                                 |
| Bulgaria                          | 532 ♥  | Alberta-CAN <sup>2</sup>            | 548 🐨                               |
| New Zealand                       | 531 🐨  | Quebec-CAN                          | 538 🐨                               |
| Slovenia                          | 530 ♥  | Andalusia-ESP                       | 515 🐨                               |
| Austria                           | 529 ♥  | Dubai-UAE                           | 476 🐨                               |
| Lithuania <sup>2,4</sup>          | 528 🛡  | Maltese-MLT                         | 457 🐨                               |
| Australia                         | 527 ♥  | Abu Dhabi-UAE                       | 424 🐨                               |
| Poland                            | 526 ♥  |                                     |                                     |

Average score is higher than U.S. average score.

NOTE: Education systems are ordered by 2011 average score. Italics indicate participants identified and counted in this report as an education system and not as a separate country. The Progress in International Reading Literacy Study (PIRLS) scores are reported on a scale from 0 to 1,000, with the scale average set at 500 and the standard deviation set at 100. The PIRLS average includes only education systems that are members of the International Association for the Evaluation of Educational Achievement (IEA), which develops and implements PIRLS at the international level. "Benchmarking" education systems are not members of the IEA and are therefore not included in the average. All U.S. state data are based on public school students only.

SOURCE: Thompson, S., Provasnik, S., Kastberg, D., Ferraro, D., Lemanski, N., Roey, S., and Jenkins, F. (2012). Highlights From PIRLS 2011: Reading Achievement of U.S. Fourth-Grade Students in an International Context (NCES 2013-010), table 3, data from the International Association for the Evaluation of Educational Achievement (IEA), Progress in International Reading Literacy Study (PIRLS), 2011. See Digest of Education Statistics 2013, table 602.10.

In 2011, there were 53 education systems that had PIRLS reading literacy data at grade 4. These 53 education systems included both countries and other benchmarking education systems. In addition to participating in the U.S. national sample, Florida participated individually and was included as an education system. In 2011, the U.S. average 4th-grade reading literacy score (556) was higher than the PIRLS scale average (500). The United States was among the top 13 education systems in reading literacy (5 education systems had higher average scores, and 7 had scores that were not measurably different). The United

States scored higher, on average, than 40 education

The five education systems with average reading scores above the U.S. score were Finland, Hong Kong-CHN, the Russian Federation, Singapore, and, within the United States, Florida. Additionally, Florida's average score (569) was higher than the PIRLS scale average. No education system scored higher than Florida, although four had scores that were not measurably different. Forty-eight education systems scored lower than Florida.

Reference tables: Digest of Education Statistics 2013, tables 602.10, 602.20, 602.30, 602.50, 602.60, and 602.70

For more information, see the Reader's Guide and the Guide to Sources.

Average score is lower than U.S. average score.

National Defined Population covers less than 90 percent of National Target Population defined by PIRLS.

<sup>&</sup>lt;sup>2</sup> National Defined Population covers 90 percent to 95 percent of National Target Population defined by PIRLS.

<sup>&</sup>lt;sup>3</sup> Met guidelines for sample participation rates only after replacement schools were included.

<sup>4</sup> National Target Population does not include all of the International Target Population defined by PIRLS.

<sup>&</sup>lt;sup>5</sup> Nearly satisfied guidelines for sample participation rates after replacement schools were included.

Exclusion rates for Azerbaijan and Georgia are slightly underestimated as some conflict zones were not covered and no official statistics were available. <sup>7</sup>The PIRLS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 15 percent, though it is less than 25 percent

<sup>&</sup>lt;sup>8</sup> The PIRLS International Study Center has reservations about the reliability of the average achievement score because the percentage of students with achievement too low for estimation exceeds 25 percent.

This page intentionally left blank.

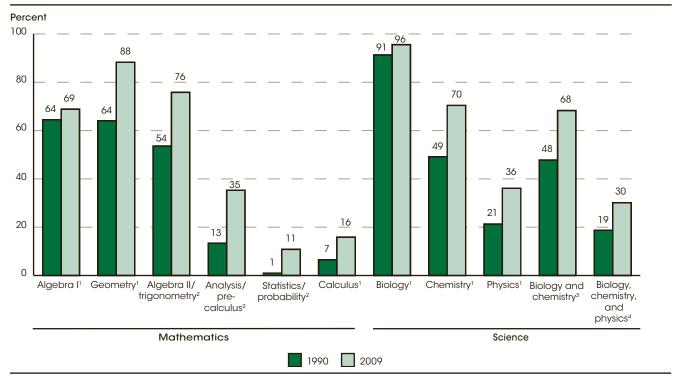
### **High School Coursetaking**

The percentages of high school graduates who had taken mathematics courses in algebra I, geometry, algebra II/trigonometry, analysis/precalculus, statistics/ probability, and calculus increased from 1990 to 2009. The percentages of high school graduates who had taken science courses in chemistry and physics also increased between 1990 and 2009.

In addition to administering students' assessments, the National Assessment of Educational Progress (NAEP) periodically collects data on the transcripts of high school graduates. The transcript survey gathers information about the types of courses that graduates from regular and honors programs take, how many credits they earn,

their grade point averages, and the relationship between coursetaking patterns and achievement. The transcript data include information only about the coursework that graduates completed while they were enrolled in grades 9 through 12.

Figure 1. Percentage of high school graduates who completed selected mathematics and science courses in high school: 1990 and 2009



Percentages are for students who earned at least one Carnegie credit.

The percentages of high school graduates who had completed mathematics courses in algebra I, geometry, algebra II/trigonometry, analysis/precalculus, statistics/ probability, and calculus increased between 1990 and 2009. For example, the percentage of graduates who

had completed calculus increased from 7 percent to 16 percent between 1990 and 2009. Similarly, the percentage of graduates who had completed algebra II/trigonometry increased from 54 percent to 76 percent.

<sup>&</sup>lt;sup>2</sup> Percentages are for students who earned at least one-half of a Carnegie credit

<sup>&</sup>lt;sup>3</sup> Percentages are for students who earned at least one Carnegie credit each in biology and chemistry.

<sup>&</sup>lt;sup>4</sup> Percentages are for students who earned at least one Carnegie credit each in biology, chemistry, and physics.

NOTE: For a transcript to be included in the analyses, the graduate had to receive either a standard or honors diploma. SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Transcript Study (HSTS), 1990 and 2009. See *Digest of Education* Statistics 2012, table 225.40

**Chapter:** 3/Elementary and Secondary Education **Section:** Student Effort, Persistence, and Progress

Scale score 300 250 203 193 194 200 179 170 150 117 114 109 104 100 50 Algebra I or below Calculus Highest mathematics course taken White Black Hispanic Asian/Pacific Islander American Indian/Alaska Native

Figure 2. Average National Assessment of Educational Progress (NAEP) 12th-grade mathematics scale scores of high school graduates, by highest mathematics course taken and race/ethnicity: 2009

‡ Reporting standards not met (too few cases for a reliable estimate)

<sup>1</sup> Includes basic math, general math, applied math, pre-algebra, and algebra I.

<sup>2</sup> Includes other racial/ethnic groups not shown separately and cases that were missing information on race/ethnicity and/or sex of student.

NOTE: The scale of the NAEP mathematics assessment for grade 12 ranges from 0 to 300. For a transcript to be included in the analyses, the graduate had to receive either a standard or honors diploma. Race categories exclude persons of Hispanic ethnicity. Reporting standards were not met for American Indian/Alaska Native estimates; therefore, data for this racial group are not shown in the figure.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Mathematics Assessment; and High School Transcript Study (HSTS), 2009. See *Digest of Education Statistics 2012*, table 222.40.

Between 1990 and 2009, the percentages of high school graduates who had taken various mathematics courses generally increased across subgroups. For example, the percentage of Hispanic graduates completing calculus increased from 4 percent in 1990 to 9 percent in 2009. Also, the percentage of Hispanic graduates completing algebra II/trigonometry increased from 40 percent to 71 percent. Similarly, the percentage of Black graduates completing calculus during this period increased from 3 to 6 percent, and the percentage completing algebra II/ trigonometry increased from 44 to 71 percent. Although there were increases in mathematics coursetaking across racial/ethnic groups during this period, gaps between groups remained in terms of the percentages of graduates completing courses. For example, in 2009 higher percentages of Asian/Pacific Islander (42 percent) and White graduates (18 percent) had taken calculus than had their Black (6 percent) and Hispanic peers (9 percent). In 2009, there was no measurable difference between the percentages of males and females who had taken calculus (16 percent each). However, the percentage of females who had taken algebra II/trigonometry (78 percent) was higher than that of male graduates (74 percent).

The percentages of high school graduates who had taken science courses in chemistry and physics also increased between 1990 and 2009. The percentage of graduates who had taken chemistry increased from 49 to 70 percent, and

the percentage of graduates who had completed physics courses increased from 21 to 36 percent. The percentage of graduates who earned at least one credit in biology, chemistry, and physics increased from 19 percent in 1990 to 30 percent in 2009.

The general increases in science coursetaking in biology, chemistry, and physics between 1990 and 2009 were reflected by increases for students of most racial/ ethnic groups. For instance, the percentage of Hispanic graduates who had completed a chemistry course increased from 38 to 66 percent, and the percentage of Hispanic graduates who had completed at least one credit in biology, chemistry, and physics increased from 10 to 23 percent. Similarly, the percentage of Black graduates who had completed a chemistry course increased from 40 to 65 percent, and the percentage of Black graduates who had completed at least one credit in biology, chemistry, and physics increased from 12 to 22 percent. Although there were increases in coursetaking among student groups from 1990 to 2009, gaps between different subgroups in coursetaking remained. In 2009, a higher percentage of Asian (54 percent) and White (31 percent) graduates had completed the combination of biology, chemistry, and physics courses than had their Black and Hispanic peers (22 percent and 23 percent, respectively). A higher percentage of males (39 percent) than of females (33 percent) had completed a physics class in 2009;

**Chapter:** 3/Elementary and Secondary Education **Section:** Student Effort, Persistence, and Progress

however, a higher percentage of females (73 percent) than of males (67 percent) had taken chemistry.

A higher percentage of 2009 graduates from private schools (85 percent) had taken courses in algebra II/ trigonometry than had graduates from traditional public schools (75 percent), and a higher percentage of graduates from private schools (23 percent) had taken courses in calculus than had graduates from public schools (15 percent). Also, a higher percentage of private high school graduates (44 percent) had taken at least one credit in biology, chemistry, and physics than had graduates from traditional public schools (29 percent). A higher percentage of graduates from city (32 percent) and suburban (39 percent) schools had taken courses in biology, chemistry, and physics than had graduates from schools in towns (19 percent) or rural areas (20 percent).

In 2009, higher average scale scores on the National Assessment of Educational Progress (NAEP) 12th-grade mathematics assessment were associated with higher levels of high school mathematics coursetaking. For

example, graduates who had taken only algebra I or below had an average scale score of 114 (on a scale of 0-300), whereas graduates who had taken calculus had an average scale score of 193. In addition, among those students who had completed specific mathematics courses, there were differences across demographic subgroups. For graduates who had taken calculus, the average scale score was higher for males than for females (197 vs. 190). Average scale scores were also higher for students who had taken calculus who were Asian/Pacific Islander (203) and White (194) than for their Hispanic (179) and Black (170) peers. Among students who had taken calculus, the average scale score for those who had attended low-poverty schools (schools in which 0 to 25 percent of students receive, or are eligible to receive, free or reduced-price lunch under the National School Lunch Program) was 199, compared with a score of 163 for their peers at high-poverty schools (schools in which 75 to 100 percent of students receive, or are eligible to receive, free or reduced-price lunch).

Reference tables: Digest of Education Statistics 2013, tables 222.40, 225.40

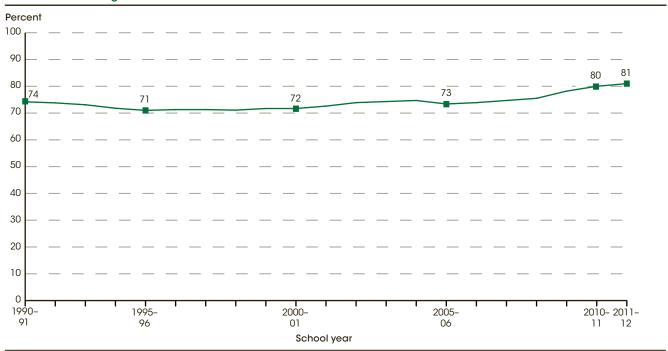
Glossary: Free or reduced-price lunch, Private school, Public school

This page intentionally left blank.

## **Public High School Graduation Rates**

In school year 2011-12, some 3.1 million public high school students, or 81 percent, graduated on time with a regular diploma. Among all public high school students, Asians/Pacific Islanders had the highest graduation rate (93 percent), followed by Whites (85 percent), Hispanics (76 percent), and American Indians/Alaska Natives and Blacks (68 percent each).

Figure 1. Averaged Freshman Graduation Rate (AFGR) for public high school students: School years 1990-91 through 2011-12



NOTE: The Averaged Freshman Graduation Rate is the number of graduates divided by the estimated freshman enrollment count 4 years earlier. This count is the sum of the number of 8th-graders 5 years earlier, the number of 9th-graders 4 years earlier, and the number of 10th-graders 3 years earlier, divided by 3. Ungraded students are allocated to individual grades proportional to each state's enrollment in those grades. Graduates include only those who earned regular diplomas or diplomas for advanced academic achievement (e.g., honors diploma) as defined by the state or jurisdiction. The 2005-06 national estimate includes imputed data for the District of Columbia, Pennsylvania, and South Carolina. The 2007-08 and 2008-09 estimates for Maine include graduates from semiprivate schools. The 2008-09 national estimate includes imputed data for California and Nevada. The 2009-10 estimate includes fall 2006 9th-graders from publicly funded private schools in the data for Maine. The 2009-10 national estimate includes imputed data for Connecticut. The 2011-12 national estimate includes imputed data for Texas.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/ Secondary Education," 1986–87 through 2007–08; "State Dropout and Completion Data File," 2005–06 through 2009–10; The Averaged Freshman Graduation Rate for Public High Schools From the CCD: School Years 2002-03 and 2003-04; Public School Graduates and Dropouts From the CCD, 2007-08 and 2008-09; and "NCES Common Core of Data State Dropout and Graduation Rate Data File," School Year 2010-11, Provisional 1a and School Year 2011-12, Preliminary Version 1a. See Digest of Education Statistics 2012, table 124; and CCD table at http://nces.ed.gov/ccd/tables/AFGR0812.asp.

This indicator examines the percentage of public high school students who graduate on time with a regular diploma. The indicator uses the Averaged Freshman Graduation Rate (AFGR), which is the number of high school diplomas expressed as a percentage of the estimated freshman class 4 years earlier. In school year 2011–12, the AFGR was 81 percent, and some 3.1 million public high school students graduated on time with a regular diploma.

The overall AFGR was higher for the graduating class of 2011–12 than it was for the class of 1990–91 (74 percent). However, from 1990-91 to 1995-96 the graduation rate decreased from 74 to 71 percent. During the period from 1998-99 to 2004-05, the rate steadily increased from 71 to 75 percent. After dropping to 73 percent in 2005–06, the graduation rate increased nearly 8 percentage points to 81 percent in 2011–12.

Percent 100 93 90 85 81 80 70 60 50 40 30 20 10 0 White Black Hispanic Asian/Pacific Total American Indian/ Islander Alaska Native Race/ethnicity

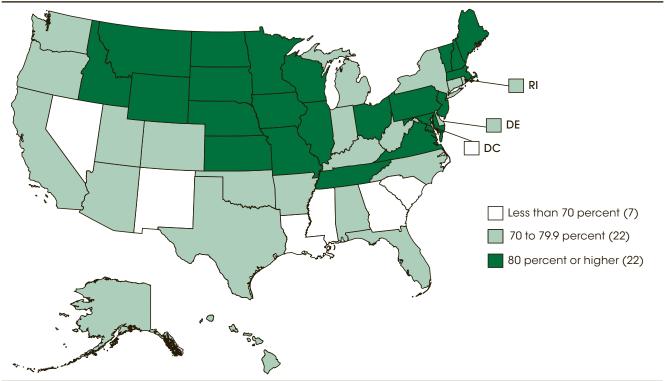
Figure 2. Averaged Freshman Graduation Rate (AFGR) for public high school students, by race/ethnicity: School year 2011–12

NOTE: The Averaged Freshman Graduation Rate is the number of graduates divided by the estimated freshman enrollment count 4 years earlier. This enrollment count is the sum of the number of 8th-graders 5 years earlier, the number of 9th-graders 4 years earlier, and the number of 10th-graders 3 years earlier, divided by 3. Ungraded students are allocated to individual grades proportional to each state's enrollment in those grades. Graduates include only those who earned regular diplomas or diplomas for advanced academic achievement (e.g., honors diploma) as defined by the state or jurisdiction. Race categories exclude persons of Hispanic ethnicity. Total includes students for whom race/ethnicity was not reported or whose race/ethnicity is not represented in the five racial/ethnic categories presented in this figure.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "NCES Common Core of Data State Dropout and Graduation Rate Data File," School Year 2011–12, Preliminary Version 1a. See CCD table at <a href="http://nces.ed.gov/ccd/tables/AFGR0812.asp">http://nces.ed.gov/ccd/tables/AFGR0812.asp</a>.

The Averaged Freshman Graduation Rate varied by race/ ethnicity in 2011–12. Asian/Pacific Islander students had the highest graduation rate (93 percent), followed by White (85 percent), Hispanic (76 percent), and American Indian/Alaska Native and Black students (68 percent each).

Figure 3. Averaged Freshman Graduation Rate (AFGR) for public high school students, by state or jurisdiction: School year 2009–10



NOTE: The Averaged Freshman Graduation Rate is the number of graduates divided by the estimated freshman enrollment count 4 years earlier. This enrollment count is the sum of the number of 8th-graders 5 years earlier, the number of 9th-graders 4 years earlier, and the number of 10th-graders 3 years earlier, divided by 3. Ungraded students are allocated to individual grades proportional to each state's enrollment in those grades. Graduates include only those who earned regular diplomas or diplomas for advanced academic achievement (e.g., honors diploma) as defined by the state or jurisdiction. Race categories exclude persons of Hispanic ethnicity. Total includes students for whom race/ethnicity was not reported or whose race/ethnicity is not represented in the five racial/ethnic categories presented in this figure.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Dropout and Completion Data File," 2009-10. See Digest of Education Statistics 2012, table 124.

The AFGR varied by state in school year 2009–10. Vermont and Wisconsin had the highest graduation rates, each at 91 percent. Twenty other states had graduation rates of 80 percent or more (ordered from high to low): North Dakota, Minnesota, Iowa, New Jersey, New Hampshire, Kansas, Pennsylvania, Idaho, Nebraska, Missouri, Maine, Massachusetts, Maryland, Illinois, Montana, South Dakota, Ohio, Virginia, Tennessee, and Wyoming. Nevada had the lowest rate, at 58 percent. Five other states and the District of Columbia had graduation rates below 70 percent (ordered from high to low): Georgia, Louisiana, South Carolina, New Mexico, Mississippi, and the District of Columbia.

In terms of changes by state, there was an increase in the AFGR in 43 states from school year 2005–06 to

2009–10. In 3 states (Tennessee, Louisiana, and Vermont) the rate increased by between 9 and 10 percentage points; in 14 others (Alaska, California, New York, Georgia, Florida, South Carolina, Kansas, Virginia, Maine, Texas, North Dakota, Alabama, New Hampshire, and North Carolina), the rate increased by more than 5 percentage points but less than 9 percentage points. The graduation rate decreased from 2005–06 to 2009–10 in the District of Columbia and 7 states (Hawaii, Delaware, Rhode Island, South Dakota, Nebraska, Arkansas, and Connecticut), with decreases of more than 5 percentage points occurring in Arkansas, the District of Columbia, and Connecticut.

**Reference tables:** *Digest of Education Statistics 2012*, table 124; and CCD table (<a href="http://nces.ed.gov/ccd/tables/AFGR0812.asp">http://nces.ed.gov/ccd/tables/AFGR0812.asp</a>)

Glossary: High school diploma, Public school or institution

This page intentionally left blank.

#### **Status Dropout Rates**

The status dropout rate decreased from 12 percent in 1990 to 7 percent in 2012, with most of the decline occurring since 2000. The number of years of school that high school dropouts completed increased from 1990 to 2012. The percentage of dropouts with less than 9 years of schooling accounted for 18 percent of status dropouts in 2012, compared with 29 percent in 1990.

The status dropout rate represents the percentage of 16through 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). This rate is different from graduation rate measures that reflect the percentage of students earning a regular diploma within 4 years of entering high school. Status dropouts are no longer

<sup>1</sup> In this indicator, status dropout rates are estimated using both the Current Population Survey (CPS) and the American Community Survey (ACS). CPS data have been collected annually for decades, allowing for the analysis of detailed long term trends, or changes over time, for the civilian, noninstitutionalized population. ACS data, available from 2006 to 2011, cover individuals living in group quarters, including those in institutionalized and noninstitutionalized settings, and can provide detail on smaller demographic groups.

attending school (public or private) and do not have a high school level of educational attainment. Based on data from the Current Population Survey, the status dropout rate decreased from 12 percent in 1990 to 7 percent in 2012, with most of the decline occurring after 2000 (when it was 11 percent). However, there was no measurable difference in the rate between 2011 and 2012.

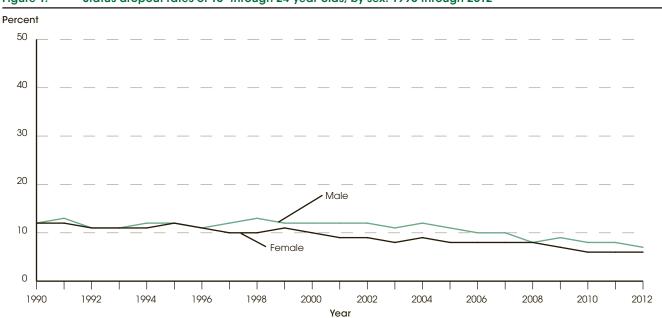


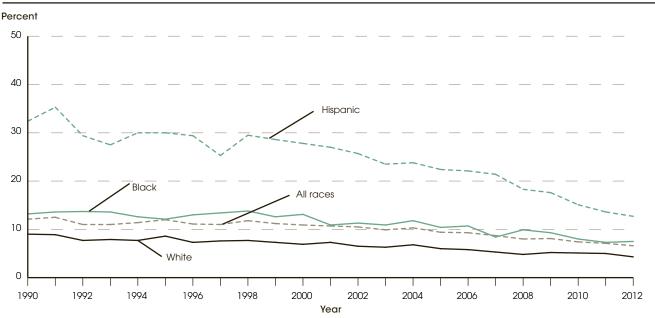
Figure 1. Status dropout rates of 16-through 24-year-olds, by sex: 1990 through 2012

NOTE: The "status dropout rate" represents the percentage of 16- through 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). Data are based on sample surveys of the civilian noninstitutionalized population, which excludes persons in prisons, persons in the military, and other persons not living in households SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1990 through 2012. See Digest of Education Statistics 2013, table 219.70

**Chapter:** 3/Elementary and Secondary Education **Section:** Student Effort, Persistence, and Progress

Between 1990 and 2012, the male status dropout rate declined from 12 to 7 percent, with most of the decline taking place after 2000 (when it was 12 percent). For females, the rate declined from 12 percent in 1990 to 10 percent in 2000 and then continued to decline to 6 percent in 2012. In 1997 and later years, the status dropout rate was higher for males than for females. For example, in 2012 some 7 percent of males were status dropouts, compared with 6 percent of females.

Figure 2. Status dropout rates of 16- through 24-year-olds, by race/ethnicity: 1990 through 2012



NOTE: The "status dropout rate" represents the percentage of 16- through 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). Data are based on sample surveys of the civilian noninstitutionalized population, which excludes persons in prisons, persons in the military, and other persons not living in households Data for all races include other racial/ethnic categories not separately shown. Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1990 through 2012. See Digest of Education Statistics 2013,

In each year from 1990 to 2012, the status dropout rate was lower for Whites than for Blacks and Hispanics. During this period, the rate for Whites declined from 9 to 4 percent; the rate for Blacks declined from 13 to 8 percent; and the rate for Hispanics declined from 32 to 13 percent. As a result, the gap between Whites and Hispanics narrowed from 23 percentage points in 1990 to 8

percentage points in 2012. While the rates for both Whites and Blacks declined during this period, the gap between the rates in 1990 was not measurably different from the gap between the rates in 2012. The White-Black gap did narrow between 2000 and 2012 (from 6 percentage points to 3 percentage points).

Percent 50 40 30 Lowest quarter 20 Middle low quarter Vliddle hiah auarter 10 Highest quarter 0 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 Year

Figure 3. Status dropout rates of 16- through 24-year-olds, by income level: 1990 through 2012

NOTE: The "status dropout rate" represents the percentage of 16- through 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). The "lowest" quarter represents the bottom 25 percent of family incomes. The "middle low" quarter represents families between the 25th percentile and the median. The "middle high" quarter represents families with incomes between the median and the 75th percentile. The "highest" quarter represents the top 25 percent of all family incomes. Data are based on sample surveys of the civilian noninstitutionalized population, which excludes persons in prisons, persons in the military, and other persons not living in households.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1990 through 2012. See Digest of Education Statistics 2013, table 219.75

The status dropout rate also declined for young adults in low- and middle-income family groups between 1990 and 2012. Status dropout rates declined from 24 to 12 percent for those in families with the lowest incomes (the bottom 25 percent of all family incomes), from 15 to 9 percent for those in "middle low" income families (families with incomes between the 25th percentile and the median), and from 9 to 4 percent for those in "middle high" income families (families with incomes between the median and the 75th percentile). For those in the highest income families

(the top 25 percent of all family incomes), there was not a significant decline in the status dropout rate over time. From 1990 to 2012, the status dropout rates for those in the highest income families were consistently lower than the rates for those in the lowest income families. While differences remained, the gap in the status dropout rate between those in the highest and lowest income families narrowed from 21 percentage points in 1990 to 10 percentage points in 2012.

Percent 50 40 30 20 12 12 11 10 5 1990 1995 2000 2005 2010 2012 School year Total Less than 9 years 11 or 12 years

Figure 4. Status dropout rates of 16- through 24-year-olds, by years of school completed: Selected years, 1990 through 2012

NOTE: The "status dropout rate" represents the percentage of 16- through 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). Data are based on sample surveys of the civilian noninstitutionalized population, which excludes persons in prisons, persons in the military, and other persons not living in households. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1990 through 2012. See *Digest of Education Statistics 2013*, table 219.75.

The number of years of school that high school dropouts completed increased over the past few decades. Reflecting both the decline in the status dropout rate and the decrease in the percentage of dropouts with low levels of education, the overall percentage of the young adult population with less than 9 years of schooling decreased from 3 percent in 1990 to 1 percent in 2012. This group, which essentially

had not attended high school, accounted for 18 percent of

status dropouts in 2012, compared with 29 percent in 1990.

who had completed 11-12 years of school did not change

From 1990 to 2012, the overall percentage of dropouts

significantly; it was 3 percent in 1990 and 2012. However, this group was a larger proportion of high school status dropouts in 2012 (50 percent) than in 1990 (26 percent).

<sup>&</sup>lt;sup>2</sup> These percentages are calculated by multiplying the status dropout rate in a given year by the percentage of status dropouts in that year with less than 9 years of schooling. The derived statistic represents the overall percentage of dropouts with less than 9 years of schooling.

Percent 50 41 40 40 35 33 30 30 23 20 14 13 13 10 9 10 6 5 5 3 3 Total White Black Hispanic Asian Pacific Islander American Two or more Indian/Alaska races Native Race/ethnicity Total Noninstitutionalized Institutionalized

Figure 5. Status dropout rates of 16- through 24-year-olds, by race/ethnicity and institutional status: American Community Survey (ACS) 2011

‡ Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) for this estimate is 50 percent or

NOTE: This figure uses a different data source than figure 2; therefore, estimates are not directly comparable to the 2011 estimates in figure 2.

Noninstitutionalized group quarters include college and university housing, military quarters, facilities for workers and religious groups, and temporary shelters for the homeless. Among those counted in noninstitutionalized group quarters in the American Community Survey (ACS), only the residents of military of 16-through 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2011. See Digest of Education Statistics 2013, table 219.80.

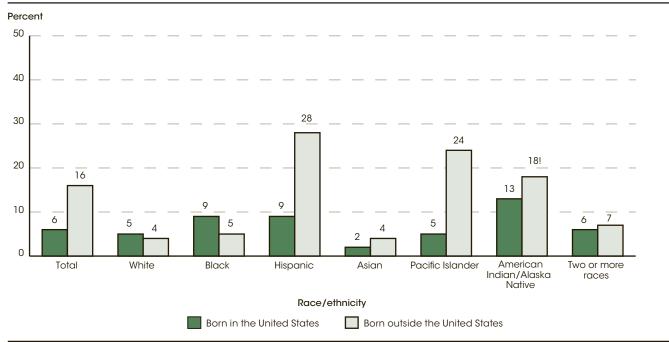
Based on data from the American Community Survey, which includes those living in institutional and noninstitutional<sup>3</sup> living quarters, the status dropout rate in 2011 was lower for Asians (3 percent) and Whites (5 percent) than for those of two or more races (6 percent), Pacific Islanders (9 percent), Blacks (10 percent), American Indians/Alaska Natives (13 percent), and Hispanics (14 percent). In 2011, the status dropout rate was 7 percent

for those living in households and noninstitutionalized group quarters and 35 percent for those in institutionalized group quarters, such as prisons and residential health facilities. This pattern of higher dropout rates for those in institutionalized settings was consistent across all racial/ethnic groups with measurable rates for those in institutionalized settings (that is, all except for Pacific Islanders).

<sup>&</sup>lt;sup>3</sup> Noninstitutional group quarters include college and university housing, military quarters, facilities for workers and religious groups, and temporary shelters for the homeless.

**Chapter:** 3/Elementary and Secondary Education **Section:** Student Effort, Persistence, and Progress

Figure 6. Status dropout rates of 16- through 24-year-olds in the noninstitutionalized group quarters and household population, by race/ethnicity and nativity: American Community Survey (ACS) 2011



! Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

NOTE: This figure uses a different data source than figure 2; therefore, estimates are not directly comparable to the 2011 estimates in figure 2. United States refers to the 50 states, the District of Columbia, Puerto Rico, American Samoa, Guam, the U.S. Virgin Islands, and the Northern Marianas. The "status dropout rate" represents the percentage of 16- through 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a General Educational Development [GED] certificate). Noninstitutionalized group quarters include college and university housing, military quarters, facilities for workers and religious groups, and temporary shelters for the homeless. Among those counted in noninstitutionalized group quarters in the American Community Survey (ACS), only the residents of military barracks are not included in the civilian noninstitutionalized population in the Current Population Survey. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2011. See Digest of Education Statistics 2013, table 219.80.

In 2011, Hispanics, Asians, and Pacific Islanders born in the United States had lower status dropout rates than did their counterparts born outside of the United States, whereas U.S.-born Blacks had higher status dropout rates than did their foreign-born counterparts. Among all racial/ethnic groups, Pacific Islanders and Hispanics had the largest difference in status dropout rates by nativity (both at 19 percentage points). The dropout rates were 5 percent for native-born Pacific Islanders and 9 percent for native-born Hispanics, compared with 24 and 28 percent for their counterparts born outside of the United States.

Reference tables: Digest of Education Statistics 2013, tables 219.70, 219.75, and 219.80

**Glossary:** Dropout, GED certificate, High school diploma, High school equivalency certificate

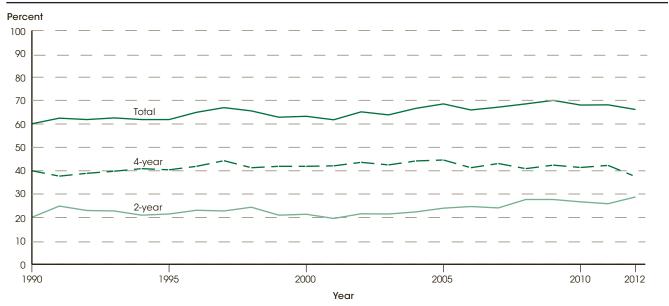
## **Immediate Transition to College**

Between 1990 and 2012, the overall immediate college enrollment rate increased from 60 to 66 percent. In 2012, the immediate enrollment rate was higher for Asian (84 percent) than for White (67 percent), Black (62 percent), and Hispanic (69 percent) high school completers. However, there were no measurable differences among the rates for Whites, Blacks, and Hispanics.

Of the 3.2 million high school completers in 2012, some 2.1 million, or 66 percent, enrolled in college the following fall. This rate, known as the *immediate college enrollment rate*, is defined as the annual percentage of high school completers (including GED recipients) who

enroll in 2- or 4-year colleges in the fall immediately after completing high school. Between 1990 and 2012, the immediate college enrollment rate increased from 60 to 66 percent. However, the rate did not change measurably between 2011 and 2012.

Figure 1. Percentage of high school completers who were enrolled in 2- or 4-year colleges by the October immediately following high school completion, by level of institution: 1990–2012



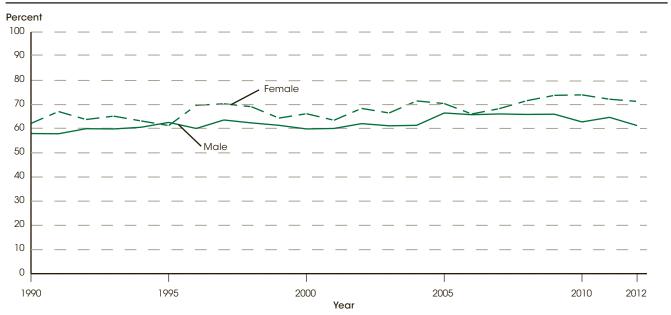
NOTE: High school completers include GED recipients.
SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1990-2012. See *Digest of Education Statistics* 2013, table 302.10.

The immediate college enrollment rate of high school completers at 2-year colleges increased from 20 percent in 1990 to 29 percent in 2012. The rate fluctuated between 20 and 25 percent in the 1990s and then increased from 21 percent in 2000 to 29 percent in 2012. The immediate college enrollment rate at 4-year colleges in 2012 (37 percent) did not differ significantly from the corresponding rate in 1990 (40 percent), but the rate in

2012 (37 percent) was lower than the rates in 2011 and 2000 (42 percent each). In each year between 1990 and 2012, the immediate college enrollment rate at 4-year colleges was higher than that at 2-year colleges. For example, in 2012 the immediate college enrollment rate at 4-year colleges was 37 percent, compared with 29 percent at 2-year colleges.

Section: Transition to College

Figure 2. Percentage of high school completers who were enrolled in 2- or 4-year colleges by the October immediately following high school completion, by sex: 1990–2012



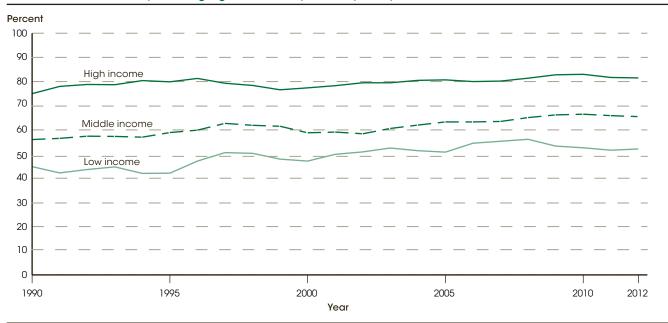
NOTE: High school completers include GED recipients.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1990-2012. See *Digest of Education Statistics* 2013, table 302.10.

The immediate college enrollment rate for males did not change measurably between 1990 (58 percent) and 2012 (61 percent), while the rate for females increased from 62

to 71 percent. In 2012, the immediate college enrollment rate was higher for females than for males (71 vs. 61 percent).

Figure 3. Percentage of high school completers who were enrolled in 2- or 4-year colleges by the October immediately following high school completion, by family income: 1990–2012



NOTE: Due to some short-term data fluctuations associated with small sample sizes, percentages for the income groups were calculated based on 3-year moving averages, except in 2012 when estimates were calculated based on 2-year moving averages. High school completers include GED recipients. Low income refers to the bottom 20 percent of all family incomes, high income refers to the top 20 percent of all family incomes, and middle income refers to the 60 percent in between.

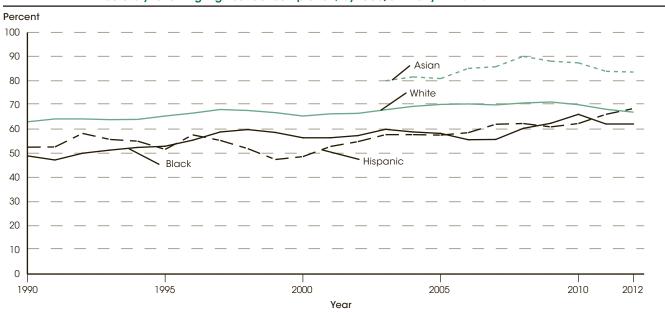
SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1990-2012. See *Digest of Education Statistics* 2013, table 302.30.

Section: Transition to College

In each year between 1990 and 2012, the immediate college enrollment rate for high school completers from high-income families was higher than the rates for their peers from low- and middle-income families. In 2012, the immediate college enrollment rate for high school completers from high-income families (81 percent) was 29 percentage points higher than the rate for those from low-income families (52 percent) and 16 percentage points higher than the rate for those from middle-income families (65 percent). In 1990, the high- to low-income gap was 30 percentage points (75 vs. 45 percent), while the high- to middle-income gap was 19 percentage points (75 vs. 56 percent).

The 29-percentage-point gap between the immediate college enrollment rates of high school completers from high- and low-income families in 2012 was not measurably different from the gap in 1990 (30 percentage points). The high- to low-income gap did not change measurably from 1990 to 1993 (ranging from 30 to 36 percentage points), but it narrowed from 1994 to 2012 (from 38 to 29 percentage points). The high- to middle-income gap in 2012 (16 percentage points) was not measurably different from the gap in 1990 (19 percentage points).

Figure 4. Percentage of high school completers who were enrolled in 2- or 4-year colleges by the October immediately following high school completion, by race/ethnicity: 1990–2012



NOTE: Due to some short-term data fluctuations associated with small sample sizes, percentages for race/ethnicity groups were calculated based on 3-year moving averages, except in 2012 when estimates were calculated based on 2-year moving averages. High school completers include GED recipients. Separate data on Asian high school completers have been collected since 2003. From 2003 onward, White, Black, and Asian data exclude persons identifying themselves as two or more races. Prior to 2003, each respondent could select only a single race category, and the "Two or more races" category was not reported. Race categories exclude persons of Hispanic ethnicity. SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1990-2012. See *Digest of Education Statistics* 2013, table 302.20.

In 2012, there were no measurable differences among the immediate college enrollment rates for White (67 percent), Black (62 percent), and Hispanic (69 percent) high school completers. The immediate college enrollment rate for Asians (84 percent) was higher than the rates for Whites, Blacks, and Hispanics in 2012 and in each year since 2003. Separate data on Asian

high school completers have been collected since 2003. The immediate college enrollment rate for Whites was higher than that for Hispanics from 1994 through 2010. Additionally, the rate for Whites was higher than that for Blacks in every year since 1990, except in 2010 and 2012 when there were no measurable differences between their rates. Between 1990 and 2012, the immediate college enrollment rate increased for White (from 63 to 67 percent), Black (from 49 to 62 percent), and Hispanic (from 52 to 69 percent) high school completers.

Reference tables: Digest of Education Statistics 2013, tables 302.10, 302.20, 302.30.

Glossary: High school completer

<sup>&</sup>lt;sup>1</sup> Due to some short-term data fluctuations associated with small sample sizes, estimates for the income groups and racial/ethnic groups were calculated based on 3-year moving averages, except in 2012 when estimates were calculated based on 2-year moving averages.

This page intentionally left blank.

The indicators in this section of *The Condition of Education* examine features of postsecondary education, many of which parallel those presented in the previous section on elementary and secondary education. The indicators examine the characteristics of postsecondary students; postsecondary programs and courses of study; finance and resources; postsecondary completions; and economic outcomes, both for postsecondary graduates and the general population.

Postsecondary education is characterized by diversity both in the types of institutions and in the characteristics of students. Postsecondary institutions vary by the types of degrees awarded, control (public or private), and whether they are operated on a nonprofit or for-profit basis. Beyond these basic differences, postsecondary institutions have distinctly different missions and provide students with a wide range of learning environments.

Indicators on postsecondary education and outcomes from previous editions of *The Condition of Education* not included in this volume are available at <a href="http://nces.ed.gov/programs/coe">http://nces.ed.gov/programs/coe</a>.



# Chapter 4

# **Postsecondary Education**

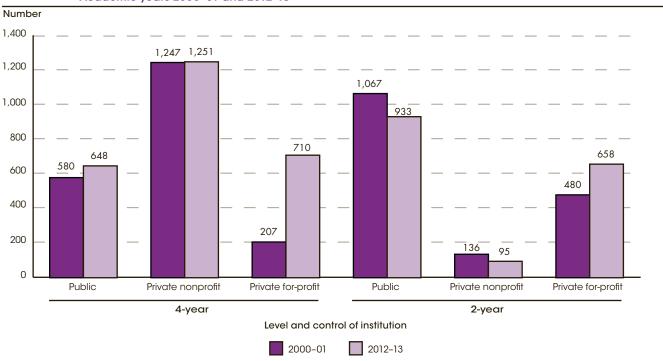
| Characteristics of Postsecondary Students  |      |
|--|------|
| ndicator 31. Characteristics of Postsecondary Institutions                           |      |
| ndicator 32. Characteristics of Postsecondary Students                               | .158 |
| Programs and Courses   |      |
| ndicator 33. Undergraduate Degree Fields   | .164 |
| ndicator 34. Graduate Degree Fields  | .166 |
| inance and Resources   |      |
| ndicator 35. Price of Attending an Undergraduate Institution                         | .168 |
| ndicator 36. Grants and Loan Aid to Undergraduate Students                           | .172 |
| ndicator 37. Postsecondary Revenues by Source  | .178 |
| ndicator 38. Expenses of Postsecondary Institutions                                  | .182 |
| ndicator 39. Characteristics of Postsecondary Faculty                                |      |
| ndicator 40. Student Loan Volume and Default Rates                                   | .190 |
| Completions  |      |
| ndicator 41. Institutional Retention and Graduation Rates for Undergraduate Students | .194 |
| ndicator 42. Degrees Conferred by Public and Private Institutions                    | .198 |

Section: Characteristics of Postsecondary Students

### **Characteristics of Postsecondary Institutions**

In 2012–13, some 26 percent of 4-year institutions had open admission policies, 26 percent accepted three-quarters or more of their applicants, 34 percent accepted one-half to less than three-quarters of their applicants, and 14 percent accepted less than half of their applicants.

Figure 1. Number of degree-granting institutions with first-year undergraduates, by level and control of institution: Academic years 2000–01 and 2012–13



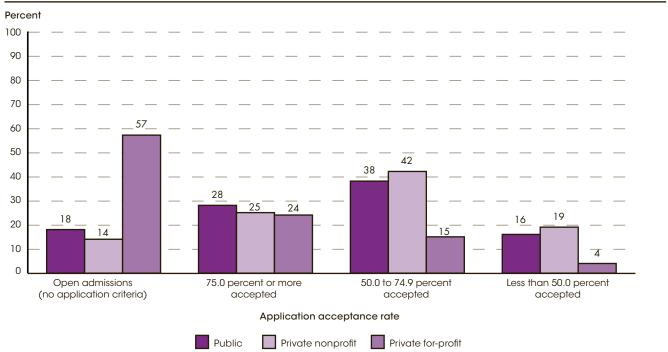
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Excludes institutions not enrolling any first-time degree/certificate-seeking undergraduates.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2000 and Fall 2012, Institutional Characteristics component. See *Digest of Education Statistics 2013*, table 305.30.

In 2012–13, there were 4,295 degree-granting institutions, including 2,609 4-year institutions offering programs at the bachelor's or higher degree level and 1,686 2-year institutions offering associate's degrees. These institutions may be governed by publicly appointed or elected officials, with major support from public funds (publicly controlled), or by privately elected or appointed officials, with major support from private sources (private control). All institutions in this analysis enroll first-year

undergraduates. Private institutions may be operated on a nonprofit or for-profit basis. The number of private nonprofit institutions in 2012–13 (1,346) was 3 percent lower than in 2000–01 (1,383), and the number of public institutions in 2012–13 (1,581) was 4 percent lower than in 2000–01 (1,647). In contrast, the number of private for-profit institutions nearly doubled between 2000–01 and 2012–13 (from 687 to 1,368).

Figure 2. Percentage distribution of 4-year degree-granting institutions with first-year undergraduates, by application acceptance rate and control of institution: Academic year 2012–13



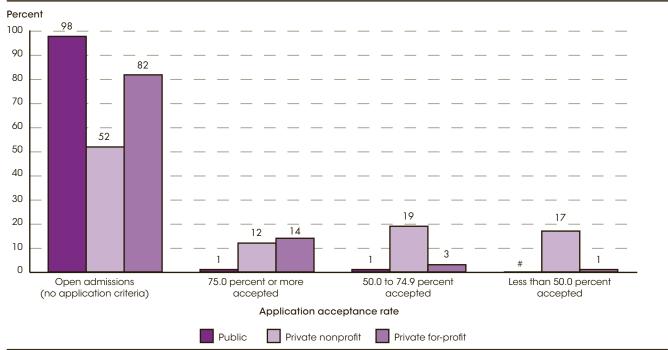
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Excludes institutions not enrolling any first-time degree/certificate-seeking undergraduates. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2012, Institutional Characteristics component. See *Digest of Education Statistics 2013*, table 305.40.

In 2012–13, some 26 percent of 4-year institutions had open admission policies (accepted all applicants), 26 percent accepted three-quarters or more of their applicants, 34 percent accepted one-half to less than three-quarters of their applicants, and 14 percent accepted less than half of their applicants. Among 4-year institutions, a higher percentage of private for-profit

institutions (57 percent) than public (18 percent) and private nonprofit institutions (14 percent) had open admission policies in 2012–13. Some 39 percent of private for-profit 4-year institutions accepted more than half of their applicants, whereas 66 percent of public 4-year institutions and 67 percent of private nonprofit 4-year institutions did so.

Figure 3. Percentage distribution of 2-year degree-granting institutions with first-year undergraduates, by application acceptance rate and control of institution: Academic year 2012–13



# Rounds to zero.

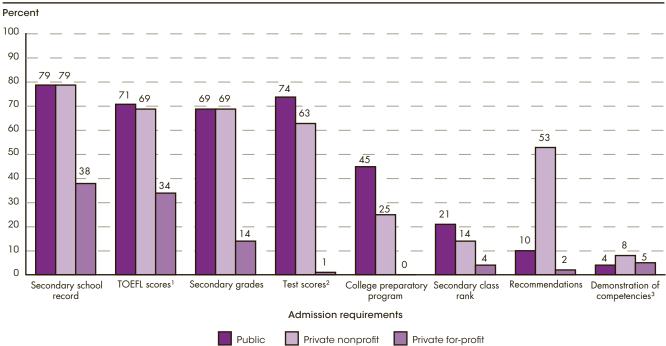
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Excludes institutions not enrolling any first-time degree/certificate-seeking undergraduates. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2012, Institutional Characteristics component. See *Digest of Education Statistics 2013*, table 305.40.

In 2012–13, some 89 percent of 2-year institutions had open admissions, 7 percent accepted three-quarters or more of their applicants, 3 percent accepted one-half to less than three-quarters of applicants, and 2 percent accepted less than half of their applicants. Almost all

public 2-year institutions had open admissions (98 percent), while 82 percent of private for-profit 2-year and 52 percent of private nonprofit 2-year institutions had open admissions.

Figure 4. Percentage of 4-year degree-granting institutions with first-year undergraduates, by admission requirements and control of institution: Academic year 2012–13



<sup>&</sup>lt;sup>1</sup> Test of English as a Foreign Language.

NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Excludes institutions not enrolling any first-time degree/certificate-seeking undergraduates. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2012, Institutional Characteristics component. See *Digest of Education Statistics 2013*, table 305.30.

In 2012–13, some 73 percent of 4-year and 10 percent of 2-year institutions had admission criteria for their applicants. Admission criteria are requirements for all applicants to an institution to submit specific information, such as secondary school administrative records, Test of English as a Foreign Language (TOEFL) scores, secondary school grades, admission tests (such as the SAT or ACT), recommendations, and college preparatory programs (i.e., International Baccalaureate). Among 4-year institutions, 74 percent of public institutions had a requirement for admission tests such as the SAT or ACT, compared with 63 percent of private nonprofit and 1 percent of private for-profit institutions. The percentage of 4-year private nonprofit institutions (53 percent) that required

recommendations for admission was higher than the percentages for public (10 percent) and private for-profit 4-year institutions (2 percent). The percentages of 4-year public and private nonprofit institutions requiring TOEFL scores (71 and 69 percent, respectively) were higher than the percentage for 4-year private for-profit institutions (34 percent). Among 2-year institutions, 29 percent of private nonprofit and 14 percent of private for-profit institutions had a requirement for secondary school records, compared with 2 percent of public institutions. A small percentage of 4-year (1 percent) and 2-year institutions (1 percent) had no admission requirements, only suggested admission criteria.

Reference tables: Digest of Education Statistics 2013, tables 305.30 and 305.40

**Glossary:** Degree-granting institutions, For-profit institution, Nonprofit institution

<sup>&</sup>lt;sup>2</sup> Includes SAT, ACT, or other admission tests.

<sup>&</sup>lt;sup>3</sup> Formal demonstration of competencies (e.g., portfolios, certificates of mastery, assessment instruments).

Section: Characteristics of Postsecondary Students

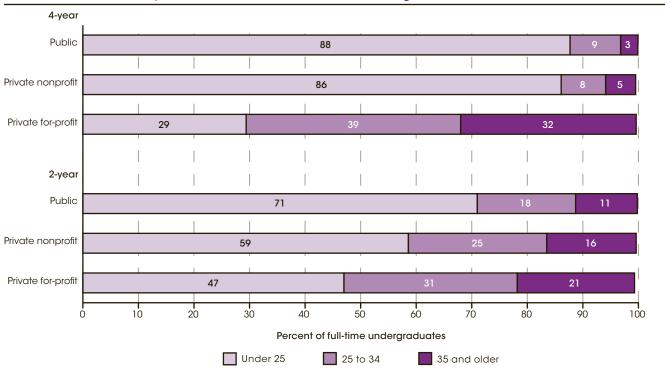
## **Characteristics of Postsecondary Students**

Some 10.6 million undergraduate students attended 4-year institutions in 2012, while 7.2 million attended 2-year institutions. At 4-year institutions in 2012, some 77 percent of undergraduate students attended full time, compared with 41 percent at 2-year institutions.

In fall 2012, there were 17.7 million undergraduate students and 2.9 million postbaccalaureate (graduate) students attending degree-granting postsecondary institutions in the United States. Undergraduate students can attend either 4-year institutions that award bachelor's or higher degrees or they can attend 2-year institutions that award associate's degrees and certificates and offer courses that may be creditable towards a bachelor's degree to be earned at a 4-year institution. Some 10.6

million undergraduate students (60 percent of the total) attended 4-year institutions in fall 2012, while 7.2 million (40 percent of the total) attended 2-year institutions. Of undergraduate students at 4-year institutions that year, 8.2 million, or 77 percent, attended full time. Of undergraduate students at 2-year institutions that year, 2.9 million (41 percent) were full-time students and 4.2 million (59 percent) were part-time students.

Figure 1. Percentage distribution of full-time undergraduate enrollment in degree-granting postsecondary institutions, by institutional level and control and student age: Fall 2011



NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Detail may not sum to totals because of rounding and the exclusion of "age unknown" students.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2012, Enrollment component. See *Digest of Education Statistics 2013*, table 303.50.

At public and private nonprofit 4-year institutions in 2011, most of the full-time undergraduates (88 and 86 percent, respectively) were young adults (i.e., under the age of 25). However, in 2011 just 29 percent of full-time students were young adults at private for-profit 4-year institutions (39 percent were between the ages of 25 and 34, and 32 percent were age 35 and older).

Of full-time students at 2-year institutions in 2011, young adults accounted for 71 percent of enrollment at

public institutions, 59 percent of enrollment at private nonprofit institutions, and 47 percent of enrollment at private for-profit institutions. Regarding the remaining age groups of full-time students in 2011, at public 2-year institutions 18 percent were between 25 and 34 years old, and 11 percent were 35 and older; at private nonprofit institutions 25 percent were between 25 and 34, and 16 percent were 35 and older; and at private for-profit institutions 31 percent were between 25 and 34, and 21 percent were 35 and older.

For more information, see the Reader's Guide and the Guide to Sources.

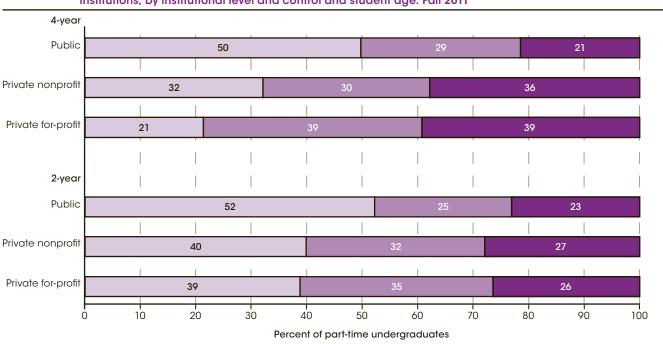


Figure 2. Percentage distribution of part-time undergraduate enrollment in degree-granting postsecondary institutions, by institutional level and control and student age: Fall 2011

NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Detail may not sum to totals because of rounding and the exclusion of "age unknown" students. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2012, Enrollment component. See *Digest of Education Statistics* 2013, table 303.50.

Under 25

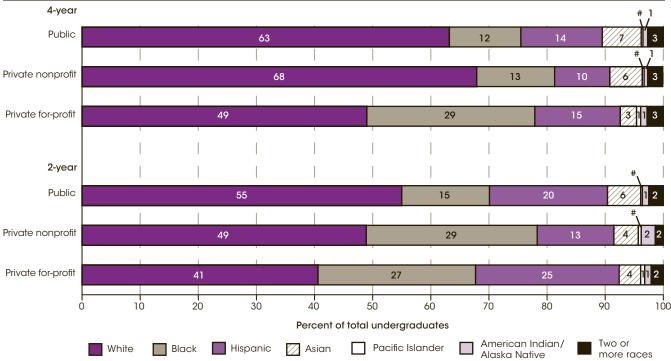
25 to 34

Of undergraduate students enrolled part time in 4-year institutions in 2011, young adults made up half of the enrollment at public institutions, 32 percent of the enrollment at private nonprofit institutions, and 21 percent of the enrollment at private for-profit institutions. Students ages 25–34 and 35 and older accounted for the other half of the part-time enrollment at public 4-year institutions (29 and 21 percent, respectively), two-thirds of the part-time enrollment at private nonprofit 4-year institutions (30 and 36 percent, respectively), and over three-quarters of the part-time enrollment at private for-profit 4-year institutions (39 percent each).

At public 2-year institutions in 2011, some 52 percent of part-time students were young adults, while 25 percent were between the ages of 25 and 34, and 23 percent were 35 and older. At private nonprofit 2-year institutions, some 40 percent of part-time students were young adults, 32 percent were between the ages of 25 and 34, and 27 percent were 35 and older. At private for-profit 2-year institutions, 39 percent of part-time students were young adults, 35 percent were between the ages of 25 and 34, and 26 percent were age 35 and older.

35 and older

Figure 3. Percentage distribution of total undergraduate enrollment in degree-granting postsecondary institutions, by institutional level and control and race/ethnicity of student: Fall 2012



# Rounds to zero

NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Race categories exclude persons of Hispanic ethnicity. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Enrollment component. See Digest of Education Statistics 2013, table 306.50.

Sixty-eight percent of all undergraduate students (fulltime and part-time) at private nonprofit 4-year institutions in 2012 were White, which was higher than the percentage of White students at either public (63 percent) or private for-profit 4-year institutions (49 percent). For Asian undergraduate students at 4-year institutions that year, the highest percentage was at public institutions (7 percent). A higher percentage of the students at 4-year private for-profit institutions were Black (29 percent) than at public 4-year institutions (12 percent) and private nonprofit 4-year institutions (13 percent). Similarly, a higher percentage of the students at 4-year private for-profit institutions were Hispanic (15 percent) than at public (14 percent) and private nonprofit (10 percent) institutions.

The percentages of White and Asian students at public 2-year institutions were higher than the percentages at private nonprofit and private for-profit institutions. In contrast, the percentages of students at private nonprofit and private for-profit institutions who were Black (29 and 27 percent, respectively) were higher than the percentage at public institutions (15 percent). The percentage of students who were Hispanic at private for-profit institutions (25 percent) was higher than the percentages at public institutions (20 percent) and private nonprofit institutions (13 percent).

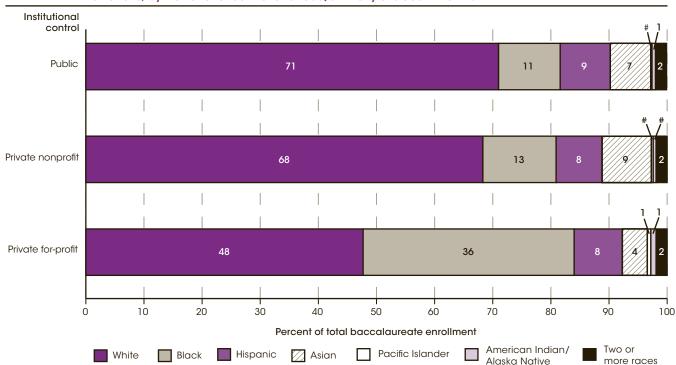


Figure 4. Percentage distribution of total postbaccalaureate enrollment in degree-granting postsecondary institutions, by institutional control and race/ethnicity of student: Fall 2012

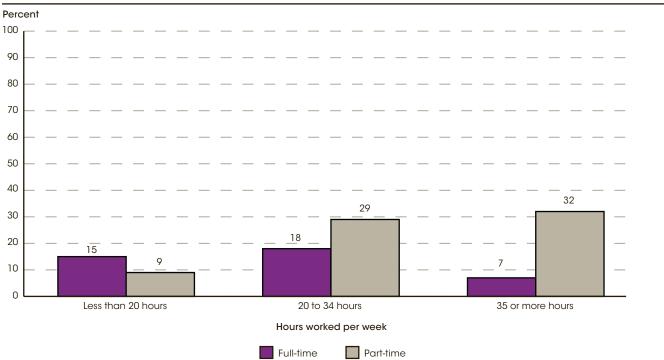
# Rounds to zero

NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Race categories exclude persons of Hispanic ethnicity. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Enrollment component. See *Digest of Education Statistics* 2013, table 306.50.

In 2012, some 48 percent of postbaccalaureate (graduate) students attended public institutions, 42 percent attended private nonprofit institutions, and 10 percent attended private for-profit institutions. There were differences in attendance patterns by race/ethnicity, however. At public institutions in 2012, some 71 percent of graduate students were White, compared with 68 percent at private nonprofit institutions and 48 percent at private for-profit institutions. Thirty-six percent of graduate students at private for-profit institutions were Black, compared with

13 percent of students at private nonprofit institutions and 11 percent of students at public institutions. Hispanics accounted for 9 percent of graduate enrollment at public institutions and 8 percent of graduate enrollment at both private nonprofit and private for-profit institutions, while Asians accounted for 9 percent of graduate enrollment at private nonprofit institutions, 7 percent of graduate enrollment at public institutions, and 4 percent of graduate enrollment at private for-profit institutions.

Percentage of college students 16 to 24 years old who were employed, by hours worked per week and Figure 5. attendance status: October 2012



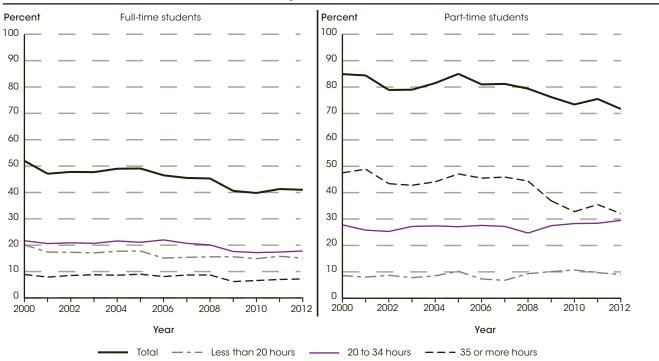
NOTE: Students were classified as full time if they were taking at least 12 hours of classes (or at least 9 hours of graduate classes) during an average school week and as part time if they were taking fewer hours.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 2012. See *Digest of Education Statistics 2013*, table 503.20.

Based on the Current Population Survey (CPS), about 41 percent of full-time college students and 72 percent of part-time college students 16 to 24 years old were employed in October 2012. About 7 percent of the fulltime students worked 35 or more hours per week, 18

percent worked 20 to 34 hours per week, and 15 percent worked less than 20 hours per week. In comparison, 32 percent of the part-time students worked 35 or more hours per week, 29 percent worked 20 to 34 hours per week, and 9 percent worked less than 20 hours per week.

Figure 6. Percentage of college students 16 to 24 years old who were employed, by attendance status and hours worked per week: October 2000 through 2012



NOTE: Students were classified as full time if they were taking at least 12 hours of classes (or at least 9 hours of graduate classes) during an average school week and as part time if they were taking fewer hours.

SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 2000 through October 2012. See *Digest of Education Statistics 2013*, table 503.20.

In general, smaller percentages of all college students 16 to 24 years old were working in 2012 than had been working a decade prior. The percentage of full-time students who were employed declined from 52 percent in 2000 to 41 percent in 2012, and the percentage of part-time students who were employed declined from 85 to 72 percent. During this period, the percentage of all part-

time students who worked 35 or more hours per week declined 15 percentage points, from 47 to 32 percent. There were no measurable changes in the percentages of part-time students who worked 20 to 34 hours per week and less than 20 hours per week. The percentage of full-time students who worked 35 or more hours declined from 9 percent in 2000 to 7 percent in 2012.

Reference tables: Digest of Education Statistics 2013, tables 303.50, 303.60, 306.50, and 503.20

**Glossary:** Degree-granting institutions, Full-time enrollment, Part-time enrollment, Postbaccalaureate enrollment, Private for-profit institution, Private nonprofit institution, Public school or institution, Undergraduate students

**Chapter:** 4/Postsecondary Education Section: Programs and Courses

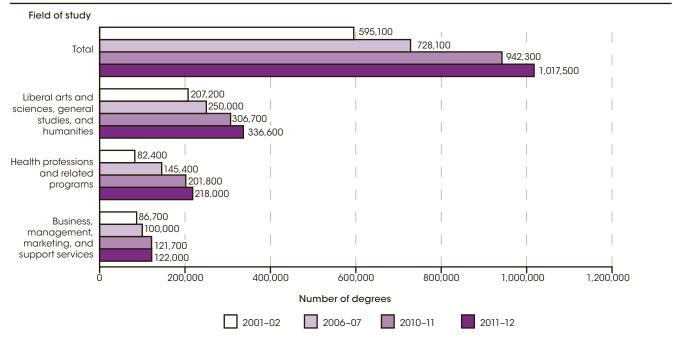
### **Undergraduate Degree Fields**

From academic year 2001-02 to 2011-12, the number of associate's degrees awarded increased by 71 percent, from 595,100 to over 1 million, and the number of bachelor's degrees awarded increased by 39 percent, from 1.3 million to 1.8 million.

In 2011–12, some 1 million associate's degrees were awarded by postsecondary institutions, an increase of 8 percent since the previous year. About two-thirds (66 percent) of the associate's degrees awarded in 2011-12 were in three broad fields of study: liberal arts and sciences, general studies, and humanities (33 percent); health professions and related programs (21 percent); and business, management, marketing, and support services (12 percent). The largest percentages of associate's

degrees were awarded in these three fields in 2011–12 as well as in 2001–02 and in 2010–11. The three fields awarding the next largest percentages of associate's degrees each accounted for 3 percent or more of all associate's degrees awarded. These were engineering technologies and engineering-related fields (4 percent); computer and information sciences and support services (4 percent); and homeland security, law enforcement, and firefighting (5 percent).

Figure 1. Number of associate's degrees awarded by Title IV postsecondary institutions in selected fields of study: Academic years 2001-02, 2006-07, 2010-11, and 2011-12



NOTE: These three fields were selected because they were the fields in which the largest percentages of associate's degrees were awarded in 2011-12. Data are for postsecondary institutions participating in Title IV federal financial aid programs. The new Classification of Instructional Programs was initiated in 2009-10. The estimates for 2001-02 and 2006-07 have been reclassified when necessary to make them conform to the new taxonomy SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2002, Fall 2007, Fall 2011, and Fall 2012, Completions component. See Digest of Education Statistics 2013, table 321.10.

The number of associate's degrees awarded in the fields of liberal arts and sciences, general studies, and humanities; health professions and related programs; and business management, marketing, and support services increased from 2001-02 to 2011-12. Degrees awarded for liberal arts and sciences increased by 62 percent during this period, from 207,200 to 336,600. Health profession degrees conferred increased by 165 percent, from 82,400 to 218,000, and business degrees awarded increased by 41 percent, from 86,700 to 122,000.

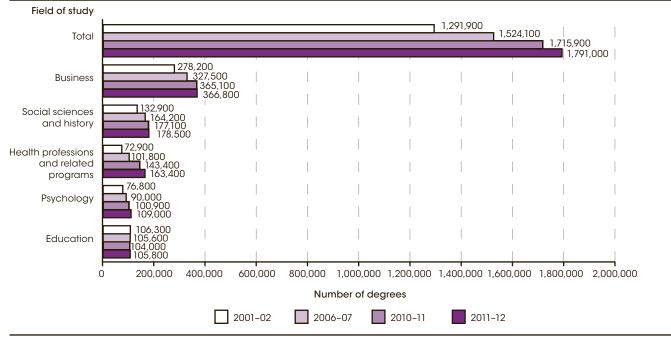
Overall, the number of associate's degrees awarded increased by 422,400 degrees, or 71 percent, from academic year 2001–02 to 2011–12. Of the 20 major fields of study in which the most associate's degrees were awarded in 2011-12, the field of homeland security, law enforcement, and firefighting had the largest percentage increase over the past decade (204 percent, from 16,700 to 50,700 degrees). Additionally, the number of associate's degrees awarded more than doubled in the following fields: psychology (177 percent, from 1,700 to 4,700), public

## **Chapter:** 4/Postsecondary Education **Section:** Programs and Courses

administration and social services (175 percent, from 3,300 to 9,100), health professions and related programs (165 percent, from 82,400 to 218,000), social sciences and history (153 percent, from 5,600 to 14,100), physical sciences and science technologies (151 percent, from 2,300 to 5,800), personal and culinary services and construction trades (118 percent each, from 9,300 to 20,400 and from

2,600 to 5,800, respectively), education (114 percent, from 9,600 to 20,500), and multi/interdisciplinary studies (106 percent, from 13,200 to 27,300). In contrast, the number of associate's degrees conferred in engineering technologies and engineering-related fields declined from 40,200 in 2001–02 to 36,500 in 2011–12 (a decrease of 9 percent).

Figure 2. Number of bachelor's degrees awarded by Title IV postsecondary institutions in selected fields of study: Academic years 2001–02, 2006–07, 2010–11, and 2011–12



NOTE: These five fields were selected because they were the fields in which the largest percentages of bachelor's degrees were awarded in 2011–12. Data are for postsecondary institutions participating in Title IV federal financial aid programs. The new Classification of Instructional Programs was initiated in 2009–10. The estimates for 2001–02 and 2006–07 have been reclassified when necessary to make them conform to the new taxonomy. "Business" includes Business, management, marketing, and related support services and Personal and culinary services. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2002, Fall 2007, Fall 2011, and Fall 2012, Completions component. See Digest of Education Statistics 2013, table 322.10.

In 2011–12, some 1.8 million bachelor's degrees were awarded by postsecondary institutions, an increase of 4 percent from 2010–11. Of the bachelor's degrees awarded in 2011–12, almost one-third (30 percent) were concentrated in two fields: business (20 percent) and social sciences and history (10 percent). The three fields awarding the next largest percentages of bachelor's degrees in 2011–12 were health professions and related programs (9 percent), psychology (6 percent), and education (6 percent). These were the same five fields in which the largest percentages of bachelor's degrees were awarded in 2001–02, 2006–07, and 2010–11.

Overall, the number of bachelor's degrees awarded increased by 499,100 degrees from academic year 2001–02 to 2011–12, reflecting an increase of 39 percent. During this period, the two fields of study awarding the largest percentages of bachelor's degrees, business and social

sciences and history, had increases of 32 percent and 34 percent, respectively. Of the 20 major fields of study in which the most bachelor's degrees were awarded in 2011–12, the largest percentage increases occurred in the fields of health professions and related programs (from 72,900 to 163,400 degrees, an increase of 124 percent), and homeland security, law enforcement, and firefighting (from 25,500 to 53,800 degrees, an increase of 111 percent). The number of psychology degrees awarded between 2001–02 and 2011–12 increased by 42 percent, from 76,800 to 109,000. In contrast, the number of degrees conferred declined in computer and information sciences and support services from 2001-02 to 2011-12 (from 50,400 to 47,400 degrees, a decrease of 6 percent). The number of bachelor's degrees awarded in the field of education in 2011–12 (105,800) was about the same as the number awarded in 2001-02 (106,300).

**Reference tables:** *Digest of Education Statistics 2013*, tables 321.10 and 322.10

**Glossary:** Associate's degree, Bachelor's degree, Classification of Instructional Programs (CIP)

**Chapter:** 4/Postsecondary Education **Section:** Programs and Courses

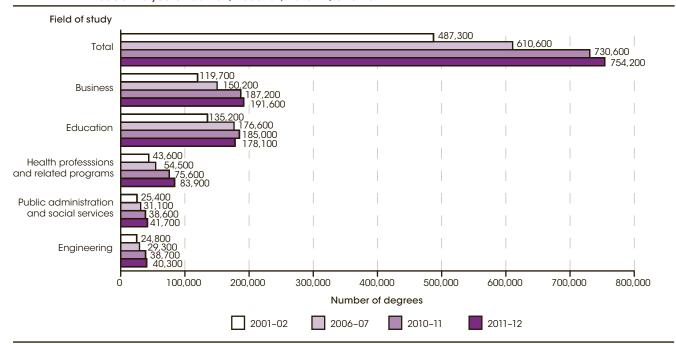
### **Graduate Degree Fields**

Between academic years 2001–02 and 2011–12, the number of master's degrees awarded increased by 55 percent, from 487,300 to 754,200, and the number of doctor's degrees awarded increased by 42 percent, from 119,700 to 170,100.

The number of master's degrees awarded by postsecondary institutions increased by 3 percent between 2010–11 and 2011–12 (from 730,600 to 754,200 degrees). Of the 754,200 master's degrees awarded in academic year 2011–12, nearly half were concentrated in two fields: business (25 percent) and education (24 percent). The three fields awarding the next largest

percentages of master's degrees were health professions and related programs (11 percent), public administration and social services (6 percent), and engineering (5 percent). These were the same five fields in which the largest percentages of master's degrees were awarded in 2001–02 and 2010–11.

Figure 1. Number of master's degrees awarded by Title IV postsecondary institutions in selected fields of study: Academic years 2001–02, 2006–07, 2010–11, and 2011–12



NOTE: These five fields were selected because they were the fields in which the largest percentage of master's degrees were awarded in 2011–12. Includes only institutions that participated in Title IV federal financial aid programs. The new Classification of Instructional Programs was initiated in 2009–10. The estimates for 2001–02 and 2006–07 have been reclassified when necessary to make them conform to the new taxonomy. "Business" includes Business, management, marketing, and related support services and Personal and culinary services.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2002, Fall 2007,

Fall 2011, and Fall 2012, Completions component. See Digest of *Education Statistics 2013*, table 323.10.

Overall, the number of master's degrees awarded increased by 266,900 between academic years 2001–02 and 2011–12, reflecting an increase of 55 percent. During this period, the two fields of study awarding the largest percentages of master's degrees, business and education, had increases in degrees awarded of 60 percent and 32 percent, respectively; although, education degrees awarded decreased by 4 percent between 2010–12 and 2011–12. In each of the 20 major fields awarding the largest percentages of master's degrees in 2011–12, the number awarded was higher than the number awarded a decade earlier. The field of homeland security, law

enforcement, and firefighting exhibited the largest percentage increase in the number of master's degrees awarded (from 2,900 to 8,400 degrees, a 186 percent increase) between 2001–02 and 2011–12. The next largest percentage increase was in the field of parks, recreation, leisure, and fitness studies (from 2,600 to 7,000 degrees, a 173 percent increase). Among the 20 largest fields of study for master's degrees in 2011–12, the field of theology and religious vocations saw the smallest percentage increase in the number of master's degrees awarded over the period (33 percent, from 10,100 to 13,400 degrees).

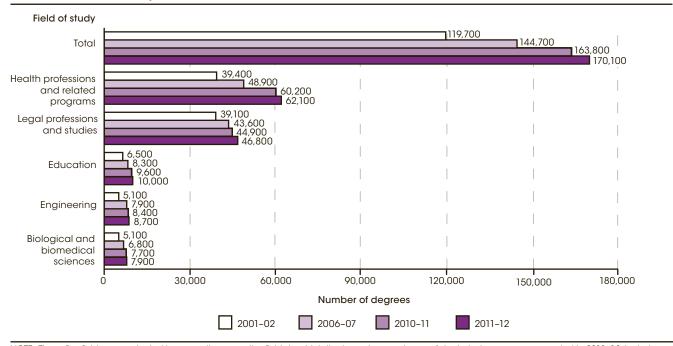
For more information, see the Reader's Guide and the Guide to Sources.

# **Chapter:** 4/Postsecondary Education **Section:** Programs and Courses

The number of doctor's degrees awarded by postsecondary institutions increased by 4 percent between 2010–11 and 2011–12 (from 163,800 to 170,100 degrees). The percentages of doctor's degrees awarded in health professions and related programs (37 percent) and legal professions and studies (28 percent) made up almost two-thirds of the 170,100 doctor's degrees

awarded in 2011–12. The three fields awarding the next largest percentages of doctor's degrees in 2011–12 were education, engineering, and biological and biomedical sciences (each accounted for 5 percent or more of all doctor's degrees awarded). These were the same five fields in which the largest percentages of doctor's degrees were awarded a decade earlier and in 2010–11.

Figure 2. Number of doctor's degrees awarded by Title IV postsecondary institutions in selected fields of study: Academic years 2001–02, 2006–07, 2010–11, and 2011–12



NOTE: These five fields were selected because they were the fields in which the largest percentages of doctor's degrees were awarded in 2011–12. Includes only institutions that participated in Title IV federal financial aid programs. The new Classification of Instructional Programs was initiated in 2009–10. The estimates for 2001–02 and 2006–07 have been reclassified when necessary to make them conform to the new taxonomy.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2002, Fall 2007, Fall 2011, and Fall 2012, Completions component. See *Diagest of Education Statistics 2013*, table 324.10.

Overall, the number of doctor's degrees awarded increased by 50,400 between academic years 2001–02 and 2011–12, reflecting an increase of 42 percent. During this period, the two fields of study awarding the largest percentages of doctor's degrees, health professions and related programs and legal professions and studies, had increases in degrees awarded of 57 percent and 20 percent, respectively. In each of the 20 major fields of study awarding the largest percentages of doctor's degrees in 2011–12, the number awarded was higher than the number awarded a decade earlier. The field of computer and information sciences exhibited the largest percentage

increase in the number of doctor's degrees awarded (from 752 to 1,700 degrees, a 126 percent increase) between 2001–02 and 2011–12. The next largest percentage increase was in the field of business (from 1,200 to 2,500 degrees awarded, a 119 percent increase). Among the 20 fields of study awarding the largest percentages of doctor's degrees in 2011–12, the field of English language and literature/letters saw the smallest percentage increase in the number of doctor's degrees awarded between 2001–02 and 2011–12 (11 percent, from 1,300 to 1,400 degrees).

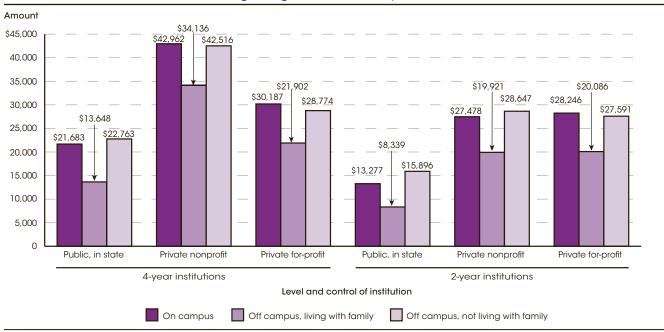
Reference tables: Digest of Education Statistics 2013, tables 323.10 and 324.10

**Glossary:** Classification of Instructional Programs (CIP), Doctor's degree, Master's degree

### **Price of Attending an Undergraduate Institution**

The average net price (total cost minus grants) of attendance in 2011–12 for first-time, full-time students was \$12,410 at public, in-state 4-year institutions, \$21,330 at private for-profit 4-year institutions, and \$23,540 at private nonprofit 4-year institutions.

Figure 1. Average total cost of attending degree-granting institutions for first-time, full-time students, by level and control of institution and living arrangement: Academic year 2012–13



NOTE: The total cost of attending a postsecondary institution is the sum of published tuition and required fees, books and supplies, and the weighted average for room, board, and other expenses. Tuition and fees at public institutions are the lower of either in-district or in-state tuition and fees. Excludes students who have already attended another postsecondary institution or who began their studies on a part-time basis. Data illustrating the average total cost of attendance for all students are weighted by the number of students at the institution receiving Title IV aid.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2012, Institutional Characteristics component. See Digest of Education Statistics 2013, table 330.40.

The total cost of attending a postsecondary institution is the sum of published tuition and required fees, books and supplies, and the weighted average for room, board, and other expenses. In academic year 2012-13, the total cost of attendance differed by institution level and control and by student living arrangements. At 4-year institutions, the average total cost of attendance for first-time, full-time students living on campus and paying in-state tuition was \$21,680 at public institutions, \$42,960 at private nonprofit institutions, and \$30,190 at private for-profit institutions. At 2-year institutions, the average total cost of attendance for first-time, full-time students living on campus and paying in-state tuition was \$13,280 at public institutions, \$27,480 at private nonprofit institutions, and \$28,250 at private for-profit institutions. At each institution level and control, the average total cost of attendance was lowest for students living with family. For example, for students paying in-state tuition at public

2-year institutions and living with family, the average total cost of attendance was \$8,340, compared with \$13,280 for students living on campus and \$15,900 for students living off campus but not with family.

Out of these total costs, the cost of room and board differed by institution level and control and by student living arrangements. In 2012–13, the average cost of room and board was generally higher for students at 4-year institutions than for students at 2-year institutions. For example, the average cost of room and board for students living on campus and paying in-state tuition at public institutions was \$9,180 at 4-year institutions, compared with \$5,820 at 2-year institutions; the average cost for students living off campus but not with family was \$9,300 at 4-year institutions, compared with \$7,650 at 2-year institutions. The average cost of room and board was generally lower for students paying in-state

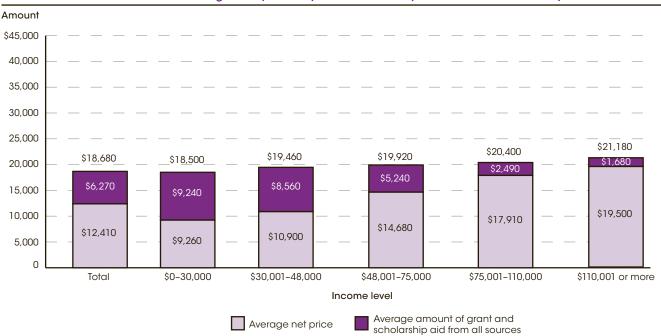
tuition at public institutions than for students at private nonprofit and private for-profit institutions. For example, the average cost of room and board for students living on campus and paying in-state tuition at 4-year public institutions was \$9,180, compared with \$10,180 at private nonprofit institutions and \$9,610 at private for-profit institutions.

Many students and their families do not pay the full price of attendance because they receive financial aid to help cover their expenses. The primary types of financial aid are grants, which do not have to be repaid, and loans, which must be repaid. Grants, which include scholarships, may be awarded on the basis of financial need, merit, or both and may include tuition aid from employers. In 2011–12, the average amount of grants for first-time, fulltime students who received grants was higher for students at private nonprofit institutions than for those at public and private for-profit institutions. For example, students

at 4-year private nonprofit institutions received an average of \$17,040, compared with \$6,270 at public and \$4,990 at private for-profit institutions.

The net price is the estimate of the actual amount of money that students and their families need to pay in a given year to cover educational expenses. Net price is calculated here as the total cost of attendance minus grants. Net price provides an indication of what the actual financial burden is upon students and their families. In 2011–12, the average net price for first-time, full-time students was lower for students at public institutions than for those at private nonprofit and private for-profit institutions. For example, the average net price of attendance in 2011-12 for first-time, full-time students was \$12,410 at public, in-state 4-year institutions, \$21,330 at private for-profit 4-year institutions, and \$23,540 at private nonprofit 4-year institutions.

Figure 2. Average total price, net price, and grants and scholarship aid for first-time, full-time students paying instate fuition and receiving aid at public 4-year institutions, by income level: Academic year 2011–12

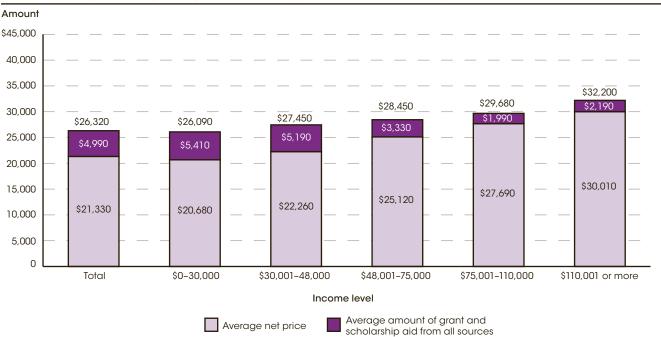


NOTE: Excludes students who previously attended another postsecondary institution or who began their studies on a part-time basis. Includes only first-time, full-time students who paid the in-state or in-district tuition rate (if they attended public institutions) and who received Title IV aid. Excludes the 18 percent of students who did not receive any Title IV aid. Title IV aid includes grant aid, work-study aid, and loan aid; however, the calculation of net price does not take into account student loan aid. Data are weighted by the number of students at the institution receiving Title IV aid. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Student Financial Aid component. See Digest of Education Statistics 2013, table 331.30.

The average amount of grant aid received and net price paid differed by family income level. In general, the lower the income, the greater the total amount of grant aid received. For example, at public 4-year institutions, the average amount of grant aid received by first-time, full-time students paying in-state tuition in 2011-12 was

highest for those with incomes of \$30,000 or less (\$9,240) and lowest for those with incomes of \$110,001 or more (\$1,680). Accordingly, the lowest average net price was for those with incomes of \$30,000 or less (\$9,260), and the highest average net price was for those with incomes of \$110,001 or more (\$19,500).

Figure 3. Average total price, net price, and grants and scholarship aid for first-time, full-time students receiving aid at private for-profit 4-year institutions, by income level: Academic year 2011–12

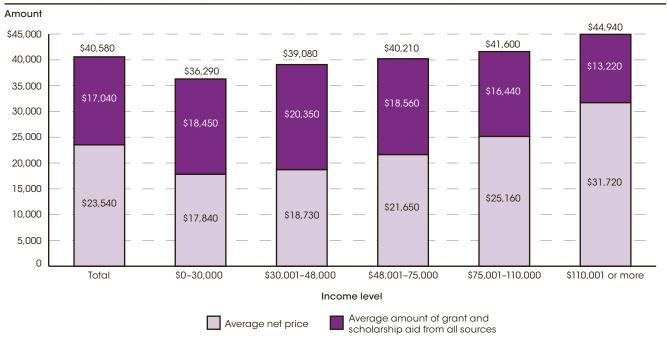


NOTE: Excludes students who previously attended another postsecondary institution or who began their studies on a part-time basis. Includes only first-time, full-time students who paid the in-state or in-district tuition rate (if they attended public institutions) and who received Title IV aid. Excludes the 18 percent of students who did not receive any Title IV aid. Title IV aid includes grant aid, work-study aid, and loan aid; however, the calculation of net price does not take into account student loan aid. Data are weighted by the number of students at the institution receiving Title IV aid. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Student Financial Aid component. See Digest of Education Statistics 2013, table 331.30.

At private for-profit 4-year institutions, the same pattern was observed. The average amount of grant aid received by first-time, full-time students in 2011–12 was highest for those with family incomes of \$30,000 or less (\$5,410) and lowest for those with incomes of \$110,001 or more

(\$2,190). Accordingly, the lowest average net price was for those with incomes of \$30,000 or less (\$20,680), and the highest average net price was for those with incomes of \$110,001 or more (\$30,010).

Figure 4. Average total price, net price, and grants and scholarship aid for first-time, full-time students receiving aid at private nonprofit 4-year institutions, by income level: Academic year 2011–12



NOTE: Excludes students who previously attended another postsecondary institution or who began their studies on a part-time basis. Includes only first-time, full-time students who paid the in-state or in-district fuition rate (if they attended public institutions) and who received Title IV aid. Excludes the 18 percent of students who did not receive any Title IV aid. Title IV aid includes grant aid, work-study aid, and loan aid; however, the calculation of net price does not take into account student loan aid. Data are weighted by the number of students at the institution receiving Title IV aid.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Student Financial Aid component. See Digest of Education Statistics 2013, table 331.30.

The pattern of average net price increasing with family income was also observed for private nonprofit 4-year institutions. However, the average amount of grant aid received in 2011–12 was highest for those with incomes between \$30,001 and \$48,000 (\$20,350), followed by those with incomes between \$48,001 and \$75,000 (\$18,560), those with incomes of \$30,000 or less (\$18,450), those with incomes between \$75,001 and \$110,000 (\$16,440), and those with incomes of \$110,001 or more (\$13,220).

The average amount of grant aid received and average net price of attendance also varied by institution control. At each family income level, the average amount of grant aid was highest for students at private nonprofit institutions and generally lowest for students at private for-profit institutions; the average net price was generally highest for students at private for-profit institutions and lowest for students paying in-state tuition at public institutions. For example, the average amount of grant aid received by students attending 4-year institutions with family incomes between \$30,001 and \$48,000 was lowest at private for-profit institutions (\$5,190), followed by public, in-state (\$8,560) and private nonprofit institutions (\$20,350). The average net price of attending a 4-year private for-profit institution (\$22,260) at this income level was higher than the price of attending a private nonprofit (\$18,730) or a public institution (\$10,900).

Reference tables: Digest of Education Statistics 2013, tables 330.40 and 331.30

Glossary: Financial aid, Private institution, Public school or institution, Tuition and fees

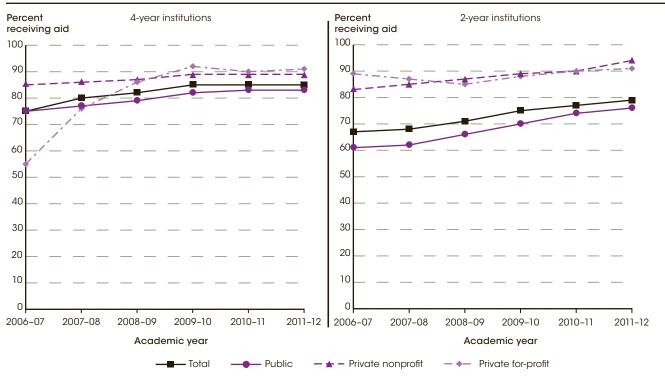
### **Grants and Loan Aid to Undergraduate Students**

The percentage of first-time, full-time undergraduate students at 4-year degreegranting institutions receiving financial aid increased from 75 percent in 2006–07 to 85 percent in 2011–12.

Grants and loans are the major forms of federal financial aid for degree-seeking undergraduate students. The largest federal grant program available to undergraduate students is the Pell Grant program. In order to qualify for a Pell Grant, a student must demonstrate financial need. Federal

loans, on the other hand, are available to all students. In addition to federal financial aid, there are also grants from state and local governments, institutions, and private sources, as well as private loans.

Figure 1. Percentage of first-time, full-time undergraduate students in degree-granting institutions receiving any financial aid, by level and control of institution: Academic years 2006–07 through 2011–12



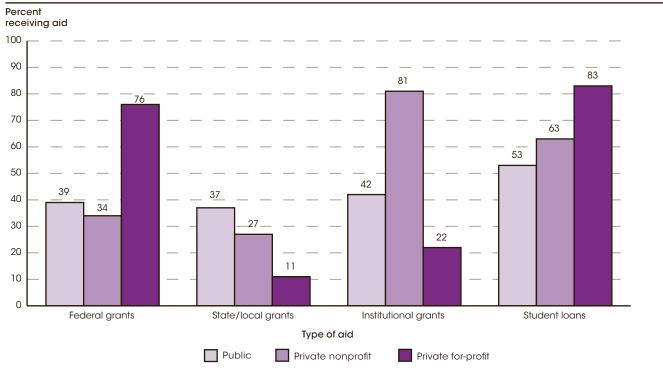
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Student financial aid includes any Federal Work-Study, loans to students, or grant or scholarship aid from the federal government, state/local government, the institution, or other sources known to the institution. Includes only loans made directly to students. Does not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents.

SOURCE: U.S. Department of Éducation, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2008 through Spring 2013, Student Financial Aid component. See *Digest of Education Statistics 2013*, table 331.20.

From academic years 2006–07 to 2011–12, the percentage of first-time, full-time undergraduate students at 4-year degree-granting institutions receiving any financial aid increased from 75 to 85 percent. During this time, the largest percentage increase was at 4-year private for-profit institutions (from 55 to 91 percent). The percentage of students receiving aid at 4-year public institutions increased from 75 to 83 percent, while the percentage of students at 4-year private nonprofit institutions had the smallest increase, from 85 to 89 percent. For 2-year

institutions, the percentage of students receiving any financial aid increased from 67 percent in 2006–07 to 79 percent in 2011–12, and the largest percentage increase in students receiving aid was at public institutions, from 61 to 76 percent. The percentage of students receiving aid at 2-year private nonprofit institutions increased from 83 to 94 percent between 2006–07 and 2011–12; the percentage receiving aid at 2-year private for-profit institutions was higher in 2011–12 (91 percent) than in 2006–07 (89 percent).

Figure 2. Percentage of first-time, full-time undergraduate students receiving financial aid at 4-year degreegranting institutions, by type of aid and institutional control: Academic year 2011–12



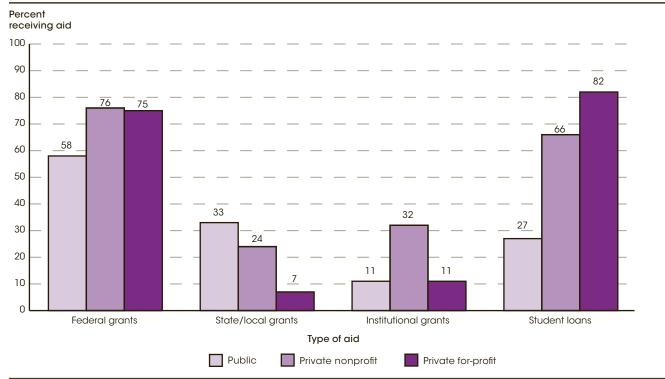
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Student financial aid includes any Federal Work-Study, loans to students, or grant or scholarship aid from the federal government, state/local government, the institution, or other sources known to the institution. Includes only loans made directly to students. Does not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Student Financial Aid component. See *Digest of Education Statistics 2013*, table 331.20.

In 2011–12, the percentage of first-time, full-time undergraduate students receiving federal grants at 4-year institutions was highest at private for-profit institutions (76 percent); at 4-year public and 4-year private nonprofit institutions, 39 percent and 34 percent of students, respectively, received federal grants. The same year, the percentage of students at 4-year institutions receiving state or local grants was highest at public institutions (37 percent), followed by the percentage receiving these grants at private nonprofit institutions (27 percent) and the percentage receiving them at private for-profit

institutions (11 percent). The percentage of students receiving institutional grants was highest at 4-year private nonprofit institutions (81 percent), followed by the percentage receiving these grants at public institutions (42 percent) and the percentage receiving them at private for-profit institutions (22 percent). The percentage of students at 4-year institutions receiving student loan aid was highest at private for-profit institutions (83 percent). In comparison, 63 percent of students at 4-year private nonprofit institutions and 53 percent of students at public institutions received student loan aid.

Figure 3. Percentage of first-time, full-time undergraduate students receiving financial aid at 2-year degreegranting institutions, by type of aid and institutional control: Academic year 2011–12



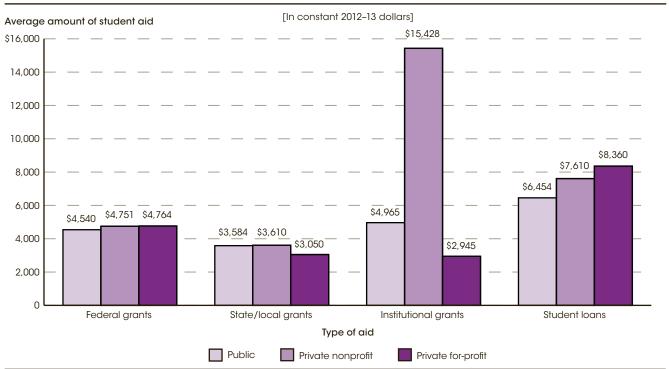
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Student financial aid includes any Federal Work-Study, loans to students, or grant or scholarship aid from the federal government, state/local government, the institution, or other sources known to the institution. Includes only loans made directly to students. Does not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Student Financial Aid component. See *Digest of Education Statistics 2013*, table 331.20.

For first-time, full-time undergraduate students at 2-year institutions in 2011–12, the percentage of students receiving federal grants was highest at private nonprofit institutions (76 percent), compared with the percentage receiving them at private for-profit institutions (75 percent) and the percentage receiving them at public institutions (58 percent). In the same year, 33 percent of students at 2-year public institutions received state or local grants, compared with 24 percent at private nonprofit institutions and 7 percent at private for-profit institutions.

About 32 percent of students at 2-year private nonprofit institutions received institutional grants, compared with 11 percent of students at each of public institutions and private for-profit institutions. The percentage of students at 2-year institutions receiving student loan aid was highest at private for-profit institutions (82 percent), compared with the percentages receiving them at private nonprofit institutions (66 percent) and at public institutions (27 percent).

Figure 4. Average amount of student aid awarded to first-time, full-time undergraduate students receiving aid at 4-year degree-granting institutions, by type of financial aid and institutional control: Academic year 2011–12



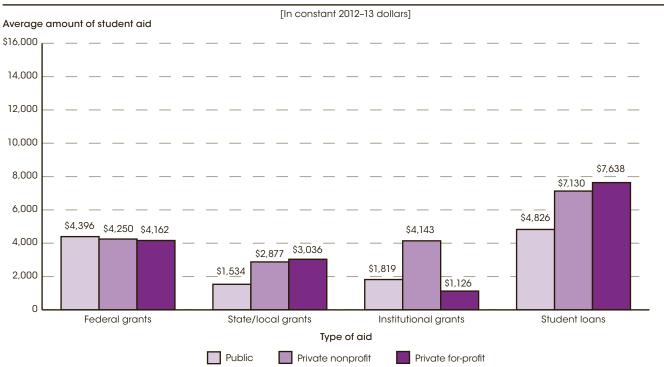
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Grant award amounts are in constant 2012-13 dollars, based on the Consumer Price Index (CPI). Includes only loans made directly to students. Does not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents.

SOURCE: Ü.S. Department of Éducation, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Student Financial Aid component. See *Digest of Education Statistics 2013*, table 331.20.

Average grant amounts are reported in constant 2012–13 dollars. The average institutional grant award for first-time, full-time students receiving institutional grants in 2011–12 at 4-year institutions was highest at private nonprofit institutions (\$15,428), compared with the average institutional grant award at public institutions (\$4,965) and at private for-profit institutions (\$2,945).

There were smaller differences in the average federal grant awards by institution type. The average federal grant award for students receiving federal grants at 4-year institutions was \$4,764 for students attending private for-profit institutions, \$4,751 for students attending private nonprofit institutions, and \$4,540 for students attending public institutions.

Average amount of student aid awarded to first-time, full-time undergraduate students receiving aid Figure 5. at 2-year degree-granting institutions, by type of financial aid and institutional control: Academic year 2011-12



NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Grant award amounts are in constant 2012-13 dollars, based on the Consumer Price Index (CPI). Includes only loans made directly to students. Does not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Student Financial Aid component. See Digest of Education Statistics 2013, table 331.20

Among 2-year institutions, the average institutional grant award for first-time, full-time students receiving institutional grants in 2011-12 was highest at private nonprofit institutions (\$4,143), compared with the average institutional grant amount awarded at public institutions (\$1,819) or at private for-profit institutions (\$1,126). Similar to 4-year institutions, there were relatively

smaller differences in the average federal grant awards by institution type. The average federal grant award for undergraduate students receiving federal grants was \$4,396 for students attending 2-year public institutions, \$4,250 for those attending private nonprofit institutions, and \$4,162 for those attending private for-profit institutions.

**Reference tables:** Digest of Education Statistics 2013, table 331.20

Glossary: Financial aid, Higher education institutions, Private institution, Public school or institution, Undergraduate students



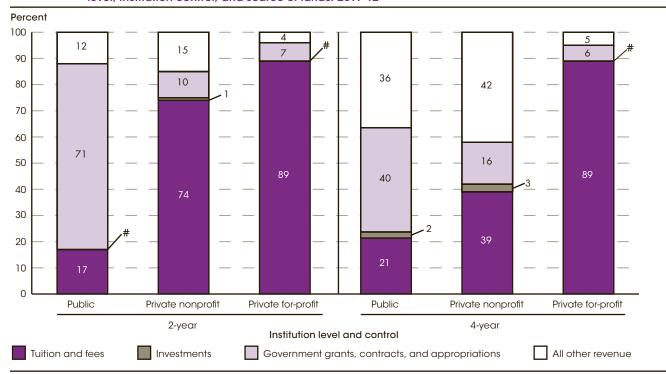
### **Postsecondary Revenues by Source**

In 2011-12, revenues from tuition and fees per full-time-equivalent (FTE) student were 14 percent higher at public institutions (\$6,072) than they were in 2006-07 (\$5,339), in constant 2012-13 dollars. At private nonprofit institutions, they were 6 percent higher (\$19,330 vs. \$18,171), and at private for-profit institutions they were 2 percent higher (\$15,176 vs. \$14,810).

In 2011–12, total revenues, in current dollars, at degreegranting postsecondary institutions were \$317 billion at public institutions, \$162 billion at private nonprofit institutions, and \$27 billion at private for-profit institutions. At private nonprofit institutions and private for-profit institutions, student tuition and fees constituted the largest percentage of total revenues (39 and 89 percent, respectively). At public institutions, the

largest revenue sources were student tuition and fees (21 percent) and state appropriations (19 percent). It is important to note that revenue data are not comparable across institutional control categories because Pell grants are included in the federal grant revenues at public institutions but tend to be included in tuition and fees and auxiliary enterprise revenues at private nonprofit and private for-profit institutions.

Figure 1. Percentage distribution of total revenues at degree-granting postsecondary institutions, by institution level, institution control, and source of funds: 2011-12

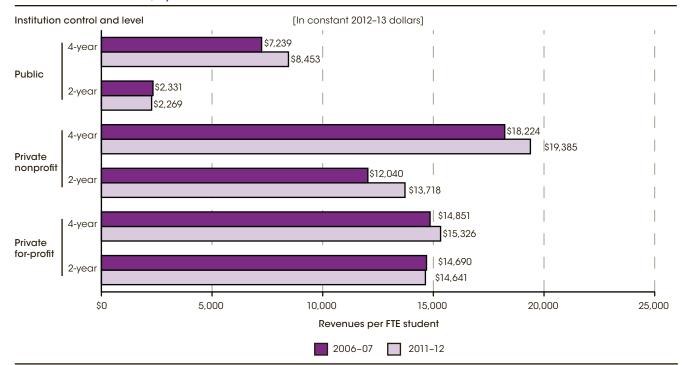


<sup>#</sup> Rounds to zero.

NOTE: Percentages are based on current 2011-12 dollars. Government grants, contracts, and appropriations include revenue from federal, state, and local governments. All other revenue includes gifts, capital or private grants and contracts, auxiliary enterprises, and other revenue. Revenue data are not comparable across institutional control categories because Pell grants are included in the federal grant revenues at public institutions but tend to be included in tuition and auxiliary enterprise revenues at private nonprofit and private for-profit institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Finance component. See Digest of Education Statistics 2013, tables 333.10, 333.40, and 333.55.

Revenues from tuition and fees made up over threequarters of all revenues for both 2-year and 4-year private for-profit institutions (89 percent each) and 74 percent at 2-year private nonprofit institutions. Revenues from government sources (which include federal, state, and local government grants, contracts, and appropriations) constituted 40 percent of total revenues at 4-year public institutions and 71 percent at 2-year public institutions. Investment returns or investment income accounted for 3 percent of total revenues at 4-year private nonprofit institutions and 2 percent of total revenues at 4-year public institutions; this source accounted for 1 percent or less of total revenues for other types of 4-year and 2-year degree-granting postsecondary institutions.

Figure 2. Revenues per full-time-equivalent (FTE) student from tuition and fees for degree-granting postsecondary institutions, by institution control and level: 2006–07 and 2011–12



NOTE: Full-time-equivalent (FTE) student includes full-time students plus the full-time equivalent of part-time students. Revenues per FTE student are reported in constant 2012-13 dollars, based on the Consumer Price Index (CPI) adjusted to a school-year basis. Revenue data are not comparable across institutional control categories because Pell grants are included in the federal grant revenues at public institutions but tend to be included in tuition and auxiliary enterprise revenues at private nonprofit and private for-profit institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2007 and Spring 2012, Enrollment component; and Spring 2008 and Spring 2013, Finance component. See *Digest of Education Statistics 2013*, tables 333.10, 333.40, and 333.55.

Between 2006–07 and 2011–12, the percentage change of revenues per full-time-equivalent (FTE) student varied by institutional control and level. Revenues per FTE student are reported in constant 2012-13 dollars, based on the Consumer Price Index (CPI). During this period, revenues from tuition and fees per FTE student increased by 14 percent at public institutions (from \$5,339 to \$6,072) and by 6 percent at private nonprofit institutions (from \$18,171 to \$19,330). At private for-profit institutions, revenues from tuition and fees were 2 percent higher in 2011-12 than in 2006-07 (\$15,176 vs. \$14,810). At public institutions from 2006–07 to 2011–12, revenues from tuition and fees per FTE student increased by 17 percent at 4-year institutions (from \$7,239 to \$8,453), while revenues were 3 percent lower (\$2,331 vs. \$2,269) at 2-year institutions. At private nonprofit institutions, revenues from tuition and fees per FTE student increased by 6 percent at 4-year institutions (from \$18,224 to \$19,385) and by 14 percent at 2-year institutions (from \$12,040 to \$13,718). At private for-profit institutions, revenues from

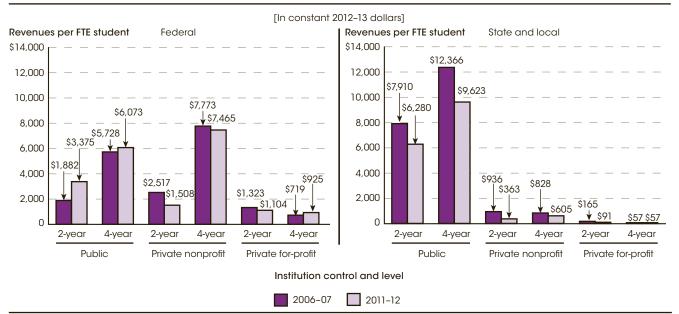
tuition and fees per FTE student at 4-year institutions were 3 percent higher in 2011–12 than they were in 2006–07 (\$15,326 vs. \$14,851), while at 2-year institutions they were less than 1 percent lower (\$14,641 vs. \$14,690).

Revenues from tuition and fees at public institutions rose more rapidly than did government revenues between 2006–07 and 2011–12. As a result, the percentage of revenues from tuition and fees was higher in 2011–12 (21 percent) than in 2006–07 (17 percent), and the percentage of revenues from government sources was lower in 2011–12 (45 percent) than in 2006–07 (46 percent).

Revenues per FTE student from government sources at public institutions were 10 percent lower in 2011–12 than in 2006–07 (\$13,370 vs. \$14,881, in constant 2012–13 dollars), 6 percent lower at private nonprofit institutions (\$8,009 vs. \$8,557), and 8 percent higher at private for-profit institutions (\$1,029 vs. \$956).

For more information, see the Reader's Guide and the Guide to Sources.

Revenues per full-time-equivalent (FTE) student from government grants, contracts, and appropriations for Figure 3. degree-granting postsecondary institutions, by type of revenue and institution control and level: 2006-07 and 2011-12



NOTE: Full-time-equivalent (FTE) student includes full-time students plus the full-time equivalent of part-time students. Revenues per FTE student are reported in constant 2012-13 dollars, based on the Consumer Price Index (CPI) adjusted to a school-year basis. Revenue data are not comparable across institutional control categories because Pell grants are included in the federal grant revenues at public institutions but tend to be included in tuition and auxiliary enterprise revenues at private nonprofit and private for-profit institutions. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2007 and Spring 2012, Enrollment component; and Spring 2008 and Spring 2013, Finance component. See Digest of Education Statistics 2013, tables 333.10,

State and local government revenues per FTE student were generally lower in 2011–12 than in 2006–07 across degree-granting postsecondary institutions. Compared with 2006-07, revenues per FTE student from state and local sources in 2011–12 were 22 percent lower at 4-year public institutions (\$12,366 vs. \$9,623), 27 percent lower at 4-year private nonprofit institutions (\$828 vs. \$605), 21 percent lower at 2-year public institutions (\$7,910 vs. \$6,280), and 61 percent lower at 2-year private nonprofit institutions (\$936 vs. \$363). State and local revenues per FTE student at private for-profit institutions were 1 percent higher at 4-year institutions and 45 percent lower at 2-year institutions.

Revenues from federal sources were higher in 2011–12 than in 2006-07 across degree-granting postsecondary institutions. At public institutions, there was a 19 percent increase in federal revenues per FTE student, whereas state revenues were 25 percent lower in 2011–12 than in 2006-07. Additionally, federal funding per FTE student increased by 6 percent at 4-year public institutions (from \$5,728 to \$6,073, in constant 2012–13 dollars) and increased by 79 percent (from \$1,882 to \$3,375) at 2-year public institutions. Compared with 2006-07, revenues per FTE student from federal sources in 2011–12 were 4 percent lower at all levels of private nonprofit institutions (\$7,728 vs. \$7,406). At 4-year private nonprofit institutions, federal revenues were also 4 percent lower in 2011–12 than in 2006–07 (\$7,465 vs. \$7,773); at 2-year private nonprofit institutions, federal revenues were 40 percent lower (\$1,508 vs. \$2,517). Revenues per FTE student from federal sources at all levels of private for-profit institutions were 11 percent higher in 2011–12 than in 2006-07 (\$965 vs. \$872).

Reference tables: Digest of Education Statistics 2013, tables 333.10, 333.40, and 333.55

Glossary: Consumer Price Index (CPI), Full-time-equivalent (FTE) enrollment, Private for-profit institution, Private institution, Private nonprofit institution, Public school or institution, Revenue, Tuition and fees

333.40, and 333.55

This page intentionally left blank.

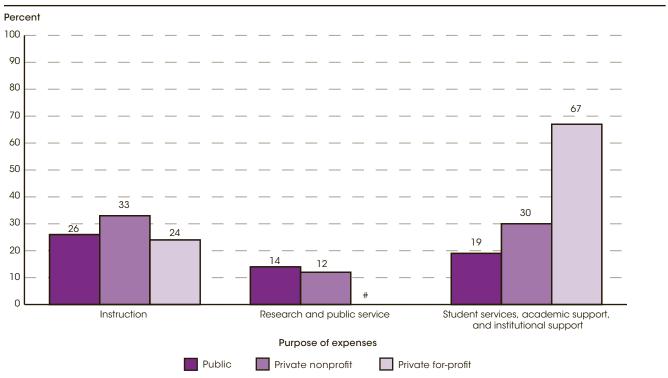
### **Expenses of Postsecondary Institutions**

In 2011-12, instruction expense per full-time-equivalent (FTE) student was \$7,512 (in constant 2012-13 dollars) at public institutions, \$16,015 at private nonprofit institutions, and \$3,542 at private for-profit institutions. Instruction expense was the largest expense category at public and private nonprofit institutions and the second largest expense category at private for-profit institutions.

In 2011–12, more than \$488 billion was spent by postsecondary institutions. Total expenses were \$306 billion (in current dollars) at public postsecondary institutions, \$160 billion at private nonprofit institutions, and \$23 billion at private for-profit institutions. Some

financial data may not be comparable across institutions by control categories because of differences in accounting standards. Comparisons by institutional level (i.e., between 2-year and 4-year institutions) may also be limited because of different institutional missions.

Figure 1. Percentage of total expenses at degree-granting postsecondary institutions, by purpose of expenses and control of institution: 2011-12



NOTE: Degree-granting institutions grant associate's degrees or higher and participate in Title IV federal financial aid programs SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Finance component. See Digest of Education Statistics 2013, tables 334.10, 334.30, and 334.50.

Instruction, including faculty salaries and benefits, is the largest expense category at public and private nonprofit postsecondary institutions and the second largest category at private for-profit institutions. At public institutions in 2011-12, some 26 percent of total expenses were spent on instruction, compared with 33 percent at private nonprofit institutions and 24 percent at private for-profit institutions. The largest expense category (67 percent) at private for-profit institutions in that year was student

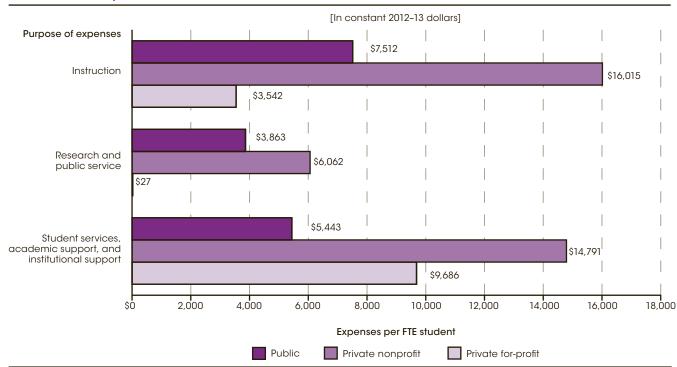
services, academic support, and institutional support, which includes expenses associated with admissions, student activities, libraries, and administrative and executive activities. By comparison, student services, academic support, and institutional support made up 19 percent of total expenses at public institutions and 30 percent of total expenses at private nonprofit institutions. Other relatively large categories at public institutions (i.e., those accounting for 8-10 percent of expenses, not shown

in the figures) were research, hospitals, and institutional support. At private nonprofit institutions, some of the other large categories (i.e., those accounting for 8–13 percent of expenses) were institutional support, research, auxiliary enterprises (i.e., self-supporting operations, such as residence halls), hospitals, academic support, and student services.

In 2011–12, across all levels of postsecondary institutional control, 2-year institutions spent a greater share of their

total expenses on instruction than did 4-year institutions. The percentage of total expenses at public institutions for instruction was 35 percent at 2-year institutions, compared with 25 percent at 4-year institutions. At private nonprofit institutions, instruction accounted for 35 percent of total expenses at 2-year institutions and 33 percent at 4-year institutions; at private for-profit institutions, the percentages of total expenses for instruction at 2-year and 4-year institutions were 30 and 23 percent, respectively.

Figure 2. Expenses per full-time-equivalent (FTE) student at degree-granting postsecondary institutions, by purpose of expenses and control of institution: 2011–12



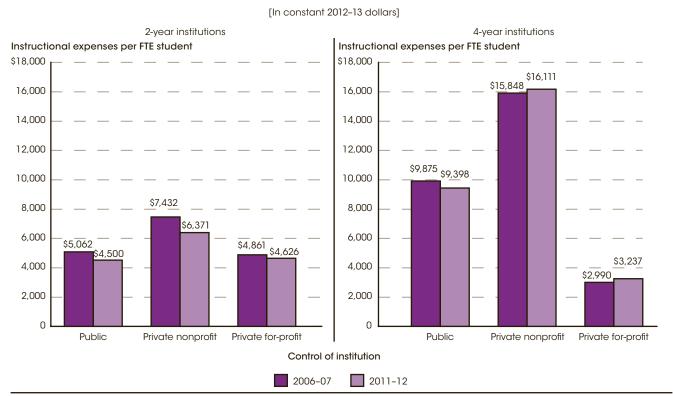
NOTE: Degree-granting institutions grant associate's degrees or higher and participate in Title IV federal financial aid programs. Full-time-equivalent (FTE) students include full-time students plus the full-time equivalent of part-time students. Expenses per FTE student are reported in constant 2012-13 dollars, based on the Consumer Price Index (CPI).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2012, Enrollment component; and Spring 2013, Finance component. See *Digest of Education Statistics 2013*, tables 334.10, 334.30, and 334.50.

In 2011–12, total expenses per full-time-equivalent (FTE) student were much higher at private nonprofit postsecondary institutions (\$49,036) than at public institutions (\$28,371) and private for-profit institutions (\$14,545). Expenses per FTE student are reported in constant 2012–13 dollars, based on the Consumer Price Index (CPI). Private nonprofit institutions spent more than twice as much per student on instruction (\$16,015) than did public institutions (\$7,512). A similar pattern was found for most other expense classifications, such as student services, academic support, and institutional support (a total of \$14,791 for private nonprofit

institutions vs. \$5,443 for public institutions). Expenses per FTE student for public services, such as expenses for public broadcasting and community services, were an exception to this pattern, with public institutions spending more than private nonprofit institutions (\$1,109 vs. \$716). Expenses per student for instruction were more than twice as high at public institutions as at private for-profit institutions (\$7,512 vs. \$3,542), but expenses per student for student services, academic support, and institutional support were higher at private for-profit institutions (\$9,686) than at public institutions (\$5,443).

Figure 3. Instructional expenses per full-time-equivalent (FTE) student for instruction at 2-year and 4-year degreegranting postsecondary institutions, by control of institution: 2006-07 and 2011-12



NOTE: Degree-granting institutions grant associate's degrees or higher and participate in Title IV federal financial aid programs. Full-time-equivalent (FTE) students include full-time students plus the full-time equivalent of part-time students. Expenses per FTE student are reported in constant 2012-13 dollars, based on the Consumer Price Index (CPI)

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2007 and Spring 2012, Enrollment component; and Spring 2008 and Spring 2013, Finance component. See Digest of Education Statistics 2013, tables 334.10, 334.30, and 334.50.

Expenses per FTE student for instruction, after adjusting for inflation, have shown varying patterns of change between 2006-07 and 2011-12 at the different postsecondary institution types. At public 4-year institutions, instruction expenses per FTE student were 5 percent lower in 2011-12 (\$9,398) than they were in 2006-07 (\$9,875); at public 2-year institutions, these expenses were 11 percent lower in 2011–12 (\$4,500) than in 2006–07 (\$5,062). At private nonprofit institutions, instruction expenses per FTE student increased by 2 percent at 4-year institutions but decreased by 14 percent at 2-year institutions. At private for-profit institutions, expenses per FTE student for instruction in 2011–12 were 8 percent higher than they were in 2006–07 for 4-year institutions (\$3,237 vs. \$2,990) and 5 percent lower for 2-year institutions (\$4,626 vs. \$4,861).

Reference tables: Digest of Education Statistics 2013, tables 334.10, 334.30, and 334.50

Glossary: Consumer Price Index (CPI), Full-time-equivalent (FTE) enrollment, Private institution, Public school or institution, Revenue, Tuition and fees

This page intentionally left blank.

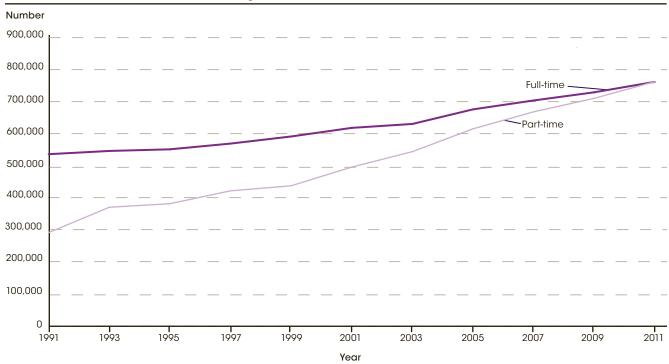
### **Characteristics of Postsecondary Faculty**

From fall 1991 to fall 2011, the number of full-time instructional faculty in degree-granting postsecondary institutions increased by 42 percent (from 536,000 to 762,000), while the number of part-time faculty increased by 162 percent (from 291,000 to 762,000). As a result of the faster increase in the number of part-time faculty, the percentage of faculty who were part time increased from 35 to 50 percent during this period.

In fall 2011, there were 1.5 million instructional faculty in degree-granting postsecondary institutions—approximately half were full time and half were part time. Faculty include professors, associate professors,

assistant professors, instructors, lecturers, assisting professors, adjunct professors, or interim professors (or the equivalent).

Figure 1. Number of instructional faculty in degree-granting postsecondary institutions, by employment status: Selected years, fall 1991 through fall 2011



NOTE: Graduate students with titles such as graduate or teaching fellow who assist senior faculty are excluded. Data through 1995–96 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's degrees or higher and participate in Title IV federal financial aid programs. Beginning in 2007, includes institutions with fewer than 15 full-time employees; these institutions did not report staff data prior to 2007.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Staff Survey" (IPEDS-S:91-99); and IPEDS Winter 2001-02 through Winter 2011-12, Human Resources component, Fall Staff section. See *Digest of Education Statistics 2013*, table 315.10.

From fall 1991 to fall 2011, the number of instructional faculty in degree-granting postsecondary institutions increased by 84 percent. The number of full-time faculty in degree-granting postsecondary institutions increased by 42 percent (from 536,000 to 762,000) from 1991 to 2011, compared with an increase of 162 percent (from 291,000 to 762,000) in the number of part-time faculty. As a result of the faster increase in the number of part-time faculty, the percentage of faculty who were part time increased

from 35 to 50 percent during this period. Additionally, the percentage of all faculty who were female increased from 36 percent in 1991 to 48 percent in 2011.

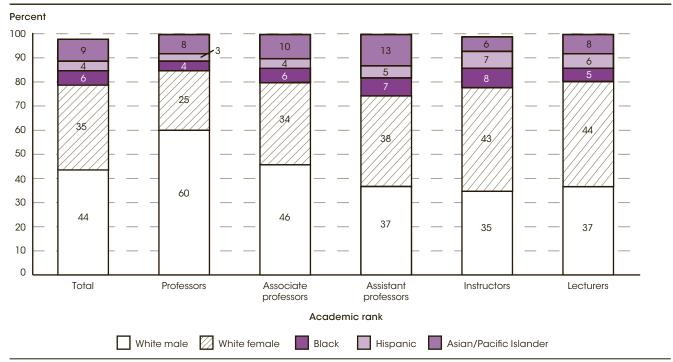
Although the number of instructional faculty increased at institutions of each control type from fall 1991 to fall 2011, the percentage increases in faculty were smaller for public and private nonprofit institutions than for private for-profit institutions. During this period, the

For more information, see the Reader's Guide and the Guide to Sources.

number of faculty increased by 64 percent (from 580,900 to 953,200) at public institutions, by 83 percent (from 236,100 to 432,700) at private nonprofit institutions, and by almost 1,400 percent (from 9,300 to 137,700) at private for-profit institutions. Despite the faster growth in

the number of faculty at private for-profit institutions over this period, only 9 percent of all faculty were employed by private for-profit institutions in 2011, while 63 percent were employed by public institutions and 28 percent by private nonprofit institutions.

Figure 2. Percentage of full-time instructional faculty whose race/ethnicity was known, in degree-granting postsecondary institutions, by academic rank, selected race/ethnicity, and sex: Fall 2011

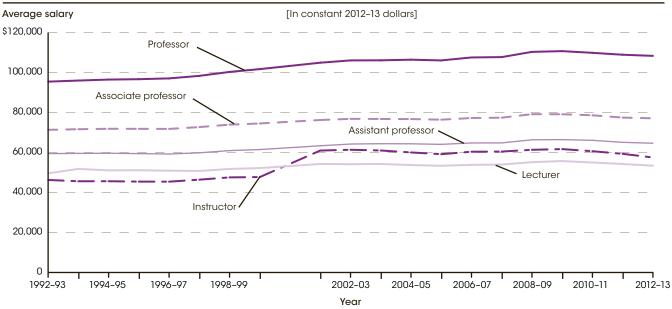


NOTE: Graduate students with titles such as graduate or teaching fellow who assist senior faculty are excluded. Degree-granting institutions grant associate's degrees or higher and participate in Title IV federal financial aid programs. Race categories exclude persons of Hispanic ethnicity. Estimates are based on full-time faculty whose race/ethnicity was known. Detail may not sum to 100 percent because data on some racial/ethnic groups are not shown. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Winter 2011–12, Human Resources component, Fall Staff section. See Digest of Education Statistics 2013, table 315.20.

In fall 2011, of those full-time instructional faculty whose race/ethnicity was known, 79 percent were White (44 percent were White males and 35 percent were White females), 6 percent were Black, 4 percent were Hispanic, 9 percent were Asian/Pacific Islander, and less than 1 percent were American Indian/Alaska Native or two or

more races. Among full-time professors, 84 percent were White (60 percent were White males and 25 percent were White females), 4 percent were Black, 3 percent were Hispanic, 8 percent were Asian/Pacific Islander, and less than 1 percent were American Indian/Alaska Native.

Average salary of full-time instructional faculty on 9-month contracts in degree-granting postsecondary Figure 3. institutions, by academic rank: Selected years, 1992–93 through 2012–13



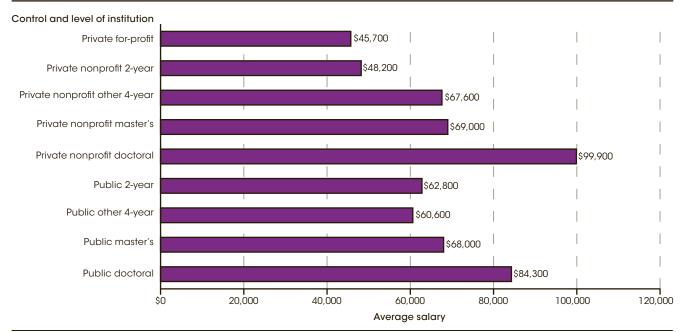
NOTE: Graduate students with titles such as graduate or teaching fellow who assist senior faculty are excluded. Data through 1995–96 are for institutions of higher education, while later data are for degree-granting institutions. Degree-granting institutions grant associate's degrees or higher and participate in Title IV federal financial aid programs. Beginning in 2007, includes institutions with fewer than 15 full-time employees; these institutions did not report staff data prior to 2007. Salaries are reported in constant 2012–13 dollars, based on the Consumer Price Index (CPI) SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Staff Survey" (IPEDS-S:91-99); and IPEDS Winter 2001-02 through Winter 2011-12 and Spring 2013, Human Resources component, Fall Staff section. See *Digest of Education Statistics 2013*, table 316.10.

In academic year 2012–13, the average salary for full-time instructional faculty on 9-month contracts at degreegranting postsecondary institutions was \$77,300; average salaries ranged from \$53,400 for lecturers to \$108,300 for professors. The average salary (adjusted for inflation) for all full-time instructional faculty on 9-month contracts increased by 10 percent from 1992-93 (\$72,600) to 2009-10 (\$79,700) but decreased by 3 percent from 2009-10 to 2012-13 (\$77,300). Average salaries for specific academic ranks also increased between 1992-93 and 2009-10: average salary increases were 16 percent for professors (from \$95,400 to \$110,700), 11 percent for associate professors (from \$71,300 to \$79,100), 12 percent for assistant professors (from \$59,500 to \$66,400), 33 percent for instructors (from \$46,300 to \$61,700), and 12 percent for lecturers (from \$49,600 to \$55,700). From 2009-10 to 2012-13, however, average salaries across

academic ranks decreased: the decreases ranged from 2 to 7 percent.

The average salary for all full-time instructional faculty was higher for males than for females in all years for which data were available. In academic year 2012-13, the average salary was higher for males than for females (\$84,000 vs. \$69,100). Between 1992–93 and 2012–13, the average salary increased by 8 percent for males and by 11 percent for females, after adjusting for inflation. Due to the faster increase in salary for females, the salary gap between male and female instructional faculty overall in 2012-13 was lower than in 1992-93 (\$14,900 vs. \$15,400). However, the gender gap in salary for professors increased from \$11,700 in 1992-93 to \$16,900 in 2012-13.

Average salary of full-time instructional faculty on 9-month contracts in degree-granting postsecondary Figure 4. institutions, by control and level of institution: 2012–13



NOTE: Degree-granting institutions grant associate's degrees or higher and participate in Title IV federal financial aid programs. Salaries reflect an average of all faculty on 9-month contracts rather than a weighted average based on contract length that appears in some other reports of the National Center for

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Human Resources component, Salaries section. See Digest of Education Statistics 2013, table 316.20.

In academic year 2012–13, the average salary for full-time instructional faculty at private nonprofit institutions (\$85,400) was higher than the average salaries for instructional faculty at public institutions (\$73,900) and at private for-profit institutions (\$45,700). Among the specific institutional types, average instructional faculty salaries were highest at private nonprofit doctoral institutions (\$99,900) and public doctoral institutions (\$84,300). Average salaries were lowest for instructional faculty at private for-profit institutions (\$45,700) and private nonprofit 2-year institutions (\$48,200). From 1999–2000 to 2012–13, average instructional faculty salaries were 2 percent lower at public institutions but 7 percent higher at private nonprofit institutions and 13 percent higher at private for-profit institutions, after adjusting for inflation.

In academic year 2011–12, approximately 45 percent of institutions had tenure systems. The percentage of institutions with tenure systems ranged from 1 percent at private for-profit institutions to almost 100 percent at public doctoral institutions. Of those faculty at institutions with tenure systems, 49 percent of full-time faculty had tenure in 2011-12, compared with 54 percent in 1999-2000. From 1999-2000 to 2011-12, the percentage of full-time faculty having tenure decreased 5 percentage points at public institutions, 4 percentage points at private nonprofit institutions, and 46 percentage points at private for-profit institutions. At institutions with tenure systems, the percentage of full-time faculty having tenure was generally higher for males than for females. In 2011–12, some 54 percent of males had tenure, compared with 41 percent of females.

Reference tables: Digest of Education Statistics 2013, tables 315.10, 315.20, 316.10, 316.20, and 316.80

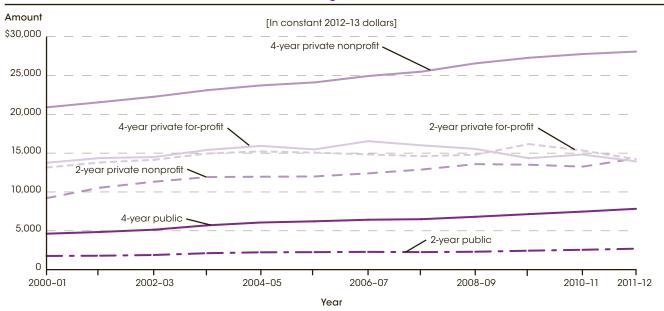
Glossary: Private institution, Public school or institution

#### **Student Loan Volume and Default Rates**

In 2011-12, the average student loan amount of \$6,800 represented a 36 percent increase over the 2000-01 amount of \$5,000 (in constant 2012-13 dollars). Of the 4.7 million students who entered the repayment phase on their student loans in fiscal year (FY) 2011, some 476,000, or 10.0 percent, had defaulted before the end of FY 2012.

Title IV of the Higher Education Act of 1965 authorized several student financial assistance programs—including federal grants, loans, and work study—to help offset the cost of attending a postsecondary institution. The largest federal loan program is the William D. Ford Federal Direct Loan program; the federal government is the lender for this program. Interest on the loans made under the Direct Loan program may be subsidized, based on need, while the student is in school. Most loans are payable over 10 years, beginning 6 months after the student leaves the institution, either by completing the program or by leaving prior to completion.

Average tuition and fees for full-time students at Title IV degree-granting postsecondary institutions, by Figure 1. level and control of institution: 2000-01 through 2011-12



NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Data on tuition and fees for public institutions are for in-state students only. Data on tuition and fees are collected in the fall. Because of their low response rate, data for private 2-year colleges must be interpreted with caution. Tuition and fees were weighted by the number of full-time-equivalent undergraduates. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2000 through Fall 2011, Institutional Characteristics component. See Digest of Education Statistics 2013, table 330.10.

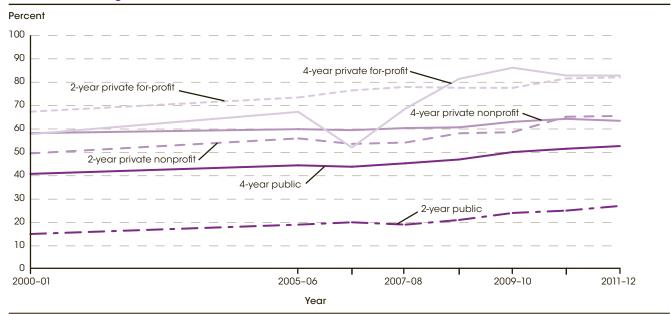
Average undergraduate tuition and fees for full-time students across all degree-granting postsecondary institutions in 2011-12 were \$10,300 in constant 2012–13 dollars—a 46 percent increase over 2000–01 (\$7,100). Among 4-year institutions, tuition and fees at public institutions had the largest percentage increase (69 percent, from \$4,600 to \$7,800) during this period; however, the largest dollar amount increase was at private nonprofit institutions (\$7,200 increase, from \$20,900 to

\$28,100). The smallest change among 4-year institutions was at private for-profit institutions (1 percent higher in 2011-12 than in 2000-01, \$13,900 vs. \$13,800). Among 2-year institutions, the largest percentage increase in tuition and fees during this period occurred at private nonprofit institutions (55 percent, from \$9,200 to \$14,300), while the smallest increase in tuition and fees occurred at private for-profit institutions (8 percent, from \$13,100 to \$14,200).

In 2011–12, average undergraduate tuition and fees at 4-year degree-granting postsecondary institutions were \$13,800 in 2011–12 (in constant 2012–13 dollars). Average in-state tuition and fees were lowest at public 4-year institutions (\$7,800), followed by private for-profit 4-year institutions (\$13,900) and private nonprofit

4-year institutions (\$28,100). At 2-year degree-granting postsecondary institutions, average undergraduate tuition and fees were \$3,300. Average in-state tuition and fees were lowest at public 2-year institutions (\$2,700), followed by private for-profit 2-year institutions (\$14,200) and private nonprofit 2-year institutions (\$14,300).

Figure 2. Percentage of first-time, full-time students enrolled in financial aid programs receiving loan aid at Title IV degree-granting postsecondary institutions, by level and control of institution: Selected years, 2000–01 through 2011–12



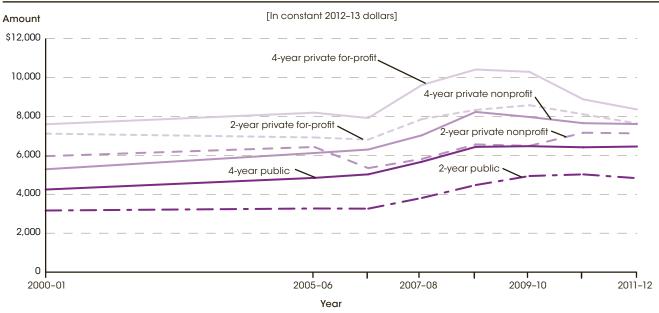
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Average amounts only include students receiving loans. Includes only loans made directly to students. Does not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents. Loan data are collected in the spring.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2002 through Spring 2013, Student Financial Aid component. See Digest of Education Statistics 2013, table 331.20.

In 2011–12, some 51 percent of first-time, full-time undergraduate students enrolled in student aid programs received student loans. Between 2000–01 and 2011–12, the overall percentage of students receiving loan aid increased by 11 percentage points. During this period, the percentage of students receiving loan aid increased

at all types of institutions, with the largest increase among 4-year institutions occurring at private for-profit institutions (from 58 to 83 percent) and the largest increase among 2-year institutions occurring at private nonprofit institutions (from 49 to 66 percent).

Average loan amounts for first-time, full-time students receiving loan aid at Title IV degree-granting Figure 3. postsecondary institutions, by level and control of institution: Selected years, 2000–01 through 2011–12



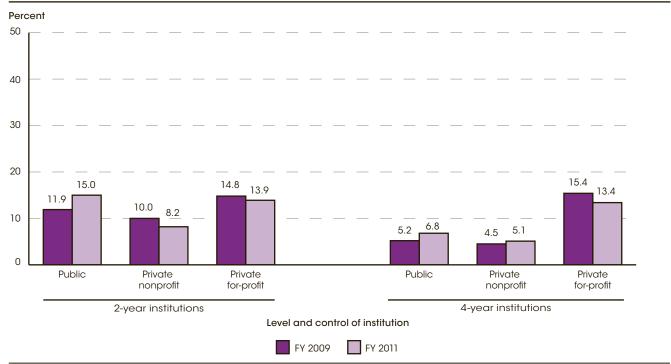
NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Average amounts only include students receiving loans. Includes only loans made directly to students. Does not include Parent Loans for Undergraduate Students (PLUS) and other loans made directly to parents. Loan data are collected in the spring. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2002 through Spring 2013, Student Financial Aid component. See Digest of Education Statistics 2013, table 331.20.

Average annual student loan amounts for first-time, full-time undergraduate students enrolled in student aid programs also increased between 2000-01 and 2011-12, from \$5,000 to \$6,800, after adjusting for inflation (a 36 percent increase). Average loan amounts were higher in 2011–12 than in 2000–01 for all types of institutions. Among 4-year institutions, the largest percentage increase in average loan amount was at public institutions (52 percent, from \$4,200 to \$6,500), while the smallest percentage change was at private for-profit institutions (10 percent higher, from \$7,600 to \$8,400). In 2011–12, inflation-adjusted average annual student loan amounts were highest at private for-profit 4-year institutions (\$8,400) and lowest at public 2-year institutions (\$4,800). Among 2-year institutions, the largest percentage increase in average loan amount during this period was at public institutions (52 percent, from \$3,200 to \$4,800), while

the smallest change was at private for-profit institutions (7 percent higher, from \$7,100 to \$7,600).

Approximately 4.7 million students entered the repayment phase of their student loans in fiscal year (FY) 2011, meaning that their student loans became due between October 1, 2010, and September 30, 2011. The percentage of students who entered repayment on their loans in FY 2011 and defaulted prior to the end of the next fiscal year is the 2-year cohort default rate. Of the 4.7 million students who entered the repayment phase on their student loans in FY 2011, some 476,000, or 10.0 percent, had defaulted before the end of FY 2012. For students in the Direct Loan Program or the Federal Family Education Loan (FFEL) program, default occurs when a payment has not been made for 270 days.

Figure 4. Two-year student loan cohort default rates at Title IV degree-granting postsecondary institutions, by level and control of institution: Fiscal years (FY) 2009 and 2011



NOTE: Does not include foreign or unclassified institutions. Default rates were calculated using student counts by institution from the Federal Student Aid Cohort Default Rate Database and the Integrated Postsecondary Education Data System (IPEDS) classification of institutions. The repayment phase is the period when student loans must be repaid and generally begins 6 months after a student leaves an institution. Default occurs when a borrower fails to make a payment for 270 days. The 2-year cohort default rate is the percentage of students who entered repayment during a given fiscal year and defaulted within the next fiscal year. Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. SOURCE: U.S. Department of Education, Office of Federal Student Aid, Direct Loan and Federal Family Education Loan Programs, Cohort Default Rate Database, retrieved December 3, 2013, from http://www2.ed.gov/offices/OSFAP/defaultmanagement/cdrschooltype2yr.pdf. See Digest of Education Statistics 2013, table 332.50.

The default rate for students in the FY 2011 cohort was 8.2 percent at 4-year degree-granting postsecondary institutions and 14.6 percent at 2-year degree-granting postsecondary institutions. The default rate for the FY 2011 cohort was highest at public 2-year institutions (15.0 percent). The lowest default rate was for students at private nonprofit 4-year institutions (5.1 percent).

Across all institutions, the overall default rate for the FY 2011 cohort (10.0 percent) was higher than the rates for

the FY 2010 (9.1 percent) and FY 2009 (8.8 percent) cohorts. The largest percentage point increase in default rates from FY 2009 to FY 2011 was at public 2-year institutions (from 11.9 to 15.0 percent). During this period, the largest percentage point decrease occurred at private for-profit 4-year institutions (from 15.4 to 13.4 percent).

Reference tables: Digest of Education Statistics 2013, tables 330.10, 331.20, and 332.50

Glossary: Default rate, Degree-granting institutions, Postsecondary education

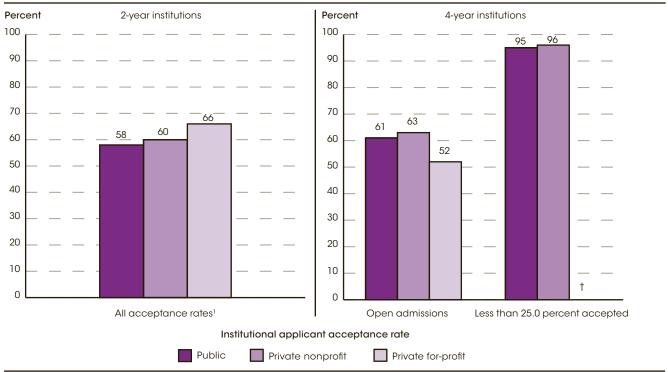
Chapter: 4/Postsecondary Education

**Section:** Completions

### Institutional Retention and Graduation Rates for Undergraduate Students

About 59 percent of first-time, full-time students who began seeking a bachelor's degree at a 4-year institution in fall 2006 completed that degree within 6 years. The graduation rate for females (61 percent) was higher than the rate for males (56 percent).

Figure 1. Annual full-time student retention rates at 2- and 4-year degree-granting institutions, by institution level, institutional applicant acceptance rate, and control: 2012



† Not applicable.

<sup>1</sup> All acceptance rates includes open admissions, all percentages of applicants accepted, and information not available.

NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. The retention rate is the percentage of first-time degree-seeking students who return to the institution to continue their studies the following fall.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Enrollment component; and Fall 2011, Institutional Characteristics component. See *Digest of Education Statistics 2013*, table 326.30.

In terms of student retention among first-time, full-time students that enrolled at 4-year degree-granting institutions in 2011, about 79 percent returned the following fall (in 2012). At public 4-year institutions, the retention rate was 79 percent, with a range of 61 percent at the least selective institutions (those with open admissions) to 95 percent at the most selective institutions (those where less than 25 percent of students are accepted). Retention rates for private nonprofit 4-year institutions followed a similar pattern: the overall

retention rate was 80 percent, ranging from 63 percent at the least selective institutions to 96 percent at the most selective. The overall retention rate at private for-profit 4-year institutions was 51 percent, with fluctuation in rates across institution selectivity levels. At 2-year institutions overall, the retention rate was 59 percent. The retention rate for 2-year institutions was highest at private for-profit institutions (66 percent), followed by private nonprofit institutions (60 percent) and public institutions (58 percent).

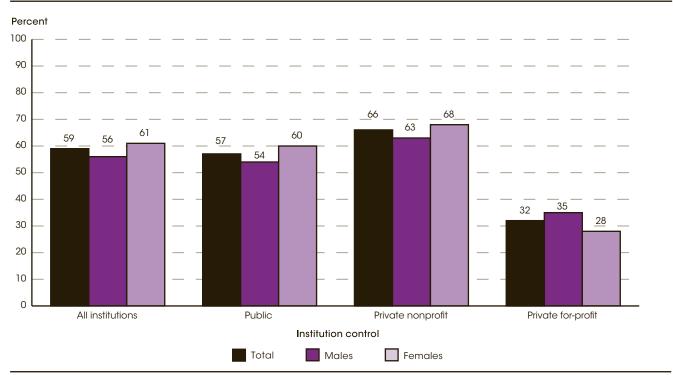
Chapter: 4/Postsecondary Education
Section: Completions

Right to Know Act, which required postsecond

The 2012 graduation rate for first-time, full-time undergraduate students who began their pursuit of a bachelor's degree at a 4-year degree-granting institution in fall 2006 was 59 percent. That is, 59 percent of first-time, full-time students who began seeking a bachelor's degree at a 4-year institution in fall 2006 completed the degree at that institution within 6 years. Graduation rates are calculated to meet requirements of the 1990 Student

Right to Know Act, which required postsecondary institutions to report the percentage of students that complete their program within 150 percent of the normal time for completion, which is within 6 years for students pursuing a bachelor's degree. Students who transfer and complete a degree at another institution are not included as completers in these rates.

Figure 2. Percentage of students seeking a bachelor's degree at 4-year degree-granting institutions who completed a bachelor's degree within 6 years, by control of institution and sex: Starting cohort year 2006



NOTE: Data are for 4-year postsecondary institutions participating in Title IV federal financial aid programs. Graduation rates apply to first-time, full-time undergraduates seeking a bachelor's or equivalent degree. Students who transferred to another institution and graduated are not counted as completers at their initial institution.

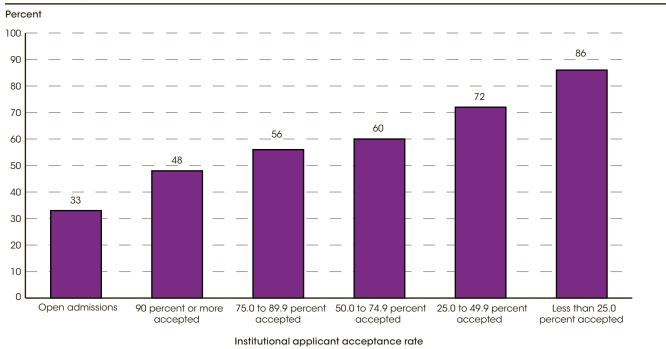
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Graduation Rates component. See *Digest of Education Statistics 2013*, table 326.10.

Among first-time, full-time undergraduate students who began seeking a bachelor's degree at a 4-year degree-granting institution in fall 2006, the 6-year graduation rate was 57 percent at public institutions, 66 percent at private nonprofit institutions, and 32 percent at private for-profit institutions. The 6-year graduation rate was

56 percent for males and 61 percent for females; it was higher for females than for males at both public (60 vs. 54 percent) and private nonprofit institutions (68 vs. 63 percent). However, at private for-profit institutions males had a higher graduation rate than females (35 vs. 28 percent).

**Section:** Completions

Figure 3. Percentage of students seeking a bachelor's degree at 4-year degree-granting institutions who completed a bachelor's degree within 6 years, by institutional applicant acceptance rate: Starting cohort year 2006



NOTE: Data are for 4-year postsecondary institutions participating in Title IV federal financial aid programs. The graduation rate is the percentage of first-time, full-time bachelor's degree-seeking students who completed their degree from their initial institution within 6 years. Students who transferred to another institution and graduated are not counted as completers at their initial institution. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Graduation Rates component. See Digest of Education Statistics 2013, table 326.10.

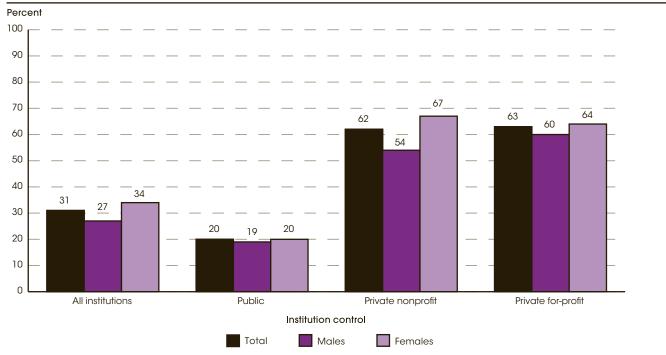
Differences in 6-year graduation rates for first-time, full-time students who began seeking a bachelor's degree in fall 2006 varied according to institutions' level of selectivity. In particular, graduation rates were highest at postsecondary degree-granting institutions that were the most selective (i.e., had the lowest admissions acceptance rates), and graduation rates were lowest at institutions

that were the least selective (i.e., had open admissions policies). For example, at 4-year institutions with open admissions policies, 33 percent of students completed a bachelor's degree within 6 years. At 4-year institutions where the acceptance rate was less than 25 percent of applicants, the 6-year graduation rate was 86 percent.

Chapter: 4/Postsecondary Education

**Section:** Completions

Figure 4. Percentage of students seeking a certificate or degree at 2-year degree-granting institutions who completed a credential within 150 percent of the normal time required to do so, by control of institution and sex: Starting cohort year 2009



NOTE: Data are for 2-year degree-granting postsecondary institutions participating in Title IV federal financial aid programs. Graduation rates refer to first-time, full-time students receiving associate's degrees or certificates from their initial institution of attendance only. An example of completing a credential within 150 percent of the normal time required to do so is taking 3 years for a 2-year degree. Students who transferred to another institution and graduated are not counted as completers at their initial institution.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2013, Graduation Rates component. See *Digest of Education Statistics 2013*, table 326.20.

At 2-year degree-granting institutions, 31 percent of first-time, full-time undergraduate students who began their pursuit of a certificate or associate's degree in fall 2009 attained it within 150 percent of the normal time required to do so. An example of completing a credential within 150 percent of the normal time required to do so is taking 3 years for a 2-year degree. This graduation rate was 20 percent at public 2-year institutions, 62 percent

at private nonprofit 2-year institutions, and 63 percent at private for-profit 2-year institutions. At 2-year institutions overall, as well as at each type of 2-year institution, the completion rate was higher for females than for males. At private nonprofit 2-year institutions, for example, 67 percent of females versus 54 percent of males completed a certificate or associate's degree within 150 percent of the normal time required.

**Reference tables:** *Digest of Education Statistics 2013*, tables 326.10, 326.20, and 326.30

**Glossary:** Associate's degree, Bachelor's degree, Full-time enrollment, Higher education institutions, Part-time enrollment, Private institution, Public school or institution

## **Degrees Conferred by Public and Private Institutions**

The number of postsecondary degrees conferred was higher in academic year 2011-12 than in 2010-11 at all levels except the certificate level. From 2000-01 to 2011-12, the number of postsecondary degrees conferred by private for-profit institutions increased by a larger percentage than the number conferred by public institutions and private nonprofit institutions; this was true for all levels of degrees.

Number of degrees conferred by Title IV postsecondary institutions and percentage change, by control of Table 1. institution and level of degree: Academic years 2000-01, 2010-11, and 2011-12

| Level of degree                        |           |           | Private |           |            |
|--|-----------|-----------|---------|-----------|------------|
| and academic year                      | Total     | Public    | Total   | Nonprofit | For-profit |
| Sub-associate certificates             |           |           |         |           |            |
| 2000-01                                | 552,503   | 309,624   | 242,879 | 29,336    | 213,543    |
| 2010-11                                | 1,029,557 | 519,670   | 509,887 | 36,513    | 473,374    |
| 2011-12                                | 987,715   | 524,386   | 463,329 | 32,872    | 430,457    |
| Percent change from 2000-01 to 2011-12 | 78.8      | 69.4      | 90.8    | 12.1      | 101.6      |
| Percent change from 2010-11 to 2011-12 | -4.1      | 0.9       | -9.1    | -10.0     | -9.1       |
| Associate's                            |           |           |         |           |            |
| 2000-01                                | 578,865   | 456,487   | 122,378 | 45,711    | 76,667     |
| 2010-11                                | 942,327   | 696,788   | 245,539 | 51,969    | 193,570    |
| 2011-12                                | 1,017,538 | 756,084   | 261,454 | 54,346    | 207,108    |
| Percent change from 2000-01 to 2011-12 | 75.8      | 65.6      | 113.6   | 18.9      | 170.1      |
| Percent change from 2010-11 to 2011-12 | 8.0       | 8.5       | 6.5     | 4.6       | 7.0        |
| Bachelor's                             |           |           |         |           |            |
| 2000-01                                | 1,244,171 | 812,438   | 431,733 | 408,701   | 23,032     |
| 2010-11                                | 1,715,913 | 1,088,297 | 627,616 | 513,106   | 114,510    |
| 2011-12                                | 1,791,046 | 1,131,886 | 659,160 | 526,506   | 132,654    |
| Percent change from 2000-01 to 2011-12 | 44.0      | 39.3      | 52.7    | 28.8      | 476.0      |
| Percent change from 2010-11 to 2011-12 | 4.4       | 4.0       | 5.0     | 2.6       | 15.8       |
| Master's                               |           |           |         |           |            |
| 2000-01                                | 473,502   | 246,054   | 227,448 | 215,815   | 11,633     |
| 2010-11                                | 730,635   | 339,250   | 391,385 | 313,200   | 78,185     |
| 2011-12                                | 754,229   | 349,311   | 404,918 | 325,427   | 79,491     |
| Percent change from 2000-01 to 2011-12 | 59.3      | 42.0      | 78.0    | 50.8      | 583.3      |
| Percent change from 2010-11 to 2011-12 | 3.2       | 3.0       | 3.5     | 3.9       | 1.7        |
| Doctor's <sup>1</sup>                  |           |           |         |           |            |
| 2000-01                                | 119,585   | 60,820    | 58,765  | 57,722    | 1,043      |
| 2010-11                                | 163,765   | 81,938    | 81,827  | 76,608    | 5,219      |
| 2011-12                                | 170,062   | 84,727    | 85,335  | 79,483    | 5,852      |
| Percent change from 2000-01 to 2011-12 | 42.2      | 39.3      | 45.2    | 37.7      | 461.1      |
| Percent change from 2010-11 to 2011-12 | 3.8       | 3.4       | 4.3     | 3.8       | 12.1       |

<sup>1</sup> Includes Ph.D., Ed.D., and comparable degrees at the doctoral level. Includes most degrees formerly classified as first-professional, such as M.D., D.D.S., and NOTE: Data are for postsecondary institutions participating in Title IV federal financial aid programs.

From academic year 2000-01 to 2011-12, the total number of postsecondary degrees conferred by public, private nonprofit, and private for-profit institutions increased for each level of degree.<sup>1</sup> For all Title IV institutions, the total number of certificates awarded

increased by 79 percent, associate's degrees increased by 76 percent, bachelor's degrees increased by 44 percent, master's degrees increased by 59 percent, and doctor's degrees increased by 42 percent from 2000-01 to 2011-12. For all postsecondary degree levels, the

For more information, see the Reader's Guide and the Guide to Sources.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2001, Fall 2011, and Fall 2012, Completions component. See Digest of Education Statistics 2013, table 318.40.

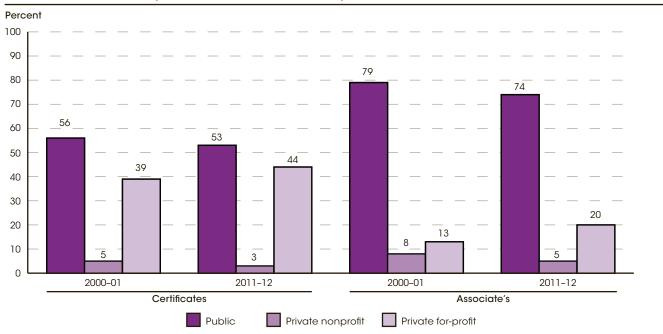
<sup>&</sup>lt;sup>1</sup>Except for certificates conferred by private nonprofit institutions, for which there was not a significant increase.

## **Chapter:** 4/Postsecondary Education **Section:** Completions

percentage increases from 2000–01 to 2011–12 were smaller for public and private nonprofit institutions than for private for-profit institutions. The total number of postsecondary degrees conferred was higher in 2011–12

than in 2010–11 for associate's degrees (by 8 percent), bachelor's degrees (by 4 percent), master's degrees (by 3 percent), and doctor's degrees (by 4 percent) but was lower at the certificate level (by 4 percent).

Figure 1. Percentage distribution of certificates and associate's degrees conferred by Title IV postsecondary institutions, by control of institution: Academic years 2000–01 and 2011–12



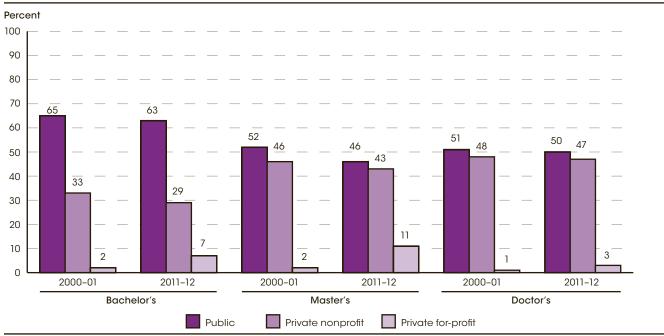
NOTE: Data are for postsecondary institutions participating in Title IV federal financial aid programs. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2001 and Fall 2012, Completions component. See *Digest of Education Statistics 2013*, table 318.40.

From academic year 2000–01 to 2011–12, the number of certificates awarded by public institutions increased by 69 percent (from 310,000 to 524,000 certificates) and by 102 percent for private for-profit institutions (from 214,000 to 430,000 certificates). The number of certificates awarded by private nonprofit institutions was 12 percent higher in 2011–12 than in 2000–01 (32,900 vs. 29,300 certificates). As a result of these changes, the share of all certificates awarded by private for-profit institutions increased from 39 percent in year 2000–01 to 44 percent in 2011–12, while the share conferred by public and private nonprofit institutions decreased over the last decade (from 56 to 53 percent and from 5 to 3 percent, respectively). From 2010-11 to 2011-12, the number of certificates awarded by private nonprofit and private for-profit institutions decreased (by 10 and 9 percent, respectively). Over these two recent years, the number of certificates awarded by public institutions increased by 1 percent.

The number of associate's degrees awarded from academic year 2000-01 to 2011-12 increased by 66 percent for public institutions (from 456,000 to 756,000 degrees), by 19 percent for private nonprofit institutions (from 45,700 to 54,300 degrees), and by 170 percent for private for-profit institutions (from 76,700 to 207,000 degrees). Due to these changes, the share of all associate's degrees conferred by private for-profit institutions increased from 13 percent in 2000-01 to 20 percent in 2011–12, while the share conferred by public and private nonprofit institutions decreased from 2000-01 to 2011–12 (from 79 to 74 percent and from 8 to 5 percent, respectively). From 2010–11 to 2011–12, the number of associate's degrees awarded also increased across institutional controls: by 9 percent for public institutions, by 7 percent for private for-profit institutions, and by 5 percent for private nonprofit institutions.

**Section:** Completions

Figure 2. Percentage distribution of bachelor's, master's, and doctor's degrees conferred by Title IV postsecondary institutions, by control of institution: Academic years 2000–01 and 2011–12



NOTE: Data are for postsecondary institutions participating in Title IV federal financial aid programs. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2001 and Fall 2012, Completions component. See *Digest of Education Statistics 2013*, table 318.40.

From academic year 2000–01 to 2011–12, the number of bachelor's degrees awarded by public institutions increased by 39 percent (from 812,000 to 1.1 million degrees), the number awarded by private nonprofit institutions increased by 29 percent (from 409,000 to 527,000 degrees), and the number awarded by private for-profit institutions increased by 476 percent (from 23,000 to 133,000 degrees). Despite the gain made by private for-profit institutions, they awarded 7 percent of all bachelor's degrees conferred in 2011-12, while public institutions awarded 63 percent and private nonprofit institutions awarded 29 percent. From 2010-11 to 2011–12, the number of bachelor's degrees awarded also increased across institutional controls: by 16 percent for private for-profit institutions, by 4 percent for public institutions, and by 3 percent for private nonprofit institutions.

The number of master's degrees awarded by public institutions increased by 42 percent (from 246,000 to 349,000 degrees) from academic year 2000–01 to 2011–12, yet the percentage of all master's degrees conferred by these institutions declined from 52 to 46 percent. Similarly, the number of master's degrees conferred by private nonprofit institutions increased by 51 percent (from 216,000 to 325,000 degrees) from 2000–01 to 2011–12, but the percentage of all master's degrees

conferred by these institutions decreased (from 46 to 43 percent). In contrast, the number of master's degrees conferred by private for-profit institutions increased by 583 percent (from 11,600 to 79,500 degrees) from 2000–01 to 2011–12, resulting in an increase in these institutions' share of total master's degrees conferred (from 2 to 11 percent). The number of master's degrees conferred was higher in 2011–12 than in 2010–11 across all institutional controls: 4 percent higher for private nonprofit institutions, 3 percent higher for public institutions, and 2 percent higher for private for-profit institutions.

From academic year 2000–01 to 2011–12, the number of doctor's degrees conferred increased by 39 percent at public institutions (from 60,800 to 84,700 degrees), by 38 percent at private nonprofit institutions (from 57,700 to 79,500 degrees), and by 461 percent at private for-profit institutions (from 1,000 to 5,900 degrees). In 2011–12, public institutions awarded 50 percent of all doctor's degrees, private nonprofit institutions awarded 47 percent, and private for-profit institutions awarded 3 percent. From 2010–11 to 2011–12, the number of doctor's degrees conferred increased at all controls: by 12 percent for private for-profit institutions, by 4 percent for private nonprofit institutions, and by 3 percent for public institutions.

Reference Tables: Digest of Education Statistics 2013, table 318.40

**Glossary:** Associate's degree, Bachelor's degree, Doctor's degree, Master's degree, Private institution, Public school or institution

For more information, see the Reader's Guide and the Guide to Sources.

This page intentionally left blank.

## **Guide to Sources**

## **National Center for Education Statistics** (NCES)

#### Common Core of Data

The Common Core of Data (CCD) is NCES's primary database on public elementary and secondary education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts containing data designed to be comparable across all states. This database can be used to select samples for other NCES surveys and provide basic information and descriptive statistics on public elementary and secondary schools and schooling in general.

The CCD collects statistical information annually from approximately 100,000 public elementary and secondary schools and approximately 18,000 public school districts (including supervisory unions and regional education service agencies) in the 50 states, the District of Columbia, Department of Defense (DoD) dependents schools, the Bureau of Indian Education, Puerto Rico, American Samoa, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands. Three categories of information are collected in the CCD survey: general descriptive information on schools and school districts; data on students and staff; and fiscal data. The general descriptive information includes name, address, phone number, and type of locale; the data on students and staff include selected demographic characteristics; and the fiscal data pertain to revenues and current expenditures.

The EDFacts data collection system is the primary collection tool for the CCD. NCES works collaboratively with the Department of Education's Performance Information Management Service to develop the CCD collection procedures and data definitions. Coordinators from State Education Agencies (SEAs) submit the CCD data at different levels (school, agency, and state) to the EDFacts collection system. Prior to submitting CCD files to EDFacts, SEAs must collect and compile information from their respective Local Education Agencies (LEAs) through established administrative records systems within their state or jurisdiction.

Once SEAs have completed their submissions, the CCD survey staff analyzes and verifies the data for quality assurance. Even though the CCD is a universe collection and thus not subject to sampling errors, nonsampling errors can occur. The two potential sources of nonsampling errors are nonresponse and inaccurate reporting. NCES attempts to minimize nonsampling errors through the use of annual training of SEA coordinators, extensive quality reviews, and survey editing procedures. In addition, each year, SEAs are given the opportunity to revise their state-level aggregates from the previous survey cycle.

The CCD survey consists of six components: The Public Elementary/Secondary School Universe Survey, the Local Education Agency (School District) Universe Survey, the State Nonfiscal Survey of Public Elementary/Secondary Education, the National Public Education Financial Survey (NPEFS), the School District Fiscal Data Survey (F-33), and the Teacher Compensation Survey.

#### Public Elementary/Secondary School Universe Survey

The Public Elementary/Secondary School Universe Survey includes all public schools providing education services to prekindergarten, kindergarten, grade 1-12, and ungraded students. The CCD Public Elementary/Secondary School Universe Survey includes records for each public elementary and secondary school in the 50 states, the District of Columbia, Puerto Rico, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, the U.S. Virgin Islands, the Bureau of Indian Education, and the DoD dependents schools (overseas and domestic).

The Public Elementary/Secondary School Universe Survey includes data for the following variables: NCES school ID number, state school ID number, name of the school, name of the agency that operates the school, mailing address, physical location address, phone number, school type, operational status, locale code, latitude, longitude, county number, county name, full-time-equivalent (FTE) classroom teacher count, low/high grade span offered, congressional district code, school level, students eligible for free lunch, students eligible for reduced-price lunch, total students eligible for free and reduced-price lunch, and student totals and detail (by grade, by race/ethnicity, and by sex). The survey also contains flags indicating whether a school is Title I eligible, schoolwide Title I eligible, a magnet school, a charter school, a shared-time school, or a BIE school, as well as which grades are offered at the school.

#### Local Education Agency (School District) Universe

The coverage of the Local Education Agency Universe Survey includes all school districts and administrative units providing education services to prekindergarten, kindergarten, grade 1-12, and ungraded students. The CCD Local Education Agency Universe Survey includes records for the 50 states, the District of Columbia, Puerto Rico, the Bureau of Indian Education, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, the U.S. Virgin Islands, and the DoD dependents schools (overseas and domestic).

The Local Education Agency Universe Survey includes the following variables: NCES agency ID number, state agency ID number, agency name, phone number, mailing address, physical location address, agency type code, supervisory union number, American National Standards Institute (ANSI) state and county code, county name, core based statistical area (CBSA) code, metropolitan/ micropolitan code, metropolitan status code, district

locale code, congressional district code, operational status code, BIE agency status, low/high grade span offered, agency charter status, number of schools, number of full-time-equivalent (FTE) teachers, number of ungraded students, number of PK–12 students, number of special education/ Individualized Education Program (IEP) students, number of English language learner (ELL) students, instructional staff fields, support staff fields, and a flag indicating whether student counts by race/ethnicity were reported by five or seven racial/ethnic categories.

#### State Nonfiscal Survey of Public Elementary/ Secondary Education

The State Nonfiscal Survey of Public Elementary/ Secondary Education for the 2011-12 school year provides state-level, aggregate information about students and staff in public elementary and secondary education. It includes data from the 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, the Commonwealth of the Northern Mariana Islands, and Guam. The DoD dependents schools (overseas and domestic), the Bureau of Indian Education, and American Samoa did not report data for the 2011–12 school year. This survey covers public school student membership by grade, race/ethnicity, and state or jurisdiction and covers number of staff in public schools by category and state or jurisdiction. Beginning with the 2006-07 school year, the number of diploma recipients and other high school completers are no longer included in the State Nonfiscal Survey of Public Elementary/Secondary Education file. These data are now published in the public-use Common Core of Data State Dropout and Completion Data File.

#### National Public Education Financial Survey

The purpose of the National Public Education Financial Survey (NPEFS) is to provide district, state, and federal policymakers, researchers, and other interested users with descriptive information about revenues and expenditures for public elementary and secondary education. The data collected are useful to (1) chief officers of state education agencies; (2) policymakers in the executive and legislative branches of federal and state governments; (3) education policy and public policy researchers; and (4) the public, journalists, and others.

Data for NPEFS are collected from SEAs in the 50 states, the District of Columbia, Puerto Rico, and four other jurisdictions (American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands). The data file is organized by state or jurisdiction and contains revenue data by funding source; expenditure data by function (the activity being supported by the expenditure) and object (the category of expenditure); average daily attendance data; and total student membership data from the CCD State Nonfiscal Survey of Public Elementary/Secondary Education.

#### School District Finance Survey

The purpose of the School District Finance Survey (F-33) is to provide finance data for all local education agencies (LEAs) that provide free public elementary and secondary education in the United States. National and state totals are not included (national- and state-level figures are presented, however, in the National Public Education Financial Survey [NPEFS]).

Both NCES and the Governments Division of the U.S. Census Bureau collect public school system finance data, and they collaborate in their efforts to gather these data. The Census Bureau acts as the primary collection agent and produces two data files: one for distribution and reporting by the Census Bureau and the other for distribution and reporting by NCES.

The FY 11 F-33 data file contains 18,297 records representing the public elementary and secondary education agencies in the 50 states and the District of Columbia. The file includes variables for revenues by source, expenditures by function and object, indebtedness, assets, student membership counts, as well as identification variables.

#### Teacher Compensation Survey

The Teacher Compensation Survey (TCS) collects total compensation, teacher status, and demographic data about individual teachers from multiple states. Twenty-three (23) states participated in the TCS for SY 2008–09. Participating states provided data on salaries, years of teaching experience, highest degree earned, race/ethnicity, and gender for each public school teacher.

Further information on the nonfiscal CCD data may be obtained from

Patrick Keaton
Administrative Data Division
Elementary and Secondary Branch
National Center for Education Statistics
1990 K Street NW
Washington, DC 20006
patrick.keaton@ed.gov
http://nces.ed.gov/ccd

Further information on the fiscal CCD data may be obtained from

Stephen Cornman
Administrative Data Division
Elementary and Secondary Branch
National Center for Education Statistics
1990 K Street NW
Washington, DC 20006
stephen.cornman@ed.gov
http://nces.ed.gov/ccd

## Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K:2011)

The Early Childhood Longitudinal Study, Kindergarten Class of 2010-11 (ECLS-K:2011) is sponsored by the National Center for Education Statistics (NCES) in the Institute of Education Sciences of the U.S. Department of Education to provide detailed information on the school achievement and experiences of students throughout their elementary school years. The students participating in ECLS-K:2011 are being followed longitudinally from the kindergarten year (the 2010-11 school year) through the spring of 2016, when most of them are expected to be in fifth grade. This sample of students is designed to be nationally representative of all students who were enrolled in kindergarten or who were of kindergarten age and being educated in an ungraded classroom or school in the United States in the 2010-11 school year, including those in public and private schools, those who attended full-day and part-day programs, those who were in kindergarten for the first time, and those who were kindergarten repeaters. Students who attended early learning centers or institutions that offered education only through kindergarten are included in the study sample and represented in the cohort.

The ECLS-K:2011 places emphasis on measuring students' experiences within multiple contexts and development in multiple domains. The design of the study includes the collection of information from the students, their parents/guardians, their teachers, their schools, and their before- and after-school care providers.

A nationally representative sample of approximately 18,200 children enrolled in 970 schools during the 2010–11 school year participated in the base year of ECLS-K-2011. The sample includes children from different racial/ethnic and socioeconomic backgrounds. Asian/Pacific Islander students were oversampled to assure that the sample included enough students of this race/ethnicity to be able to make accurate estimates for these students as a group. Two data collections were conducted in the 2010–11 school year, one in the fall and one in the spring. A total of approximately 780 of the 1,320 originally sampled schools participated during the base year of the study. This translates into a weighted unit response rate (weighted by the base weight) of 63 percent for the base year.

Further information on the ECLS-K may be obtained from

Gail Mulligan
Sample Surveys Division
Longitudinal Surveys Branch
National Center for Education Statistics
1990 K Street NW
Washington, DC 20006
ecls@ed.gov
http://nces.ed.gov/ecls/birth.asp

## Integrated Postsecondary Education Data System

The Integrated Postsecondary Education Data System (IPEDS) surveys approximately 7,500 postsecondary institutions, including universities and colleges, as well as institutions offering technical and vocational education beyond the high school level. IPEDS, an annual universe collection that began in 1986, replaced the Higher Education General Information Survey (HEGIS). In order to present data in a timely manner, "provisional" IPEDS data are used in tables shown. These data have been fully reviewed, edited, and imputed, but do not incorporate data revisions submitted by institutions after the close of data collection.

IPEDS consists of interrelated survey components that provide information on postsecondary institutions, student enrollment, programs offered, degrees and certificates conferred, and both the human and financial resources involved in the provision of institutionally based postsecondary education. Prior to 2000, the IPEDS survey had the following subject-matter components: Graduation Rates; Fall Enrollment; Institutional Characteristics; Completions; Salaries, Tenure, and Fringe Benefits of Full-Time Faculty; Fall Staff; Finance; and Academic Libraries (in 2000, the Academic Libraries component became a survey separate from IPEDS). Since 2000, IPEDS survey components occurring in a particular collection year have been organized into three seasonal collection periods: fall, winter, and spring. The Institutional Characteristics and Completions components first took place during the fall 2000 collection; the Employees by Assigned Position (EAP), Salaries, and Fall Staff components first took place during the winter 2001–02 collection; and the Enrollment, Student Financial Aid, Finance, and Graduation Rates components first took place during the spring 2001 collection. In the winter 2005-06 data collection, the Employees by Assigned Position, Fall Staff, and Salaries components were merged into the Human Resources component. During the 2007-08 collection year, the Enrollment component was broken into two separate components: 12-Month Enrollment (taking place in the fall collection) and Fall Enrollment (taking place in the spring collection). In the 2011–12 IPEDS data collection year, the Student Financial Aid component was moved to the winter data collection to aid in the timing of the net price of attendance calculations displayed on the College Navigator (http://nces.ed.gov/collegenavigator). In the 2012-13 IPEDS data collection year, the Human Resources component was moved to the spring data collection.

Beginning in 2008–09, the first-professional degree category was combined with the post-master's certificate category. Some degrees formerly identified as first-professional that take more than two full-time-equivalent academic years to complete, such as those in Theology

(M.Div, M.H.L./Rav), are included in the Master's degree category. Doctor's degrees were broken out into three distinct categories: research/scholarship, professional practice, and other doctor's degrees.

IPEDS race/ethnicity data collection also changed in 2008–09. The "Asian" race category is now separate from a "Native Hawaiian or Other Pacific Islander" category. Survey takers also have the option of identifying themselves as being of "Two or more races." To reflect the recognition that "Hispanic" refers to ethnicity, not race, the new Hispanic category reads "Hispanics of any race."

The degree-granting institutions portion of IPEDS is a census of colleges that award associate's or higher degrees and are eligible to participate in Title IV financial aid programs. Prior to 1993, data from technical and vocational institutions were collected through a sample survey. Beginning in 1993, all data are gathered in a census of all postsecondary institutions. The tabulations on "institutional characteristics" from 1993 forward are based on lists of all institutions and are not subject to sampling errors.

The classification of institutions offering college and university education changed as of 1996. Prior to 1996, institutions that had courses leading to an associate's or higher degree or that had courses accepted for credit toward those degrees were considered higher education institutions. Higher education institutions were accredited by an agency or association that was recognized by the U.S. Department of Education or were recognized directly by the Secretary of Education. Tables, or portions of tables, that use only this standard are noted as "higher education." The newer standard includes institutions that award associate's or higher degrees and that are eligible to participate in Title IV federal financial aid programs. Tables that contain any data according to this standard are titled "degree-granting" institutions. Time-series tables may contain data from both series, and they are noted accordingly. The impact of this change on data collected in 1996 was not large. For example, tables on faculty salaries and benefits were only affected to a very small extent. Also, degrees awarded at the bachelor's level or higher were not heavily affected. The largest impact was on private 2-year college enrollment. In contrast, most of the data on public 4-year colleges were affected to a minimal extent. The impact on enrollment in public 2-year colleges was noticeable in certain states, but was relatively small at the national level. Overall, total enrollment for all institutions was about one-half of a percent higher in 1996 for degree-granting institutions than for higher education institutions.

Prior to the establishment of IPEDS in 1986, HEGIS acquired and maintained statistical data on the characteristics and operations of institutions of higher education. Implemented in 1966, HEGIS was an annual universe survey of institutions accredited at the college level by an agency recognized by the Secretary of the U.S. Department of Education. These institutions were

listed in NCES's Education Directory, Colleges and Universities.

HEGIS surveys collected information on institutional characteristics, faculty salaries, finances, enrollment, and degrees. Since these surveys, like IPEDS, were distributed to all higher education institutions, the data presented are not subject to sampling error. However, they are subject to nonsampling error, the sources of which varied with the survey instrument.

The NCES Taskforce for IPEDS Redesign recognized that there were issues related to the consistency of data definitions as well as the accuracy, reliability, and validity of other quality measures within and across surveys. The IPEDS redesign in 2000 provided institution-specific web-based data forms. While the new system shortened data processing time and provided better data consistency, it did not address the accuracy of the data provided by institutions.

Beginning in 2003–04 with the Prior Year Data Revision System, prior-year data have been available to institutions entering current data. This allows institutions to make changes to their prior-year entries either by adjusting the data or by providing missing data. These revisions allow the evaluation of the data's accuracy by looking at the changes made.

NCES conducted a study (NCES 2005-175) of the 2002–03 data that were revised in 2003–04 to determine the accuracy of the imputations, track the institutions that submitted revised data, and analyze the revised data they submitted. When institutions made changes to their data, it was assumed that the revised data were the "true" data. The data were analyzed for the number and type of institutions making changes, the type of changes, the magnitude of the changes, and the impact on published data.

Because NCES imputes missing data, imputation procedures were also addressed by the Redesign Taskforce. For the 2003–04 assessment, differences between revised values and values that were imputed in the original files were compared (i.e., revised value minus imputed value). These differences were then used to provide an assessment of the effectiveness of imputation procedures. The size of the differences also provides an indication of the accuracy of imputation procedures. To assess the overall impact of changes on aggregate IPEDS estimates, published tables for each component were reconstructed using the revised 2002–03 data. These reconstructed tables were then compared to the published tables to determine the magnitude of aggregate bias and the direction of this bias.

The fall 2011 and spring 2012 data collections were entirely web-based. Data were provided by "keyholders," institutional representatives appointed by campus chief executives, who were responsible for ensuring that survey data submitted by the institution were correct and

complete. Because Title IV institutions are the primary focus of IPEDS and because these institutions are required to respond to the survey, response rates for Title IV institutions in the fall 2011 IPEDS collection were high. The Institutional Characteristics (IC) component response rate among all Title IV entities was 100.0 percent (all 7,479 Title IV entities responded). In addition, the response rates for the Completions and 12-Month Enrollment components were also 100.0 percent.

NCES statistical standards require that the potential for nonresponse bias for all institutions (including those in other U.S. jurisdictions) be analyzed for sectors for which the response rate is less than 85 percent. Due to response rates of 100.0 percent at the unit level for all three of the survey components, analysis for nonresponse bias was not necessary for the fall 2011 collection. However, data from four institutions that responded to the IC component contained item nonresponse. Price of attendance data collected during fall 2011 but covering prior academic years were imputed for these institutions.

Although IPEDS provides the most comprehensive data system for postsecondary education, there are 100 or more entities that collect their own information from postsecondary institutions. This raises the issue of how valid IPEDS data are when compared to education data collected by non-IPEDS sources. In the Data Quality Study, Thomson Peterson data were chosen to assess the validity of IPEDS data because Thomson Peterson is one of the largest and most comprehensive sources of postsecondary data available.

Not all IPEDS components could be compared to Thomson Peterson. Either Thomson Peterson did not collect data related to a particular IPEDS component, or the data items collected by Thomson Peterson were not comparable to the IPEDS items (i.e., the data items were defined differently). Comparisons were made for a selected number of data items in five areas—tuition and price, employees by assigned position, enrollment, student financial aid, and finance. More details on the accuracy and reliability of IPEDS data can be found in the *Integrated Postsecondary Education Data System Data Quality Study* (NCES 2005-175).

Further information on IPEDS may be obtained from

Richard Reeves
Administrative Data Division
Postsecondary Branch
National Center for Education Statistics
1990 K Street NW
Washington, DC 20006
richard.reeves@ed.gov
http://nces.ed.gov/ipeds

#### Fall (12-Month Enrollment)

Data on 12-month enrollment are collected for award levels ranging from postsecondary certificates of less than

1 year to doctoral degrees. The 12-month period during which data are collected is selected by the institution and can be either July 1 through June 30 or September 1 through August 31. Data are collected by race/ethnicity and gender and include unduplicated headcounts and instructional activity (contact or credit hours). These data are also used to calculate a full-time-equivalent (FTE) enrollment based on instructional activity. FTE enrollment is useful for gauging the size of the educational enterprise at the institution. Prior to the 2007-08 IPEDS data collection, the data collected in the 12-Month Enrollment component were part of the Fall Enrollment component, which is conducted during the spring data collection period. However, to improve the timeliness of the data, a separate 12-Month Enrollment survey component was developed in 2007. These data are now collected in the fall for the previous academic year. Of the 7,407 Title IV entities that were expected to respond to the 12-Month Enrollment component of the fall 2012 data collection, 7,403 responded, for an approximate response rate of 100.0 percent.

Further information on the IPEDS 12-Month Enrollment component may be obtained from

IPEDS Staff
Administrative Data Division
Postsecondary Branch
National Center for Education Statistics
1990 K Street NW
Washington, DC 20006
http://nces.ed.gov/ncestaff/SurvDetl.asp?surveyID=010

#### Fall (Completions)

This survey was part of the HEGIS series throughout its existence. However, the degree classification taxonomy was revised in 1970–71, 1982–83, 1991–92, and 2002–03. Collection of degree data has been maintained through IPEDS.

Degrees-conferred trend tables arranged by the 2002–03 classification are included to provide consistent data from 1970-71 through the most recent year. Data on associate's and other formal awards below the baccalaureate degree, by field of study, cannot be made comparable with figures from years prior to 1982-83. The nonresponse rate does not appear to be a significant source of nonsampling error for this survey. The response rate over the years has been high; for the fall 2012 Completions component, it was about 100.0 percent. Because of the high response rate, there was no need to conduct a nonresponse bias analysis. Imputation methods for the fall 2012 Completions component are discussed in Postsecondary Institutions and Cost of Attendance in 2012–13; Degrees and Other Awards Conferred, 2011–12; and 12-Month Enrollment, 2011–12 (NCES 2013-289rev).

The Integrated Postsecondary Education Data System Data Quality Study (NCES 2005-175) indicated that most Title IV institutions supplying revised data on completions in 2003–04 were able to supply missing data for the prior year. The small differences between imputed data for the prior year and the revised actual data supplied by the institution indicated that the imputed values produced by NCES were acceptable.

Further information on the IPEDS Completions component may be obtained from

IPEDS Staff
Administrative Data Division
Postsecondary Branch
National Center for Education Statistics
1990 K Street NW
Washington, DC 20006
http://nces.ed.gov/ncestaff/SurvDetl.asp?surveyID=010

#### Fall (Institutional Characteristics)

This survey collects the basic information necessary to classify institutions, including control, level, and types of programs offered, as well as information on tuition, fees, and room and board charges. Beginning in 2000, the survey collected institutional pricing data from institutions with first-time, full-time, degree/certificate-seeking undergraduate students. Unduplicated full-year enrollment counts and instructional activity are now collected in the Fall Enrollment survey. Beginning in 2008–09, student financial aid data collected includes greater detail. The overall unweighted response rate was 100.0 percent for Title IV degree-granting institutions for 2009 data.

In the fall 2012 data collection, the response rate for the 7,476 Title IV entities expected to respond to the Institutional Characteristics component was about 100.0 percent (7,474 Title IV entities responded). In addition, data from 10 institutions that responded to the Institutional Characteristics component contained item nonresponse, and these missing items were imputed. Imputation methods for the fall 2012 Institutional Characteristics component are discussed in the 2012–13 Integrated Postsecondary Education Data System (IPEDS) Methodology Report (NCES 2013-293).

The Integrated Postsecondary Education Data System Data Quality Study (NCES 2005-175) looked at tuition and price in Title IV institutions. Only 8 percent of institutions in 2002–03 and 2003–04 reported the same data to IPEDS and Thomson Peterson consistently across all selected data items. Differences in wordings or survey items may account for some of these inconsistencies.

Further information on the IPEDS Institutional Characteristics component may be obtained from

Tara Lawley Administrative Data Division Postsecondary Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 tara.lawley@ed.gov http://nces.ed.gov/ipeds

#### Winter (Student Financial Aid)

This component was part of the spring data collection from IPEDS data collection years 2000–01 to 2010–11, but it moved to the winter data collection starting with the 2011–12 IPEDS data collection year. This move will aid in the timing of the net price of attendance calculations displayed on College Navigator (<a href="http://nces.ed.gov/collegenavigator">http://nces.ed.gov/collegenavigator</a>).

Financial aid data are collected for undergraduate students. Data are collected regarding federal grants, state and local government grants, institutional grants, and loans. The collected data include the number of students receiving each type of financial assistance and the average amount of aid received by type of aid. Beginning in 2008–09, student financial aid data collected includes greater detail on types of aid offered.

In the winter 2012–13 data collection, the Student Financial Aid component presented data on the number of first-time, full-time degree- and certificate-seeking undergraduate financial aid recipients for the 2011–12 academic year. Of the 7,064 Title IV institutions expected to respond to the Student Financial Aid component, 7,058 Title IV institutions responded, resulting in a response rate of about 99.9 percent.

Further information on the IPEDS Student Financial Aid component may be obtained from

Tara Lawley
Administrative Data Division
Postsecondary Branch
National Center for Education Statistics
1990 K Street NW
Washington, DC 20006
tara.lawley@ed.gov
http://nces.ed.gov/ipeds

### Spring (Fall Enrollment)

This survey has been part of the HEGIS and IPEDS series since 1966. Response rates for this survey have been relatively high, generally exceeding 85 percent. Beginning in 2000, with web-based data collection, higher response rates were attained. In the spring 2013 data collection, where the Fall Enrollment component covered fall 2012, the response rate was 99.9 percent. Data collection procedures for the Fall Enrollment component of the spring 2013 data collection are presented in *Enrollment in Postsecondary Institutions, Fall 2012; Financial Statistics, Fiscal Year 2012; Graduation Rates, Selected Cohorts, 2004–09; and Employees in Postsecondary Institutions, Fall 2012* (NCES 2013-183).

Beginning with the fall 1986 survey and the introduction of IPEDS (see above), the survey was redesigned. The

survey allows (in alternating years) for the collection of age and residence data. Beginning in 2000, the survey collected instructional activity and unduplicated headcount data, which are needed to compute a standardized, full-time-equivalent (FTE) enrollment statistic for the entire academic year.

The Integrated Postsecondary Education Data System Data Quality Study (NCES 2005-175) showed that public institutions made the majority of changes to enrollment data during the 2004 revision period. The majority of changes were made to unduplicated headcount data, with the net differences between the original data and the revised data at about 1 percent. Part-time students in general and enrollment in private nonprofit institutions were often underestimated. The fewest changes by institutions were to Classification of Instructional Programs (CIP) code data. (The CIP is a taxonomic coding scheme that contains titles and descriptions of primarily postsecondary instructional programs.) More institutions provided enrollment data to IPEDS than to Thomson Peterson. A fairly high percentage of institutions that provided data to both provided the same data, and among those that did not, the difference in magnitude was less than 10 percent.

Further information on the IPEDS Fall Enrollment component may be obtained from

**IPEDS Staff** Administrative Data Division Postsecondary Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 http://nces.ed.gov/ncestaff/SurvDetl.asp?surveyID=010

#### Spring (Finance)

This survey was part of the HEGIS series and has been continued under IPEDS. Substantial changes were made in the financial survey instruments in fiscal year (FY) 1976, FY 82, FY 87, FY 97, and FY 02. While these changes were significant, considerable effort has been made to present only comparable information on trends and to note inconsistencies. The FY 76 survey instrument contained numerous revisions to earlier survey forms, which made direct comparisons of line items very difficult. Beginning in FY 82, Pell Grant data were collected in the categories of federal restricted grant and contract revenues and restricted scholarship and fellowship expenditures. Finance tables including data prior to 2000 have been adjusted by subtracting the largely duplicative Pell Grant amounts from the later data to maintain comparability with pre-FY 82 data. The introduction of IPEDS in the FY 87 survey included several important changes to the survey instrument and data processing procedures. Beginning in FY 97, data for private institutions were collected using new financial concepts consistent with Financial Accounting Standards Board (FASB) reporting standards, which provide a more comprehensive view of college finance activities. The data for public institutions continued to be collected using the older survey form. The data for public and private institutions were no longer comparable and, as a result, no longer presented together in analysis tables. In FY 01, public institutions had the option of either continuing to report using Government Accounting Standards Board (GASB) standards or using the new FASB reporting standards. Beginning in FY 02, public institutions had three options: the original GASB standards, the FASB standards, or the new GASB Statement 35 standards (GASB35). Because of the complexity of the multiple forms used by public institutions, finance data for public institutions for some recent years are not available.

Possible sources of nonsampling error in the financial statistics include nonresponse, imputation, and misclassification. The unweighted response rate has been about 85 to 90 percent for most of the historic years; however, in more recent years, response rates have been much higher because Title IV institutions are required to respond. The 2002 IPEDS data collection was a full-scale web-based collection, which offered features that improved the quality and timeliness of the data. The ability of IPEDS to tailor online data entry forms for each institution based on characteristics such as institutional control, level of institution, and calendar system, and the institutions' ability to submit their data online, were two such features that improved response.

The response rate for the FY 2012 Finance survey component was 99.8 percent. Data collection procedures for the FY 2012 survey are discussed in Enrollment in Postsecondary Institutions, Fall 2012; Financial Statistics, Fiscal Year 2012; Graduation Rates, Selected Cohorts, 2004-09; and Employees in Postsecondary Institutions, Fall 2012: First Look (Provisional Data) (NCES 2013-183).

Two general methods of imputation were used in HEGIS. If prior-year data were available for a nonresponding institution, they were inflated using the Higher Education Price Index and adjusted according to changes in enrollments. If prior-year data were not available, current data were used from peer institutions selected for location (state or region), control, level, and enrollment size of institution. In most cases, estimates for nonreporting institutions in HEGIS were made using data from peer institutions.

Beginning with FY 87, IPEDS included all postsecondary institutions, but maintained comparability with earlier surveys by allowing 2- and 4-year institutions to be tabulated separately. For FY 87 through FY 91, in order to maintain comparability with the historical time series of HEGIS institutions, data were combined from two of the three different survey forms that make up IPEDS. The vast majority of the data were tabulated from form 1, which was used to collect information from public and private nonprofit 2- and 4-year colleges. Form 2, a condensed form, was used to gather data for 2-year for-profit institutions. Because of the differences in the

data requested on the two forms, several assumptions were made about the form 2 reports so that their figures could be included in the degree-granting institution totals.

In IPEDS, the form 2 institutions were not asked to separate appropriations from grants and contracts, nor were they asked to separate state from local sources of funding. For the form 2 institutions, all federal revenues were assumed to be federal grants and contracts, and all state and local revenues were assumed to be restricted state grants and contracts. All other form 2 sources of revenue, except for tuition and fees and sales and services of educational activities, were included under "other." Similar adjustments were made to the expenditure accounts. The form 2 institutions reported instruction and scholarship and fellowship expenditures only. All other educational and general expenditures were allocated to academic support.

The Integrated Postsecondary Education Data System Data Quality Study (NCES 2005-175) found that only a small percentage (2.9 percent, or 168) of postsecondary institutions either revised 2002–03 data or submitted data for items they previously left unreported. Though relatively few institutions made changes, the changes made were relatively large—greater than 10 percent of the original data. With a few exceptions, these changes, large as they were, did not greatly affect the aggregate totals.

Again, institutions were more likely to report data to IPEDS than to Thomson Peterson, and there was a higher percentage reporting different values among those reporting to both. The magnitude of the difference was generally greater for research expenditures. It is likely that the large differences are a function of the way institutions report these data to both entities.

Further information on the IPEDS Finance component may be obtained from

IPEDS Staff
Administrative Data Division
Postsecondary Branch
National Center for Education Statistics
1990 K Street NW
Washington, DC 20006
http://nces.ed.gov/ncestaff/SurvDetl.asp?surveyID=010

## Spring (Graduation Rates and Graduation Rates 200 Percent)

Graduation rates data are collected for full-time, first-time degree- and certificate-seeking undergraduate students. Data included are the number of students entering the institution as full-time, first-time degree- or certificate-seeking students in a particular year (cohort), by race/ethnicity and gender; the number of students completing their program within a time period equal to 1½ times (150 percent) the normal period of time; and the number of students who transferred to other institutions.

In the spring 2013 data collection, the Graduation Rates component collected counts of full-time, first-time degree-and certificate-seeking undergraduate students entering an institution in the cohort year (4-year institutions used the cohort year 2006; less-than-4-year institutions used the cohort year 2009), and their completion status as of August 31, 2012 (150 percent of normal program completion time) at the institution initially entered. The response rate for this component was 99.9 percent.

The 200 Percent Graduation Rates component collected counts of full-time, first-time degree- and certificate-seeking undergraduate students beginning their postsecondary education in the reference period and their completion status as of August 31, 2012 (200 percent of normal program completion time) at the same institution where the students started. Four-year institutions report on bachelor's or equivalent degree-seeking students and use cohort year 2004 as the reference period, while less-than-4-year institutions report on all students in the cohort and use cohort year 2008 as the reference period. The response rate for this component was 99.9 percent.

Further information on the IPEDS Graduation component may be obtained from

IPEDS Staff
Administrative Data Division
Postsecondary Branch
National Center for Education Statistics
1990 K Street NW
Washington, DC 20006
http://nces.ed.gov/ncestaff/SurvDetl.asp?surveyID=010

#### Spring (Human Resources)

The IPEDS Human Resources (HR) component was part of the winter data collection from IPEDS data collection years 2000–01 to 2011–12. For the 2012–13 data collection year, the HR component was moved to the spring 2013 data collection, in order to give institutions more time to prepare their survey responses (the spring and winter collections begin on the same date, but the reporting deadline for the spring collection is several weeks later than the reporting deadline for the winter collection).

Human Resources, 2012-13 Collection Year

In 2012–13, new occupational categories replaced the primary function/occupational activity categories previously used in the IPEDS HR component. This change was required in order to align the IPEDS HR categories with the 2010 Standard Occupational Classification (SOC) system. In tandem with the change in 2012–13 from using primary function/occupational activity categories to using the new occupational categories, the sections making up the IPEDS HR component (which previously had been Employees by Assigned Position [EAP], Fall Staff, and Salaries) were

changed to Full-Time Instructional Staff, Full-time Noninstructional Staff, Salaries, Part-Time Staff, and New

The webpage "Changes to the 2012–13 IPEDS Data Collection and Changes to Occupational Categories for the 2012–13 Human Resources Data Collection" (http://nces.ed.gov/ipeds/surveys/datacollection2012-13. asp) provides information on the redesigned IPEDS component, and the webpage "Resources for Implementing Changes to the IPEDS Human Resources (HR) Survey Component Due to Updated 2010 Standard Occupational Classification (SOC) System" (http:// nces.ed.gov/ipeds/resource/soc.asp) contains further information, including notes comparing the new classifications with the old ("Comparison of New IPEDS Occupational Categories with Previous Categories"), a crosswalk from the new IPEDS occupational categories to the 2010 SOC occupational categories ("New IPEDS Occupational Categories and 2010 SOC"), answers to frequently asked questions, and a link to current IPEDS HR survey screens.

Human Resources, Collection Years Prior to 2012–13

In IPEDS collection years prior to 2012–13, the Human Resources component was composed of three sections: Employees by Assigned Position (EAP), Fall Staff, and Salaries.

Data gathered by the Employees by Assigned Position (EAP) section categorizes all employees by full- or part-time status, faculty status, and primary function/ occupational activity. Institutions with M.D. or D.O. programs are required to report their medical school employees separately. A response to the EAP was required of all 6,858 Title IV institutions and administrative offices in the United States and other jurisdictions for winter 2008-09, and 6,845, or 99.8 percent unweighted, responded. Of the 6,970 Title IV institutions and administrative offices required to respond to the winter 2009-10 EAP, 6,964, or 99.9 percent, responded. And of the 7,256 Title IV institutions and administrative offices required to respond to the EAP for winter 2010-11, 7,252, or 99.9 percent, responded.

The primary functions/occupational activities of the EAP section are primarily instruction, instruction combined with research and/or public service, primarily research, primarily public service, executive/administrative/ managerial, other professionals (support/service), graduate assistants, technical and paraprofessionals, clerical and secretarial, skilled crafts, and service/maintenance.

All full-time instructional faculty classified in the EAP full-time nonmedical school part as either (1) primarily instruction or (2) instruction combined with research and/or public service are included in the Salaries section, unless they are exempt.

The Fall Staff section categorizes all staff on the institution's payroll as of November 1 of the collection year, by employment status (full time or part time), primary function/occupational activity, gender, and race/ ethnicity. These data elements are collected from degreegranting and non-degree-granting institutions; however, additional data elements are collected from degreegranting institutions and related administrative offices with 15 or more full-time staff. These elements include faculty status, contract length/teaching period, academic rank, salary class intervals, and newly hired full-time permanent staff.

The Fall Staff section, which is required only in odd-numbered reporting years, was not required during the 2008-09 HR data collection. However, of the 6,858 Title IV institutions and administrative offices in the United States and other jurisdictions, 3,295, or 48.0 percent unweighted, did provide data in the Fall Staff section that year. During the 2009-10 HR data collection, when all 6,970 Title IV institutions and administrative offices were required to respond to the Fall Staff section, 6,964, or 99.9 percent, did so. A response to the Fall Staff section of the 2010-11 HR collection was optional, and 3,364 Title IV institutions and administrative offices responded that year (a response rate of 46.3 percent).

The study Integrated Postsecondary Education Data System Data Quality Study (NCES 2005-175) found that for 2003-04 employee data items, changes were made by 1.2 percent (77) of the institutions that responded. All who made changes made changes that resulted in different employee counts. For both institutional and aggregate differences, the changes had little impact on the original employee count submissions. A large number of institutions reported different staff data to IPEDS and Thomson Peterson; however, the magnitude of the differences was small—usually no more than 17 faculty members for any faculty variable.

The Salaries section collects data for full-time instructional faculty on the institution's payroll as of November 1 of the collection year (except those in medical schools of the EAP section, as described above), by contract length/teaching period, gender, and academic rank. The reporting of data by faculty status in the Salaries section is required from 4-year degree-granting institutions and above only. Salary outlays and fringe benefits are also collected for full-time instructional staff on 9/10- and 11/12-month contracts/teaching periods. This section is applicable to degree-granting institutions unless exempt.

This institutional survey was conducted for most years from 1966-67 to 1987-88; it has been conducted annually since 1989-90, except for 2000-01. Although the survey form has changed a number of times during these years, only comparable data are presented.

Between 1966-67 and 1985-86, this survey differed from other HEGIS surveys in that imputations were not made for nonrespondents. Thus, there is some possibility that the salary averages presented in this report may differ from the results of a complete enumeration of all colleges and universities. Beginning with the surveys for 1987–88, the IPEDS data tabulation procedures included imputations for survey nonrespondents. The unweighted response rate for the 2008-09 Salaries survey section was 99.9 percent. The response rate for the 2009–10 Salaries section was 100.0 percent (4,453 of the 4,455 required institutions responded), and the response rate for 2010–11 was 99.9 percent (4,561 of the 4,565 required institutions responded). Imputation methods for the 2010-11 Salaries survey section are discussed in *Employees in Postsecondary* Institutions, Fall 2010, and Salaries of Full-Time *Instructional Staff, 2010–11* (NCES 2012-276).

Although data from this survey are not subject to sampling error, sources of nonsampling error may include computational errors and misclassification in reporting and processing. The electronic reporting system does allow corrections to prior-year reported or missing data, and this should help with these problems. Also, NCES reviews individual institutions' data for internal and longitudinal consistency and contacts institutions to check inconsistent data.

The Integrated Postsecondary Education Data System Data Quality Study (NCES 2005-175) found that only 1.3 percent of the responding Title IV institutions in 2003–04 made changes to their salaries data. The differences between the imputed data and the revised data were small and found to have little impact on the published data.

Further information on the Human Resources component may be obtained from

IPEDS Staff
Administrative Data Division
Postsecondary Branch
National Center for Education Statistics
1990 K Street NW
Washington, DC 20006
http://nces.ed.gov/ncestaff/SurvDet1.asp?surveyID=010

## National Assessment of Educational Progress

The National Assessment of Educational Progress (NAEP) is a series of cross-sectional studies initially implemented in 1969 to assess the educational achievement of U.S. students and monitor changes in those achievements. In the main national NAEP, a nationally representative sample of students is assessed at grades 4, 8, and 12 in various academic subjects.

The assessments are based on frameworks developed by the National Assessment Governing Board (NAGB). Assessment items include both multiple-choice and constructed-response (requiring written answers) items. Results are reported in two ways: by average score and by achievement level. Average scores are reported for the nation, for participating states and jurisdictions, and for subgroups of the population. Percentages of students performing at or above three achievement levels (*Basic, Proficient,* and *Advanced*) are also reported for these groups.

From 1990 until 2001, main NAEP was conducted for states and other jurisdictions that chose to participate. In 2002, under the provisions of the No Child Left Behind Act of 2001, all states began to participate in main NAEP and an aggregate of all state samples replaced the separate national sample.

Mathematics assessments were administered in 2000, 2003, 2005, 2007, 2009, 2011, and 2013. In 2005, NAGB called for the development of a new mathematics framework. The revisions made to the mathematics framework for the 2005 assessment were intended to reflect recent curricular emphases and better assess the specific objectives for students at each grade level.

The revised mathematics framework focuses on two dimensions: mathematical content and cognitive demand. By considering these two dimensions for each item in the assessment, the framework ensures that NAEP assesses an appropriate balance of content, as well as a variety of ways of knowing and doing mathematics.

For grades 4 and 8, comparisons over time can be made among the assessments prior to and after the implementation of the 2005 framework. The changes to the grade 12 assessment were too drastic to allow the results to be directly compared with previous years. The changes to the grade 12 assessment included adding more questions on algebra, data analysis, and probability to reflect changes in high school mathematics standards and coursework, as well as the merging of the measurement and geometry content areas. The reporting scale for grade 12 mathematics was changed from 0–500 to 0–300. For more information regarding the 2005 mathematics framework revisions, see <a href="http://nces.ed.gov/nationsreportcard/mathematics/frameworkcomparison.asp.">http://nces.ed.gov/nationsreportcard/mathematics/frameworkcomparison.asp.</a>

Reading assessments were administered in 2000, 2002, 2003, 2005, 2007, 2009, 2011, and 2013. In 2009, a new framework was developed for the 4th-, 8th-, and 12th-grade NAEP reading assessments.

Both a content alignment study and a reading trend or bridge study were conducted to determine if the "new" assessment was comparable to the "old" assessment. Overall, the results of the special analyses suggested that the old and new assessments were similar in terms of their item and scale characteristics and the results they produced for important demographic groups of students. Thus, it was determined that the results of the 2009 reading assessment could still be compared to those from earlier assessment years, thereby maintaining the trend lines first established in 1992. For more information regarding the 2009 reading framework revisions, see <a href="http://nces.ed.gov/nationsreportcard/reading/">http://nces.ed.gov/nationsreportcard/reading/</a> whatmeasure.asp.

In spring 2013, NAEP released results from the NAEP 2012 economics assessment in *The Nation's Report Card:* Economics 2012 (NCES 2013-453). First administered in 2006, the NAEP economics assessment measures 12th-graders' understanding of a wide range of topics in three main content areas: market economy, national economy, and international economy. The 2012 assessment is based on a nationally representative sample of nearly 11,000 12th-graders. Comparing results from 2012 with results from 2006 can advance the inquiry of whether our nation's high school seniors are becoming more literate in economics.

In The Nation's Report Card: A First Look—2013 Mathematics and Reading (NCES 2014-451), NAEP released the results of the 2013 mathematics and reading assessments. Results can also be accessed using the interactive graphics and downloadable data available at the new online Nation's Report Card website (http:// nationsreportcard.gov/reading math 2013/#/).

In addition to conducting the main assessments, NAEP also conducts the long-term trend assessments and trial urban district assessments. Long-term trend assessments provide an opportunity to observe educational progress in reading and mathematics of 9-, 13-, and 17-year-olds since the early 1970s. The long-term trend reading assessment measures students' reading comprehension skills using an array of passages that vary by text types and length. The assessment was designed to measure students' ability to locate specific information in the text provided; make inferences across a passage to provide an explanation; and identify the main idea in the text.

The NAEP long-term trend assessment in mathematics measures knowledge of mathematical facts; ability to carry out computations using paper and pencil; knowledge of basic formulas, such as those applied in geometric settings; and ability to apply mathematics to skills of daily life, such as those involving time and

The Nation's Report Card: Trends in Academic Progress 2012 (NCES 2013-456) provides the results of 12 longterm trend reading assessments dating back to 1971 and 11 long-term trend mathematics assessments dating back to 1973.

The NAEP Trial Urban District Assessment (TUDA) focuses attention on urban education and measures educational progress within participating large urban districts. TUDA mathematics and reading assessments are based on the same mathematics and reading assessments

used to report national and state results. TUDA reading results were first reported for 6 urban districts in 2002, and TUDA mathematics results were first reported for 10 urban districts in 2003.

The Nation's Report Card: A First Look—2013 Mathematics and Reading Trial Urban District Assessment (NCES 2014-466) provides the results of the 2013 mathematics and reading TUDA, which measured the reading and mathematics progress of 4th- and 8th-graders from 21 urban school districts. Results from the 2013 mathematics and reading TUDA can also be accessed using the interactive graphics and downloadable data available at the online TUDA website (http://nationsreportcard.gov/ reading math tuda 2013/#/). Further information on NAEP may be obtained from

Arnold Goldstein Assessments Division Reporting and Dissemination Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 arnold.goldstein@ed.gov http://nces.ed.gov/nationsreportcard

### Private School Universe Survey

The purposes of the Private School Universe Survey (PSS) data collection activities are (1) to build an accurate and complete list of private schools to serve as a sampling frame for NCES sample surveys of private schools and (2) to report data on the total number of private schools, teachers, and students in the survey universe. Begun in 1989 under the U.S. Census Bureau, the PSS has been conducted every 2 years, and data for the 1989-90, 1991–92, 1993–94, 1995–96, 1997–98, 1999–2000, 2001–02, 2003–04, 2005–06, 2007–08, and 2009–10 school years have been released. A First Look report on the 2011-12 PSS data, Characteristics of Private Schools in the United States: Results From the 2011–12 Private School Universe Survey (NCES 2013-316) was published in July 2013.

The PSS produces data similar to that of the CCD for public schools, and can be used for public-private comparisons. The data are useful for a variety of policy and research-relevant issues, such as the growth of religiously affiliated schools, the number of private high school graduates, the length of the school year for various private schools, and the number of private school students and teachers.

The target population for this universe survey is all private schools in the United States that meet the PSS criteria of a private school (i.e., the private school is an institution that provides instruction for any of grades K through 12, has one or more teachers to give instruction, is not administered by a public agency, and is not operated in a private home). The survey universe is composed of

schools identified from a variety of sources. The main source is a list frame initially developed for the 1989–90 PSS. The list is updated regularly by matching it with lists provided by nationwide private school associations, state departments of education, and other national guides and sources that list private schools. The other source is an area frame search in approximately 124 geographic areas, conducted by the U.S. Census Bureau.

Of the 40,302 schools included in the 2009–10 sample, 10,229 were found ineligible for the survey. Those not responding numbered 1,856, and those responding numbered 28,217. The unweighted response rate for the 2009–10 PSS survey was 93.8 percent.

Of the 39,325 schools included in the 2011–12 sample, 10,030 cases were considered as out-of-scope (not eligible for the PSS). A total of 26,983 private schools completed a PSS interview (15.8 percent completed online), while 2,312 schools refused to participate, resulting in an unweighted response rate of 92.1 percent.

Further information on the PSS may be obtained from

Steve Broughman
Sample Surveys Division
Cross-Sectional Surveys Branch
National Center for Education Statistics
1990 K Street NW
Washington, DC 20006
<a href="mailto:stephen.broughman@ed.gov">stephen.broughman@ed.gov</a>
<a href="http://nces.ed.gov/surveys/pss">http://nces.ed.gov/surveys/pss</a>

### Projections of Education Statistics

Since 1964, NCES has published projections of key statistics for elementary and secondary schools and institutions of higher education. The latest report is titled *Projections of Education Statistics to 2022* (NCES 2014-051). These projections include statistics for enrollments, instructional staff, graduates, earned degrees, and expenditures. These reports include several alternative projection series and a methodology section describing the techniques and assumptions used to prepare them.

Differences between the reported and projected values are, of course, almost inevitable. An evaluation of past projections revealed that, at the elementary and secondary level, projections of enrollments have been quite accurate: mean absolute percentage differences for enrollment ranged from 0.3 to 1.3 percent for projections from 1 to 5 years in the future, while those for teachers were less than 3 percent. At the higher education level, projections of enrollment have been fairly accurate: mean absolute percentage differences were 5 percent or less for projections from 1 to 5 years into the future.

Further information on *Projections of Education Statistics* may be obtained from

William Hussar Annual Reports and Information National Center for Education Statistics 1990 K Street NW Washington, DC 20006 william.hussar@ed.gov http://nces.ed.gov/annuals

# Other Department of Education Agencies

### Office of Special Education Programs

Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act

The Individuals with Disabilities Education Act (IDEA) is a law ensuring services to children with disabilities throughout the nation. IDEA governs how states and public agencies provide early intervention, special education, and related services to more than 6.5 million eligible infants, toddlers, children, and youth with disabilities.

The Individuals with Disabilities Education Act (IDEA), formerly the Education of the Handicapped Act (EHA), requires the Secretary of Education to transmit to Congress annually a report describing the progress made in serving the nation's children with disabilities. This annual report contains information on children served by public schools under the provisions of Part B of the IDEA and on children served in state-operated programs for the disabled under Chapter I of the Elementary and Secondary Education Act.

Statistics on children receiving special education and related services in various settings and school personnel providing such services are reported in an annual submission of data to the Office of Special Education Programs (OSEP) by the 50 states, the District of Columbia, and the outlying areas. The child count information is based on the number of children with disabilities receiving special education and related services on December 1 of each year. Count information is available from <a href="http://www.ideadata.org">http://www.ideadata.org</a>.

Since each participant in programs for the disabled is reported to OSEP, the data are not subject to sampling error. However, nonsampling error can arise from a variety of sources. Some states follow a noncategorical approach to the delivery of special education services, but produce counts of students by disabling condition because Part B of the EHA requires it. In those states that do categorize their disabled students, definitions and labeling practices vary.

Further information on this annual report to Congress may be obtained from

Office of Special Education Programs
Office of Special Education and Rehabilitative Services
U.S. Department of Education
400 Maryland Avenue SW
Washington, DC 20202-7100
<a href="http://www.ed.gov/about/reports/annual/osep/index.html">http://www.ed.gov/about/reports/annual/osep/index.html</a>
<a href="http://idea.ed.gov/http://www.ideadata.org">http://idea.ed.gov/http://www.ideadata.org</a>

### Other Governmental Agencies

### Bureau of Justice Statistics

National Crime Victimization Survey (NCVS)

The National Crime Victimization Survey (NCVS), administered for the U.S. Bureau of Justice Statistics by the U.S. Census Bureau, is the nation's primary source of information on crime and the victims of crime. Initiated in 1972 and redesigned in 1992, the NCVS collects detailed information on the frequency and nature of the crimes of rape, sexual assault, robbery, aggravated and simple assault, theft, household burglary, and motor vehicle theft experienced by Americans and their households each year. The survey measures both crimes reported to police and crimes not reported to the police.

NCVS estimates presented may differ from those in previous published reports. This is because a small number of victimizations, referred to as series victimizations, are included using a new counting strategy. High-frequency repeat victimizations, or series victimizations, are six or more similar but separate victimizations that occur with such frequency that the victim is unable to recall each individual event or describe each event in detail. As part of ongoing research efforts associated with the redesign of the NCVS, BJS investigated ways to include high-frequency repeat victimizations, or series victimizations, in estimates of criminal victimization. Including series victimizations would obtain a more accurate estimate of victimization. BJS has decided to include series victimizations using the victim's estimates of the number of times the victimizations occurred over the past 6 months, capping the number of victimizations within each series at a maximum of 10. This strategy for counting series victimizations balances the desire to estimate national rates and account for the experiences of persons with repeat victimizations while noting that some estimation errors exist in the number of times these victimizations occurred. Including series victimizations in national rates results in rather large increases in the level of violent victimization; however, trends in violence are generally similar regardless of whether series victimizations are included. For more information on the new counting strategy and supporting

research, see *Methods for Counting High-Frequency Repeat Victimizations in the National Crime Victimization Survey* at <a href="http://bjs.oip.usdoj.gov/content/pub/pdf/mchfrv.pdf">http://bjs.oip.usdoj.gov/content/pub/pdf/mchfrv.pdf</a>.

Readers should note that in 2003, in accordance with changes to the Office of Management and Budget's standards for the classification of federal data on race and ethnicity, the NCVS item on race/ethnicity was modified. A question on Hispanic origin is followed by a question on race. The new question about race allows the respondent to choose more than one race and delineates Asian as a separate category from Native Hawaiian or Other Pacific Islander. Analysis conducted by the Demographic Surveys Division at the U.S. Census Bureau showed that the new question had very little impact on the aggregate racial distribution of the NCVS respondents, with one exception: There was a 1.6 percentage point decrease in the percentage of respondents who reported themselves as White. Due to changes in race/ethnicity categories, comparisons of race/ethnicity across years should be made with caution.

There were changes in the sample design and survey methodology in the 2006 NCVS that may have affected survey estimates. Caution should be used when comparing the 2006 estimates to those of other years. Data from 2007 onward are comparable to earlier years. Analyses of the 2007 estimates indicate that the program changes made in 2006 had relatively small effects on NCVS changes. For more information on the 2006 NCVS data, see *Criminal Victimization*, 2006, at <a href="http://bjs.ojp.usdoj.gov/content/pub/pdf/cv06.pdf">http://bjs.ojp.usdoj.gov/content/pub/pdf/cv06.pdf</a>, the technical notes at <a href="http://bjs.ojp.usdoj.gov/content/pub/pdf/cv06tn.pdf">http://bjs.ojp.usdoj.gov/content/pub/pdf/cv06tn.pdf</a>, and <a href="http://bjs.ojp.usdoj.gov/content/pub/pdf/cv07.pdf">Criminal Victimization</a>, 2007, at <a href="http://bjs.ojp.usdoj.gov/content/pub/pdf/cv07.pdf">http://bjs.ojp.usdoj.gov/content/pub/pdf/cv07.pdf</a>.

The number of NCVS-eligible households in the sample in 2011 was about 89,000. They were selected using a stratified, multistage cluster design. In the first stage, the primary sampling units (PSUs), consisting of counties or groups of counties, were selected. In the second stage, smaller areas, called Enumeration Districts (EDs), were selected from each sampled PSU. Finally, from selected EDs, clusters of four households, called segments, were selected for interview. At each stage, the selection was done proportionate to population size in order to create a self-weighting sample. The final sample was augmented to account for households constructed after the decennial Census. Within each sampled household, U.S. Census Bureau personnel attempt to interview all household members age 12 and older to determine whether they had been victimized by the measured crimes during the 6 months preceding the interview.

The first NCVS interview with a housing unit is conducted in person. Subsequent interviews are conducted by telephone, if possible. About 72,000 persons age 12 and older are interviewed each 6 months. Households remain in the sample for 3 years and are interviewed seven times at 6-month intervals. Since the survey's

inception, the initial interview at each sample unit has been used only to bound future interviews to establish a time frame to avoid duplication of crimes uncovered in these subsequent interviews. Beginning in 2006, data from the initial interview have been adjusted to account for the effects of bounding and included in the survey estimates. After their seventh interview, households are replaced by new sample households. The NCVS has consistently obtained a response rate of over 90 percent at the household level. The completion rates for persons within households in 2011 were about 88 percent. Weights were developed to permit estimates for the total U.S. population 12 years and older.

Further information on the NCVS may be obtained from

Jennifer Truman Victimization Statistics Branch Bureau of Justice Statistics 810 Seventh Street NW Washington, DC 20531 jennifer.truman@usdoj.gov

#### **Bureau of Labor Statistics**

#### Consumer Price Indexes

The Consumer Price Index (CPI) represents changes in prices of all goods and services purchased for consumption by urban households. Indexes are available for two population groups: a CPI for All Urban Consumers (CPI-U) and a CPI for Urban Wage Earners and Clerical Workers (CPI-W). Unless otherwise specified, data are adjusted for inflation using the CPI-U. These values are frequently adjusted to a school-year basis by averaging the July through June figures. Price indexes are available for the United States, the four Census regions, size of city, cross-classifications of regions and size classes, and 26 local areas. The major uses of the CPI include as an economic indicator, as a deflator of other economic series, and as a means of adjusting income.

Also available is the Consumer Price Index research series using current methods (CPI-U-RS), which presents an estimate of the CPI-U from 1978 to the present that incorporates most of the improvements that the Bureau of Labor Statistics has made over that time span into the entire series. The historical price index series of the CPI-U does not reflect these changes, though these changes do make the present and future CPI more accurate. The limitations of the CPI-U-RS include considerable uncertainty surrounding the magnitude of the adjustments and the several improvements in the CPI that have not been incorporated into the CPI-U-RS for various reasons. Nonetheless, the CPI-U-RS can serve as a valuable proxy for researchers needing a historical estimate of inflation using current methods.

Further information on consumer price indexes may be obtained from

Bureau of Labor Statistics U.S. Department of Labor 2 Massachusetts Avenue NE Washington, DC 20212 http://www.bls.gov/cpi

### **Employment and Unemployment Surveys**

Statistics on the employment and unemployment status of the population and related data are compiled by the Bureau of Labor Statistics (BLS) using data from the Current Population Survey (CPS) (see below) and other surveys. The Current Population Survey, a monthly household survey conducted by the U.S. Census Bureau for the Bureau of Labor Statistics, provides a comprehensive body of information on the employment and unemployment experience of the nation's population, classified by age, sex, race, and various other characteristics.

Further information on unemployment surveys may be obtained from

Bureau of Labor Statistics
U.S. Department of Labor
2 Massachusetts Avenue NE
Washington, DC 20212
cpsinfo@bls.gov
http://www.bls.gov/bls/employment.htm

#### Census Bureau

## American Community Survey (ACS)

The Census Bureau introduced the American Community Survey (ACS) in 1996. Fully implemented in 2005, it provides a large monthly sample of demographic, socioeconomic, and housing data comparable in content to the Long Forms of the Decennial Census up to and including the 2000 long form. Aggregated over time, these data will serve as a replacement for the Long Form of the Decennial Census. The survey includes questions mandated by federal law, federal regulations, and court decisions.

Since 2011, the survey has been mailed to approximately 295,000 addresses in the United States and Puerto Rico each month, or about 3.5 million addresses annually. A larger proportion of addresses in small governmental units (e.g., American Indian reservations, small counties, and towns) also receive the survey. The monthly sample size is designed to approximate the ratio used in the 2000 Census, which requires more intensive distribution in these areas. The ACS covers the U.S. resident population,

which includes the entire civilian, noninstitutionalized population; incarcerated persons; institutionalized persons; and the active duty military who are in the United States. In 2006, the ACS began interviewing residents in group quarter facilities. Institutionalized group quarters include adult and juvenile correctional facilities, nursing facilities, and other health care facilities. Noninstitutionalized group quarters include college and university housing, military barracks, and other noninstitutional facilities such as workers and religious group quarters and temporary shelters for the homeless.

National-level data from the ACS are available from 2000 onward. The ACS produces 1-year estimates for populations of 65,000 and over, 3-year estimates for populations of 20,000 or over, and 5-year estimates for populations of almost any size. To illustrate, 2012 ACS 1-year estimates represented data collected between January 1, 2012, and December 31, 2012; 2010–12 ACS 3-year estimates represented data collected between January 1, 2010, and December 31, 2012; and the 2008–12 ACS 5-year estimates represented data collected between January 1, 2008, and December 31, 2012.

Further information about the ACS is available at <a href="http://www.census.gov/acs/www/">http://www.census.gov/acs/www/</a>.

### **Current Population Survey**

The Current Population Survey (CPS) is a monthly survey of about 60,000 households conducted by the U.S. Census Bureau for the Bureau of Labor Statistics. The CPS is the primary source of information of labor force statistics for the U.S. noninstitutionalized population (e.g., excludes military personnel and their families living on bases and inmates of correctional institutions). In addition, supplemental questionnaires are used to provide further information about the U.S. population. Specifically, in October, detailed questions regarding school enrollment and school characteristics are asked. In March, detailed questions regarding income are asked.

The current sample design, introduced in July 2001, includes about 72,000 households. Each month about 58,900 of the 72,000 households are eligible for interview, and of those, 7 to 10 percent are not interviewed because of temporary absence or unavailability. Information is obtained each month from those in the household who are 15 years of age and older, and demographic data are collected for children 0–14 years of age. In addition, supplemental questions regarding school enrollment are asked about eligible household members ages 3 and older. Prior to July 2001, data were collected in the CPS from about 50,000 dwelling units. The samples are initially selected based on the decennial census files and are periodically updated to reflect new housing construction.

A major redesign of the CPS was implemented in January 1994 to improve the quality of the data collected. Survey questions were revised, new questions were added, and computer-assisted interviewing methods were used for

the survey data collection. Further information about the redesign is available in *Current Population Survey*, *October 1995: (School Enrollment Supplement) Technical Documentation* at <a href="http://www.census.gov/prod/techdoc/cps/cpsoct95.pdf">http://www.census.gov/prod/techdoc/cps/cpsoct95.pdf</a>.

Caution should be used when comparing data from 1994 through 2001 with data from 1993 and earlier. Data from 1994 through 2001 reflect 1990 census-based population controls, while data from 1993 and earlier reflect 1980 or earlier census-based population controls. Also use caution when comparing data from 1994 through 2001 with data from 2002 onward, as data from 2002 reflect 2000 census-based controls. Changes in population controls generally have relatively little impact on summary measures such as means, medians, and percentage distributions. They can have a significant impact on population counts. For example, use of the 1990 censusbased population control resulted in about a 1 percent increase in the civilian noninstitutional population and in the number of families and households. Thus, estimates of levels for data collected in 1994 and later years will differ from those for earlier years by more than what could be attributed to actual changes in the population. These differences could be disproportionately greater for certain subpopulation groups than for the total population.

Beginning in 2003, race/ethnicity questions expanded to include information on people of two or more races. Native Hawaiian/Pacific Islander data are collected separately from Asian data. The questions have also been worded to make it clear that self-reported data on race/ethnicity should reflect the race/ethnicity with which the responder identifies, rather than what may be written in official documentation.

The estimation procedure employed for monthly CPS data involves inflating weighted sample results to independent estimates of characteristics of the civilian noninstitutional population in the United States by age, sex, and race. These independent estimates are based on statistics from decennial censuses; statistics on births, deaths, immigration, and emigration; and statistics on the population in the armed services. Generalized standard error tables are provided in the Current Population Reports; methods for deriving standard errors can be found within the CPS technical documentation at <a href="http://www.census.gov/cps/methodology/techdocs.html">http://www.census.gov/cps/methodology/techdocs.html</a>. The CPS data are subject to both nonsampling and sampling errors.

Prior to 2009, standard errors were estimated using the generalized variance function. The generalized variance function is a simple model that expressed the variance as a function of the expected value of a survey estimate. Beginning with March 2009 CPS data, standard errors were estimated using replicate weight methodology. Those interested in using CPS household-level supplement replicate weights to calculate variances may refer to Estimating Current Population Survey (CPS) Household-Level Supplement Variances Using Replicate Weights at http://

thedataweb.rm.census.gov/pub/cps/supps/HH-level Use of the Public Use Replicate Weight File.doc.

Further information on CPS may be obtained from

Education and Social Stratification Branch Population Division Census Bureau U.S. Department of Commerce 4600 Silver Hill Road Washington, DC 20233 http://www.census.gov/cps

#### Dropouts

Each October, the Current Population Survey (CPS) includes supplemental questions on the enrollment status of the population ages 3 years and over as part of the monthly basic survey on labor force participation. In addition to gathering the information on school enrollment, with the limitations on accuracy as noted below under "School Enrollment," the survey data permit calculations of dropout rates. Both status and event dropout rates are tabulated from the October CPS. Event rates describe the proportion of students who leave school each year without completing a high school program. Status rates provide cumulative data on dropouts among all young adults within a specified age range. Status rates are higher than event rates because they include all dropouts ages 16 through 24, regardless of when they last attended school.

In addition to other survey limitations, dropout rates may be affected by survey coverage and exclusion of the institutionalized population. The incarcerated population has grown more rapidly and has a higher dropout rate than the general population. Dropout rates for the total population might be higher than those for the noninstitutionalized population if the prison and jail populations were included in the dropout rate calculations. On the other hand, if military personnel, who tend to be high school graduates, were included, it might offset some or all of the impact from the theoretical inclusion of the jail and prison population.

Another area of concern with tabulations involving young people in household surveys is the relatively low coverage ratio compared to older age groups. CPS undercoverage results from missed housing units and missed people within sample households. Overall CPS undercoverage for October 2012 is estimated to be about 14 percent. CPS coverage varies with age, sex, and race. Generally, coverage is larger for females than for males and larger for non-Blacks than for Blacks. For example, in October 2012 the coverage ratio for Black 20- to 24-year-old males was 63 percent. The CPS weighting procedure partially corrects for the bias due to undercoverage. Further information on CPS methodology may be obtained from <a href="http://www.census.gov/cps">http://www.census.gov/cps</a>.

Further information on the calculation of dropouts and dropout rates may be obtained from *Trends in High School Dropout and Completion Rates in the United States:* 1972–2009 (NCES 2012-006) at <a href="http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2012006">http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2012006</a> or by contacting

Chris Chapman
Sample Surveys Division
Cross-Sectional Surveys Branch
National Center for Education Statistics
1990 K Street NW
Washington, DC 20006
<a href="mailto:chapman@ed.gov">chris.chapman@ed.gov</a>

#### Educational Attainment

Reports documenting educational attainment are produced by the Census Bureau using March CPS supplement (Annual Social and Economic Supplement [ASEC]) results. The sample size for the 2013 ASEC supplement (including basic CPS) was about 99,000 households. The latest release is *Educational Attainment in the United States: 2013*; the tables may be downloaded at <a href="http://www.census.gov/hhes/socdemo/education/data/cps/2013/tables.html.gov/hhes/">http://www.census.gov/hhes/socdemo/education/data/cps/2013/tables.html.gov/hhes/</a>.

In addition to the general constraints of CPS, some data indicate that the respondents have a tendency to overestimate the educational level of members of their household. Some inaccuracy is due to a lack of the respondent's knowledge of the exact educational attainment of each household member and the hesitancy to acknowledge anything less than a high school education. Another cause of nonsampling variability is the change in the numbers in the armed services over the years.

Further information on CPS's educational attainment data may be obtained from

Education and Social Stratification Branch Census Bureau U.S. Department of Commerce 4600 Silver Hill Road Washington, DC 20233 http://www.census.gov/hhes/socdemo/education

#### School Enrollment

Each October, the Current Population Survey (CPS) includes supplemental questions on the enrollment status of the population ages 3 years and over. Prior to 2001, the October supplement consisted of approximately 47,000 interviewed households. Beginning with the October 2001 supplement, the sample was expanded by 9,000 to a total of approximately 56,000 interviewed households. The main sources of nonsampling variability in the responses to the supplement are those inherent in the survey instrument. The question of current enrollment may not be answered accurately for various reasons. Some

respondents may not know current grade information for every student in the household, a problem especially prevalent for households with members in college or in nursery school. Confusion over college credits or hours taken by a student may make it difficult to determine the year in which the student is enrolled. Problems may occur with the definition of nursery school (a group or class organized to provide educational experiences for children) where respondents' interpretations of "educational experiences" vary.

For the October 2012 basic CPS, the household-level nonresponse rate was 9.6 percent. The person-level nonresponse rate for the school enrollment supplement was an additional 9.2 percent. Since the basic CPS nonresponse rate is a household-level rate and the school enrollment supplement nonresponse rate is a person-level rate, these rates cannot be combined to derive an overall nonresponse rate. Nonresponding households may have fewer persons than interviewed ones, so combining these rates may lead to an overestimate of the true overall nonresponse rate for persons for the school enrollment supplement.

Further information on CPS methodology may be obtained from <a href="http://www.census.gov/cps">http://www.census.gov/cps</a>.

Further information on the CPS School Enrollment Supplement may be obtained from

Education and Social Stratification Branch Census Bureau U.S. Department of Commerce 4600 Silver Hill Road Washington, DC 20233 http://www.census.gov/hhes/school/index.html

## Decennial Census, Population Estimates, and Population Projections

The decennial census is a universe survey mandated by the U.S. Constitution. It is a questionnaire sent to every household in the country, and it is composed of seven questions about the household and its members (name, sex, age, relationship, Hispanic origin, race, and whether the housing unit is owned or rented). The Census Bureau also produces annual estimates of the resident population by demographic characteristics (age, sex, race, and Hispanic origin) for the nation, states, and counties, as well as national and state projections for the resident population. The reference date for population estimates is July 1 of the given year. With each new issue of July 1 estimates, the Census Bureau revises estimates for each year back to the last census. Previously published estimates are superseded and archived.

Census respondents self-report race and ethnicity. The race questions on the 1990 and 2000 censuses differed in some significant ways. In 1990, the respondent was instructed to select the one race "that the respondent

considers himself/herself to be," whereas in 2000, the respondent could select one or more races that the person considered himself or herself to be. American Indian, Eskimo, and Aleut were three separate race categories in 1990; in 2000, the American Indian and Alaska Native categories were combined, with an option to write in a tribal affiliation. This write-in option was provided only for the American Indian category in 1990. There was a combined Asian and Pacific Islander race category in 1990, but the groups were separated into two categories in 2000.

The census question on ethnicity asks whether the respondent is of Hispanic origin, regardless of the race option(s) selected; thus, persons of Hispanic origin may be of any race. In the 2000 census, respondents were first asked, "Is this person Spanish/Hispanic/Latino?" and then given the following options: No, not Spanish/ Hispanic/Latino; Yes, Puerto Rican; Yes, Mexican, Mexican American, Chicano; Yes, Cuban; and Yes, other Spanish/Hispanic/Latino (with space to print the specific group). In the 2010 census, respondents were asked "Is this person of Hispanic, Latino, or Spanish origin?" The options given were No, not of Hispanic, Latino, or Spanish origin; Yes, Mexican, Mexican Am., Chicano; Yes, Puerto Rican; Yes, Cuban; and Yes, another other Hispanic, Latino, or Spanish origin—along with instructions to print "Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on" in a specific box.

The 2000 and 2010 censuses each asked the respondent "What is this person's race?" and allowed the respondent to select one or more options. The options provided were largely the same in both the 2000 and 2010 censuses: White; Black, African American, or Negro; American Indian or Alaska Native (with space to print the name of enrolled or principal tribe); Asian Indian; Japanese; Native Hawaiian; Chinese; Korean; Guamanian or Chamorro; Filipino; Vietnamese; Samoan; Other Asian; Other Pacific Islander; and Some other race. The last three options included space to print the specific race. Two significant differences between the 2000 and 2010 census questions on race were that no race examples were provided for the "Other Asian" and "Other Pacific Islander" responses in 2000, whereas the race examples of "Hmong, Laotian, Thai, Pakistani, Cambodian, and so on" and "Fijian, Tongan, and so on," were provided for the "Other Asian" and "Other Pacific Islander" responses, respectively, in 2010.

The census population estimates program modified the enumerated population from the 2010 census to produce the population estimates base for 2010 and onward. As part of the modification, the Census Bureau recoded the "Some other race" responses from the 2010 census to one or more of the five OMB race categories used in the estimates program (for more information, see <a href="http://www.census.gov/popest/methodology/2012-nat-st-co-meth.pdf">http://www.census.gov/popest/methodology/2012-nat-st-co-meth.pdf</a>).

Further information on the decennial census may be obtained from <a href="http://www.census.gov">http://www.census.gov</a>.

# Survey of Income and Program Participation

The main objective of the Survey of Income and Program Participation (SIPP) is to provide accurate and comprehensive information about the income and program participation of individuals and households in the United States and about the principal determinants of income and program participation. SIPP offers detailed information on cash and noncash income on a subannual basis. The survey also collects data on taxes, assets, liabilities, and participation in government transfer programs. SIPP data allow the government to evaluate the effectiveness of federal, state, and local programs.

The survey design is a continuous series of national panels, with sample size ranging from approximately 14,000 to 36,700 interviewed households. The duration of each panel ranges from 2½ to 4 years. The SIPP sample is a multistage-stratified sample of the U.S. civilian noninstitutionalized population. For the 1984-93 panels, a new panel of households was introduced each year in February. A 4-year panel was introduced in April 1996. A 2000 panel was introduced in February 2000 for two waves, but was cancelled after 8 months. A 2½-year panel was introduced in February 2004 and is the first SIPP panel to use the 2000 decennial-based redesign of the sample. All household members ages 15 years and over are interviewed by self-response, if possible. Proxy response is permitted when household members are not available for interviewing. The latest panel was selected in September 2008.

The SIPP content is built around a "core" of labor force, program participation, and income questions designed to measure the economic situation of people in the United States. These questions expand the data currently available on the distribution of cash and noncash income and are repeated at each interviewing wave. The survey uses a 4-month recall period, with approximately the same number of interviews being conducted in each month of the 4-month period for each wave. Interviews are conducted by personal visit and by decentralized telephone.

The survey has been designed to also provide a broader context for analysis by adding questions on a variety of topics not covered in the core section. These questions are labeled "topical modules" and are assigned to particular interviewing waves of the survey. Topics covered by the modules include personal history, child care, wealth, program eligibility, child support, utilization and cost of healthcare, disability, school enrollment, taxes, and annual income.

Further information on the SIPP may be obtained from

Economics and Statistics Administration Census Bureau U.S. Department of Commerce 4600 Silver Hill Road Washington, DC 20233 http://www.census.gov/sipp/intro.html

### Other Organization Sources

### International Association for the Evaluation of Educational Achievement

The International Association for the Evaluation of Educational Achievement (IEA) is composed of governmental research centers and national research institutions around the world whose aim is to investigate education problems common among countries. Since its inception in 1958, the IEA has conducted more than 30 research studies of cross-national achievement. The regular cycle of studies encompasses learning in basic school subjects. Examples are the Trends in International Mathematics and Science Study (TIMSS) and the Progress in International Reading Literacy Study (PIRLS). IEA projects also include studies of particular interest to IEA members, such as the TIMSS 1999 Video Study of Mathematics and Science Teaching, the Civic Education Study, and studies on information technology in education.

The international bodies that coordinate international assessments vary in the labels they apply to participating education systems, most of which are countries. IEA differentiates between IEA members, which IEA refers to as "countries" in all cases, and "benchmarking participants." IEA members include countries such as the United States and Ireland, as well as subnational entities such as England and Scotland (which are both part of the United Kingdom), the Flemish community of Belgium, and Hong Kong-CHN (which is a Special Administrative Region of China). IEA benchmarking participants are all subnational entities and include Canadian provinces, U.S. states, and Dubai in the United Arab Emirates (among others). Benchmarking participants, like the participating countries, are given the opportunity to assess the comparative international standing of their students' achievement and to view their curriculum and instruction in an international context. Subnational entities that participated as benchmarking participants are excluded from this indicator's analysis.

Some IEA studies, such as TIMSS and PIRLS, include an assessment portion as well as contextual questionnaires to collect information about students' home and school experiences. The TIMSS and PIRLS scales, including the

scale averages and standard deviations, are designed to remain constant from assessment to assessment so that education systems (including countries and subnational education systems) can compare their scores over time, as well as compare their scores directly with the scores of other education systems. Although each scale was created to have a mean of 500 and a standard deviation of 100, the subject matter and the level of difficulty of items necessarily differ by grade, subject, and domain/dimension. Therefore, direct comparisons between scores across grades, subjects, and different domain/dimension types should not be made.

Further information on the International Association for the Evaluation of Educational Achievement may be obtained from <a href="http://www.iea.nl">http://www.iea.nl</a>.

## Trends in International Mathematics and Science Study

The Trends in International Mathematics and Science Study (TIMSS, formerly known as the Third International Mathematics and Science Study) provides reliable and timely data on the mathematics and science achievement of U.S. fourth- and eighth-graders compared with that of their peers in other countries. TIMSS is on a 4-year cycle, with data collection occurring in 1995, 1999 (eighth grade only), 2003, 2007, and 2011. In 2011, a total of 77 education systems, including 63 IEA members and 14 benchmarking participants, participated in TIMSS. The next TIMSS data collection is scheduled for 2015. TIMSS collects information through mathematics and science assessments and questionnaires. The questionnaires request information to help provide a context for student performance, focusing on such topics as students' attitudes and beliefs about learning mathematics and science, what students do as part of their mathematics and science lessons, students' completion of homework, and their lives both in and outside of school; teachers' perceptions of their preparedness for teaching mathematics and science topics, teaching assignments, class size and organization, instructional content and practices, and participation in professional development activities; and principals' viewpoints on policy and budget responsibilities, curriculum and instruction issues, and student behavior, as well as descriptions of the organization of schools and courses. The assessments and questionnaires are designed to specifications in a guiding framework. The TIMSS framework describes the mathematics and science content to be assessed and provides grade-specific objectives, an overview of the assessment design, and guidelines for item development.

## Progress in International Reading Literacy Study

The Progress in International Reading Literacy Study (PIRLS) provides reliable and timely data on the reading literacy of U.S. fourth-graders compared with that of their

peers in other countries. PIRLS is on a 5-year cycle, with data having been collected in 2001, 2006, and 2011. In 2011, a total of 57 education systems, including 48 IEA members and 9 benchmarking participants, participated in PIRLS. The next PIRLS data collection is scheduled for 2016. PIRLS collects information through a reading literacy assessment and questionnaires that help to provide a context for student performance. Questionnaires are administered to collect information about students' home and school experiences in learning to read. A student questionnaire addresses students' attitudes towards reading and their reading habits. In addition, questionnaires are given to students' teachers and school principals to gather information about students' school experiences in developing reading literacy. In countries other than the United States, a parent questionnaire is also administered. The assessments and questionnaires are designed to specifications in a guiding framework. The PIRLS framework describes the reading content to be assessed and provides objectives specific to fourth grade, an overview of the assessment design, and guidelines for item development.

## TIMSS and PIRLS Sampling and Response Rates

It is not feasible to assess every fourth- or eighth-grade student in the United States. As is done in all participating countries and other education systems, representative samples of students are selected. The sample design employed by TIMSS and PIRLS in 2011 is generally referred to as a two-stage stratified cluster sample. In the first stage of sampling, individual schools were selected with a probability proportionate to size (PPS) approach, which means that the probability is proportional to the estimated number of students enrolled in the target grade. In the second stage of sampling, intact classrooms were selected within sampled schools.

TIMSS and PIRLS guidelines call for a minimum of 150 schools to be sampled, with a minimum of 4,000 students assessed. The basic sample design of one classroom per school was designed to yield a total sample of approximately 4,500 students per population.

About 23,000 students in almost 900 schools across the United States participated in the 2011 TIMSS, joining 600,000 other student participants around the world. Because the Progress in International Reading Literacy Study (PIRLS) was also administered at grade 4 in spring 2011, TIMSS and PIRLS in the United States were administered in the same schools to the extent feasible. Students took either TIMSS or PIRLS on the day of the assessments. About 13,000 U.S. students participated in PIRLS in 2011, joining 300,000 other student participants around the world. Accommodations were not provided for students with disabilities or students who were unable to read or speak the language of the test. These students were excluded from the sample. The IEA

requirement is that the overall exclusion rate, which is composed of exclusions of schools and students, should not exceed more than 5 percent of the national desired target population.

In order to minimize the potential for response biases, the IEA developed participation or response rate standards that apply to all participating education systems and govern whether or not an education system's data are included in the TIMSS or PIRLS international datasets and the way in which its statistics are presented in the international reports. These standards were set using composites of response rates at the school, classroom, and student and teacher levels. Response rates were calculated with and without the inclusion of substitute schools that were selected to replace schools refusing to participate. In TIMSS 2011 at grade 4 in the United States, the weighted school participation rate was 79 percent before the use of substitute schools and 84 percent after the use of replacement schools; the weighted student response rate was 95 percent. In TIMSS 2011 at grade 8 in the United States, the weighted school participation rate was 87 percent before the use of substitute schools and 87 percent after the use of replacement schools; the weighted student response rate was 94 percent. In the 2011 PIRLS administered in the United States, the weighted school participation rate was 80 percent before the use of substitute schools and 85 percent after the use of replacement schools; the weighted student response rate was 96 percent.

Further information on the TIMSS study may be obtained from

Stephen Provasnik
Assessments Division
International Assessment Branch
National Center for Education Statistics
1990 K Street NW, Room 9034
Washington, DC 20006
(202) 502-7480
stephen.provasnik@ed.gov
http://nces.ed.gov/timss
http://www.iea.nl/timss 2011.html

Further information on the PIRLS study may be obtained from

Sheila Thompson
Assessments Division
International Assessment Branch
National Center for Education Statistics
1990 K Street NW, Room 9031
Washington, DC 20006
(202) 502-7425
sheila.thompson@ed.gov
http://nces.ed.gov/surveys/pirls/
http://www.iea.nl/pirls\_2011.html

# Organization for Economic Cooperation and Development

The Organization for Economic Cooperation and Development (OECD) publishes analyses of national policies and survey data in education, training, and economics in OECD and partner countries. Newer studies include student survey data on financial literacy and on digital literacy.

### Education at a Glance (EAG)

To highlight current education issues and create a set of comparative education indicators that represent key features of education systems, OECD initiated the Indicators of Education Systems (INES) project and charged the Centre for Educational Research and Innovation (CERI) with developing the cross-national indicators for it. The development of these indicators involved representatives of the OECD countries and the OECD Secretariat. Improvements in data quality and comparability among OECD countries have resulted from the country-to-country interaction sponsored through the INES project. The most recent publication in this series is Education at a *Glance 2012: OECD Indicators*.

The 2013 EAG featured the 34 OECD countries: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, the Republic of Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. In addition to the 34 OECD countries, two non-OECD countries that participated in OECD's Indicators of Education Systems (INES) program, Brazil and the Russian Federation, were often included, along with six other G20 countries that did not participate in INES (Argentina, China, India, Indonesia, Saudi Arabia, and South Africa).

The OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions, and Classifications provides countries with specific guidance on how to prepare information for OECD education surveys; facilitates countries' understanding of OECD indicators and their use in policy analysis; and provides a reference for collecting and assimilating educational data. Chapter 7 of the OECD Handbook for Internationally Comparative Education Statistics contains a discussion of data quality issues. Users should examine footnotes carefully to recognize some of the data limitations.

Further information on international education statistics may be obtained from

Andreas Schleicher Deputy Director for Education and Skills and Special Advisor on Education Policy to the OECD's Secretary General OECD Directorate for Education and Skills 2, rue André Pascal 75775 Paris CEDEX 16 France andreas.schleicher@oecd.org http://www.oecd.org

### Program for International Student Assessment

The Program for International Student Assessment (PISA) is a system of international assessments that focuses on 15-year-olds' capabilities in reading literacy, mathematics literacy, and science literacy. PISA also includes measures of general, or cross-curricular, competencies such as learning strategies. PISA emphasizes functional skills that students have acquired as they near the end of mandatory schooling. PISA is organized by the Organization for Economic Cooperation and Development (OECD), an intergovernmental organization of industrialized countries, and was administered for the first time in 2000, when 43 education systems participated. In 2003, 41 education systems participated in the assessment; in 2006, 57 education systems (30 OECD member countries and 27 nonmember countries or education systems) participated; and in 2009, 65 education systems (34 OECD member countries and 31 nonmember countries or education systems) participated. (An additional nine education systems administered PISA 2009 in 2010.) In PISA 2012, the most recent administration of PISA, 65 education systems (34 OECD member countries and 31 nonmember countries or education systems), as well as the U.S. states of Connecticut, Florida, and Massachusetts, participated. PISA is a 2-hour paper-and-pencil exam. Assessment items include a combination of multiplechoice questions and open-ended questions that require students to develop their own response. PISA scores are reported on a scale that ranges from 0 to 1,000, with the OECD mean set at 500 and a standard deviation set at 100. In 2012, mathematics, science, and reading literacy were assessed primarily through a paper-and-pencil exam, and problem-solving was administered using a computer-based exam. Education systems could also participate in optional pencil-and-paper financial literacy

assessments and computer-based mathematics and reading assessments. PISA is implemented on a 3-year cycle that began in 2000. Each PISA assessment cycle focuses on one subject in particular, although all three subjects are assessed every 3 years. In the first cycle, PISA 2000, reading literacy was the major focus, occupying roughly two-thirds of assessment time. For 2003, PISA focused on mathematics literacy as well as the ability of students to solve problems in real-life settings. In 2006, PISA focused on science literacy. In 2009, PISA focused on reading literacy again. In 2012, PISA focused on mathematics literacy.

The intent of PISA reporting is to provide an overall description of performance in reading literacy, mathematics literacy, and science literacy every 3 years, and to provide a more detailed look at each domain in the years when it is the major focus. These cycles will allow education systems to compare changes in trends for each of the three subject areas over time.

To implement PISA, each of the participating education systems scientifically draws a nationally representative sample of 15-year-olds, regardless of grade level. In the United States, about 6,100 students from 161 public and private schools took the PISA 2012 assessment. In the U.S. state education systems, about 1,700 students at 50 schools in Connecticut, about 1,900 students at 54 schools in Florida, and about 1,700 students at 49 schools in Massachusetts took the 2012 assessment. PISA 2012 was only administered at public schools in the U.S. state education systems.

In each education system, the assessment is translated into the primary language of instruction; in the United States, all materials are written in English.

Further information on PISA may be obtained from

Holly Xie Dana Kelly Assessments Division International Assessment Branch National Center for Education Statistics 1990 K Street NW Washington, DC 20006 holly.xie@ed.gov dana.kelly@ed.gov http://nces.ed.gov/surveys/pisa

This page intentionally left blank.

## Glossary

#### Α

Achievement gap Occurs when one group of students outperforms another group, and the difference in average scores for the two groups is statistically significant (that is, larger than the margin of error).

Achievement levels, NAEP Specific achievement levels for each subject area and grade to provide a context for interpreting student performance. At this time they are being used on a trial basis.

**Basic**—denotes partial mastery of the knowledge and skills that are fundamental for *proficient* work at a given grade.

**Proficient**—represents solid academic performance. Students reaching this level have demonstrated competency over challenging subject matter.

Advanced—signifies superior performance.

Associate's degree A degree granted for the successful completion of a sub-baccalaureate program of studies, usually requiring at least 2 years (or equivalent) of fulltime college-level study. This includes degrees granted in a cooperative or work-study program.

Averaged freshman graduation rate (AFGR) A measure of the percentage of the incoming high school freshman class that graduates 4 years later. It is calculated by taking the number of graduates with a regular diploma and dividing that number by the estimated count of incoming freshman 4 years earlier, as reported through the NCES Common Core of Data (CCD). The estimated count of incoming freshman is the sum of the number of 8th-graders 5 years earlier, the number of 9th-graders 4 years earlier (when current seniors were freshman), and the number of 10th-graders 3 years earlier, divided by 3. The purpose of this averaging is to account for the high rate of grade retention in the freshman year, which adds 9th-grade repeaters from the previous year to the number of students in the incoming freshman class each year. Ungraded students are allocated to individual grades proportional to each state's enrollment in those grades. The AFGR treats students who transfer out of a school or district in the same way as it treats students from that school or district who drop out.

#### В

Bachelor's degree A degree granted for the successful completion of a baccalaureate program of studies, usually requiring at least 4 years (or equivalent) of full-time college-level study. This includes degrees granted in a cooperative or work-study program.

#### C

*Charter school* A school providing free public elementary and/or secondary education to eligible students under a specific charter granted by the state legislature or other appropriate authority, and designated by such authority to be a charter school.

Classification of Instructional Programs (CIP) The CIP is a taxonomic coding scheme that contains titles and descriptions of primarily postsecondary instructional programs. It was developed to facilitate NCES' collection and reporting of postsecondary degree completions by major field of study using standard classifications that capture the majority of reportable program activity. It was originally published in 1980 and was revised in 1985, 1990, 2000, and 2010.

College A postsecondary school which offers general, or liberal arts education, usually leading to an associate's, bachelor's, master's, doctor's, or first-professional degree. Junior colleges and community colleges are included under this terminology.

Combined school A school that encompasses instruction at both the elementary and the secondary levels; includes schools starting with grade 6 or below and ending with grade 9 or above.

Constant dollars Dollar amounts that have been adjusted by means of price and cost indexes to eliminate inflationary factors and allow direct comparison across

Consumer Price Index (CPI) This price index measures the average change in the cost of a fixed market basket of goods and services purchased by consumers. Indexes vary for specific areas or regions, periods of time, major groups of consumer expenditures, and population groups. The CPI reflects spending patterns for two population groups: (1) all urban consumers and urban wage earners and (2) clerical workers. CPIs are calculated for both the calendar year and the school year using the U.S. All Items CPI for All Urban Consumers (CPI-U). The calendar year CPI is the same as the annual CPI-U. The school year CPI is calculated by adding the monthly CPI-U figures, beginning with July of the first year and ending with June of the following year, and then dividing that figure by 12.

Current expenditures (elementary/secondary) The expenditures for operating local public schools, excluding capital outlay and interest on school debt. These expenditures include such items as salaries for school personnel, benefits, student transportation, school books and materials, and energy costs. Beginning in 1980-81, expenditures for state administration are excluded.

*Instruction expenditures* Includes expenditures for activities related to the interaction between teacher and students. Includes salaries and benefits for teachers and

instructional aides, textbooks, supplies, and purchased services such as instruction via television. Also included are tuition expenditures to other local education agencies.

Administration expenditures Includes expenditures for school administration (i.e., the office of the principal, full-time department chairpersons, and graduation expenses), general administration (the superintendent and board of education and their immediate staff), and other support services expenditures.

**Transportation** Includes expenditures for vehicle operation, monitoring, and vehicle servicing and maintenance.

**Food services** Includes all expenditures associated with providing food to students and staff in a school or school district. The services include preparing and serving regular and incidental meals or snacks in connection with school activities, as well as the delivery of food to schools.

Enterprise operations Includes expenditures for activities that are financed, at least in part, by user charges, similar to a private business. These include operations funded by sales of products or services, together with amounts for direct program support made by state education agencies for local school districts.

#### D

**Default rate** The percentage of loans that are in delinquency and have not been repaid according to the terms of the loan. According to the federal government, a federal student loan is in default if there has been no payment on the loan in 270 days. The Department of Education calculates a *2-year cohort* default rate, which is the percentage of students who entered repayment in a given fiscal year (from October 1 to September 30) and then defaulted within the following two fiscal years.

**Degree-granting institutions** Postsecondary institutions that are eligible for Title IV federal financial aid programs and grant an associate's or higher degree. For an institution to be eligible to participate in Title IV financial aid programs it must offer a program of at least 300 clock hours in length, have accreditation recognized by the U.S. Department of Education, have been in business for at least 2 years, and have signed a participation agreement with the Department.

**Disabilities, children with** Those children evaluated as having any of the following impairments and needing special education and related services because of these impairments. (These definitions apply specifically to data from the U.S. Office of Special Education and Rehabilitative Services presented in this publication.)

**Deaf-blindness** Having concomitant hearing and visual impairments which cause such severe communication and other developmental and educational problems that the student cannot be accommodated in special education programs solely for deaf or blind students.

**Deafness** Having a hearing impairment which is so severe that the student is impaired in processing linguistic information through hearing (with or without amplification) and which adversely affects educational performance.

**Hearing impairment** Having a hearing impairment, whether permanent or fluctuating, which adversely affects the student's educational performance, but which is not included under the definition of "deaf" in this section.

*Intellectual disability* Having significantly subaverage general intellectual functioning, existing concurrently with defects in adaptive behavior and manifested during the developmental period, which adversely affects the child's educational performance.

Multiple disabilities Having concomitant impairments (such as intellectually disabled-blind, intellectually disabled-orthopedically impaired, etc.), the combination of which causes such severe educational problems that the student cannot be accommodated in special education programs solely for one of the impairments. Term does not include deaf-blind students.

**Orthopedic impairment** Having a severe orthopedic impairment which adversely affects a student's educational performance. The term includes impairment resulting from congenital anomaly, disease, or other causes.

Other health impairment Having limited strength, vitality, or alertness due to chronic or acute health problems, such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, or diabetes, which adversely affect the student's educational performance.

Serious emotional disturbance Exhibiting one or more of the following characteristics over a long period of time, to a marked degree, and adversely affecting educational performance: an inability to learn which cannot be explained by intellectual, sensory, or health factors; an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; or a tendency to develop physical symptoms or fears associated with personal or school problems. This term does not include children

who are socially maladjusted, unless they also display one or more of the listed characteristics.

Specific learning disability Having a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. The term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or environmental, cultural, or economic disadvantage.

Speech/language impairment Having a communication disorder, such as stuttering, impaired articulation, language impairment, or voice impairment, which adversely affects the student's educational performance.

Visual impairment Having a visual impairment which, even with correction, adversely affects the student's educational performance. The term includes partially seeing and blind children.

**Doctor's degree** An earned degree that generally carries the title of Doctor. The Doctor of Philosophy degree (Ph.D.) is the highest academic degree and requires mastery within a field of knowledge and demonstrated ability to perform scholarly research. Other doctor's degrees are awarded for fulfilling specialized requirements in professional fields, such as education (Ed.D.), musical arts (D.M.A.), business administration (D.B.A.), and engineering (D.Eng. or D.E.S.). Many doctor's degrees in academic and professional fields require an earned master's degree as a prerequisite. The doctor's degree classification includes most degrees that NCES formerly classified as first-professional degrees. Such degrees are awarded in the fields of dentistry (D.D.S. or D.M.D.), medicine (M.D.), optometry (O.D.), osteopathic medicine (D.O.), pharmacy (Pharm.D.), podiatry (D.P.M., Pod.D., or D.P.), veterinary medicine (D.V.M.), chiropractic (D.C. or D.C.M.), and law (L.L.B. or J.D.).

**Dropout** The term is used to describe both the event of leaving school before completing high school and the status of an individual who is not in school and who is not a high school completer. High school completers include both graduates of school programs as well as those completing high school through equivalency programs such as the General Educational Development (GED) program. Transferring from a public school to a private school, for example, is not regarded as a dropout event. A person who drops out of school may later return and graduate but is called a "dropout" at the time he or she leaves school. Measures to describe these behaviors include the event dropout rate (or the closely related school persistence rate), the status dropout rate, and the high school completion rate.

#### Ε

**Educational attainment** The highest grade of regular school attended and completed.

Educational attainment (Current Population Survey) This measure uses March CPS data to estimate the percentage of civilian, noninstitutionalized people ages 25 through 29 who have achieved certain levels of educational attainment. Estimates of educational attainment do not differentiate between those who graduated from public schools, those who graduated from private schools, and those who earned a GED; these estimates also include individuals who earned their credential or completed their highest level of education outside of the United States.

1972-1991 During this period, an individual's educational attainment was considered to be his or her last fully completed year of school. Individuals who completed 12 years of schooling were deemed to be high school graduates, as were those who began but did not complete the first year of college. Respondents who completed 16 or more years of schooling were counted as college graduates.

1992-present Beginning in 1992, CPS asked respondents to report their highest level of school completed or their highest degree received. This change means that some data collected before 1992 are not strictly comparable with data collected from 1992 onward and that care must be taken when making comparisons across years. The revised survey question emphasizes credentials received rather than the last grade level attended or completed. The new categories include the following:

- High school graduate, high school diploma, or the equivalent (e.g., GED)
- Some college but no degree
- Associate's degree in college, occupational/ vocational program
- Associate's degree in college, academic program (e.g., A.A., A.S., A.A.S.)
- Bachelor's degree (e.g., B.A., A.B., B.S.)
- Master's degree (e.g., M.A., M.S., M.Eng., M.Ed., M.S.W., M.B.A.)
- Professional school degree (e.g., M.D., D.D.S., D.V.M., LL.B., J.D.)
- Doctor's degree (e.g., Ph.D., Ed.D.)

**Elementary school** A school classified as elementary by state and local practice and composed of any span of grades not above grade 8.

English language learner (ELL) An individual who, due to any of the reasons listed below, has sufficient difficulty speaking, reading, writing, or understanding the English language to be denied the opportunity to learn successfully in classrooms where the language of instruction is English or to participate fully in the larger U.S. society. Such an individual (1) was not born in the United States or has a native language other than English; (2) comes from environments where a language other than English is dominant; or (3) is an American Indian or Alaska Native and comes from environments where a language other than English has had a significant impact on the individual's level of English language proficiency.

Expenditures, total For elementary/secondary schools, these include all charges for current outlays plus capital outlays and interest on school debt. For degree-granting institutions, these include current outlays plus capital outlays. For government, these include charges net of recoveries and other correcting transactions other than for retirement of debt, investment in securities, extension of credit, or as agency transactions. Government expenditures include only external transactions, such as the provision of perquisites or other payments in kind. Aggregates for groups of governments exclude intergovernmental transactions among the governments.

**Expenditures per pupil** Charges incurred for a particular period of time divided by a student unit of measure, such as average daily attendance or fall enrollment.

#### F

Financial aid Grants, loans, assistantships, scholarships, fellowships, tuition waivers, tuition discounts, veteran's benefits, employer aid (tuition reimbursement), and other monies (other than from relatives or friends) provided to students to help them meet expenses. Except where designated, includes Title IV subsidized and unsubsidized loans made directly to students.

**For-profit institution** A private institution in which the individual(s) or agency in control receives compensation other than wages, rent, or other expenses for the assumption of risk.

*Free or reduced-price lunch* See National School Lunch Program.

Full-time enrollment The number of students enrolled in higher education courses with total credit load equal to at least 75 percent of the normal full-time course load. At the undergraduate level, full-time enrollment includes students who have a credit load of 12 or more semester or quarter credits. At the postbaccalaureate level, full-time enrollment includes students who have a credit load of 9 or more semester or quarter credits, as well as other students who are considered full time by their institutions.

*Full-time-equivalent (FTE) enrollment* For institutions of higher education, enrollment of full-time students, plus the full-time equivalent of part-time students. The

full-time equivalent of the part-time students is estimated using different factors depending on the type and control of institution and level of student.



*GED certificate* This award is received following successful completion of the General Educational Development (GED) test. The GED program, sponsored by the American Council on Education, enables individuals to demonstrate that they have acquired a level of learning comparable to that of high school graduates. See also High school equivalency certificate.

Graduate enrollment The number of students who are working towards a master's or doctor's degree. These enrollment data measure those students who are registered at a particular time during the fall. At some institutions, graduate enrollment also includes students who are in postbaccalaureate classes but not in degree programs. In most tables, graduate enrollment includes all students in regular graduate programs and all students in postbaccalaureate classes but not in degree programs (unclassified postbaccalaureate students).

Gross domestic product (GDP) The total national output of goods and services valued at market prices. GDP can be viewed in terms of expenditure categories which include purchases of goods and services by consumers and government, gross private domestic investment, and net exports of goods and services. The goods and services included are largely those bought for final use (excluding illegal transactions) in the market economy. A number of inclusions, however, represent imputed values, the most important of which is rental value of owner-occupied housing. GDP, in this broad context, measures the output attributable to the factors of production—labor and property—supplied by U.S. residents.

#### Н

**High school completer** An individual who has been awarded a high school diploma or an equivalent credential, including a General Educational Development (GED) certificate.

*High school diploma* A formal document regulated by the state certifying the successful completion of a prescribed secondary school program of studies. In some states or communities, high school diplomas are differentiated by type, such as an academic diploma, a general diploma, or a vocational diploma.

High school equivalency certificate A formal document certifying that an individual has met the state requirements for high school graduation equivalency by obtaining satisfactory scores on an approved examination and meeting other performance requirements (if any) set by a state education agency or other appropriate body.

One particular version of this certificate is the General Educational Development (GED) test. The GED test is a comprehensive test used primarily to appraise the educational development of students who have not completed their formal high school education and who may earn a high school equivalency certificate by achieving satisfactory scores. GEDs are awarded by the states or other agencies, and the test is developed and distributed by the GED Testing Service of the American Council on Education.

#### Higher education institutions (basic classification)

**4-year institution** An institution legally authorized to offer and offering at least a 4-year program of collegelevel studies wholly or principally creditable toward a baccalaureate degree. In some tables, a further division between universities and other 4-year institutions is made. A "university" is a postsecondary institution which typically comprises one or more graduate professional schools. For purposes of trend comparisons in this volume, the selection of universities has been held constant for all tabulations after 1982. "Other 4-year institutions" would include the rest of the nonuniversity 4-year institutions.

**2-year institution** An institution legally authorized to offer and offering at least a 2-year program of collegelevel studies which terminates in an associate degree or is principally creditable toward a baccalaureate degree. Also includes some institutions that have a less than 2-year program but were designated as institutions of higher education in the Higher Education General Information Survey.

*Less-than-2-year institution* An institution that offers programs of less than 2 years' duration below the baccalaureate level. Includes occupational and vocational schools with programs that do not exceed 1,800 contact hours.

Individuals with Disabilities Education Act (IDEA)

IDEA is a federal law requiring services to children with disabilities throughout the nation. IDEA governs how states and public agencies provide early intervention, special education, and related services to more than 6.8 million eligible infants, toddlers, children, and youth with disabilities. Infants and toddlers with disabilities (birth-age 2) and their families receive early intervention services under IDEA, Part C. Children and youth (ages 3-21) receive special education and related services under IDEA, Part B.

International Standard Classification of Education (ISCED) Used to compare educational systems in different countries. ISCED is the standard used by

many countries to report education statistics to the United Nations Educational, Scientific, and Cultural Organization (UNESCO) and the Organization for Economic Cooperation and Development (OECD). ISCED divides educational systems into the following seven categories, based on six levels of education.

**ISCED Level 0** Education preceding the first level (early childhood education) usually begins at age 3, 4, or 5 (sometimes earlier) and lasts from 1 to 3 years, when it is provided. In the United States, this level includes nursery school and kindergarten.

**ISCED Level 1** Education at the first level (primary or elementary education) usually begins at age 5, 6, or 7 and continues for about 4 to 6 years. For the United States, the first level starts with 1st grade and ends with 6th grade.

ISCED Level 2 Education at the second level (lower secondary education) typically begins at about age 11 or 12 and continues for about 2 to 6 years. For the United States, the second level starts with 7th grade and typically ends with 9th grade. Education at the lower secondary level continues the basic programs of the first level, although teaching is typically more subject focused, often using more specialized teachers who conduct classes in their field of specialization. The main criterion for distinguishing lower secondary education from primary education is whether programs begin to be organized in a more subject-oriented pattern, using more specialized teachers conducting classes in their field of specialization. If there is no clear breakpoint for this organizational change, lower secondary education is considered to begin at the end of 6 years of primary education. In countries with no clear division between lower secondary and upper secondary education, and where lower secondary education lasts for more than 3 years, only the first 3 years following primary education are counted as lower secondary education.

**ISCED Level 3** Education at the third level (upper secondary education) typically begins at age 15 or 16 and lasts for approximately 3 years. In the United States, the third level starts with 10th grade and ends with 12th grade. Upper secondary education is the final stage of secondary education in most OECD countries. Instruction is often organized along subjectmatter lines, in contrast to the lower secondary level, and teachers typically must have a higher level, or more subject-specific, qualification. There are substantial differences in the typical duration of programs both across and between countries, ranging from 2 to 5 years of schooling. The main criteria for classifications are (1) national boundaries between lower and upper secondary education and (2) admission into educational programs, which usually requires the completion of lower secondary education or a

combination of basic education and life experience that demonstrates the ability to handle the subject matter in upper secondary schools.

ISCED Level 4 Education at the fourth level (postsecondary nontertiary education) straddles the boundary between secondary and postsecondary education. This program of study, which is primarily vocational in nature, is generally taken after the completion of secondary school and typically lasts from 6 months to 2 years. Although the content of these programs may not be significantly more advanced than upper secondary programs, these programs serve to broaden the knowledge of participants who have already gained an upper secondary qualification.

**ISCED Level 5** Education at the fifth level (first stage of tertiary education) includes programs with more advanced content than those offered at the two previous levels. Entry into programs at the fifth level normally requires successful completion of either of the two previous levels.

ISCED Level 5A Tertiary-type A programs provide an education that is largely theoretical and is intended to provide sufficient qualifications for gaining entry into advanced research programs and professions with high skill requirements. Entry into these programs normally requires the successful completion of an upper secondary education; admission is competitive in most cases. The minimum cumulative theoretical duration at this level is 3 years of full-time enrollment. In the United States, tertiary-type A programs include first university programs that last approximately 4 years and lead to the award of a bachelor's degree and second university programs that lead to a master's degree.

ISCED Level 5B Tertiary-type B programs are typically shorter than tertiary-type A programs and focus on practical, technical, or occupational skills for direct entry into the labor market, although they may cover some theoretical foundations in the respective programs. They have a minimum duration of 2 years of full-time enrollment at the tertiary level. In the United States, such programs are often provided at community colleges and lead to an associate's degree.

**ISCED Level 6** Education at the sixth level (advanced research qualification) is provided in graduate and professional schools that generally require a university degree or diploma as a minimum condition for admission. Programs at this level lead to the award of an advanced, postgraduate degree, such as a Ph.D. The theoretical duration of these programs is 3 years of full-time enrollment in most countries (for a cumulative total of at least 7 years at levels five and six), although

the length of the actual enrollment is often longer. Programs at this level are devoted to advanced study and original research.

#### M

Master's degree A degree awarded for successful completion of a program generally requiring 1 or 2 years of full-time college-level study beyond the bachelor's degree. One type of master's degree, including the Master of Arts degree, or M.A., and the Master of Science degree, or M.S., is awarded in the liberal arts and sciences for advanced scholarship in a subject field or discipline and demonstrated ability to perform scholarly research. A second type of master's degree is awarded for the completion of a professionally oriented program, for example, an M.Ed. in education, an M.B.A. in business administration, an M.F.A. in fine arts, an M.M. in music, an M.S.W. in social work, and an M.P.A. in public administration. Some master's degrees—such as divinity degrees (M.Div. or M.H.L./Rav), which were formerly classified as "first-professional"—may require more than 2 years of full-time study beyond the bachelor's degree.

#### Ν

National School Lunch Program Established by President Truman in 1946, the program is a federally assisted meal program operated in public and private nonprofit schools and residential child care centers. To be eligible for free lunch, a student must be from a household with an income at or below 130 percent of the federal poverty guideline; to be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the federal poverty guideline.

**Nonprofit institution** A private institution in which the individual(s) or agency in control receives no compensation other than wages, rent, or other expenses for the assumption of risk. Nonprofit institutions may be either independent nonprofit (i.e., having no religious affiliation) or religiously affiliated.

**Nursery school** An instructional program for groups of children during the year or years preceding kindergarten, which provides educational experiences under the direction of teachers. See also Prekindergarten.

#### 0

Organization for Economic Cooperation and Development (OECD) An intergovernmental organization of 34 industrialized countries that serves as a forum for member countries to cooperate in research and policy development on social and economic topics of common interest. These countries include: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece,

Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States. In addition to member countries, partner countries (Brazil, China, India, Indonesia, Russia, and South Africa) contribute to the OECD's work in a sustained and comprehensive manner.

**Part-time enrollment** The number of students enrolled in higher education courses with a total credit load less than 75 percent of the normal full-time credit load. At the undergraduate level, part-time enrollment includes students who have a credit load of less than 12 semester or quarter credits. At the postbaccalaureate level, full-time enrollment includes students who have a credit load of less than 9 semester or quarter credits.

Postbaccalaureate enrollment The number of students working towards advanced degrees and of students enrolled in graduate-level classes but not enrolled in degree programs. See also Graduate enrollment.

**Postsecondary education** The provision of formal instructional programs with a curriculum designed primarily for students who have completed the requirements for a high school diploma or equivalent. This includes programs of an academic, vocational, and continuing professional education purpose, and excludes avocational and adult basic education programs.

**Poverty** The U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition. A family, along with each individual in it, is considered poor if the family's total income is less than that family's threshold. The poverty thresholds do not vary geographically and are adjusted annually for inflation using the Consumer Price Index. The official poverty definition counts money income before taxes and does not include capital gains and noncash benefits (such as public housing, Medicaid, and food stamps).

**Prekindergarten** Preprimary education for children typically ages 3-4 who have not yet entered kindergarten. It may offer a program of general education or special education and may be part of a collaborative effort with Head Start.

**Private institution** An institution that is controlled by an individual or agency other than a state, a subdivision of a state, or the federal government, which is usually supported primarily by other than public funds, and the operation of whose program rests with other than publicly elected or appointed officials.

Private nonprofit institution An institution in which the individual(s) or agency in control receives no compensation other than wages, rent, or other

expenses for the assumption of risk. These include both independent nonprofit institutions and those affiliated with a religious organization.

Private for-profit institution An institution in which the individual(s) or agency in control receives compensation other than wages, rent, or other expenses for the assumption of risk (e.g., proprietary schools).

**Private school** Private elementary/secondary schools surveyed by the Private School Universe Survey (PSS) are assigned to one of three major categories (Catholic, other religious, or nonsectarian) and, within each major category, one of three subcategories based on the school's religious affiliation provided by respondents.

*Catholic* Schools categorized according to governance, provided by Catholic school respondents, into parochial, diocesan, and private schools.

Other religious Schools that have a religious orientation or purpose but are not Roman Catholic. Other religious schools are categorized according to religious association membership, provided by respondents, into Conservative Christian, other affiliated, and unaffiliated schools. Conservative Christian schools are those "Other religious" schools with membership in at least one of four associations: Accelerated Christian Education, American Association of Christian Schools, Association of Christian Schools International, and Oral Roberts University Education Fellowship. Affiliated schools are those "Other religious" schools not classified as Conservative Christian with membership in at least 1 of 11 associations—Association of Christian Teachers and Schools, Christian Schools International, Evangelical Lutheran Education Association, Friends Council on Education, General Conference of the Seventh-Day Adventist Church, Islamic School League of America, National Association of Episcopal Schools, National Christian School Association, National Society for Hebrew Day Schools, Solomon Schechter Day Schools, and Southern Baptist Association of Christian Schools—or indicating membership in "other religious school associations." Unaffiliated schools are those "Other religious" schools that have a religious orientation or purpose but are not classified as Conservative Christian or affiliated.

**Nonsectarian** Schools that do not have a religious orientation or purpose and are categorized according to program emphasis, provided by respondents, into regular, special emphasis, and special education schools. Regular schools are those that have a regular elementary/secondary or early childhood program emphasis. Special emphasis schools are those that have a Montessori, vocational/technical, alternative, or special program emphasis. Special education schools are those that have a special education program emphasis.

**Property tax** The sum of money collected from a tax levied against the value of property.

**Public school or institution** A school or institution controlled and operated by publicly elected or appointed officials and deriving its primary support from public funds.

Purchasing Power Parity (PPP) indexes PPP exchange rates, or indexes, are the currency exchange rates that equalize the purchasing power of different currencies, meaning that when a given sum of money is converted into different currencies at the PPP exchange rates, it will buy the same basket of goods and services in all countries. PPP indexes are the rates of currency conversion that eliminate the difference in price levels among countries. Thus, when expenditures on gross domestic product (GDP) for different countries are converted into a common currency by means of PPP indexes, they are expressed at the same set of international prices, so that comparisons among countries reflect only differences in the volume of goods and services purchased.

#### R

Raciallethnic group Classification indicating general racial or ethnic heritage. Race/ethnicity data are based on the *Hispanic* ethnic category and the race categories listed below (five single-race categories, plus the *two or more races* category). Race categories exclude persons of Hispanic ethnicity unless otherwise noted.

White A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

**Black or African American** A person having origins in any of the black racial groups of Africa. Used interchangeably with the shortened term *Black*.

*Hispanic or Latino* A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. Used interchangeably with the shortened term *Hispanic*.

Asian A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. Prior to 2010–11, the Common Core of Data (CCD) combined Asian and Pacific Islander categories.

Native Hawaiian or Other Pacific Islander A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

Prior to 2010–11, the Common Core of Data (CCD) combined Asian and Pacific Islander categories.

American Indian or Alaska Native A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

Two or more races A person identifying himself or herself as of two or more of the following race groups: White, Black, Asian, Native Hawaiian or Other Pacific Islander, or American Indian or Alaska Native. Some, but not all, reporting districts use this category. "Two or more races" was introduced in the 2000 Census and became a regular category for data collection in the Current Population Survey (CPS) in 2003. The category is sometimes excluded from a historical series of data with constant categories. It is sometimes included within the category "other."

**Regular school** A public elementary/secondary school providing instruction and education services that does not focus primarily on special education, vocational/technical education, or alternative education, or on any of the particular themes associated with magnet/special-program-emphasis schools.

**Revenue** All funds received from external sources, net of refunds, and correcting transactions. Noncash transactions, such as receipt of services, commodities, or other receipts in kind are excluded, as are funds received from the issuance of debt, liquidation of investments, and nonroutine sale of property.

#### S

**Salary** The total amount regularly paid or stipulated to be paid to an individual, before deductions, for personal services rendered while on the payroll of a business or organization.

**Secondary school** A school comprising any span of grades beginning with the next grade following an elementary or middle school (usually 7, 8, or 9) and ending with or below grade 12. Both junior high schools and senior high schools are included.

Student membership Student membership is an annual headcount of students enrolled in school on October 1 or the school day closest to that date. The Common Core of Data (CCD) allows a student to be reported for only a single school or agency. For example, a vocational school (identified as a "shared time" school) may provide classes for students from a number of districts and show no membership.

T

Traditional public school Publicly funded schools other than public charter schools. See also Public school or institution and Charter school.

Tuition and fees A payment or charge for instruction or compensation for services, privileges, or the use of equipment, books, or other goods. Tuition may be charged per term, per course, or per credit.

Undergraduate students Students registered at an institution of higher education who are working in a baccalaureate degree program or other formal program below the baccalaureate, such as an associate's degree, vocational, or technical program.

U

This page intentionally left blank.

This page intentionally left blank.

