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ABSTRACT

This report, 10th in a series, presents data for 1997 on high school dropout rates, and examines high school completion and graduation rates. The report is based on the best and most current national data available, using data from the Current Population Survey of the Bureau of the Census. Data show that about 5 out of every 100 young adults enrolled in high school in 1996 left school before October of 1997 without successfully completing a high school program. This estimate (the "event" dropout rate) of 4.6% was similar to those reported over the last 10 years, but lower than that of the early 1970s. Hispanic students were more likely than white and black students to leave school short of completing a high school program. In 1997, 9.5% of Hispanics were event dropouts, compared with 3.6% of Whites and 5.0% of Blacks. Young adults from families with incomes in the lowest 20% of all family incomes were nearly seven times as likely to dropout as were their peers in the top 20% of income distribution. Status dropout rates represent the proportion of young adults aged 16 to 24 years who are out of school and have not earned a high school credential. In October 1997, 11% of the young adults in the United States were in this situation. Hispanic young adults have higher status dropout rates than either Whites or Blacks. In addition, data show that, in 1997, about 86% of all 18-through 24-year-olds not enrolled in school had completed high school or an equivalent credential. Three appendixes contain standard error and time series tables, supplemental tables, and technical notes. (Contains seven tables and three figures.) (SLD)

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Dropout Rates in the United States 1997

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NATIONAL CENTER FOR EDUCATION STATISTICS

Statistical Analysis Report

March 1999

Dropout Rates in the United States 1997

Phillip Kaufman
Steve Klein
MPR Associates, Inc.

Mary Frase
National Center for Education Statistics

**U.S. Department of Education
Office of Educational Research and Improvement NCES 1999-082**

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National Center for Education Statistics

Pascal D. Forgione, Jr.
Commissioner

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FOREWORD

The National Center for Education Statistics (NCES) collects and publishes information on the condition of education in the United States. Under mandate from the Hawkins-Stafford Elementary and Secondary School Improvements Amendment of 1988 (P.L. 100-297), NCES released the first annual report on school dropouts in 1989. Although law no longer requires the reporting of dropout statistics, this report has been continued because of the importance of charting dropout behavior among America's youth.

This report, the tenth in the series, presents data for 1997 on high school dropout rates, and examines high school completion and graduation rates. In addition to extending time series data reported in earlier years, this report focuses on the characteristics of high school dropouts and high school completers in 1997.

The report is based on the best and most current national data available at this time. It utilizes the data from the Current Population Survey conducted by the Bureau of the Census to develop national event and status dropout rates for young adults of various ages. As a part of an ongoing effort to expand and improve data collected about dropouts, NCES initiated a dropout statistics collection in the 1991-92 school year as a component of the Common Core of Data; data from the fifth year of that collection are included in this report for most states. Current Population Survey data are also used to develop national and state-specific high school completion rates.

I hope the information in this report will be useful in discussions about this critical national issue.

Pascal D. Forgione, Jr.
Commissioner of Education Statistics

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Many individuals made substantial contributions to the preparation of this report. This report was prepared under the direction of Martin Orland, Associate Commissioner for the Early Childhood, International and Crosscutting Studies Division.

Recognition is extended to Rosalind Bruno of the Education and Social Stratification Branch, Population Division, Bureau of the Census for providing access to CPS data on which this report is based. Special recognition goes to Marilyn M. McMillen, without whose contributions as an author of the 3rd to 9th annual dropout reports this report would not be possible. Without the efforts of Lee Hoffman and Beth Young at NCES, the CCD dropout data collection would not continue to expand; we thank them for their hard work.

We would also like to extend our gratitude to Lisa Richards Hone and the American Council on Education for supplying data on GED test takers and certificates issued.

Without the assistance of Martha Alt, Barbara Kridl, Leslie Retallick, and Francesca Tussing of MPR Associates, this report could not have been prepared. They provided invaluable analytical, editorial, graphic, and production assistance.

The report was reviewed by Jeffrey Owings, Beth Young, and Marilyn M. McMillen from NCES; Gladys Martinez from the U.S. Bureau of the Census; and Susan Kochan from the Louisiana State Department of Education. While, of course, we are responsible for any remaining flaws, their efforts and contributions are greatly appreciated.

EXECUTIVE SUMMARY

This is the tenth in a series of National Center for Education Statistics reports on high school dropout and completion rates. It presents data on rates in 1997, the most recent year for which data are available, and includes time series data on high school dropout and completion rates for the period 1972 through 1997. In addition to extending time series data reported in earlier years, this report examines the characteristics of high school dropouts and high school completers in 1997.

Table A—Proportion of 15- to 24-year-olds dropping out of grades 10 to 12, proportion of 16- to 24-year-olds who were dropouts, and proportion of 18- to 24-year-olds who had completed high school, by race-ethnicity: October 1997

Dropout and completion measures	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic
Percent age 15 to 24 in grades 10 to 12 dropping out, October 1996 to October 1997	4.6	3.6	5.0	9.5
Percent of youth 16 to 24 who were dropouts in 1997	11.0	7.6	13.4	25.3
Percent of youth 18 to 24 who were high school completers in 1997*	85.9	90.5	82.0	66.7

* Excludes those still enrolled in high school.

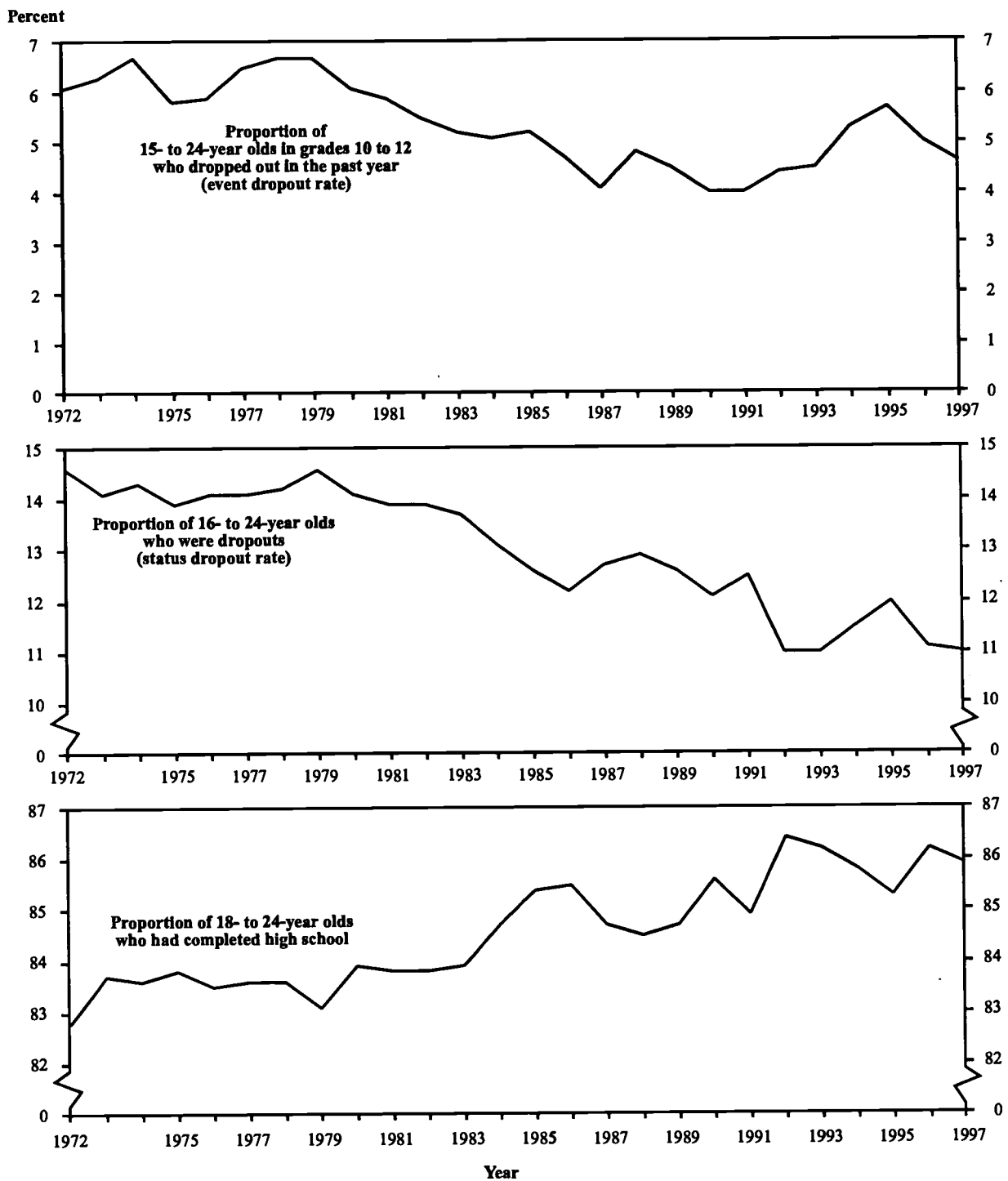
SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1997, unpublished data.

Event Dropout Rates

Event dropout rates for 1997 describe the proportion of youths ages 15 through 24 years who dropped out of grades 10 to 12 in the 12 months preceding October 1997. Demographic data collected in the Current Population Survey (CPS) permit event dropout rates to be calculated across a variety of individual characteristics, including race, sex, region of residence, and income level.

- About five out of every 100 young adults enrolled in high school in 1996 left school before October of 1997 without successfully completing a high school program. This estimate of 4.6 percent was similar to those reported over the last 10 years, but lower than in the early 1970s (table A, figure A, and table 1).

Figure A—Proportion of 15- to 24-year-olds dropping out of grades 10 to 12, proportion of 16- to 24-year-olds who were dropouts, and proportion of 18- to 24-year-olds who had completed high school: October 1972 to October 1997



SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

- Hispanic students were more likely than white and black students to leave school short of completing a high school program: in 1997, 9.5 percent of Hispanics were event dropouts, compared with 3.6 percent of white and 5.0 percent of black students. Event dropout rates were not significantly different between white and black students (table 1).
- In 1997, young adults living in families with incomes in the lowest 20 percent of all family incomes were nearly 7 times as likely as their peers from families in the top 20 percent of the income distribution to drop out of high school (table 1).
- Students who remain in high school longer than the majority of their age cohort dropped out at higher rates than their younger peers (table 1).
- Although dropout rates were highest among students age 19 or older, about two-thirds (69 percent) of the current year dropouts were ages 15 through 18; moreover, 35 percent of the 1997 dropouts were 15 through 17 years of age (table 1).

Status Dropout Rates

Over the last decade, between 300 and 500 thousand 10th- through 12th-grade students left school each year without successfully completing a high school program. Each year some of these young adults return to school or an alternative certification program, and others pass out of this age group. Status dropout rates represent the proportion of young adults ages 16 through 24 who are out of school and who have not earned a high school credential.

- In October of 1997, some 3.6 million young adults were not enrolled in a high school program and had not completed high school. These youths accounted for 11.0 percent of the 33 million 16- through 24-year-olds in the United States in 1997 (table A, figure A, and table 3). As noted with event rates, this estimate is consistent with those reported over the last 10 years, but lower than in the early 1970s.
- Status dropout rates of whites remain lower than for blacks, but over the past quarter century the difference between blacks and whites has narrowed (figure 2).
- Hispanic young adults in the United States continue to have higher status dropout rates than either whites or blacks (figure 2). In 1997, 25.3 percent of Hispanic young adults were status dropouts, compared to 13.4 percent of blacks and 7.6 percent of whites (table 3).
- Thirty-nine percent of Hispanic young adults born outside the 50 states and the District of Columbia were high school dropouts. Although the dropout rates of Hispanics born in the United States were lower, they were higher than the dropout rates of non-Hispanics born in the United States (table 3).

High School Completion Rates

The high school completion rate represents the proportion of 18- to 24-year olds who have completed a high school diploma or an equivalent credential, including a General Educational Development (GED) credential.

- In 1997, about 86 percent of all 18- through 24-year-olds, not enrolled in school, had completed high school—a slight increase since the early 1970s (table A, figure A, and table 4).
- The high school completion rate has increased for white and black young adults since the early 1970s, with 1997 rates of 90.5 percent for whites and 82.0 percent for blacks. Hispanic young adults have not shared in this improvement, with 66.7 percent reported as having completed high school in 1997 (figure 3 and table 4).

Method of High School Completion

Most young adults complete a regular diploma and graduate from high school; others complete high school by an alternative route, such as by passing the General Educational Development (GED) test.

- During the 1990s the percent of young adults, not enrolled in school, holding a high school credential has remained relatively unchanged; however the percent holding an alternative certification increased from 4.9 percent in 1990 to 9.1 percent in 1997, and the percent holding regular diplomas decreased by a similar amount (table 6).

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INTRODUCTION

The economic consequences of leaving high school without a diploma are severe. On average, dropouts are more likely to be unemployed than high school graduates and to earn less money when they eventually secure work.¹ High school dropouts are also more likely to receive public assistance than high school graduates who do not go on to college.² This increased reliance on public assistance is likely due, at least in part, to the fact that young women who drop out of school are more likely to have children at younger ages and are more likely to be single parents.³ The individual stresses and frustrations associated with dropping out have social implications as well: dropouts comprise a disproportionate percentage of the nation's prison and death row inmates.⁴

Secondary schools in today's society are faced with the challenge of increasing curricular rigor to strengthen the knowledge base of high school graduates, while at the same time increasing the proportion of all students who successfully complete a high school program. Monitoring high school dropout and completion rates provides one measure of progress in meeting these goals.

This is the tenth annual dropout report from the National Center for Education Statistics (NCES). This report spans the 25-year time period from 1972 through 1997, and focuses primarily on updates to annual time series data. Data from the October 1997 Current Population Survey (CPS) of the U.S. Bureau of the Census are used to compute national high school dropout and completion rates and rates by background characteristics, such as sex, race-ethnicity, family income, and region of the country. State-level data from the CPS are used to produce estimates of high school completion rates by state. In addition, NCES data from the Common Core of Data (CCD) are used to provide estimates of dropout rates by state for many states.

¹U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 1998*, NCES 98-013, Washington, D.C.: U.S. Government Printing Office, 1998, Indicators 31 and 32.

²U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 1996*, NCES 96-304, Washington, D.C.: U.S. Government Printing Office, 1996, Indicator 36.

³U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1994*, NCES 96-863, by M. McMillen and P. Kaufman, Washington, D.C.: U.S. Government Printing Office, 1996.

⁴Estimates indicate that one quarter of Federal and one half of state prison inmates are high school dropouts. See U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, *Comparing Federal and State Prison Inmates, 1991*, NCJ-145864, by C.W. Harlow, Washington, D.C.: U.S. Government Printing Office, September 1994.

EVENT, STATUS, AND COHORT DROPOUT RATES

Event, status, and cohort dropout rates each provide a different perspective on the student dropout population. The National Center for Education Statistics presents definitions and data for all three types of dropout rates in order to provide a fuller profile of the dropout problem in the United States. High school graduation and completion rates conclude the profile of high school outcomes for young adults in the United States.

Types of Dropout Rates

- **Event** rates describe the proportion of students who leave school each year without completing a high school program. This annual measure of recent dropout occurrences provides important information about how effective educators are in keeping students enrolled in school.
- **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, regardless of when they last attended school. Since status rates reveal the extent of the dropout problem in the population, this rate also can be used to estimate the need for further education and training designed to help dropouts participate fully in the economy and life of the nation.
- **Cohort** rates measure what happens to a group of students over a period of time. This rate is based on repeated measures of a cohort of students with shared experiences and reveals how many students starting in a specific grade drop out over time. Typically, data from longitudinal studies provide more background and contextual information on the students who drop out than are available through the CPS or CCD data collections.⁵

Event Dropout Rates

Event rates calculated using the October 1997 CPS data measure the proportion of students who dropped out between October 1996 and October 1997.⁶ These dropouts are 15-

⁵Cohort data are available only sporadically. The most recent information available is from the August 1994 Third Follow-up of the National Education Longitudinal Study of 1988, which contains data on a cohort of the eighth-grade class of 1988. These data were previously reported in U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1996*, NCES 98-250, by M. McMillen and P. Kaufman, Washington D.C.: U.S. Government Printing Office, 1998, and can be found in Appendix B, tables B7 to B10.

⁶Specifically, the numerator of the event rate for 1997 is the number of persons 15 through 24 years old surveyed in 1997 who were enrolled in high school in October of 1996, were not enrolled in October of 1997, and also did not complete high school (i.e., had not received a high school diploma or an equivalency certificate) between October 1996 and October 1997. The denominator of the event rate is the sum of the dropouts (i.e., the numerator) and the number of all persons 15 through 24 years old who attended grades 10 through 12 in 1996 and were still enrolled in 1997 or had graduated or completed high school.

Table 1—Event dropout rates and number and distribution of dropouts for grades 10–12, ages 15–24, by background characteristics: October 1997

Characteristics	Event dropout rate (percent)	Number of event dropouts (thousands)	Population enrolled (thousands)	Percent of all dropouts	Percent of population
Total	4.6	454	9,984	100.0	100.0
Sex					
Male	5.0	251	5,031	55.3	50.4
Female	4.1	203	4,953	44.7	49.6
Race-ethnicity ¹					
White, non-Hispanic	3.6	243	6,710	53.4	67.2
Black, non-Hispanic	5.0	77	1,528	16.9	15.3
Hispanic	9.5	119	1,251	26.3	12.5
Family income ²					
Low	12.3	172	1,390	37.8	13.9
Middle	4.1	229	5,596	50.5	56.1
High	1.8	53	2,998	11.7	30.0
Age ³					
15 to 16	2.7	74	2,750	16.2	27.5
17	2.4	85	3,545	18.7	35.5
18	5.9	154	2,617	33.8	26.2
19	10.2	86	839	18.9	8.4
20 to 24	24.2	56	233	12.4	2.3
Region					
Northeast	3.5	64	1,813	14.0	18.2
Midwest	4.0	101	2,508	22.2	25.1
South	4.0	133	3,299	29.3	33.0
West	6.6	157	2,363	34.5	23.7

¹Due to relatively small sample sizes, American Indian/Alaskan Natives and Asian/Pacific Islanders are included in the total but are not shown separately.

²Low income is defined as the bottom 20 percent of all family incomes for 1997; middle income is between 20 and 80 percent of all family incomes; and high income is the top 20 percent of all family incomes. See Appendix C of this report for a full definition of family income.

³Age when a person dropped out may be one year younger, because the dropout event could occur at any time over a 12-month period.

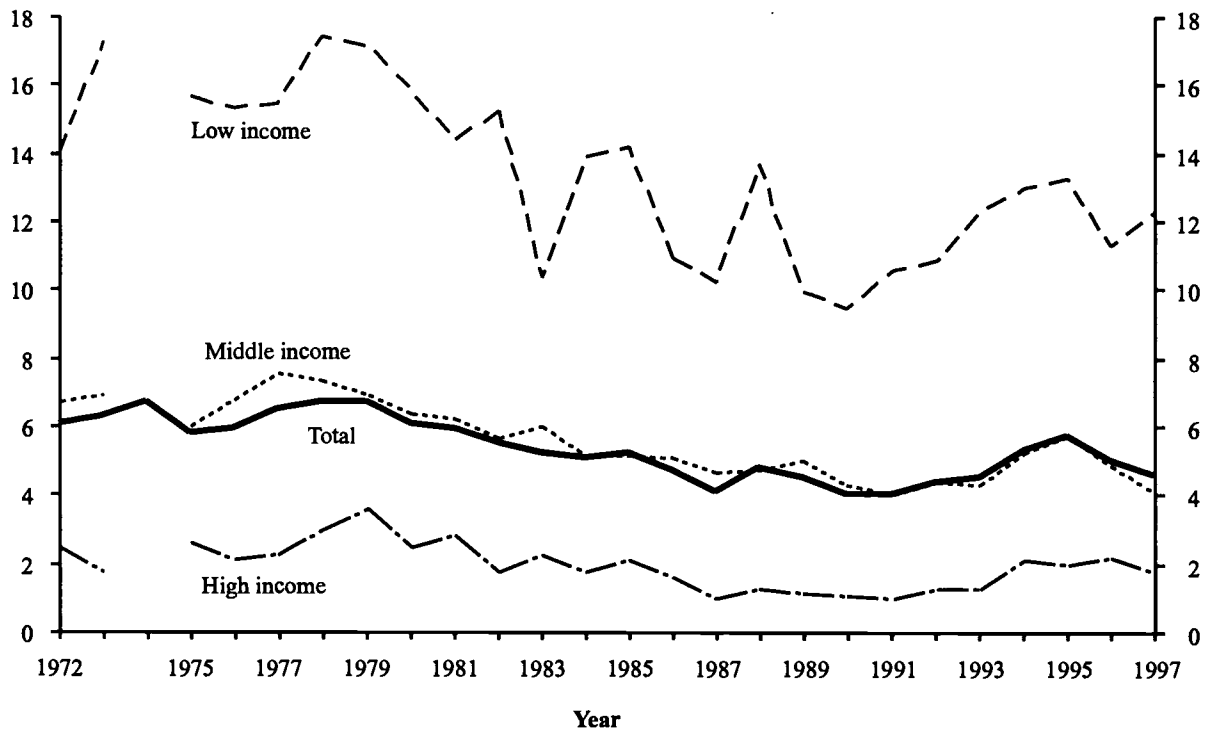
NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1997, unpublished data.

through 24-year-olds who were enrolled in high school in October of 1996, but had not completed high school and were not enrolled in grades 10 through 12 a year later. In this definition, a young person could complete high school by either earning a high school diploma or receiving an alternative credential such as a GED. By October 1997, 5 out of every 100 young adults (4.6 percent) enrolled in high school in October 1996 were not in school and had not successfully completed a high school program (table 1).⁷

Over the past quarter century, annual estimates of the event dropout rate have fluctuated between 4.0 and 6.7 percent (figure 1 and table A9), but overall there has been a downward trend in event dropout rates over the entire period, from 6.1 percent in 1972 to 4.6 percent in 1997.⁸ The percentage of young adults who left school each year without successfully completing a high school program decreased from 1972 through 1987.

Figure 1—Event dropout rates for grades 10–12, ages 15–24, by family income: October 1972 through October 1997



NOTE: Data on family income are missing for 1974.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

⁷Standard errors for all tables and figures are provided in Appendix A.

⁸The statistical significance of these comparisons was assessed with Student's *t*-test with a Bonferroni correction for multiple comparisons. Time trends noted in this report were assessed using weighted least squares regressions. For a full discussion of the statistical methods used in this report, see Appendix C. All comparisons in this report are statistically significant at the $\alpha = 0.05$ level.

Despite year-to-year fluctuations, the percentage of students dropping out of school each year has neither increased nor decreased since 1987. Changes in data collection and estimation procedures coincided with an increase in the rates from 1991 through 1995 (see Appendix C). However, the 1997 rate of 4.6 percent was similar to the 1991 rate, and over the entire period from 1991 to 1997, there was no consistent upward or downward trend in event rates.

Income

The Current Population Survey includes family income data that can be used to provide information about the relationship between socioeconomic background and the decisions of young adults to drop out of school. Of course the range of factors that may affect young adults' life decisions extend beyond the economic conditions associated with family income; however, in the absence of additional measures, family income serves as a good indicator for the other social and economic factors that are likely to be related to a young adult's decision to stay in school.⁹

In 1997, 12.3 percent of students from families in the lowest 20 percent of the income distribution dropped out of high school; by way of comparison, 4.1 percent in the middle 60 percent of the income distribution dropped out, and 1.8 percent of students from families with incomes in the top 20 percent dropped out (table 1).

Since the mid-1970s, there has been a downward trend in the annual estimates of the event dropout rate for young adults living in families of all income levels (figure 1). Specifically, between 1975 and 1997 annual event dropout rates fell by 3.4 percentage points for low income individuals, by 1.9 percentage points for middle income, and 0.8 percentage points for high income individuals (table A9).

The declines in dropout rates for all income groups occurred in the 1970s and 1980s. Event dropout rates for all income groups stabilized in the 1990s. For example, event dropout rates for low income youth approached 10 percent in 1989 and 1990; since 1990, dropout rates have fluctuated between 11 and 13 percent. Event rates for young adults living in middle and high income families have also shown no upward or downward trend since 1990.

Income is only one of a number of closely linked factors that may be related to a student's decision to drop out of school: others include race-ethnicity, age, sex, and geographic region of residence. Analyses of all of the specific interactions among intervening variables that mediate the dropout decision are beyond the scope of this report. Instead, this

⁹The variable used to assess family income is from a single question asked of the household respondent in the October CPS. In some cases, a 15- to 24-year-old is unrelated to the household head or is the head of the household (or spouse/companion of the head) themselves. Because family income for a 15- to 24-year-old is defined as the current household income of the family of the household respondent, reported incomes may not reflect the family background of all youth. See Appendix C for a more detailed discussion.

report reviews some of the primary factors that are associated with higher event dropout rates.¹⁰

Race–Ethnicity

The 1997 CPS data are consistent with earlier reports of a strong association between race–ethnicity and the likelihood of dropping out of school. In particular, cohort studies of national longitudinal data for American high school students, such as the High School and Beyond survey sponsored by NCES, show that Hispanics and blacks are at greater risk of dropping out than whites, with Hispanics at a greater risk of dropping out than either white or black students.¹¹ More recently, analyses of data from the NCES National Education Longitudinal Study, and analyses reported by the President’s Advisory Commission on Educational Excellence for Hispanic Americans also confirm these patterns.¹²

Data from the October 1997 CPS repeat this pattern for Hispanics, showing an event dropout rate of 9.5 percent for Hispanic students that is higher than the rate of 3.6 percent for white students and 5.0 percent for black students (table 1). However, event dropout rates were not significantly different between white and black students.¹³

Age and Sex

In October of 1997, about 1 out of every 10 youths ages 15 through 24 who had been enrolled in school a year earlier was over age 18, but dropouts from this older group of students accounted for 3 out of every 10 high school dropouts in 1997. Thus, students who pursue a high school program beyond the traditional ages are at an increased risk of dropping out of school (table 1). Event dropout rates for younger enrollees are substantially lower (for example, 2.7 percent for 15- and 16-year-olds and 2.4 percent for 17-year-olds versus 5.9 for 18-year-olds, 10.2 for 19-year-olds, and 24.2 for 20- to 24-year-olds).

Although dropout rates were highest among students age 19 or older, about two-thirds (69 percent) of the current year dropouts were ages 15 through 18 (table 1). About one-third (35 percent) of all young adults who left school between October of 1996 and October of

¹⁰For coverage on the interaction of dropout rates with other factors, the interested reader is referred to G. Natriello, (Ed.), *School Dropouts: Patterns and Policies*. New York: Teachers College Press, 1987. For an ethnographic depiction of these factors at work, see M. Fine, *Framing Dropouts*, New York: State University of New York Press, 1991.

¹¹See R. Ekstron, M. Goertz, J. Pollack and D. Rock, “Who Drops Out of High School and Why? Findings from a National Study,” in *School Dropouts: Patterns and Policies*, G. Natriello (Ed.), New York: Teachers College Press, 1987, pg. 52–69. For dropout data using the High School and Beyond Study, see tables B9 and B10, and U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1994*, NCES 96-863, by M. McMillen and P. Kaufman, Washington, D.C.: U.S. Government Printing Office, 1996.

¹²U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1994*, NCES 96-863, by M. McMillen and P. Kaufman, Washington, D.C.: U.S. Government Printing Office, 1996; and President’s Advisory Commission on Educational Excellence for Hispanic Americans, *Our Nation on the Fault Line: Hispanic American Education*, Washington, D.C.: U.S. Government Printing Office, 1996.

¹³While these differences appear to be relatively large, they are not statistically significant at the 0.05 level due to relatively large standard errors.

1997 were ages 15, 16, and 17 in October of 1997. These youths left school short of the typical age of normal school completion. Understanding why these younger students choose to leave school early is an important issue to investigate.

The event dropout rates for male and female students were similar in 1997.

Region and State

Event dropout rates in the West were higher than in any other region of the country. For example, 6.6 percent of all young adults living in the Western United States left school without completing their education in 1997, compared to 3.5 percent of youth living in the Northeast (table 1).

For the past five years, the Common Core of Data (CCD) universe collection at NCES has included a dropout component in the agency level nonfiscal data collection. Currently NCES, through the National Cooperative for Elementary and Secondary Statistics and the CCD collection, is working with states and school districts to develop this national database of public school dropout rates. The number of participating states that report using consistent data definitions and collection procedures has increased from 14 states in the 1991–92 school year to 25 states in the 1993–94 school year to 29 states plus Puerto Rico for the 1995–96 school year. Once all states are participating fully in this data collection, event data for sex, race–ethnicity, and for grades 7 through 12 will be aggregated at the state and national levels.

In the 1996–97 school year collection, 47 states plus Puerto Rico submitted data to CCD for dropouts from the 1995–96 school year. Data from 29 states and Puerto Rico met the quality and comparability levels necessary for publishing state level estimates that support valid cross-state comparisons. The middle case, or median, of the dropout rates for these jurisdictions was 4.6 percent, found by taking the average of Nebraska and Rhode Island, with rates ranging from 1.5 percent in Puerto Rico to 11.6 percent in Louisiana (table 2).

Table 2—Event dropout rates for grades 9–12, by state: 1993–94, 1994–95, and 1995–96

State	1993–94	1994–95	1995–96
Alabama	5.8	6.2	5.6
Arkansas	5.3	4.9	4.1
California	5.3	4.4	3.9
Connecticut	4.9	5.0	4.8
Delaware	4.6	4.6	4.5
District of Columbia	9.6	10.6	—
Georgia	8.7	9.0	8.5
Hawaii	5.1	4.9	4.7
Indiana	—	4.6	3.5
Iowa	3.2	3.5	3.1
Kansas	5.0	5.1	4.7
Louisiana	4.7	3.5	11.6*
Maine	3.1	3.4	3.1
Massachusetts	3.7	3.6	3.3
Minnesota	5.1	5.2	5.3
Mississippi	6.1	6.4	6.2
Missouri	7.1	7.1	6.6
Montana	—	—	5.6
Nebraska	4.6	4.5	4.5
Nevada	9.8	10.3	9.6
New Mexico	8.1	8.5	—
New York	4.0	4.1	3.7
North Dakota	2.7	2.5	2.5
Ohio	—	5.3	5.4
Oregon	7.3	7.1	7.0
Pennsylvania	3.8	4.1	4.0
Rhode Island	4.9	4.6	4.6
South Carolina	—	—	2.9
Texas	3.7	2.7	—
Utah	—	3.6	4.4
West Virginia	—	4.2	3.8
Wyoming	—	6.7	5.7
Puerto Rico	—	—	1.5

—Data not available.

* Effective with the 1995–96 school year, Louisiana changed its dropout data collection from school-level aggregate counts reported to districts to an individual, student-record system. The increase in the dropout rate is due in part to the increased ability to track students.

NOTE: All states except for the District of Columbia, New Hampshire, New Jersey, and Washington reported 1995–96 data. However, among the 47 states and Puerto Rico that reported dropouts, 29 states and Puerto Rico said they adhered exactly to the standard definition and collection procedures.

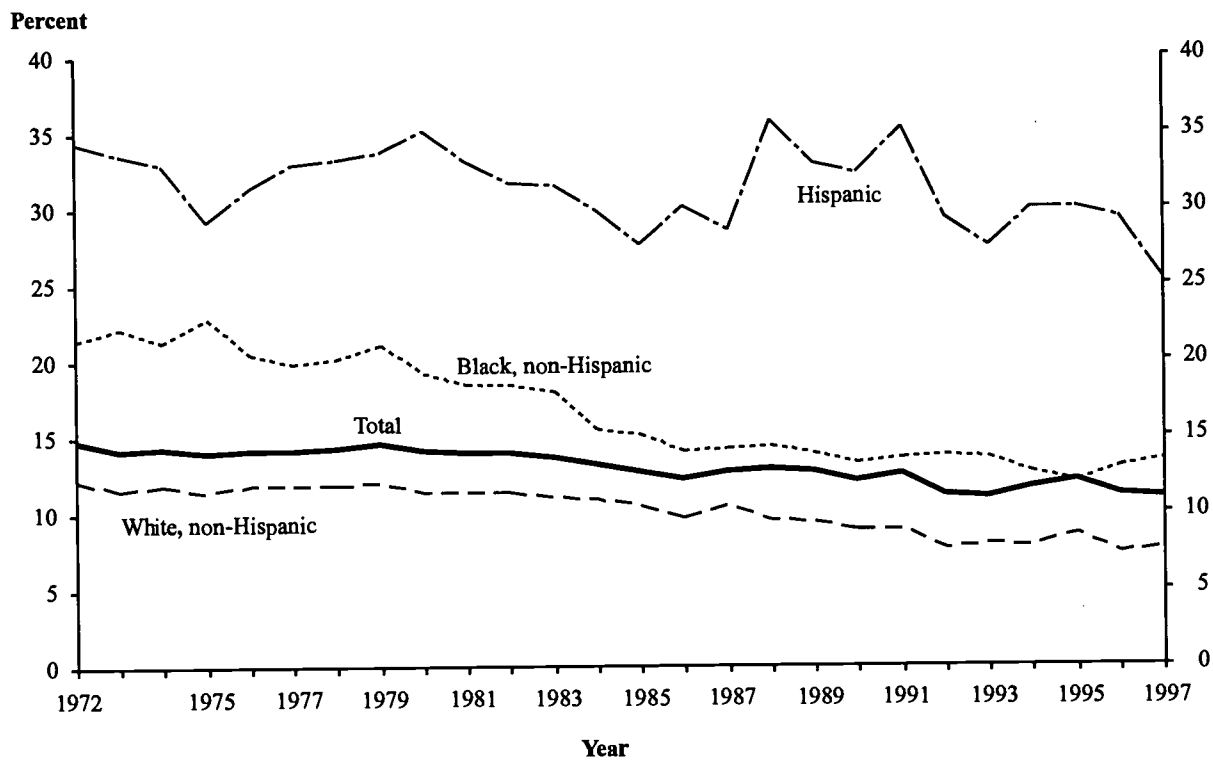
SOURCE: National Center for Education Statistics, Common Core of Data, Public Elementary/Secondary Agency Universe Survey (various years).

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Status Dropout Rates

The cumulative effect of hundreds of thousands of young adults leaving school each year without successfully completing a high school program translates into several million young adults who are out of school but lacking a high school credential. Each year over the last decade this number has exceeded 3 million.¹⁴ In October of 1997 there were 3.6 million 16- through 24-year-olds who were not enrolled in a high school program and had not completed high school (table 3). Overall, 11.0 percent of the 33 million 16- through 24-year-olds in the U.S. in 1997 were in this group. As noted with event rates, this estimate is consistent with those reported over the last 10 years, but lower than in the early 1970s.

Figure 2—Status dropout rates, ages 16–24, by race–ethnicity: October 1972 through October 1997



SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

¹⁴For data from 1988–1996, see U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1991*, NCES 92-129, by P. Kaufman, M. McMillen and D. Bradby. Washington, D.C.: U.S. Government Printing Office, 1992; and Appendix B, table B5.

Race–Ethnicity

Over the past quarter century, the status dropout rates for white young adults have persisted at levels lower than the rates observed for either black or Hispanic young adults (figure 2 and table A11). However, over the time period, the percentages of white and black young adults out of school without a high school credential have declined by nearly 40 percent in each group. Since the dropout rates for black young adults have been higher than those for white young adults, the comparable rates of change have resulted in a narrowing of the gap between the rates for blacks and whites.

The percentage of Hispanic young adults out of school without a high school credential has remained higher than that of blacks and whites in every year throughout this 25-year time period.¹⁵ During this period, when immigration patterns contributed to substantial changes in the size and composition of the Hispanic population, the status dropout rates for Hispanic young adults did not decline. Over most of the last 25 years, close to one-third of the 16- through 24-year-old Hispanics in the United States were reported as out of school and lacking a high school credential.¹⁶

Overall, 7.6 percent of white young adults ages 16 through 24 were out of school without a high school credential in 1997, accounting for 1.7 million of the 3.6 million dropouts (table 3). Even though whites were relatively less likely to be status dropouts in 1997 than black and Hispanic young adults, whites comprised the largest group of status dropouts (45.7 percent).

While Hispanics and blacks represented similar proportions of the young adult population (14.1 percent vs. 14.7 percent, respectively), Hispanics were disproportionately represented among status dropouts in 1997. A total of 1.2 million Hispanics were dropouts in 1997, accounting for 25.3 percent of all Hispanic young adults in this age group. In comparison, 0.6 million black young adults, or 13.4 percent of the total black population of 16- through 24-year-olds, were dropouts in the corresponding period.

¹⁵See for example, G. Brown, N. Rose, S. Hill, and M. Olivas, *The Condition of Education for Hispanic Americans*, Washington, D.C.: U.S. Department of Education, 1980; U.S. Department of Education, Office of Bilingual Education and Minority Language Affairs, *An Analysis of Language Minority and Limited English Proficient Students from NELS:88*, by F. Bennici and W. Strang, Washington, D.C.: U.S. Government Printing Office, August 1995; U.S. Department of Education, *Characteristics of Secondary-School-Age Language Minority and Limited English Proficient Youth*, by W. Strang, M. Winglee and J. Stunkard, Washington, D.C.: U.S. Government Printing Office, 1993; U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1990*, NCES 91-053, by P. Kaufman and M. McMillen, Washington, D.C.: U.S. Government Printing Office, 1991; and, U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1996*, NCES 98-250, by P. Kaufman and M. McMillen, Washington, D.C.: U.S. Government Printing Office, 1998.

¹⁶The erratic nature of the Hispanic status rate reflects, in part, the small sample size of Hispanics in CPS. The status rate for Hispanics of 25.3 percent in 1997 was not significantly lower than the rate for Hispanics in any year between 1992 and 1996.

Table 3—Rate, number, and distribution of status dropouts, ages 16–24, by background characteristics: October 1997

Characteristics	Status dropout rate (percent)	Number of status dropouts (thousands)	Population (thousands)	Percent of all dropouts	Percent of population
Total	11.0	3,624	32,960	100.0	100.0
Sex					
Male	11.9	1,970	16,619	54.4	50.4
Female	10.1	1,654	16,341	45.6	49.6
Race–ethnicity ¹					
White, non-Hispanic	7.6	1,656	21,800	45.7	66.1
Black, non-Hispanic	13.4	649	4,847	17.9	14.7
Hispanic	25.3	1,180	4,660	32.6	14.1
Age					
16	4.0	160	3,951	4.4	12.0
17	5.6	227	4,042	6.3	12.3
18	12.4	468	3,776	12.9	11.5
19	15.3	570	3,728	15.7	11.3
20 to 24	12.6	2,198	17,463	60.7	53.0
Recency of immigration					
Born outside the 50 states and the District of Columbia					
Hispanic	38.6	725	1,877	20.0	5.7
Non-Hispanic	7.8	143	1,826	3.9	5.5
First generation ²					
Hispanic	15.4	250	1,624	6.9	4.9
Non-Hispanic	5.0	87	1,747	2.4	5.3
Second generation or more ³					
Hispanic	17.7	205	1,159	5.7	3.5
Non-Hispanic	9.0	2,214	24,731	61.1	75.0
Region					
Northeast	10.5	623	5,947	17.2	18.0
Midwest	8.8	693	7,855	19.1	23.8
South	11.7	1,350	11,488	37.2	34.9
West	12.5	959	7,669	26.5	23.3

¹Due to relatively small sample sizes, American Indian/Alaskan Natives and Asian/Pacific Islanders are included in the total but are not shown separately.

²Individuals defined as first generation were born in the 50 states or the District of Columbia and have one or both parents born outside the 50 states and the District of Columbia.

³Individuals defined as second generation or more were born in the 50 states or the District of Columbia and have both parents born in the 50 states or the District of Columbia.

NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1997, unpublished data.

Hispanic Dropout Rates

High Hispanic dropout rates are attributable, in part, to relatively greater dropout rates among Hispanic immigrants. Data from the 1997 CPS appear to substantiate earlier findings (table 3).¹⁷ In fact, the status dropout rate of 38.6 percent for Hispanic 16- through 24-year-olds born outside the 50 states and the District of Columbia was at least double the rates of 15.4 percent registered for Hispanic youths born in the United States with at least one or both parents born outside the United States, and 17.7 percent for Hispanic youths with both parents born in the United States.¹⁸

Dropout rates for Hispanic youths born in the U.S. are lower than the dropout rates for Hispanic youths born outside the U.S. However, regardless of place of birth, Hispanic young adults are more likely to be dropouts than their non-Hispanic peers.

Data from 1995 show that over half of the foreign-born Hispanic youths who were dropouts had never enrolled in a U.S. school, and 80 percent of these young adults were reported as either speaking English “not well” or “not at all.”¹⁹ Some of the young Hispanic immigrants who do not enroll in school in the U.S. may have entered the U.S. beyond what is considered “normal” high school age, and some may have come to the U.S. in search of employment rather than education. But the data also suggest that language may be a barrier to participation in U.S. schools. Regardless of the reasons, for the large proportion of Hispanic young adults not having a high school credential, the impact is the same; whether they were born in the 50 states and the District of Columbia or elsewhere and whether or not they enrolled in U.S. schools, these young adults probably do not have the basic level of education thought to be essential in today’s economy.

Age and Sex

As might be expected, young adults of high school age registered among the lowest status dropout rates, presumably because many of these individuals were still enrolled in school and pursuing a high school diploma.

Data on status dropout rates indicate that males were more likely to be status dropouts than females in 1997. Although males and females are relatively equally represented in the

¹⁷U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1995*, NCES 97-473, by M. McMillen, P. Kaufman and S. Klein, Washington, D.C.: U.S. Government Printing Office, 1997.

¹⁸For the sake of simplicity, the terms “foreign born” and “born outside the United States” are used in the text to refer to anyone born outside the 50 states and the District of Columbia and the term “born in the United States” is used to refer to persons born within the 50 states and the District of Columbia. People born in Puerto Rico and the territories, although U.S. citizens, are grouped with those born in other countries. Because of issues related to language and schooling and because CPS does not cover the outlying areas, individuals born in Puerto Rico and the U.S. territories are distinguished from those born in the 50 states and D.C.

¹⁹See tables 16 and 20, U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1995*, NCES 97-473, by M. McMillen, P. Kaufman and S. Klein, Washington, D.C.: U.S. Government Printing Office, 1997. The English-speaking ability is based on the reports of a household respondent rather than reports from each individual in the household. These data on the ability to speak English are limited to young adults who were reported as speaking Spanish at home.

population of young adults ages 16 to 24 years of age, males comprised a greater percentage of all status dropouts: in 1997, 54 percent of all status dropouts were male, compared to 46 percent of all females.

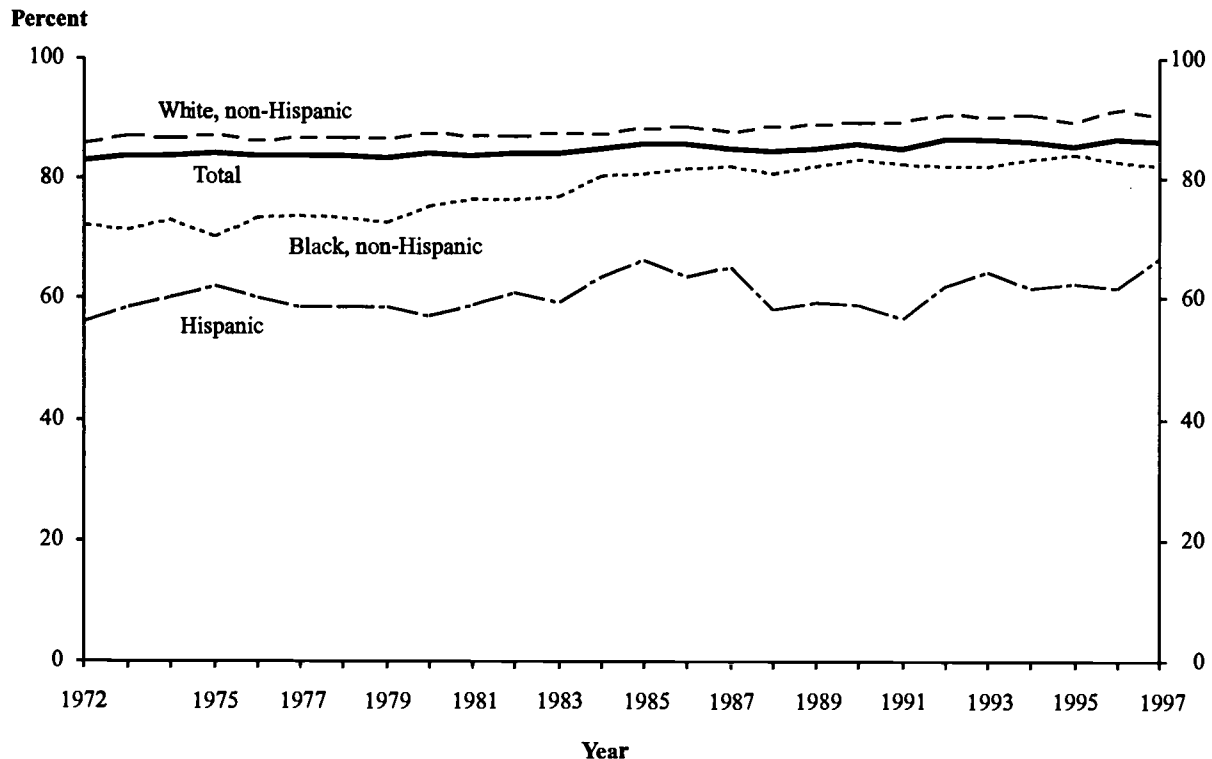
Region

Status dropout rates in the Midwest were significantly lower than those in the South and West. Moreover, while young adults living in the Midwest region of the country comprised roughly 24 percent of the population of the United States, 19 percent of all dropouts resided in this region. In contrast, while young adults living in the West made up 23 percent of the total population, nearly 27 percent of all dropouts lived in this region. The percentage of status dropouts living in the Northeast and South were similar to their representation in the overall population.

HIGH SCHOOL COMPLETION RATES

The relative importance of a high school education has changed dramatically over the last half century in the United States. When the grandparents of today's high school students entered adulthood, a high school education was an asset in the labor force, held by about half of the population ages 25 through 29 in 1950.²⁰ By the early 1970s, when the parents of today's high school students entered the work force, about 83 to 84 percent of the population ages 18 through 24 not enrolled in high school had completed a high school education (figure 3 and table A13). At that point in time, a high school education still served as an entryway to a number of promising career paths. Now, a quarter of a century later, technological advances in the workplace have increased the demand for a skilled labor force to the point where a high school education serves more as a minimum requirement for entry to the labor force. The completion of a high school education is now even more essential as a basis for entry both into additional education and training or into the labor force.

Figure 3—Completion rates, ages 18–24 not currently enrolled in high school or below, by race–ethnicity: October 1972 through October 1997



SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

²⁰U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics: 1996*, NCES 96-133. Washington, D.C.: U.S. Government Printing Office, 1996.

Completion Rates

The high school completion rate represents the proportion of 18- to 24-year olds who have completed a high school diploma or an equivalent credential, including a General Educational Development (GED) credential.²¹ Despite the increased importance of a high school education, the high school completion rate for the country has increased slightly over the last quarter century. Between 1972 and 1985, high school completion rates climbed by 2.6 percentage points (from 82.8 percent in 1972 to 85.4 percent in 1985); since 1985, the rate has fluctuated around 85 and 86 percent. This net increase of about 3 percentage points over 25 years represents slow progress toward the national goal of a 90 percent high school completion rate.

Race–Ethnicity

High school completion rates analyzed within each racial–ethnic group show somewhat similar patterns (figure 3 and table A13). Whites exhibited a positive trend in high school completion over the last quarter-century, although rates appear to have stabilized somewhat in the last decade. Specifically, the high school completion rate climbed from about 86 percent in the early 1970s to about 90 percent in the 1990s. Since 1990, white completion rates have fluctuated around 90 percent (figure 3 and table A13). Most recently, the high school completion rate of 90.5 percent for white young adults in 1997 was significantly higher than completion rates in every year before 1989.

Black young adults also made significant gains in completing their high school education over the last quarter-century, although, like whites, their completion rates appear to have stabilized in recent years. The 1997 black completion rate of 82 percent is significantly higher than completion rates before 1984, indicating that a greater proportion of black young adults are now completing high school than in the 1970s and early 1980s. Since 1990, completion rates have fluctuated around 83 percent, and trend data over the period suggest black completion rates have remained unchanged in the 1990s.

A relatively low percentage of Hispanic young adults complete high school programs—in 1997 about 67 percent of all Hispanic 18- through 24-year-olds had completed their secondary schooling. Overall completion rates for Hispanics have fluctuated over the last quarter-century, but have shown no consistent trend over the entire period. For example, completion rates for Hispanics increased in the period between 1980 and 1985, declined between 1985 and 1990, and increased again between 1990 and 1997. The 1997 completion rate of 66.7 percent was not significantly different from the 1985 rate of 66.6 percent.

²¹The high school completion rate is based on the population of young adults ages 18 through 24 who are not still enrolled in school; the status dropout rate is based on the population ages 16 through 24. Thus, the age range of the status dropout rate is two years wider, and those 18- through 24-year-olds who are still enrolled in a high school program are excluded from the calculation of the high school completion rate. Because of these differences, the status dropout rate and the high school completion rate are not the simple inverse of each other.

White youth are still more likely than both black and Hispanic youth to complete high school (table 4). In 1997, 90.5 percent of all white youth ages 18 to 24 had completed high school, followed by 82.0 percent of black and 66.7 percent of Hispanics.

Table 4—Completion rates and number and distribution of completers, ages 18–24, not currently enrolled in high school or below, by background characteristics: October 1997

Characteristics	Completion rate			Number of completers (thousands)	Population (thousands)	Percent of all completers
	Total	Diploma (percent)	Alternative ¹			
Total	85.9	76.7	9.1	20,241	23,569	100.0
Sex						
Male	84.6	75.4	9.2	9,894	11,696	48.9
Female	87.2	78.0	9.1	10,347	11,872	51.1
Race-ethnicity ²						
White, non-Hispanic	90.5	81.1	9.4	14,343	15,841	70.9
Black, non-Hispanic	82.0	72.2	9.7	2,671	3,259	13.2
Hispanic	66.7	59.1	7.7	2,229	3,339	11.0
Age						
18 to 19	82.3	74.2	8.1	5,142	6,249	25.4
20 to 21	87.0	76.5	10.5	6,049	6,952	29.9
22 to 24	87.3	78.4	8.9	9,050	10,367	44.7
Region						
Northeast	86.6	78.2	8.4	3,694	4,268	18.3
Midwest	88.7	80.7	8.0	4,995	5,630	24.7
South	85.1	75.0	10.2	6,985	8,205	34.5
West	83.5	74.2	9.3	4,567	5,467	22.6

¹Completed high school by means of an equivalency test, such as a General Educational Development (GED) exam.

²Due to relatively small sample sizes, American Indian/Alaskan Natives and Asian/Pacific Islanders are included in the total but are not shown separately.

NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1997, unpublished data.

Age and Sex

Young adults ages 18 and 19 not currently enrolled in high school were less likely than older individuals to have completed high school. In 1997, approximately 82 percent of 18- to 19-year-olds not currently enrolled in high school had completed their secondary schooling, compared to 87 percent of young adults ages 20 to 24 (table 4).

As might be expected given their relatively lower status dropout rate, females ages 18 to 24 who were no longer enrolled in high school were more likely to have completed high school than males.

Region and State

Young adults in the Northeast and Midwest had higher high school completion rates compared to their contemporaries living in the West; moreover, young adults living in the Midwest were more likely to complete high school than those living in the South (table 4).

Often interest in geographic comparisons extends beyond the regional level to state-specific data. In order to compare high school completion on a state-by-state basis, completion rates are computed based on data spanning a three-year period. The resulting state-specific completion rates represent the average annual rate over the three-year periods of 1989–91, 1992–94 and 1995–97.²² These data show considerable state-by-state variation (table 5). Using the 1995–97 three-year average, the national rate was 85.8 percent, with the average completion rates ranging from 76.6 percent in Nevada to 94.9 percent in Maryland.

²²The sample sizes of the numbers of completers at the state level in the Current Population Survey are, by definition, substantially smaller than the counts of completers supporting the national estimates (but appreciably larger than the counts of dropouts). To improve the stability of the state-level estimates for high school completion rates, the rates are displayed as three-year averages (for example, the data for 1989–91 represent the average of the data from 1989, 1990, and 1991 and the data for 1995–97 are based on averages of data from 1995, 1996, and 1997). Even with this, sampling variability is increased substantially, especially in states with relatively smaller populations in the 18 through 24 age range. Thus, it is not surprising that the rates for some states fluctuate over the three-year periods. Moreover, it should be noted that survey respondents may have attended school in a different state from where they lived at the time of the CPS interview.

Table 5—High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by state: October 1989–91, 1992–94, and 1995–97

State	1989–91 ¹	1992–94 ^{1,2}	1995–97 ^{1,2}
		(percent)	
Total	85.0	86.1	85.8
Alabama	82.2	82.2	84.9
Alaska	88.7	90.9	85.5
Arizona	83.2	83.7	82.7
Arkansas	87.1	87.5	85.7
California	76.7	78.9	80.6
Colorado	87.8	87.6	88.2
Connecticut	89.7	92.6	94.4
Delaware	85.9	93.7	87.4
District of Columbia	82.0	86.4	87.2
Florida	83.2	83.2	81.9
Georgia	85.5	79.4	84.1
Hawaii	92.9	90.7	93.5
Idaho	83.1	86.7	88.0
Illinois	85.4	86.7	88.6
Indiana	88.9	88.4	87.4
Iowa	94.5	94.2	88.3
Kansas	92.5	92.2	91.5
Kentucky	81.6	83.3	83.3
Louisiana	80.6	83.9	80.4
Maine	90.5	94.0	90.8
Maryland	87.3	92.9	94.9
Massachusetts	89.6	91.2	91.0
Michigan	86.3	89.2	89.7
Minnesota	92.0	93.2	91.6
Mississippi	84.0	88.8	82.8
Missouri	88.0	90.0	87.3
Montana	92.7	91.6	89.3
Nebraska	90.8	95.9	91.2
Nevada	82.6	83.4	76.6
New Hampshire	87.3	86.6	90.6
New Jersey	90.0	91.0	87.0
New Mexico	84.7	83.7	82.7
New York	87.7	87.5	89.5
North Carolina	82.8	85.3	87.1
North Dakota	95.6	96.6	92.3
Ohio	89.3	89.6	88.5
Oklahoma	87.1	83.1	87.4
Oregon	89.2	82.9	79.3
Pennsylvania	90.2	89.7	88.3
Rhode Island	87.4	90.7	86.0
South Carolina	82.6	87.0	89.2
South Dakota	87.6	93.2	88.2
Tennessee	76.5	82.3	84.2
Texas	78.4	80.5	80.5
Utah	93.9	93.9	90.9
Vermont	85.9	89.8	89.3
Virginia	87.0	88.6	87.3
Washington	87.4	87.3	88.2
West Virginia	82.7	85.6	90.2
Wisconsin	93.4	93.4	90.7
Wyoming	91.4	91.6	88.9

¹Numbers on this table reflect 3-year averages.

²Numbers for these periods reflect new wording of the educational attainment item in the CPS beginning in 1992 and changes in CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

Method of High School Completion

The pressures placed on the education system to turn out increasingly larger numbers of qualified lifelong learners have led to an increased interest in alternative methods of high school completion. At this point, most students pursuing an alternative to a regular diploma take the General Educational Development (GED) tests, with the goal of earning a high school equivalency credential.

Over the 25-year period covered by this report, approximately 18 million people took the GED tests and about 11 million, or 60 percent, received a high school equivalency credential based on the GED tests.²³ About three-quarters of a million people take the GED test each year and nearly a half million test-takers receive a GED credential. A minimum passing score is set nationally by the test administrator at the American Council on Education. Effective January 1, 1997, this minimum passing score was raised to a new standard that is met by only 66 percent of graduating high school seniors.²⁴ Individual states set their own passing scores at or above the minimum requirement.

Any one age 16 or older who is out of school without a high school diploma can register and take the GED tests. Historically, the GED was established as a means of offering a high school credential to World War II veterans who might have interrupted their schooling to go to war. Since that time, the GED has been viewed as a second-chance program for people who failed to graduate from a regular high school program. Seemingly in contradiction with these programmatic goals, data on GED test-takers show that while the average age of GED test-takers is about 26, over the last quarter century one-third of the test-takers have been ages 16 through 19.²⁵

In recent years, research into the adult outcomes for GED credential holders, as compared to dropouts on the one hand and regular diploma recipients on the other, has fueled a debate over the value of the GED credential. There is conflicting evidence in the research literature concerning the effects of having a GED credential on labor force participation, employment, earnings, wage rates, postsecondary program participation, and persistence in postsecondary programs.²⁶

²³U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1997*, NCES 98-015, Washington D.C.: U.S. Government Printing Office, 1998, Table 102. Note data for U.S. outlying areas are included in these counts.

²⁴American Council of Education, *Test of GED, Technical Manual*, Washington, D.C.: GED Testing Service, 1997.

²⁵U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics: 1996*, NCES 96-133, Washington, D.C.: U.S. Government Printing Office, 1996, Table 100.

²⁶See, for example, R.J. Murnane, J.B. Willet and K.P. Boudett, "Do high school dropouts benefit from obtaining a GED?" *Education and Policy Analysis* 17(2): 133-47; Iowa Department of Education, *What has happened to Iowa's GED graduates? A two-, five-, and ten-year follow-up study*, Des Moines: State of Iowa Department of Education ED 344-047, 1992; J. Baldwin, I.S. Hirsch, D. Rock and K. Yamamoto, *The Literacy Proficiencies of GED Examinees: Results from the GED-NALS Comparison Study*. Washington, D.C. and Princeton, NJ: The American Council on Education and the Educational Testing Service, 1995. Also for a detailed review of the literature, see U.S. Department of Education, National Library of Education, *Educational and Labor Market Performance of GED Recipients*, by D. Boesel, N. Alsalam and T. Smith, Washington D.C.: 1996.

These conflicting findings have led some to question the efficacy of promoting GED programs for youths who are still young enough to participate in regular high school programs. This debate highlights the need to monitor the characteristics and the relative size of the groups of dropouts, high school graduates, and alternative completers.

Most of the 85.9 percent of 18- through 24-year-olds who had completed high school by October 1997 graduated with a regular diploma. In 1997, 76.7 percent of the 18-through 24-year-olds who were not still enrolled in high school held regular diplomas, which represented the high school graduation rate (as opposed to the high school completion rate) (table 6).

Table 6—High school completion rates and method of completion of 18- through 24-year-olds not currently enrolled in high school or below: October 1988 through October 1997

Completion method	Year									
	1988	1989	1990	1991	1992 ¹	1993 ¹	1994 ^{1,2}	1995 ^{1,2}	1996 ^{1,2}	1997 ^{1,2}
Total	84.5	84.7	85.6	84.9	86.4	86.2	85.8	85.3	86.2	85.9
Diploma	80.3	80.5	80.6	80.7	81.2	81.2	78.8	77.5	76.5	76.7
Alternative ³	4.2	4.2	4.9	4.2	5.2	4.9	7.0	7.7	9.8	9.1

¹Numbers for these years reflect new wording of the educational attainment item in the CPS.

²Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

³Completed high school by means of an equivalency test, such as a General Educational (GED) exam.

NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

In 1997, 2 million young adults 18 through 24 years of age had earned high school credentials by passing an equivalency exam such as the General Educational Development (GED) test.²⁷ The young adults who completed high school through this alternative route account for 9.1 percent of the 18- through 24-year-olds who were not still enrolled in high school in 1997 (table 6).

CPS data indicating whether high school credentials were obtained through a regular diploma or through an alternative route were first collected in 1988.²⁸ Between 1988 and 1997, the diploma rate declined by 3.6 percentage points falling from 80.3 percent in 1988 to 76.7 percent in 1997. In comparison, the alternative credential rate increased by 4.9 percentage points, climbing from 4.2 percent to 9.1 percent over the same period. As noted in

²⁷The General Educational Development (GED) test is the principal equivalency exam in use at this time. In 1997, over 780,000 people living in the U.S. age 16 or older took the GED test, and 59 percent or over 460,000 passed the exam to earn a high school credential. GED Testing Service, *Who Took the GED? 1998 GED Statistical Report*, Washington D.C.: American Council on Education, 1998.

²⁸In the CPS data there may be some ambiguity concerning students who complete high school with a certificate of attendance. While they should be counted as non-completers, some respondents may report them as completers when asked about educational attainment.

Appendix C, the rate increase from 1993 to 1994 coincided with the CPS implementation of CATI procedures. However, the rate continued to increase between 1994 and 1996.

Among the three racial-ethnic groups, whites were most likely to have earned a high school diploma followed by blacks and then Hispanics. Although Hispanics were least likely of the three racial-ethnic groups to have earned a high school diploma, they were as likely to complete school with an alternative credential (e.g., GED) as white and black young adults.

CONCLUSIONS

In October of 1997, nearly 5 out of every 100 young adults enrolled in high school in October of 1996 had left high school without successfully completing a high school program. In total, these dropouts accounted for approximately a half million of the 9.9 million 15- through 24-year-olds enrolled in high school in the previous October. These numbers have not changed appreciably in recent years.

The cumulative effect of hundreds of thousands of young adults leaving school each year short of finishing a high school program translates into several million young adults who are out of school, yet lacking a high school credential. In 1997, there were 3.6 million 16-through 24-year-olds who, although not enrolled in school, had not yet completed a high school program. Overall, 11.0 percent of the 33 million 16- through 24-year-olds in the United States were in this group of dropouts. Although there have been a number of year-to-year fluctuations in this rate, over the past 25 years there has been a gradual pattern of decline that amounts to an average annual percentage change of 0.11 percent per year.

The goal of reducing the dropout rate is to increase the percentage of young adults who complete a high school education. Despite the increased importance of a high school education, the high school completion rate has shown limited gains over the last quarter century and has been stable throughout most of the 1990s. In 1997, just over three-quarters of the 18- through 24-year-olds not still in high school were reported as being high school graduates (76.7 percent); another 9.1 percent of these youths were reported as having completed by an alternative route such as the GED.

Over the last eight years, the percent of young adults who had completed high school has been relatively stable for whites and blacks. During the same time, the percent who had completed high school through an alternative test increased, with 1997 alternative completion rates of about 10 percent for white and black young adults.

The net effect of these recent changes has been stable dropout and high school completion rates for young adults in the 1990s. These findings suggest that the emphasis given in recent years to decreasing dropout rates and also revising standards and high school graduation requirements may have translated into an increase in the use of alternative methods of high school completion, rather than an overall decrease in dropout rates or increase in the proportion of young adults holding a high school credential.

APPENDIX A

Standard Error and Time Series Tables

Table A1—Standard errors for Table A: Proportion of 15- to 24-year-olds dropping out of grades 10 to 12, proportion of 16- to 24-year-olds who were dropouts, and proportion of 18- to 24-year-olds who had completed high school, by race-ethnicity: October 1997

Dropout and completion measure	Total	White, non-Hispanic	Black, non-Hispanic	Hispanic
Percent age 15 to 24 in grades 10 to 12 dropping out, October 1996 to October 1997	0.32	0.35	0.92	1.45
Percent of youth 16 to 24 who were dropouts in 1997	0.27	0.28	0.80	1.11
Percent of youth 18 to 24 who were high school completers in 1997*	0.35	0.36	1.10	1.42

*Excludes those still enrolled in high school.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1997, unpublished data.

Table A2—Standard errors for Table 1: Event dropout rates and number and distribution of dropouts for grades 10–12, ages 15–24, by background characteristics: October 1997

Characteristics	Event dropout rate	Number of event dropouts (thousands)	Population enrolled (thousands)	Percent of all dropouts	Percent of population
Total	0.32	32	131	—	—
Sex					
Male	0.47	24	93	3.59	0.77
Female	0.43	21	92	3.59	0.77
Race-ethnicity ¹					
White, non-Hispanic	0.35	24	107	3.60	0.72
Black, non-Hispanic	0.92	13	54	2.88	0.59
Hispanic	1.45	16	54	3.61	0.58
Income ²					
Low	1.36	19	52	3.50	0.53
Middle	0.41	23	99	3.61	0.76
High	0.37	11	68	2.32	0.71
Age ³					
15 to 16	0.47	13	65	2.66	0.69
17	0.40	14	32	2.82	0.74
18	0.71	19	44	3.42	0.68
19	1.61	13	39	2.83	0.43
20 to 24	4.32	10	23	2.37	0.23
Region					
Northeast	0.67	12	56	2.51	0.59
Midwest	0.60	15	65	3.00	0.67
South	0.53	17	76	3.29	0.72
West	0.79	19	64	3.43	0.65

— Not applicable.

¹Due to relatively small sample sizes, American Indian/Alaskan Natives and Asian/Pacific Islanders are included in the total but are not shown separately.

²Low income is defined as the bottom 20 percent of all family incomes for 1997; middle income is between 20 and 80 percent of all family incomes; and high income is the top 20 percent of all family incomes. See Appendix C of this report for a full definition of family income.

³Age when a person dropped out may be one year younger, because the dropout event could occur at any time over a 12-month period.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1997, unpublished data.

Table A3—Standard errors for Table 3: Rate, number, and distribution of status dropouts, ages 16–24, by background characteristics: October 1997

Characteristics	Status dropout rate	Number of status dropouts (thousands)	Percent of all dropouts	Percent of population
Total	0.27	87	—	—
Sex				
Male	0.39	64	1.27	0.42
Female	0.36	59	1.27	0.42
Race–ethnicity¹				
White, non-Hispanic	0.28	60	1.27	0.40
Black, non-Hispanic	0.80	39	1.04	0.32
Hispanic	1.11	52	1.36	0.34
Age				
16	0.48	19	0.53	0.28
17	0.56	23	0.62	0.28
18	0.82	31	0.86	0.27
19	0.91	34	0.93	0.27
20 to 24	0.39	67	1.25	0.42
Recency of immigration				
Born outside the 50 states and the District of Columbia				
Hispanic	1.96	37	1.16	0.22
Non-Hispanic	0.97	18	0.50	0.19
First generation²				
Hispanic	1.56	25	0.74	0.21
Non-Hispanic	0.80	14	0.39	0.19
Second generation or more³				
Hispanic	1.96	23	0.67	0.18
Non-Hispanic	0.28	69	1.25	0.37
Region				
Northeast	0.61	36	0.96	0.33
Midwest	0.49	39	1.01	0.36
South	0.46	53	1.24	0.40
West	0.58	45	1.13	0.36

—Not applicable.

¹Due to relatively small sample sizes, American Indian/Alaskan Natives and Asian/Pacific Islanders are included in the total but are not shown separately.

²Individuals defined as first generation were born in the 50 states or the District of Columbia and have one or both parents born outside the 50 states and the District of Columbia.

³Individuals defined as second generation or more were born in the 50 states or the District of Columbia and have both parents born in the 50 states or the District of Columbia.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1997, unpublished data.

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Table A4—Standard errors for Table 4: Completion rates and number and distribution of completers, ages 18–24, not currently enrolled in high school or below, by background characteristics: October 1997

Characteristics	Completion rate			Number of completers (thousands)	Percent of all completers
	Total (percent)	Diploma (thousands)	Alternative ¹		
Total	0.35	0.42	0.29	82	—
Sex					
Male	0.51	0.61	0.41	60	0.54
Female	0.47	0.58	0.41	56	0.54
Race-ethnicity ²					
White, non-Hispanic	0.36	0.48	0.36	57	0.49
Black, non-Hispanic	1.10	1.28	0.85	36	0.39
Hispanic	1.42	1.49	0.80	48	0.38
Age					
18 to 19	0.74	0.85	0.53	46	0.47
20 to 21	0.62	0.78	0.57	43	0.50
22 to 24	0.50	0.62	0.43	52	0.54
Region					
Northeast	0.80	0.97	0.65	34	0.42
Midwest	0.65	0.81	0.56	37	0.47
South	0.60	0.74	0.51	50	0.51
West	0.77	0.91	0.60	42	0.45

— Not applicable.

¹Completed high school by means of an equivalency test, such as a General Educational Development (GED) exam.

²Due to relatively small sample sizes, American Indian/Alaskan Natives and Asian/Pacific Islanders are included in the total but are not shown separately.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1997, unpublished data.

Table A5—Standard errors for Table 5: High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by state: October 1989–91, 1992–94, and 1995–97

State	1989–91 ¹	1992–94 ^{1,2}	1995–97 ^{1,2}
Total	0.21	0.21	0.21
Alabama	2.12	1.75	1.86
Alaska	2.23	3.93	2.30
Arizona	1.91	2.00	1.77
Arkansas	2.11	2.08	1.81
California	0.71	0.70	0.67
Colorado	1.74	1.68	1.53
Connecticut	1.58	1.46	1.32
Delaware	4.09	2.79	3.88
District of Columbia	4.71	4.78	3.86
Florida	1.02	0.97	1.03
Georgia	1.31	1.48	1.29
Hawaii	2.49	2.75	2.03
Idaho	3.81	3.19	1.38
Illinois	0.96	0.93	0.97
Indiana	1.28	1.26	1.45
Iowa	1.28	1.26	2.01
Kansas	1.55	1.58	1.62
Kentucky	1.86	1.93	1.92
Louisiana	1.79	1.77	1.72
Maine	2.68	2.05	1.80
Maryland	1.41	1.15	1.05
Massachusetts	1.13	1.13	1.42
Michigan	1.04	0.96	0.94
Minnesota	1.18	1.11	1.30
Mississippi	2.09	1.79	1.89
Missouri	1.33	1.27	1.59
Montana	2.92	3.07	3.27
Nebraska	2.21	1.49	2.31
Nevada	3.40	3.23	2.24
New Hampshire	2.95	3.25	1.63
New Jersey	1.01	1.04	1.38
New Mexico	2.82	2.99	1.38
New York	0.74	0.77	0.85
North Carolina	1.36	1.28	1.35
North Dakota	2.38	2.17	2.82
Ohio	0.86	0.89	0.92
Oklahoma	1.88	2.13	1.77
Oregon	1.81	2.15	2.20
Pennsylvania	0.85	0.86	0.93
Rhode Island	3.14	3.02	3.60
South Carolina	1.91	1.69	1.57
South Dakota	3.70	2.90	3.56
Tennessee	1.72	1.59	1.55
Texas	0.93	0.87	0.83
Utah	1.59	1.57	1.65
Vermont	4.71	3.94	1.98
Virginia	1.34	1.21	1.56
Washington	1.52	1.41	1.36
West Virginia	2.67	2.43	1.67
Wisconsin	1.05	1.07	1.38
Wyoming	4.21	3.85	4.45

¹Numbers on this table reflect 3-year averages.

²Numbers for these periods reflect new wording of the educational attainment item in the CPS beginning in 1992 and changes in CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

NOTE: Some of the standard error estimates in this table may differ from those previously published due to changes in the generalized variance parameters developed by the Bureau of the Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

Table A6—Standard errors for Table 6: High school completion rates and method of completion of 18- through 24-year-olds not currently enrolled in high school or below: October 1988 through October 1997

Completion method	Year									
	1988	1989	1990	1991	1992 ¹	1993 ¹	1994 ^{1,2}	1995 ^{1,2}	1996 ^{1,2}	1997 ^{1,2}
Total	0.37	0.37	0.36	0.37	0.36	0.36	0.36	0.37	0.35	0.35
Diploma	0.40	0.41	0.41	0.41	0.41	0.41	0.42	0.43	0.43	0.42
Alternative ³	0.20	0.21	0.22	0.21	0.23	0.23	0.26	0.28	0.30	0.29

¹Numbers for these years reflect new wording of the educational attainment item in the CPS.

²Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

³Completed high school by means of an equivalency test, such as a General Educational (GED) exam.

NOTE: Some of the standard error estimates in this table may differ from those previously published due to changes in the generalized variance parameters developed by the Bureau of the Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

Table A7—Supporting data for Figure A: Proportion of 15- to 24-year-olds dropping out of grades 10 to 12, proportion of 16- to 24-year-olds who were dropouts, and proportion of 18- to 24-year-olds who had completed high school: October 1972 to October 1997

Year	Event rate	Status rate	High school completion rate
	15- to 24-year-old dropouts from grades 10 to 12	16- to 24-year-old dropouts in age group	18- to 24-year-old completers ¹
		(percent)	
1972	6.1	14.6	82.8
1973	6.3	14.1	83.7
1974	6.7	14.3	83.6
1975	5.8	13.9	83.8
1976	5.9	14.1	83.5
1977	6.5	14.1	83.6
1978	6.7	14.2	83.6
1979	6.7	14.6	83.1
1980	6.1	14.1	83.9
1981	5.9	13.9	83.8
1982	5.5	13.9	83.8
1983	5.2	13.7	83.9
1984	5.1	13.1	84.7
1985	5.2	12.6	85.4
1986	4.7	12.2	85.5
1987 ²	4.1	12.7	84.7
1988 ²	4.8	12.9	84.5
1989 ²	4.5	12.6	84.7
1990 ²	4.0	12.1	85.6
1991 ²	4.0	12.5	84.9
1992 ^{2,3}	4.4	11.0	86.4
1993 ^{2,3}	4.5	11.0	86.2
1994 ^{2,3,4}	5.3	11.5	85.8
1995 ^{2,3,4}	5.7	12.0	85.3
1996 ^{2,3,4}	5.0	11.1	86.2
1997 ^{2,3,4}	4.6	11.0	85.9

¹Excluding those not still enrolled in high school.

²Numbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

³Numbers for these years reflect new wording of the educational attainment item in the CPS.

⁴Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table A8—Standard errors for Figure A: Proportion of 15- to 24-year-olds dropping out of grades 10 to 12, proportion of 16- to 24-year-olds who were dropouts, and proportion of 18- to 24-year-olds who had completed high school: October 1972 to 1997

Year	Event rate	Status rate	High school
	15- to 24-year-old dropouts from grades 10 to 12	16- to 24-year-old dropouts in age group	completion rate 18- to 24-year-old completers ¹
1972	0.33	0.28	0.35
1973	0.33	0.27	0.34
1974	0.34	0.27	0.33
1975	0.32	0.27	0.33
1976	0.32	0.26	0.33
1977	0.34	0.27	0.33
1978	0.34	0.27	0.33
1979	0.34	0.27	0.33
1980	0.33	0.26	0.32
1981	0.33	0.26	0.32
1982	0.34	0.27	0.34
1983	0.33	0.27	0.34
1984	0.33	0.27	0.33
1985	0.34	0.27	0.33
1986	0.32	0.27	0.33
1987 ²	0.30	0.28	0.35
1988 ²	0.36	0.30	0.38
1989 ²	0.36	0.31	0.38
1990 ²	0.34	0.29	0.36
1991 ²	0.34	0.30	0.37
1992 ^{2,3}	0.35	0.28	0.36
1993 ^{2,3}	0.36	0.28	0.36
1994 ^{2,3,4}	0.34	0.26	0.36
1995 ^{2,3,4}	0.35	0.27	0.37
1996 ^{2,3,4}	0.34	0.27	0.35
1997 ^{2,3,4}	0.32	0.27	0.35

¹Excluding those not still enrolled in high school.

²Numbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

³Numbers for these years reflect new wording of the educational attainment item in the CPS.

⁴Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

NOTE: Some of the standard error estimates in this table may differ from those previously published due to changes in the generalized variance parameters developed by the Bureau of the Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

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Table A9—Supporting data for Figure 1: Event dropout rates for grades 10–12, ages 15–24, by family income: October 1972 through October 1997

Year	Event dropout rate	Family income ¹		
		Low income	Middle income	High income
		(percent)		
1972	6.1	14.1	6.7	2.5
1973	6.3	17.3	7.0	1.8
1974	6.7	—	—	—
1975	5.8	15.7	6.0	2.6
1976	5.9	15.4	6.8	2.1
1977	6.5	15.5	7.6	2.2
1978	6.7	17.4	7.3	3.0
1979	6.7	17.1	6.9	3.6
1980	6.1	15.8	6.4	2.5
1981	5.9	14.4	6.2	2.8
1982	5.5	15.2	5.6	1.8
1983	5.2	10.4	6.0	2.2
1984	5.1	13.9	5.1	1.8
1985	5.2	14.2	5.2	2.1
1986	4.7	10.9	5.1	1.6
1987 ²	4.1	10.3	4.7	1.0
1988 ²	4.8	13.7	4.7	1.3
1989 ²	4.5	10.0	5.0	1.1
1990 ²	4.0	9.5	4.3	1.1
1991 ²	4.0	10.6	4.0	1.0
1992 ^{2,3}	4.4	10.9	4.4	1.3
1993 ^{2,3}	4.5	12.3	4.3	1.3
1994 ^{2,3,4}	5.3	13.0	5.2	2.1
1995 ^{2,3,4}	5.7	13.3	5.7	2.0
1996 ^{2,3,4}	5.0	11.1	5.1	2.1
1997 ^{2,3,4}	4.6	12.3	4.1	1.8

— Data not available for this year.

¹Low income is defined as the bottom 20 percent of all family incomes for the year; middle income is between 20 and 80 percent of all family incomes; and high income is the top 20 percent of all family incomes. See Appendix C of this report for a full definition of family income.

²Numbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

³Numbers for these years reflect new wording of the educational attainment item in the CPS.

⁴Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

Table A10—Standard errors for Figure 1: Event dropout rates for grades 10–12, ages 15–24, by income: October 1972 through October 1997

Year	Event dropout rate	Family income ¹		
		Low income	Middle income	High income
		(percent)		
1972	0.33	1.55	0.45	0.39
1973	0.33	1.65	0.46	0.32
1974	0.34	—	—	—
1975	0.32	1.57	0.43	0.38
1976	0.32	1.61	0.46	0.34
1977	0.34	1.57	0.48	0.35
1978	0.34	1.69	0.48	0.40
1979	0.34	1.62	0.47	0.44
1980	0.33	1.51	0.46	0.38
1981	0.33	1.50	0.45	0.41
1982	0.34	1.52	0.46	0.36
1983	0.33	1.35	0.48	0.39
1984	0.33	1.49	0.45	0.37
1985	0.34	1.53	0.47	0.39
1986	0.32	1.33	0.45	0.34
1987 ²	0.30	1.29	0.45	0.27
1988 ²	0.36	1.59	0.48	0.35
1989 ²	0.36	1.43	0.50	0.33
1990 ²	0.34	1.39	0.45	0.33
1991 ²	0.34	1.43	0.44	0.31
1992 ^{2,3}	0.35	1.42	0.46	0.36
1993 ^{2,3}	0.36	1.57	0.46	0.35
1994 ^{2,3,4}	0.34	1.44	0.44	0.41
1995 ^{2,3,4}	0.35	1.36	0.47	0.39
1996 ^{2,3,4}	0.34	1.34	0.46	0.41
1997 ^{2,3,4}	0.32	1.36	0.41	0.37

— Data not available for this year.

¹Low income is defined as the bottom 20 percent of all family incomes for the year; middle income is between 20 and 80 percent of all family incomes; and high income is the top 20 percent of all family incomes. See Appendix C of this report for a full definition of family income.

²Numbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

³Numbers for these years reflect new wording of the educational attainment item in the CPS.

⁴Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

NOTE: Some of the standard error estimates in this table may differ from those previously published due to changes in the generalized variance parameters developed by the Bureau of the Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

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Table A11—Supporting data for Figure 2: Status dropout rates for persons ages 16–24, by race-ethnicity: October 1972 through October 1997

Year	Total	Race-ethnicity ¹		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
		(percent)		
1972	14.6	12.3	21.3	34.3
1973	14.1	11.6	22.2	33.5
1974	14.3	11.9	21.2	33.0
1975	13.9	11.4	22.9	29.2
1976	14.1	12.0	20.5	31.4
1977	14.1	11.9	19.8	33.0
1978	14.2	11.9	20.2	33.3
1979	14.6	12.0	21.1	33.8
1980	14.1	11.4	19.1	35.2
1981	13.9	11.4	18.4	33.2
1982	13.9	11.4	18.4	31.7
1983	13.7	11.2	18.0	31.6
1984	13.1	11.0	15.5	29.8
1985	12.6	10.4	15.2	27.6
1986	12.2	9.7	14.2	30.1
1987 ²	12.7	10.4	14.1	28.6
1988 ²	12.9	9.6	14.5	35.8
1989 ²	12.6	9.4	13.9	33.0
1990 ²	12.1	9.0	13.2	32.4
1991 ²	12.5	8.9	13.6	35.3
1992 ^{2,3}	11.0	7.7	13.7	29.4
1993 ^{2,3}	11.0	7.9	13.6	27.5
1994 ^{2,3,4}	11.5	7.7	12.6	30.0
1995 ^{2,3,4}	12.0	8.6	12.1	30.0
1996 ^{2,3,4}	11.1	7.3	13.0	29.4
1997 ^{2,3,4}	11.0	7.6	13.4	25.3

¹Due to relatively small sample sizes, American Indian/Alaskan Natives and Asian/Pacific Islanders are included in the total but are not shown separately.

²Numbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

³Numbers for these years reflect new wording of the educational attainment item in the CPS.

⁴Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

NOTE: Some of the estimates in this table may differ from those previously published.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

Table A12—Standard errors for Figure 2: Status dropout rates for persons ages 16–24, by race-ethnicity: October 1972 through October 1997

Year	Total	Race-ethnicity ¹		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
		(percent)		
1972	0.28	0.29	1.07	2.22
1973	0.27	0.28	1.06	2.24
1974	0.27	0.28	1.05	2.08
1975	0.27	0.27	1.06	2.02
1976	0.26	0.28	1.01	2.01
1977	0.27	0.28	1.00	2.02
1978	0.27	0.28	1.00	2.00
1979	0.27	0.28	1.01	1.98
1980	0.26	0.27	0.97	1.89
1981	0.26	0.27	0.93	1.80
1982	0.27	0.29	0.98	1.93
1983	0.27	0.29	0.97	1.93
1984	0.27	0.29	0.92	1.91
1985	0.27	0.29	0.92	1.93
1986	0.27	0.28	0.90	1.88
1987 ²	0.28	0.30	0.91	1.84
1988 ²	0.30	0.32	1.00	2.30
1989 ²	0.31	0.32	0.98	2.19
1990 ²	0.29	0.30	0.94	1.91
1991 ²	0.30	0.31	0.95	1.93
1992 ^{2,3}	0.28	0.29	0.95	1.86
1993 ^{2,3}	0.28	0.29	0.94	1.79
1994 ^{2,3,4}	0.26	0.27	0.75	1.16
1995 ^{2,3,4}	0.27	0.28	0.74	1.15
1996 ^{2,3,4}	0.27	0.26	0.75	1.13
1997 ^{2,3,4}	0.27	0.28	0.80	1.11

¹Due to relatively small sample sizes, American Indian/Alaskan Natives and Asian/Pacific Islanders are included in the total but are not shown separately.

²Numbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

³Numbers for these years reflect new wording of the educational attainment item in the CPS.

⁴Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

NOTE: Some of the standard error estimates in this table may differ from those previously published due to changes in the generalized variance parameters developed by the Bureau of the Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

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Table A13—Supporting data for Figure 3: Completion rates for persons ages 18–24 not currently enrolled in high school or below, by race–ethnicity: October 1972 through October 1997

Year	Total	Race–ethnicity ¹		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
		(percent)		
1972	82.8	86.0	72.1	56.2
1973	83.7	87.0	71.6	58.7
1974	83.6	86.7	73.0	60.1
1975	83.8	87.2	70.2	62.2
1976	83.5	86.4	73.5	60.3
1977	83.6	86.7	73.9	58.6
1978	83.6	86.9	73.4	58.8
1979	83.1	86.6	72.6	58.5
1980	83.9	87.5	75.2	57.1
1981	83.8	87.1	76.7	59.1
1982	83.8	87.0	76.4	60.9
1983	83.9	87.4	76.8	59.4
1984	84.7	87.5	80.3	63.7
1985	85.4	88.2	81.0	66.6
1986	85.5	88.8	81.8	63.5
1987 ²	84.7	87.7	81.9	65.1
1988 ²	84.5	88.7	80.9	58.2
1989 ²	84.7	89.0	81.9	59.4
1990 ²	85.6	89.6	83.2	59.1
1991 ²	84.9	89.4	82.5	56.5
1992 ^{2,3}	86.4	90.7	82.0	62.1
1993 ^{2,3}	86.2	90.1	81.9	64.4
1994 ^{2,3,4}	85.8	90.7	83.3	61.8
1995 ^{2,3,4}	85.3	89.8	84.5	62.8
1996 ^{2,3,4}	86.2	91.5	83.0	61.9
1997 ^{2,3,4}	85.9	90.5	82.0	66.7

¹Due to relatively small sample sizes, American Indian/Alaskan Natives and Asian/Pacific Islanders are included in the total but are not shown separately.

²Numbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

³Numbers for these years reflect new wording of the educational attainment item in the CPS.

⁴Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

Table A14—Standard errors for Figure 3: Completion rates for persons ages 18–24 not currently enrolled in high school or below, by race–ethnicity: October 1972 through October 1997

Year	Total	Race–ethnicity ¹		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
		(percent)		
1972	0.32	0.33	1.20	1.83
1973	0.31	0.31	1.17	1.83
1974	0.31	0.31	1.17	1.70
1975	0.30	0.30	1.18	1.72
1976	0.30	0.31	1.12	1.68
1977	0.30	0.31	1.12	1.66
1978	0.30	0.31	1.11	1.61
1979	0.30	0.31	1.11	1.58
1980	0.30	0.30	1.07	1.51
1981	0.29	0.30	1.02	1.46
1982	0.31	0.32	1.06	1.57
1983	0.31	0.32	1.06	1.59
1984	0.31	0.32	0.99	1.54
1985	0.31	0.32	1.00	1.58
1986	0.31	0.32	0.99	1.51
1987 ²	0.32	0.34	0.99	1.47
1988 ²	0.36	0.36	1.13	1.78
1989 ²	0.36	0.37	1.11	1.73
1990 ²	0.34	0.34	1.03	1.54
1991 ²	0.34	0.35	1.06	1.53
1992 ^{2,3}	0.33	0.33	1.07	1.53
1993 ^{2,3}	0.34	0.35	1.07	1.49
1994 ^{2,3,4}	0.34	0.34	1.02	1.43
1995 ^{2,3,4}	0.35	0.36	1.01	1.40
1996 ^{2,3,4}	0.35	0.34	1.08	1.49
1997 ^{2,3,4}	0.35	0.36	1.10	1.42

¹Due to relatively small sample sizes, American Indian/Alaskan Natives and Asian/Pacific Islanders are included in the total but are not shown separately.

²Numbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

³Numbers for these years reflect new wording of the educational attainment item in the CPS.

⁴Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

NOTE: Some of the standard error estimates in this table may differ from those previously published due to changes in the generalized variance parameters developed by the Bureau of the Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

APPENDIX B
Supplemental Tables

**Table B1—Event dropout rates and number of dropouts and population ages 15–24 in grades 10–12:
October 1990 through October 1997**

Year	Event dropout rate (percent)	Number of dropouts (thousands)	Population enrolled (thousands)
1990	4.0	347	8,675
1991	4.0	348	8,700
1992 ¹	4.4	383	8,705
1993 ¹	4.5	381	8,469
1994 ^{1,2}	5.3	497	9,377
1995 ^{1,2}	5.7	544	9,509
1996 ^{1,2}	5.0	485	9,612
1997 ^{1,2}	4.6	454	9,984

¹Numbers for these years reflect new wording of the educational attainment item in the CPS.

²Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

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Table B2—Standard errors for Table B1: Event dropout rates and number of dropouts and population ages 15–24 in grades 10–12: October 1990 through October 1997

Year	Event dropout rate (percent)	Number of dropouts (thousands)	Population enrolled (thousands)
1990	0.34	29	128
1991	0.34	29	128
1992 ¹	0.35	30	128
1993 ¹	0.36	30	127
1994 ^{1,2}	0.34	32	123
1995 ^{1,2}	0.35	33	124
1996 ^{1,2}	0.34	33	129
1997 ^{1,2}	0.32	32	131

¹Numbers for these years reflect new wording of the educational attainment item in the CPS.

²Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

NOTE: Some of the standard error estimates in this table may differ from those previously published due to changes in the generalized variance parameters developed by the Bureau of the Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

Table B3—Event dropout rates, grades 10–12, ages 15–24, by sex and race–ethnicity: October 1972 through October 1997

Year	Sex			Race-ethnicity ¹		
	Total	Male	Female	White non-Hispanic	Black non-Hispanic	Hispanic
	(percent)					
1972	6.1	5.9	6.3	5.3	9.5	11.2
1973	6.3	6.8	5.7	5.5	9.9	10.0
1974	6.7	7.4	6.0	5.8	11.6	9.9
1975	5.8	5.4	6.1	5.0	8.7	10.9
1976	5.9	6.6	5.2	5.6	7.4	7.3
1977	6.5	6.9	6.1	6.1	8.6	7.8
1978	6.7	7.5	5.9	5.8	10.2	12.3
1979	6.7	6.8	6.7	6.0	9.9	9.8
1980	6.1	6.7	5.5	5.2	8.2	11.7
1981	5.9	6.0	5.8	4.8	9.7	10.7
1982	5.5	5.8	5.1	4.7	7.8	9.2
1983	5.2	5.8	4.7	4.4	7.0	10.1
1984	5.1	5.4	4.8	4.4	5.7	11.1
1985	5.2	5.4	5.0	4.3	7.8	9.8
1986	4.7	4.7	4.7	3.7	5.4	11.9
1987	4.1	4.3	3.8	3.5	6.4	5.4
1988 ²	4.8	5.1	4.4	4.2	5.9	10.4
1989 ²	4.5	4.5	4.5	3.5	7.8	7.8
1990 ²	4.0	4.0	3.9	3.3	5.0	7.9
1991 ²	4.0	3.8	4.2	3.2	6.0	7.3
1992 ^{2,3}	4.4	3.9	4.9	3.7	5.0	8.2
1993 ^{2,3}	4.5	4.6	4.3	3.9	5.8	6.7
1994 ^{3,3,4}	5.3	5.2	5.4	4.2	6.6	10.0
1995 ^{2,3,4}	5.7	6.2	5.3	4.5	6.4	12.4
1996 ^{2,3,4}	5.0	5.0 ⁵	5.1 ⁵	4.1	6.7	9.0
1997 ^{2,3,4}	4.6	5.0	4.1	3.6	5.0	9.5

¹Due to relatively small sample sizes, American Indian/Alaskan Natives and Asian/Pacific Islanders are included in the total but are not shown separately.

²Numbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

³Numbers for these years reflect new wording of the educational attainment in the CPS.

⁴Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

⁵Revised from *Dropout Rates in the United States: 1996*.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

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Table B4—Standard errors for Table B3: Event dropout rates, grades 10–12, ages 15–24, by sex and race–ethnicity: October 1972 through October 1997

Year	Total	Sex		Race–ethnicity ¹		
		Male	Female	White non-Hispanic	Black non-Hispanic	Hispanic
				(percent)		
1972	0.33	0.46	0.48	0.34	1.32	2.81
1973	0.33	0.49	0.45	0.35	1.35	2.65
1974	0.34	0.51	0.46	0.35	1.41	2.52
1975	0.32	0.44	0.46	0.33	1.25	2.50
1976	0.32	0.48	0.43	0.35	1.15	2.05
1977	0.34	0.49	0.46	0.37	1.20	2.13
1978	0.34	0.51	0.46	0.36	1.31	2.75
1979	0.34	0.49	0.48	0.37	1.32	2.43
1980	0.33	0.49	0.45	0.35	1.21	2.56
1981	0.33	0.47	0.46	0.34	1.29	2.28
1982	0.34	0.49	0.46	0.36	1.21	2.31
1983	0.33	0.50	0.45	0.35	1.17	2.44
1984	0.33	0.49	0.46	0.36	1.06	2.51
1985	0.34	0.50	0.48	0.36	1.26	2.55
1986	0.32	0.46	0.45	0.34	1.05	2.69
1987 ²	0.30	0.44	0.41	0.33	1.14	1.89
1988 ²	0.36	0.52	0.50	0.39	1.20	3.09
1989 ²	0.36	0.51	0.51	0.37	1.39	2.65
1990 ²	0.34	0.48	0.47	0.36	1.15	2.29
1991 ²	0.34	0.46	0.49	0.36	1.20	2.17
1992 ^{2,3}	0.35	0.46	0.53	0.38	1.09	2.23
1993 ^{2,3}	0.36	0.51	0.50	0.40	1.20	2.03
1994 ^{2,3,4}	0.34	0.48	0.49	0.37	1.03	1.52
1995 ^{2,3,4}	0.35	0.51	0.48	0.38	1.00	1.61
1996 ^{2,3,4}	0.34	0.49	0.50	0.38	1.05	1.50
1997 ^{2,3,4}	0.32	0.47	0.43	0.35	0.92	1.45

¹Due to relatively small sample sizes, American Indian/Alaskan Natives and Asian/Pacific Islanders are included in the total but are not shown separately.

²Numbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

³Numbers for these years reflect new wording of the educational attainment in the CPS.

⁴Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

NOTE: Some of the standard error estimates in this table may differ from those previously published due to changes in the generalized variance parameters developed by the Bureau of the Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

Table B5—Rate and number of status dropouts and population, ages 16–24: October 1990 through October 1997

	October							
	1990	1991	1992 ¹	1993 ¹	1994 ^{1,2}	1995 ^{1,2}	1996 ^{1,2}	1997 ^{1,2}
Status dropout rate (percent)	12.1	12.5	11.0	11.0	11.5	12.0	11.1	11.0
Number of status dropouts (thousands)	3,797	3,881	3,410	3,396	3,727	3,876	3,611	3,624
Population (thousands)	31,443	31,171	30,944	30,845	32,560	32,379	32,452	32,960

¹Numbers for these years reflect new wording of the educational attainment item in the CPS.

²Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

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Table B6—Standard errors for Table B5: Rate and number of status dropouts and population, ages 16–24: October 1992 through October 1997

	October							
	1990	1991	1992 ¹	1993 ¹	1994 ^{1,2}	1995 ^{1,2}	1996 ^{1,2}	1997 ^{1,2}
Status dropout rate (percent)	0.29	0.30	0.28	0.28	0.26	0.27	0.27	0.27
Number of status dropouts (thousands)	92	93	88	88	85	86	87	87

¹Numbers for these years reflect new wording of the educational attainment item in the CPS.

²Numbers in these years reflect changes in CPS due to newly instituted computer-assisted interviewing and the change in the population controls to the 1990 Census-based estimates, with adjustment for undercount in the 1990 Census.

NOTE: Some of the standard error estimates in this table may differ from those previously published due to changes in the generalized variance parameters developed by the Bureau of the Census.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

Table B7—NELS:88 8th- to 12th-grade cohort dropout rates, by sex and race-ethnicity: 1992 and 1994

Characteristics	Cohort dropout rate			
	Spring 1990-92 ¹	Spring 1988-92	August 1988-92	August 1988-94
Total	7.1	10.8	10.1	7.2
Sex				
Male	6.9	10.3	9.8	7.5
Female	7.4	11.3	10.4	6.9
Race-ethnicity ²				
Asian/Pacific Islander	3.9	4.9	4.3	5.1
Hispanic	12.2	17.8	17.2	14.1
Black, non-Hispanic	9.1	13.4	12.7	8.5
White, non-Hispanic	5.9	9.1	8.3	5.8
American Indian or Alaskan Native	22.3	30.4	30.4	17.1

¹The denominator for this rate includes the members of the 1988 eighth-grade cohort who were still enrolled in school in the spring of 1990; excluded are students who dropped out between 1988 and 1990 and students who migrated out of the country or died.

²Not shown separately are 434 persons (approximately 2 percent of the unweighted sample) whose race-ethnicity is unknown.

NOTE: This table is based on the core cohort of eighth graders (i.e., this sample excludes students in the base year sample whose sex, race-ethnicity, and dropout status were determined through the Followback Study of Excluded Students). As such, numbers may differ from earlier reports.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 Base Year, First, Second, and Third Follow-up Surveys, 1988, 1990, 1992, and 1994, unpublished data.

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Table B8—Standard errors for Table B7: NELS:88 8th- to 12th-grade cohort dropout rates, by sex and race-ethnicity: 1992 and 1994

Characteristics	Cohort dropout rate			
	Spring 1990–92 ¹	Spring 1988–92	August 1992	Spring 1994
			(percent)	
Total	0.40	0.52	0.47	0.45
Sex				
Male	0.53	0.65	0.62	0.69
Female	0.55	0.73	0.65	0.48
Race-ethnicity ²				
Asian/Pacific Islander	1.55	1.55	1.54	1.78
Hispanic	1.36	1.51	1.49	1.44
Black, non-Hispanic	1.16	1.61	1.51	1.30
White, non-Hispanic	0.41	0.54	0.47	0.49
American Indian or Alaskan Native	7.57	8.62	8.62	4.92

¹The denominator for this rate includes the members of the 1988 eighth-grade cohort who were still enrolled in school in the spring of 1990; excluded are students who dropped out between 1988 and 1990 and students who migrated out of the country or died.

²Not shown separately are 434 persons (approximately 2 percent of the unweighted sample) whose race-ethnicity is unknown.

NOTE: This table is based on the core cohort of eighth graders (i.e., this sample excludes students in the base year sample, whose sex, race-ethnicity, and dropout status were determined through the Followback Study of Excluded Students). As such, numbers may differ from earlier reports.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 Base Year, First, and Second Followup Surveys, 1988, 1990, 1992, and 1994, unpublished data.

Table B9—HS&B and NELS:88 10th- to 12th-grade cohort dropout rates, by demographic characteristics: August 1982 and 1992

Status in 10th grade	Cohort dropout rate	
	HS&B 1980–82	NELS:88 1990–92
	(percent)	
Total	9.9	5.6
Sex		
Male	11.0	5.2
Female	9.0	6.0
Race–ethnicity*		
Asian/Pacific Islander	2.2	4.6
Hispanic	16.8	10.9
Black, non-Hispanic	11.3	7.6
White, non-Hispanic	8.8	4.3
American Indian or Alaskan Native	25.1	18.2
Family below poverty level		
Yes	13.0	10.9
No	6.1	3.6
Family composition		
Two parents	5.5	4.2
Two adults/one parent	12.9	7.9
Single parent	11.0	7.4
Other	19.8	10.4
Own child in home		
Yes		
Male	19.4	6.8
Female	33.0	18.3
No		
Male	8.3	5.1
Female	7.0	5.5

*Not shown separately are those included in the total whose race–ethnicity is unknown.

NOTE: See Appendix C for the definitions of poverty and family composition used in these tables.

SOURCES: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Study, Sophomore Cohort, First Follow-up Survey, 1982, unpublished data. U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 First and Second Follow-up Surveys, 1990 and 1992, unpublished data.

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Table B10—Standard errors for Table B9: HS&B and NELS:88 10th- to 12th-grade cohort dropout rates, by demographic characteristics: August 1982 and 1992

Status in 10th grade	Cohort dropout rate	
	HS&B 1980–82	NELS:88 1990–92
	(percent)	
Total	0.42	0.36
Sex		
Male	0.64	0.45
Female	0.54	0.56
Race–ethnicity*		
Asian/Pacific Islander	0.73	2.14
Hispanic	1.65	1.44
Black, non-Hispanic	1.15	1.22
White, non-Hispanic	0.46	0.33
American Indian or Alaskan Native	5.33	8.09
Family below poverty level		
Yes	0.86	1.16
No	0.28	0.35
Family composition		
Two parents	0.24	0.42
Two adults/one parent	1.25	1.06
Single parent	0.78	0.96
Other	1.86	2.22
Own child in home		
Yes		
Male	6.50	2.35
Female	7.42	3.91
No		
Male	0.38	0.46
Female	0.36	0.56

*Not shown separately are those included in the total whose race–ethnicity is unknown.

NOTE: See Appendix C for the definitions of poverty and family composition used in these tables.

SOURCES: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Study, Sophomore Cohort, First Followup Survey, 1982, unpublished data. U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 First and Second Followup Surveys, 1990 and 1992, unpublished data.

APPENDIX C

Technical Notes

Definition of Who Is a Dropout

There are variations in the dropout definitions in the existing data sources, including the Current Population Survey (CPS), the High School and Beyond Study (HS&B), and the National Education Longitudinal Study of 1988 (NELS:88). In addition, the age or grade span examined and the type of dropout rate—status, event, or cohort—varies across the data sources. Furthermore, there were potentially significant changes in CPS procedures in 1986, 1992, and 1994.

Defining and Calculating Event Dropout Rates Using the CCD

The Common Core of Data (CCD) administered by NCES is an annual survey of the state-level education agencies in the 50 states, the District of Columbia, and the outlying areas. Statistical information is collected on public schools, staff, students, and finance.

A dropout data collection component was field tested during the 1989–90 school year. The participants were in approximately 300 school districts that included representatives from 27 states and two territories. The data were gathered through administrative records maintained at school districts and schools. The field test data were used to inform the design of a dropout statistics component for CCD.

The definition that was agreed upon by NCES and the states was the following:

A dropout is an individual who:

1. Was enrolled in school at some time during the previous school year;
2. Was not enrolled at the beginning of the current school year;
3. Has not graduated from high school or completed a state- or district-approved educational program; and
4. Does not meet any of the following exclusionary conditions: transfer to another public school district, private school, or state- or district-approved education program; temporary absence due to suspension or school-approved education program; or death.

For the purpose of this definition:

- The school year is the 12-month period of time from the first day of school (operationally set as October 1), with dropouts from the previous summer reported for the year and grade for which they fail to enroll;
- Individuals who are not accounted for on October 1 are considered dropouts;
- An individual has graduated from high school or completed a state- or district-approved educational program upon receipt of formal recognition from school authorities. State- or district-approved educational program may consist of special education and district- or state-sponsored GED preparation.

The collection was initiated with a set of instructions to state CCD coordinators in the summer of 1991. Those instructions specified the details of dropout data to be collected during the 1991-92 school year. Dropouts, like graduates, are reported for the preceding school year. The 1991-92 data were submitted to NCES as a component of the 1992-93 CCD data collection. Most recently, the 1995-96 dropout data were submitted as a component of the 1996-97 CCD collection.

The dropout collection through the National Center for Education Statistics (NCES) Common Core of Data (CCD) is designed to be consistent with the current CPS procedures. However, the CCD collection includes dropouts in grades 7 through 12 versus only grades 10 through 12 in the CPS. The CCD collection is based on administrative records rather than a household survey as in CPS. One other difference in the CCD collection is that the CCD counts anyone receiving a GED outside of a regular (approved) secondary education program as a dropout.

As in the development of any nationally consistent definition, there is considerable variation in the dropout definition across local, state, and federal data collections on such issues as whether:

- those who return to school after October 1 are identified as dropouts;
- those who complete a grade and drop out over the summer are attributed to the grade completed or the next grade;
- students entering GED programs are considered dropouts; and
- a student that drops out more than once can be counted as a dropout more than once.

As this process progresses further, there will, no doubt, be some discontinuities in dropout reporting as more consistent data become available.

Defining and Calculating Dropout Rates Using the CPS

Event Rates

The October Supplement to the CPS is the only national data source that can currently be used to estimate annual national dropout rates. As a measure of recent dropout experiences, the event rate measures the proportion of students who dropped out over a one-year interval of time.

The numerator of the event rate for 1997 is the number of persons 15 through 24 years old surveyed in 1997 who were enrolled in high school (grades 10–12) in October 1996, were not enrolled in high school in October 1997, and who also did not complete high school (that is, had not received a high school diploma or an equivalency certificate) between October 1996 and October 1997.

The denominator of the event rate for 1997 is the sum of the dropouts (that is, the numerator) and the number of all persons 15 through 24 years old who attended grades 10, 11, and 12 in October 1996 who were still enrolled in October 1997 or who graduated or completed high school between October 1996 and October 1997.

The dropout interval is defined to include the previous summer and the current school year; so that once a grade is completed, the student is then at risk of dropping out of the next grade. Given that the data collection is tied to each young adult's enrollment status in October of two consecutive years, any student who drops out and returns within the 12-month period is not counted as a dropout.

Status Rates

The status dropout rate is a cumulative rate that estimates the proportion of young adults who are dropouts, regardless of when they dropped out.

The numerator of the status rate for 1997 is the number of young adults ages 16 through 24 years of age who, as of October 1997, had not completed high school and were not currently enrolled. The denominator is the total number of 16- through 24-year-olds in October 1997.

CPS Design

CPS is a nationally representative sample survey of all households. The survey is conducted in approximately 60,000 dwelling units in 729 primary sampling units. Dwelling units are in-sample for four successive monthly interviews, out-of-sample for the next 8 months, and then returned to the sample for the following four months. The sample frame is a complete list of dwelling-unit addresses at the Census updated by demolitions and new construction and field listings. The population surveyed excludes members of the Armed Forces, inmates of correctional institutions, and patients in long-term medical or custodial facilities; it is referred to as the civilian, non-institutionalized population. Typically, about 4 percent of dwelling units are not interviewed, because occupants are not at home after repeated callbacks, or for some other reason.

An adult member of each household serves as the informant for that household, supplying data for each member of the household. In addition, in October supplementary questions regarding school enrollment are asked about eligible household members 3 years old and over. Most interviews are conducted by phone using computer-assisted telephone interviewing.

CPS Dropout Data Collection

CPS data on educational attainment and enrollment status in the current year and prior year are used to identify dropouts; and additional CPS data are used to describe some basic characteristics of dropouts. The CPS provides the only source of national time series data on dropout rates. However, because CPS collects no information on school characteristics and experiences, its uses in addressing dropout issues are primarily for providing some insights into who drops out. In addition, the sample design of the CPS yields estimates for Hispanics that tend to have large standard errors, which make it difficult to interpret patterns in Hispanic dropout rates.

The October CPS Supplement enrollment items used to identify dropouts include the following:

- Is...attending or enrolled in regular school?
- What grade or year is...attending?
- Was...attending or enrolled in a regular school or college in October, 199-, that is, of October of last year?
- What grade or year was...attending last year?

Changes Introduced in 1986

In an effort to improve data quality, in 1986 the Bureau of Census instituted new editing procedures for cases with missing data on school enrollment items. The effect of the editing changes were evaluated for data from 1986 by applying both the old and new editing procedures. The result was an increase in the number of students enrolled in school the current year and a decrease in the number of students enrolled last year but not enrolled in the current year (i.e. dropouts). The new editing procedures lowered, but not significantly, the 1986 event rate for grades 10–12, ages 14 through 24, by about 0.4 percentage points, from 4.69 to 4.28. The changes in the editing procedures made even less of a difference in the status dropout rates for 16- through 24-year-olds (12.2 percent based on the old procedures and 12.1 percent based on the new).

Changes Introduced in 1992

Prior to 1992, educational attainment was based on the control card questions on highest grade attended and completed. Identification as a high school graduate was derived based on attendance and completion of grade 12.

The control card items used to identify educational attainment were:

- What is the highest grade or year...has attended?
- Did...complete that grade?

The 1992 redesign of the CPS introduced a change in the data used to identify high school completers. Dropout data from the CPS are now based on a combination of control card data on educational attainment and October Supplement data on school enrollment and educational attainment. In 1992 the Census Bureau changed the items on the control card which measured each individual's educational attainment.

The new control card educational attainment item is as follows:

- What is the highest level of school... has completed or the highest degree...has received?

The following response categories are used for high school:

- 9th grade,
- 10th grade,
- 11th grade, and
- 12th grade—no diploma.

Students whose highest grade completed is the 9th, 10th, or 11th grade are assumed to have dropped out in the next grade (i.e., the 10th, 11th, and 12th grades, respectively).

The following response categories are used to identify high school completers:

- high school graduate—high school diploma or the equivalent (for example GED); and
- all categories indicating some postsecondary education, from some college, no degree through doctorate degree.

Although the response categories are not automatically read to each respondent, they can be used as a prompt to help clarify the meaning of a question or a response. Identification as a high school completer is based on the direct response to the new control card educational attainment item.

Differences in the pre- and post-1992 methods of identifying high school completers reflect two phenomena: not all 12th-grade completers receive a high school diploma or

equivalent, and not all holders of a high school diploma or certificate complete the 12th grade. These differences have an impact on the numbers and proportions of event and status dropouts.

Differences in event rates. In the case of the event rate, in prior years students who completed 12th grade and left school without graduating or receiving an equivalent credential were counted as completers when they were in fact dropouts. On the other hand, some students who left school because they completed high school before the 12th grade were identified as dropouts when they were really early completers (e.g., those who passed the California Challenge Exam, received a GED certificate, or were admitted early to college).²⁹ The current use of actual graduation or completion status includes the first group as dropouts and the second group as completers.

Compared to before, the event dropout rate includes 12th graders who did not receive a credential of some sort in the numerator count of dropouts and the early completers are not included in the numerator as dropouts. The denominator is not changed.

In 1992, the net effect of these changes resulted in an increase in the aggregate event dropout rate that was not significant. In 1992, the October CPS included both versions of the educational attainment items—the old items based on the number of years of school completed and the new one based on the more accurate response categories.³⁰ Using the old items, the estimated event rate for 1992 was 4.0, compared with a rate of 4.4 percent in 1992 using the new educational attainment item.

Differences in the status rate. The status rate involves a third group of students who were coded differently prior to 1992. These students leave high school before completing the 12th grade, never complete the 12th grade, but later graduate or complete high school by some alternative means, such as an equivalency exam. Prior to 1992 these young adults were coded as dropouts. Since 1992, members of this group have been coded as graduates or completers. Furthermore, the explicit inclusion of high school graduation or completion, including the GED as a response category may have increased the likelihood of identifying late completers.

Under the procedures introduced in 1992, the 12th graders who do not complete high school or the equivalent are now included in the numerator of the status dropout rate while early and late completers are not included in the numerator. The denominator is not changed. These changes, including the identification and removal of late completers from the dropout count, contributed to a decrease in the status dropout rate. Indeed, using years of school

²⁹Although prior to 1992 the questionnaire did not have the words “high school diploma or equivalency certificate,” the interviewer instructions included an instruction to record 12th grade for people who completed high school with a GED or other certificate although they had dropped out earlier. The specific inclusion of these words on the questionnaire appear to have made a difference in the quality of responses from the household informant.

³⁰Unlike prior years, however, data for individuals missing on the variables representing years of school completed (“What is the highest grade or year ...has attended?” and “Did...complete that grade?”) were not imputed by the Census Bureau. For this analysis we imputed missing data on these variables based on the grade they attended last year (if enrolled last year). For those individuals that were missing data and were not enrolled last year we imputed their highest grade completed by examining the responses to the new educational attainment variable.

completed rather than the new educational attainment item, the status rate in 1992 rises to 11.4 percent rather than the 11.0 percent based on the new educational attainment item. However, the estimate of 11.4 percent is still much lower than the status rate for 1991 (12.5 percent). While this could represent real change in the status dropout rate, the fact that this would be the largest decrease in the status dropout rate seen in the time series data from 1972 to 1995, coupled with the fact that the rate for 1993 also was 11.0 percent, leads one to speculate that the introduction of the new educational attainment item resulted in more accurate data on educational attainment throughout the survey, including the variables that had been used to calculate the number of years of school completed.

One exception to the procedures to identify dropouts in CPS is the treatment by the Bureau of the Census of students in special schools (i.e., not regular schools). These special schools are:

. . . schools that are not in the regular school system, such as trade schools, business colleges, and schools for the mentally handicapped, which do not advance students to regular school degrees.³¹

When the Census Bureau identifies students in special schools, they code them as not enrolled in regular school. Therefore, if a person enrolled in a special school is reported as completing less than the 12th grade, he or she will be counted as a status dropout.

Changes Introduced in 1994

During the 1994 data collection and processing, two additional changes were implemented in the CPS. Computer-assisted telephone interviewing (CATI) was introduced, resulting in higher completion rates for each individual data item and thus less reliance on allocation of missing responses. If the allocation procedures yielded a distribution different from the 1994 reported patterns, there is the potential for a change in the distribution of the high school completion status.

In 1994 there were also changes introduced in the processing and computing phase of data preparation. The benchmarking year for these survey estimates was changed from the 1980 Census to the 1990 Census. In addition, adjustments for undercount in the Census were also included, which had not been done before. Thus, any age, sex, or racial-ethnic groups that were found to be under-represented in the 1990 Census were given increased weights. Analysis using 1993 data of the effect of the changes in the benchmarking year and adjustment of undercount indicates the change especially affected the weights assigned to Hispanic young adults (table C1).

³¹U.S. Department of Commerce, Bureau of the Census, *School Enrollment-Social and Economic Characteristics of Students: October 1994*. U.S. Government Printing Office, September 1996.

Table C1: Average weights and population estimates using 1980 and 1990 Census-based weights for all 15- to 24-year-olds, by race-ethnicity: October 1993

Race-ethnicity	1980 based		1990 based		Percentage change*
	Average weight	Population estimate (thousands)	Average weight	Population estimate (thousands)	
White, non-Hispanic	1.79	23,911	1.84	24,611	2.8
Black, non-Hispanic	2.25	5,087	2.33	5,285	3.6
Hispanic	2.09	3,998	2.48	4,747	18.7

*Change in rates between 1980-based weights and 1990-based weights using 1980 as the base year (i.e., for whites the calculation is: $\{(1.84-1.79)/1.79\}$).

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, various years, unpublished data.

These changes have the potential for affecting both the numerator and denominator of the dropout rates. Analyses of the 1993 data showed that the change in the benchmark year for the sample weights increased the Hispanic status and event dropout rates somewhat, while it had little effect on the white or black rates (table C2). However, the change in the overall event and status rates appears to be driven by the increase in the estimated size of the Hispanic population. Since Hispanics drop out at higher rates than other groups, increasing their relative proportion of the population increases the overall dropout rates.

Table C2 shows that overall the change in the benchmark year had a larger impact on status rates than on event rates. Using the 1990-based weights increased the event rate by 1.3 percent, but raised the status rate by 3.2 percent.

Table C2—Estimated event and status dropout rates based on 1980 and 1990 Census weights: October 1993

Characteristics	1980-based weights		1990-based weights		Percent difference in rates	
	Event	Status	Event	Status	Event	Status
	(percent)		(percent)			
Total	4.46	11.01	4.52	11.36	1.3	3.2
Sex						
Male	4.58	11.17	4.65	11.61	1.5	4.0
Female	4.34	10.85	4.38	11.10	1.0	2.3
Race-ethnicity						
White non-Hispanic	3.93	7.94	3.95	7.96	0.5	0.3
Black non-Hispanic	5.83	13.56	5.81	13.52	-0.3	-0.3
Hispanic	6.72	27.52	6.90	27.88	2.8	1.3

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (various years), unpublished data.

Defining and Calculating High School Completion Rates Using the CPS

The educational attainment and high school completion status data from the October CPS are also used to measure the high school graduation and completion rates. The completion rate computed and published is for the young adult population in the years beyond high school—that is, the 18- to 24-year-old population. These rates are reported nationally by race–ethnicity. At the state level, three-year moving averages are computed to yield more stable estimates for completion rates.

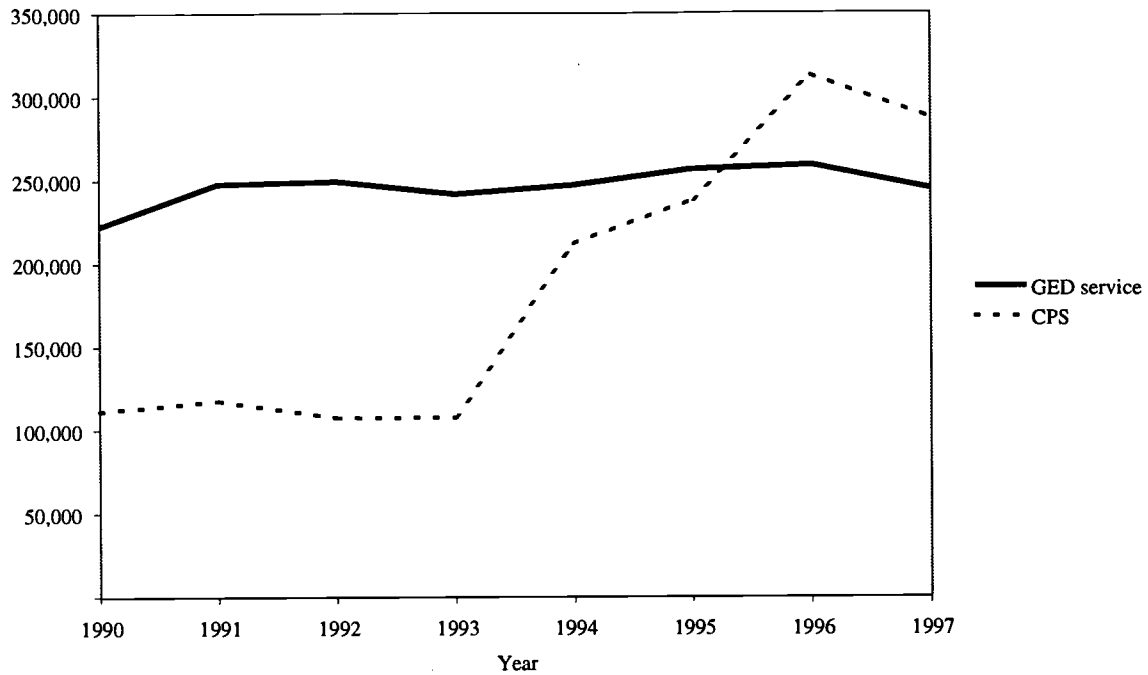
As was noted in the text, the state completion rates reflect the experiences of the 18- to 24-year-olds living in the state at the time of the interview; thus, movements in and out of states to accommodate employment and postsecondary education may be evident in some states. For example, a state with a relatively large unskilled labor employment sector might have a lower high school completion rate than anticipated, due to an influx of young workers. Conversely, a state with a disproportionate number of colleges and universities might have a higher high school completion rate than anticipated, due to an influx of postsecondary students.

Increases in GED rates

The section on completion indicated that there was a substantial increase in the last few years in the estimate of the percentage of 18- to 24-year-olds getting GEDs. For example, the alternative completion rate was 4.9 percent in 1993, but rose to 7.0 percent in 1994, and to 9.8 percent in 1996, and then was 9.1 in 1997. Although the standard errors on these estimates are fairly large, the absolute change is also quite large. The large increase between 1993 and 1994 came at the time when CPS instituted CATI in 1994.

The American Council on Education (ACE), which administers the GED, produces annual reports on the number of persons taking the GED and the number of persons who were issued a GED credential. From these reports it is possible to calculate the number of 18- to 24-year-olds who received a GED in the past year for 1990 through 1997. It is also possible to estimate the same quantity from the CPS data for 1990 to 1997 by looking at only those who were reported to have completed a GED last year and using this, along with the GED item, to calculate how many 18- to 24-year-olds obtained GEDs each year. The CPS estimates of the number of GED recipients in the years 1990 to 1993 were lower than the ACE estimates in each of these years. The CPS estimates for 1994 through 1997 are much closer to the estimates from the American Council on Education than previous years and are not statistically different than those for the ACE in these later years (figure C1 and table C3).

Figure C1—Number of 18- to 24-year-olds who received a GED in given year: 1990 to 1997



SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, various years, unpublished data; and American Council on Education, GED Testing Service, *GED Statistical Report*, 1990 to 1997.

Table C3—Number of 18- to 24-year-olds who received a GED in given year: 1990 to 1997

Year	GED Service	CPS	Standard error
			CPS
1990	222,295	111,023	16,728
1991	247,767	117,371	17,197
1992	249,470	107,030	16,425
1993	241,787	107,415	16,455
1994	247,051	211,560	23,047
1995	256,441	237,876	24,424
1996	258,957	312,645	27,957
1997	244,749	286,811	26,793

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, various years, unpublished data; and American Council on Education, GED Testing Service, *GED Statistical Report*, 1990 to 1997.

Definition of Family Income in CPS

Family income is derived from a single question asked of the household respondent. Income includes money income from all sources including jobs, business, interest, rent, social security payments, and so forth. The income of nonrelatives living in the household is excluded, but the income of all family members 14 years old and over, including those temporarily living away, is included. Family income refers to receipts over a 12-month period.

Income for families from which no income information was obtained (about 5 percent of families) was imputed. A sequential hot deck procedure was used. A total of 200 imputation classes were created—5 levels of the age of head of household by 5 levels of the education of the head of household by 2 levels for the employment status of the head of household, and 4 levels of the number of workers in the household. To minimize the multiple use of a single donor, up to 5 donors were placed in each imputation class. A donor was selected at random from these when a family with missing income information was encountered. In a few instances (about 10 of 50,000 families in each year) an imputation class had no donors but a family from the class with missing income information was encountered. In these cases a donor was selected by collapsing similar classes until a non-empty imputation class was created.

To facilitate comparisons over time, the categorical family income information was transformed into a continuous family income variable. The transformation was accomplished by randomly assigning for each family an income value from the income interval to which their income belonged. For intervals below the median a rectangular probability density function was used; for those above the median a Pareto probability density function was used. The methodology has a feature that if the continuous family income variable were transformed back to a categorical family income variable, the value for each family would be identical to the original data. Based on the continuous family income variable, a family income percentile variable is calculated for each person in the survey which represents that person's position in the family income distribution. For example, if 25 percent of all persons have a lower value of family income (and 75 percent have a higher value), then the person's

family income percentile variable has a value of 25. The methodology gives all persons in the same household the same value of both the categorical and continuous versions of family income. There are several issues that affect the interpretation of dropout rates by family income using the CPS. First, it is possible that the family income of the students at the time they dropped out was somewhat different than their current family income.

Furthermore, family income is from a single question asked of the household respondent in the October CPS. In some cases, there are persons 15 through 24 years old living in the household who are unrelated to the household respondent, yet whose family income is defined as the income of the family of the household respondent. Therefore, the current household income of the respondent may not accurately reflect that person's family background. In particular, some of the young adults in the 15- through 24-year age range do not live in a family unit with a parent present. An analysis of 1997 event dropout rates by family income and family status (presence of parent in the household) indicates whether any bias is introduced into the analysis of dropout rates by family income by including in the analysis youth not living with at least one parent (table C4). About ten percent of 15- to 24-year-olds enrolled in high school in the previous year were not living with a parent and the percentage was much higher for students in low-income households than for those from middle- and high-income households.

The event dropout rate was lower for those with at least one parent in the household than for those not living with a parent. This was true for all 15- to 24-year-olds as well as within each category of household income. The dropout rate for those with at least one parent in the household was 82 to 83 percent of the dropout rate for all 15- to 24-year-olds within each of the three categories of household income. As a result, despite the fact that a much higher proportion of students in low-income households did not reside with a parent, the relative relationships among dropout rates for the three income groups were similar for those with a parent in the household as they were for all 15- to 24-year-olds. Specifically, the event dropout rate for those from low-income households was about three times higher than for those from middle-income households and seven times higher than for those from high-income households, both among all 15- to 24-year-olds and among those residing with at least one parent.

Table C4—Event dropout rates for 15- to 24-year-olds, by household type by race—ethnicity and income: October 1997

Characteristics	Percentage			Event rate		
	Total	Parent in home	No parent in home	Total	Parent in home	No parent in home
Estimate						
Total	100.0	90.1	9.9	4.6	3.5	14.0
Low income	100.0	67.5	32.5	12.3	10.1	17.0
Middle income	100.0	91.8	8.2	4.1	3.4	11.6
High income	100.0	97.2	2.8	1.8	1.5	10.3
Standard error						
Total	—	0.09	0.09	0.32	1.33	0.56
Low income	—	0.40	0.40	1.36	2.18	1.89
Middle income	—	0.12	0.12	0.41	1.31	0.69
High income	—	0.10	0.10	0.37	2.06	0.87

— Not applicable

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1997, unpublished data.

Definition of Geographic Regions in CPS

There are four Census regions used in this report: Northeast, Midwest, South, and West. The Northeast consists of Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, and Pennsylvania. The Midwest consists of Ohio, Indiana, Illinois, Michigan, Wisconsin, Iowa, Minnesota, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. The South consists of Delaware, Maryland, Washington D.C., Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas. The West consists of Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii.

Definition of Immigration Status in CPS

Immigration status was derived from a variable on the control card inquiring about the citizenship status of the reference person:

Citizen Status:

- 1 = Native, born in the U.S.
- 2 = Native, born in Puerto Rico or U.S. outlying area
- 3 = Native, born abroad of American parent or parents
- 4 = Foreign born, U.S. citizen by naturalization
- 5 = Foreign born, not a citizen of the U.S.

Those coded (1) above (Native, born in U.S.) were considered born in the 50 states and the District of Columbia. All others were considered born elsewhere. (In 1997, about 1.0 percent of all 16- to 24-year-olds and of Hispanic 16- to 24-year-olds were born abroad to American parents.)

Imputation for Item Non-Response

For many key items in the October CPS, the Bureau of the Census imputes data for cases with missing data due to item non-response. However, item non-response data for the method of high school completion were not imputed by the Bureau of the Census. Special imputations were conducted for these items using a sequential hot deck procedure implemented through the PROC IMPUTE computer program developed by the American Institutes for Research.³² Three categories of age, two categories of race, two categories of sex, and two categories of citizenship were used as imputation cells.

³²D. H. McLaughlin, *Imputation for Non-Response Adjustment*, American Institutes for Research, October 1991, updated: February 1994.

Defining and Calculating Cohort Dropout Rates Using NELS:88

The NELS:88 base-year survey comprised a national probability sample of all regular public and private 8th-grade schools in the 50 states and District of Columbia in the 1987–88 school year. Excluded from the NELS:88 sample were Bureau of Indian Affairs schools, special education schools for the handicapped, area vocational schools that do not enroll students directly, and schools for dependents of U.S. personnel overseas; such school-level exclusions have a very small impact on national estimates.

NELS:88 started with the base-year data collection in which students, parents, teachers, and school administrators were selected to participate in the survey. NELS:88 began with a target sample of 1,032 sample schools, of which 30 were deemed ineligible. Some 698 of the 1,002 eligible schools agreed to participate in the study. Given the longitudinal nature of the study, the initial school response rate of 69.7 percent was deemed too low to yield acceptable levels of schools, administrators, teachers, parents, and most importantly, students. To address this concern, a sample of sister schools was selected and 359 replacement schools were identified and added to the study. Responses were obtained from 1,057 schools, thus increasing the school response rate to 77.7 percent ($1,057/(1,002+359)$). Usable student data were received for 1,052 of the schools.

The total eighth-grade enrollment for the 1,052 NELS:88 sample schools was 202,996. During the listing procedures (before 24–26 students were selected per school), 5.35 percent of the students were excluded because they were identified by school staff as being incapable of completing the NELS:88 instruments owing to limitations in their language proficiency or to mental or physical disabilities. Ultimately, 93 percent or 24,599 of the sample students participated in the base-year survey in the spring of 1988.

The NELS:88 first follow-up survey was conducted in the spring of 1990. Students, dropouts, teachers, and school administrators participated in the followup, with a successful data collection effort for approximately 93 percent of the base-year student respondents. In addition, because the characteristics and education outcomes of the students excluded from the base year may differ from those of students who participated in the base-year data collection, a special study was initiated to identify the enrollment status of a representative sample of the base-year ineligible students. Data from this sample were then combined with first and second follow-up data for the computation of 8th- to 10th-grade, 10th- to 12th-grade, and 8th- to 12th-grade cohort dropout rates.

The second follow-up survey was conducted in the spring of 1992. Students, dropouts, parents, teachers, and school administrators participated in this followup. Approximately 91 percent of the sample of students participated in the second follow-up survey, with 88 percent of the dropouts responding.

The second follow-up High School Transcript Study was conducted in the fall of 1992. Transcript data spanning the three or four years of high school (9th or 10th through 12th grades) were collected for 1) students attending, in the spring of 1992, schools sampled

for the second follow-up school administrator and teacher surveys,³³ 2) all dropouts and dropouts in alternative programs who had attended high school for a minimum of one term; 3) all early graduates, regardless of school contextual sample type; and 4) triple ineligibles enrolled in the twelfth grade in the spring of 1992, regardless of school affiliation. Triple ineligibles are sample members who were ineligible—due to mental or physical handicap or language barrier—for the base year, first follow-up, and second follow-up surveys. The transcript data collected from schools included student-level data (e.g., number of days absent per school year, standardized test scores) and complete course-taking histories. Complete high school course-taking records were, of course, obtained only for those transcript survey sample members who graduated by the end of the spring term of 1992; incomplete records were collected for sample members who had dropped out of school, had fallen behind the modal progression sequence, or were enrolled in a special education program requiring or allowing more than twelve years of schooling.

A total of 1,287 contextual schools and 256 non-contextual schools responded to the request for transcripts. Reasons cited by school staff for not complying with the request included: inadequate permission for transcript release (some schools required parental permission for the release of minors' transcripts); no record of the sample member or no course-taking record because of brevity of enrollment; insufficient staff for transcript preparation (despite offers of remuneration for preparation costs); and archiving or transfer of sample member records. Student coverage rates were 89.5 percent for the total transcript sample and 74.2 percent for the dropout/alternative completers.

Missing from the cohort rates from NELS:88 is anyone who had dropped out prior to the spring of their eighth-grade year. Thus, the overall cohort dropout rates reported here may be lower than they would have been if a younger cohort were used. This may be particularly important for Hispanics, given that CPS data show that Hispanic dropouts tend to have completed less schooling than other dropouts. The cohort rates also reflect the school enrollment status of both eligible and ineligible non-participants and participants, to the extent that this information could be obtained.

The following definition of a dropout was employed in NELS:88:

1. an individual who, according to the school (if the sample member could not be located) or according to the school and home, is not attending school (i.e., has not been in school for 4 consecutive weeks or more and is not absent due to accident or illness); or
2. a student who has been in school less than 2 weeks after a period in which he or she was classified as a dropout.

Thus, a student who was a temporary dropout (stopout) who was found by the study to be out of school for 4 or more consecutive school weeks and had returned to school (that

³³Schools selected for the contextual components of the second followup (the school administrator and teacher surveys) are referred to as *contextual* schools. Sample members enrolled in those schools are referred to as *contextual* students.

is, had been back in school for a period of at least 2 weeks at the time of survey administration in the spring of 1990) would not be classified as a dropout for purposes of the cohort dropout rates reported here.

The basic NELS:88 procedure for identification of a dropout was to confirm school-reported dropout status with the student's household. For the first followup, dropout status was obtained first from the school and then confirmed with the household for 96.4 percent of the dropouts. Thus only 3.6 percent of the dropouts were identified by only school-reported information. For the second followup, 4.9 percent of the dropouts were identified by only school-reported information.

The 1988–1990 dropout rate requires data from both 1988 and 1990. As a result, the size of the sample used in computing the 1988 to 1990 rate is tied to the size of the sample in 1990. Many students changed schools between 1988 and 1990. Because of the costs associated with following small numbers of students to many schools, a subsampling operation was conducted at the time of the first followup. Of the 24,599 students who participated in 1988, 20,263 students were sampled, and 130 were found to be out of scope (due to death or migration out of the country). The dropout rates from 1988–1990 reflect the experiences of 20,133 sample cases. Some 1,088 sample cases dropped out and 19,045 sample cases continued in school.

The 1990–1992 rate starts from the 19,045 student sample cases who were in school in 1990. Some 91 of the student sample cases from 1990 were identified as out of scope in 1992. The dropout rates from 1990 to 1992 reflect the experiences of 18,954 student sample cases.

The 1988–1992 rates reflect the experiences of 20,070 student sample cases. These cases result from the 20,263 subsampled student cases in 1990, less 92 cases that were out of scope in both 1990 and 1992, less the 91 students sample cases identified as out of scope in 1992, less 10 dropout sample cases identified as out of scope in 1992. Note that 24 student sample cases who were out of the country in 1990 returned to school in the U.S. by spring 1992, and an additional 14 student sample cases who were out of the country in spring 1990 returned to the U.S. by spring 1992 but did not reenroll (dropouts). Another 354 student sample cases who dropped out between 1988 and 1990 returned to school by spring 1992.

HS&B Calculation of Cohort Dropout Rates

The original dropout variable in HS&B was defined somewhat differently than the dropout variable in NELS:88.³⁴ The essential difference was in the way in which the surveys handled students in alternative programs. Specifically, HS&B originally considered those who were in “alternative” programs, such as those leading to a GED, or those who had received a GED as dropouts, not students or completers, respectively. NELS:88 was designed

³⁴The NELS:88 Second Followup Dropout Data Users Manual has an extensive discussion of the differences in definitional use in the two surveys.

so that researchers would have the flexibility to define dropping out in more than one way. In order to equate the two data sets, several modifications were made to the original HS&B definition for the purpose of this report.³⁵

Variables Used in Comparison of HS&B and NELS:88

Poverty

In HS&B, a student was considered to be living below the poverty line if their family size was 1 to 3 persons and their family income was \$7,000 or less; or if their family size was 4 to 6 persons and their family income was \$11,999 or less; or their family size was 7 or more persons and their family income was under \$15,999.

In NELS:88 a student was considered to be living below the poverty line if their family size was 1 to 2 persons and their family income was \$7,499 or less; or if their family size was 3 persons and family income was \$9,999 or less; or if their family size was 4 or 5 persons and family income was \$14,999 or less; or if their family size was 6 or 7 persons and family income was \$19,999 or less; or if their family size was 8 persons and family income was \$24,999 or less; or if their family size was 9 or more persons and family income was under \$34,999.

Family Composition

In both HS&B and NELS:88 a student's family composition was defined as:

1. Two parents—if both the father and mother were in the household.
2. Two adults/one parent—if the father was not in household but the mother and a male guardian/stepfather were in the household; or if the mother was not in the household but the father and a female guardian/stepmother were in the household.
3. Single parent—if the father was in the household and no other adult partner was in household; or if the mother was in the household and no other adult partner was in the household.
4. Other—if neither parent were in the household.

³⁵See the technical appendix to P. Kaufman, M. McMillen, and P. Sweet, *A Comparison of High School Dropout Rates in 1982 and 1992* (Washington, D.C.: National Center for Education Statistics, October 1996).

Accuracy of Estimates

The estimates in this report are derived from samples and are subject to two broad classes of error—sampling and nonsampling error. Sampling errors occur because the data are collected from a sample of a population rather than from the entire population. Estimates based on a sample will differ somewhat from the values that would have been obtained from a universe survey using the same instruments, instructions, and procedures. Nonsampling errors come from a variety of sources and affect all types of surveys, universe as well as sample surveys. Examples of sources of nonsampling error include design, reporting, and processing errors, and errors due to nonresponse. The effects of nonsampling errors are more difficult to evaluate than those that result from sampling variability. As much as possible, procedures are built into surveys in order to minimize nonsampling errors.

In reporting sample survey data, estimates based on unweighted sample sizes less than 30 are not displayed. The standard error is a measure of the variability due to sampling when estimating a parameter. It indicates how much variance there is in the population of possible estimates of a parameter for a given sample size. Standard errors can be used as a measure of the precision expected from a particular sample. The probability that a complete census would differ from the sample by less than the standard error is about 68 out of 100. The chances that the difference would be less than 1.65 times the standard error are about 90 out of 100; that the difference would be less than 1.96 times the standard error, about 95 out of 100.

Standard errors for percentages and number of persons based on CPS data were calculated using the following formulas:

Percentage:

$$se = \sqrt{(b / N)(p)(100 - p)}$$

where p = the percentage ($0 < p < 100$),

N = the population on which the percentage is based, and

b = the parameter associated with the characteristic;

b is equal to 2,369 for the total or white population; 2,680 for the black population; and 3,051 for the Hispanic population ages 14 through 24 years old for 1996 and 1997.

Number of persons:

$$se = \sqrt{(bx)(1 - x / T)}$$

where x = the number of persons (i.e., dropouts),

T = population in the category (i.e., blacks 16 through 24), and

b = as above.

Standard errors for the estimates in the text tables and figures appear in Appendix A.

In October of 1998, the Bureau of the Census released new *b* parameters for 1996 and 1997. With the release of the new parameters, the Bureau of the Census also made adjustments to the parameters for earlier years. Therefore, for some years, the standard errors presented in the appendix tables here are different than the standard errors presented in earlier reports.

Response Rates

Current Population Survey. For the October 1997 basic CPS, the unweighted nonresponse rate was 6.3 percent and for the school enrollment supplement the nonresponse rate was an additional 4.7 percent for a total supplement unweighted nonresponse rate of 10.7 percent.

High School and Beyond. The overall unweighted student response rate for the second follow-up was about 94 percent.

NELS:88 Second Follow-up. The overall unweighted student response rate was 94 percent and the weighted response rate was 91 percent.

Methodology and Statistical Procedures

The comparisons in the text have all been tested for statistical significance to ensure that the differences are larger than those that might be expected due to sampling variation. Two types of comparisons have been made in the text.

Differences in two estimated percentages. The Student's *t* statistic can be used to test the likelihood that the differences between two percentages are larger than would be expected by sampling error.

$$t = \frac{P_1 - P_2}{\sqrt{se_1^2 + se_2^2}}$$

where P_1 and P_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors.

As the number of comparisons on the same set of data increases, the likelihood that the *t* value for at least one of the comparisons will exceed 1.96 simply due to sampling error increases. For a single comparison, there is a 5 percent chance that the *t* value will exceed 1.96 due to sampling error. For five tests, the risk of getting at least one *t* value that high increases to 23 percent and for 20 comparisons, 64 percent.

One way to compensate for this danger when making multiple comparisons is to adjust the alpha level to take into account the number of comparisons being made. For example, rather than establishing an alpha level of 0.05 for a single comparison, the alpha level is set to ensure that the likelihood is less than 0.05 that the *t* value for any of the

comparisons exceeds the critical value by chance alone when there are truly no differences for any of the comparisons. This Bonferroni adjustment is calculated by taking the desired alpha level and dividing by the number of possible comparisons, based on the variable(s) being compared. The *t* value corresponding to the revised, lower alpha level must be exceeded in order for any of the comparisons to be considered significant. For example, to test for differences in dropout rates between whites, blacks, and Hispanics, the following steps would be involved:

- Establish the number of comparisons—in this case three (whites and blacks; whites and Hispanics; and blacks and Hispanics). The number of two-way comparisons that can be made equals $[(n)(n-1)]/2$, where *n* is the number of variable categories. Thus, with three categories the number of possible comparisons is $[(3)(2)]/2 = 3$.
- Divide the desired alpha level, 0.05, by the number of comparisons (e.g., three) to obtain the new alpha level ($0.05/3 = 0.0166$).
- Consult a table of *t* statistics (or the standard normal table for *z* values if the *N* is large) to find the *t* value that corresponds to that alpha ($t = 2.39$ for alpha = 0.0166).

All comparisons in this report were tested using the Bonferroni adjustment for the *t* tests. Where categories of two variables were involved, the number of comparisons used to make the Bonferroni adjustment was based on the relationship(s) being tested.

Trends. Regression analysis was used to test for trends across age groups and over time. Regression analysis assesses the degree to which one variable (the dependent variable) is related to a set of other variables (the independent variables). The estimation procedure most commonly used in regression analysis is ordinary least squares (OLS).

The analyses in this report were conducted on the event rates, status rates, and completion rates. The event rate and status rate estimates were used as dependent measures in the analysis with a variable representing time and a dummy variable controlling for changes in the educational attainment item in 1992 (0 = years 1968 to 1991, 1 = 1992 to 1997) used as independent variables. However, in these data some of the observations were less reliable than others (i.e., some years' standard errors were larger than other years'). In such cases OLS estimation procedures do not apply and it is necessary to modify the regression procedures to obtain unbiased regression parameters. The modification that is usually recommended transforms the observations to variables which satisfy the usual assumptions of ordinary least squares regression and then applies the usual OLS analysis to these variables.

This was done in this analysis using the data manipulation and regression capability of Microsoft EXCEL[®]. Each of the variables in the analysis was transformed by dividing each by the standard error of the relevant year's rate (event, status, or completion). The new dependent variable was then regressed on the new time variable and new editing-change dummy variable. All statements about trends in this report are statistically significant at the 0.05 level.

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