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ABSTRACT

This report presents national data for 1990 on high school dropout and retention rates. The report uses the Current Population Survey and the National Education Longitudinal Study of 1988. The three types of dropout rates discussed are: (1) event rates, (2) status rates, and (3) cohort rates. The report also examines high school completion and graduation rates. Data indicate that national dropout rates have declined over the last decade. The event dropout rate for persons 15 through 24 years old in grades 10 through 12 was 6.2 percent in 1980 and 4.1 percent in 1990. The status dropout rate for persons 16 through 24 was 14.1 percent in 1973 and 12.1 percent in 1990. In addition, recently collected longitudinal data reveal that about 7 percent of the eighth graders enrolled in the spring of 1988 dropped out before the end of their sophomore year in high school. The following results are highlighted: (1) male and female rates are comparable; (2) central city rates are higher than suburban rates; (3) rates for Hispanic Americans are higher than rates for Whites; and (4) status and cohort rates in the South are higher than those in the Northeast and Midwest and are higher for Blacks than for Whites. New data collection efforts by the National Center for Education Statistics that have a bearing on issues of high school dropouts and graduates are briefly discussed in the concluding section. The report includes 15 tables and 11 graphs. Appendix A contains time series and standard error tables, and Appendix B provides technical notes. (JB)

NATIONAL CENTER FOR EDUCATION STATISTICS

Dropout Rates in the United States: 1990

U.S. Department of Education
Office of Educational Research and Improvement

NCES 91-053

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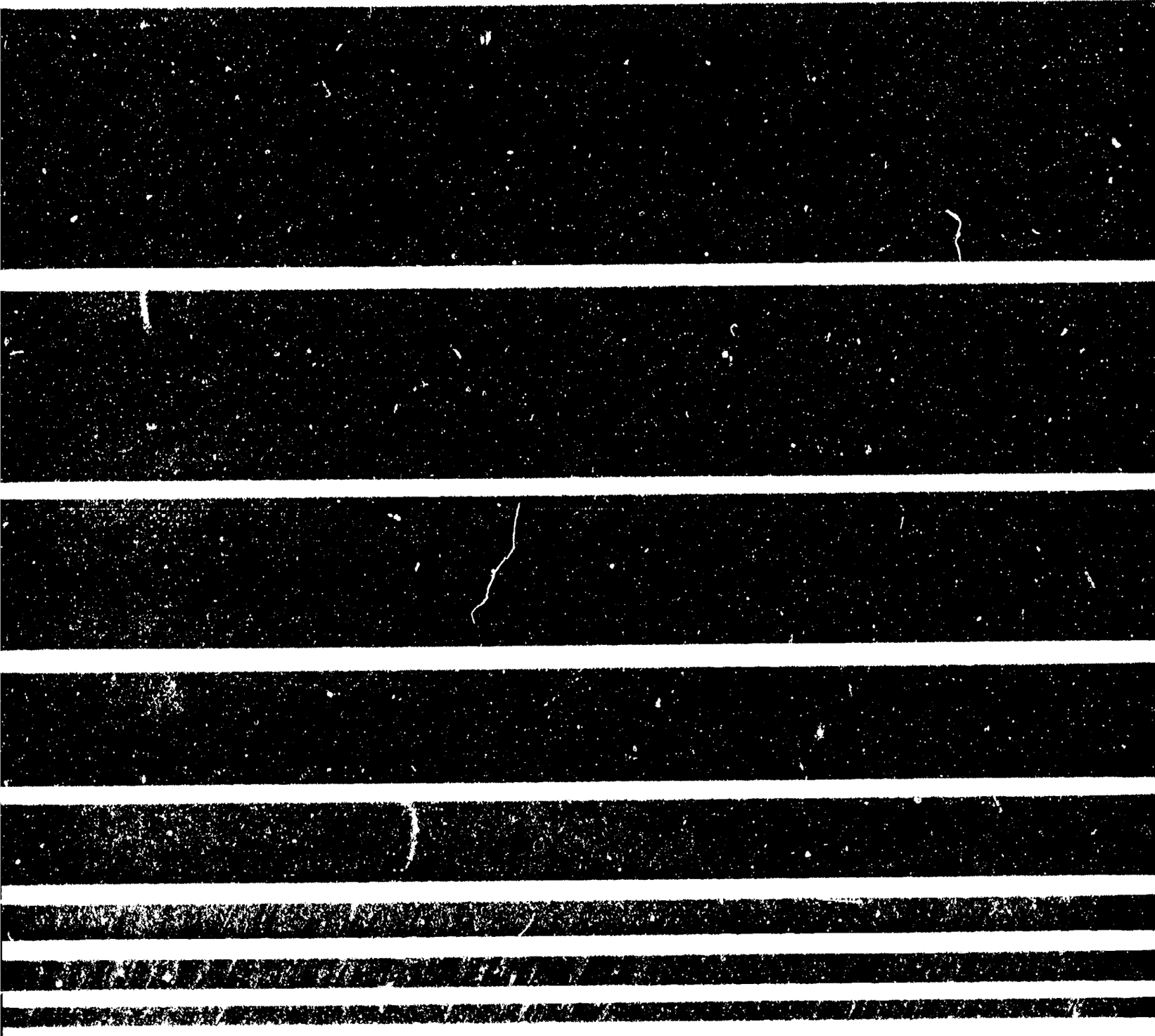
National Center for Education Statistics

"The purpose of the Center shall be to collect, and analyze, and disseminate statistics and other data related to education in the United States and in other nations."—Section 406(b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e–1).

September 1991



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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. The Hawkins-Stafford Elementary and Secondary School Improvement Amendments of 1988 (P.L. 100-297) mandated specifically that NCES collect and publish data about dropping out of school. One of these mandates requires NCES to report annually on dropout and retention rates for a 12-month period to the appropriate committees of Congress on the second Tuesday after Labor Day, beginning in 1989. This report was prepared pursuant to that mandate and is NCES' third annual report on dropout rates.

This report presents the data for 1990 on high school dropout and retention rates. It also examines high school completion and graduation rates. At the conclusion of the report is a discussion of new data collection efforts by NCES that have a direct bearing on the issues of high school dropouts and graduates.

The report is based on the best and most current national data available at this time. It utilizes the Current Population Survey conducted by the Bureau of the Census to develop event and status dropout rates and the National Education Longitudinal Study of 1988 to develop an 8th- to 10th-grade cohort dropout rate. NCES is currently pursuing an extensive, integrated program to expand and improve data collected about dropouts in response to the provisions of P.L. 100-297. These efforts were described in an earlier report, *Activities to Plan and Implement the Reporting of School Dropout and Retention Indicators: Status Report to the United States Congress on Activities Related to Section 406 (G) of the General Education Provisions Act (GEPA) as Amended by Public Law 100-297*, May 1989.

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

Emerson J. Elliott
Acting Commissioner of
Education Statistics

ACKNOWLEDGMENTS

This report was prepared under the direction of Jeffrey Owings, Chief, Longitudinal and Household Studies Branch, Elementary/Secondary Education Statistics Division. Many individuals made substantial contributions to its preparation. Denise Bradby of MPR Associates assisted in all aspects of the preparation of this report and Aaron Pallas of Michigan State University reviewed the final drafts. Andrea Livingston, Leslie Retallick, Brett Threlkeld, Sharlene Mulder, and Ramona McCowan of MPR Associates provided invaluable editorial, graphics, and production assistance.

Without the assistance of Robert Kominski, Chief, Education and Social Stratification Branch, Population Division, Bureau of the Census, and Rosalind Bruno of his staff, the sections of this report based on CPS data could not have been prepared. They provided data tapes, special tabulations, and guidance in interpreting the data. Paul Siegel, Population Division, Bureau of the Census, also provided guidance and technical expertise.

Numerous members of the NCES staff provided assistance in preparing various parts of the report. Mary Frase, Jeffrey Owings, and Susan Ahmed reviewed drafts and table shells during initial stages of the project.

The report was reviewed by Susan Ahmed, Mary Frase, Lee Hoffman, and Robert Burton of NCES; Robert Kominski, Bureau of the Census; and Russell Rumberger of the University of California at Santa Barbara. Their efforts and contributions are greatly appreciated.

EXECUTIVE SUMMARY

This third annual report to Congress by the National Center for Education Statistics presents data for 1990 on high school dropout and retention rates, along with time series data for the period 1973 through 1990. The report includes the first release of dropout rates for eighth graders who dropped out of school between 1988 and 1990. It also includes a detailed examination of high school completion and graduation rates.

Types of Dropout Rates

There are a variety of ways in which to define and calculate dropout rates. Each type of dropout rate measures a different facet of dropping out. Three types are discussed in this report: event rates, status rates, and cohort rates.

- Event rates measure the proportion of students who drop out in a single year without completing high school.
  - Event rates are important because they reveal how many students are leaving high school each year and how each year's rates compare with previous ones.
- Status rates measure the proportion of the population who have not completed high school and are not enrolled at one point in time, regardless of when they dropped out.
  - Status dropout rates are important because they reveal the extent of the dropout problem in the population and, therefore, suggest the magnitude of the challenge for further training and education that will permit these individuals to participate more fully in the economy and the life of the nation.
  - Status dropout rates are much higher than event dropout rates because they represent the cumulative impact of annual event dropout rates over a number of years.
- Cohort rates measure what happens to a single group (or cohort) of students over a period of time.
  - Cohort rates are important because they reveal how many students in a single age group (or in a specific grade in school) drop out over time.
  - Cohort rates also allow the calculation of how many dropouts from the cohort eventually complete high school with a diploma or an alternative credential.

This report updates the data on event and status rates presented in last year's report and presents a cohort rate from the eighth-grade class of 1988.

Event, Status, and Cohort Dropout Rates

National dropout rates have declined over the last decade. The event dropout rate for persons 15 through 24 years old in grades 10-12 was 6.2 percent in 1980 and 4.1 percent in 1990. And, the status dropout rate for persons 16 through 24 years old was 14.1 percent in 1980 and 12.1 percent in 1990. In addition, recently collected longitudinal data reveal that about 7 percent of the eighth graders enrolled in the spring of 1988 dropped out before the end of their sophomore year in high school.

Analyses of dropout rates for 1990 by selected demographic characteristics reveal consistent patterns across the three types of national dropout rates—event, status, and cohort. In particular, male and female dropout rates are comparable, central city rates are higher than suburban rates, and rates for Hispanics are higher than rates for whites. The status and cohort rates in the South are higher than those in the Northeast and Midwest and are higher for blacks than for whites.

Event Rate

- In 1990, some 4.1 percent of 15- through 24-year-olds in grades 10-12 dropped out of school before completion. The event dropout rate represents approximately 347,000 students dropping out of school in 1990.

- The school retention rate for 1990—the proportion of 15- through 24-year-olds in grades 10-12 graduating or remaining in school from one year to the next—was 95.9 percent.

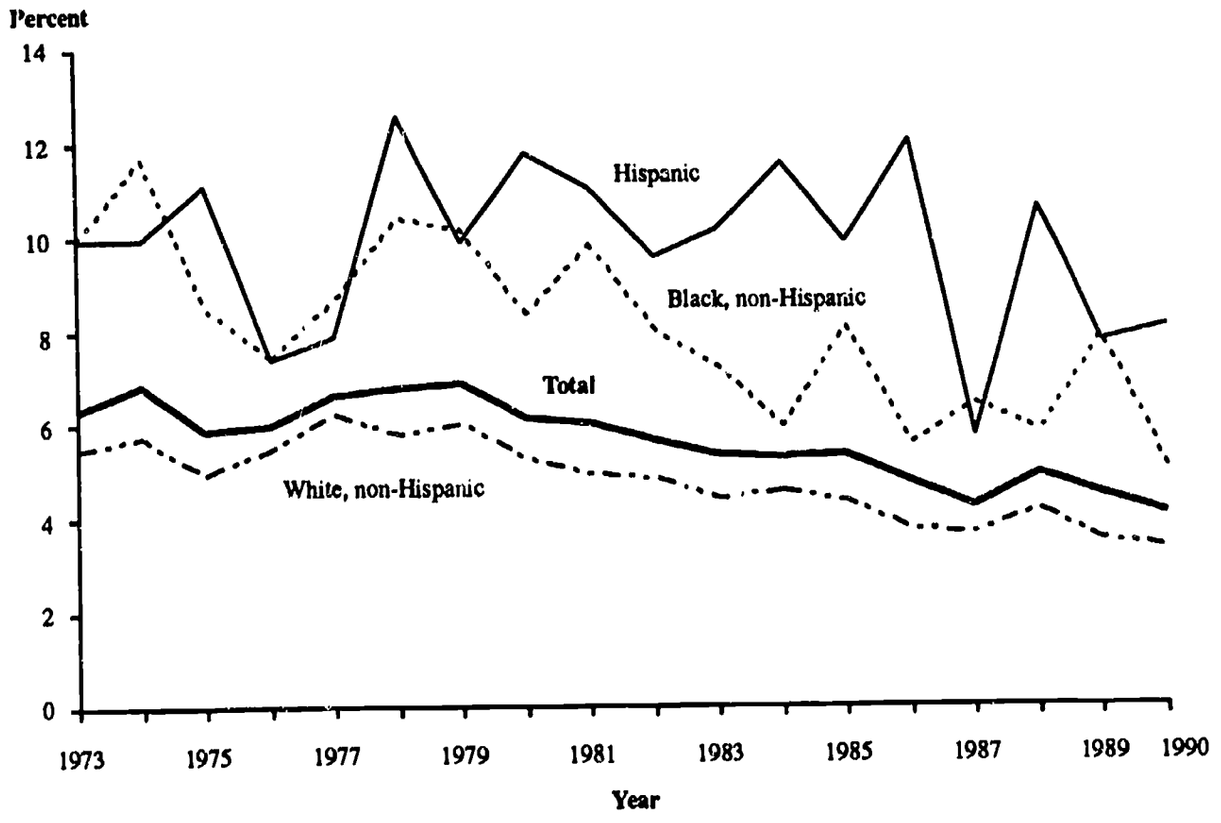
- The event rate for 1990 was not statistically different from the rate for 1989, nor were there significant differences between the rates for 1990 and 1989 for males, females, or members of different racial or ethnic groups.

- The event dropout rate has fallen over the last decade. In the late 1970s, the annual event dropout rate was over 6 percent. By 1990, the rate was 4.1 percent (figure A). This decline is also evident in the event dropout rates for white and black students.

- For 1990, the event rate was higher in the central cities (5.7 percent) than in the suburbs (3.2 percent). Furthermore, the rate for Hispanics (8.1 percent) was greater than for whites (3.4 percent).

- While Hispanics, students living in central cities, and older students were more likely to drop out than other students, the majority of students who dropped out over the last year were white, under 20 years old, and lived in suburbs or nonmetropolitan areas.

Figure A.—Single-year event dropout rates for grades 10-12, ages 15-24, by race-ethnicity: 1973 through 1990



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

Status Rate

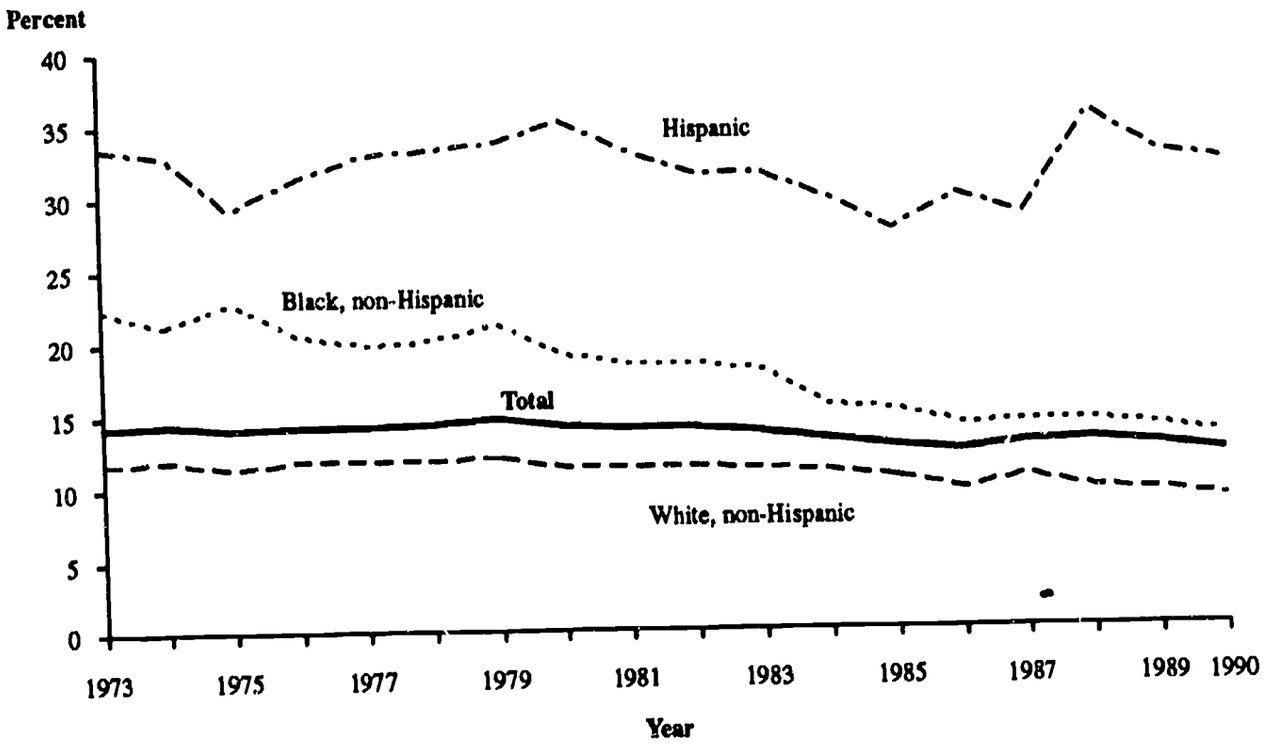
- In October 1990, approximately 3.8 million persons in the United States ages 16-24 had not completed high school and were not currently enrolled in school. This represented about 12.1 percent of all persons in this age group.

- The 1990 status rate for all persons ages 16-24 was not statistically different from the 1989 rate, nor were there significant differences between the 1990 and 1989 rates for males, females, or members of different racial or ethnic groups.

- The percentage of young persons who are status dropouts has generally declined over the last two decades. In 1973, some 14.1 percent of persons 16-24 were not enrolled and had not completed high school, compared with 12.1 percent in 1990 (figure B).

- Persons in central cities, in the southern or western regions of the country, and black and Hispanic persons were more likely to be status dropouts than were other persons. About one-third of all Hispanics 16-24 had not finished high school and were not enrolled in school.

Figure B.—Status dropout rates for persons ages 16-24, by race-ethnicity: October 1973 through October 1990



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

Cohort Rates

- Some 6.8 percent of the eighth-grade cohort of 1988 dropped out of school between the 8th and 10th grades. Male and female eighth graders dropped out of school at approximately the same rate over this 2-year period.

- Cohort dropout rates were significantly higher for Hispanic and black students than they were for white and Asian students.

- Compared with students in the suburbs, eighth graders from central cities were more likely to drop out between 1988 and 1990. Likewise, students residing in the South were more likely than students in the Northeast and Midwest to have dropped out.

Types of High School Completion and Graduation Rates

Just as dropout rates can be calculated in various ways, there are several ways to calculate graduation or completion rates.

- Graduation rates vary according to two factors: 1) how high school graduation is defined (e.g., inclusion or exclusion of recipients of high school equivalency certificates), and 2) the age group examined (e.g., a great many 17- and 18-year-olds are still enrolled in school). Consequently, even when using the same data source, graduation/completion rates for 1990 ranged from 34 percent to 86 percent depending on how the rate was calculated (table A).

- The high school graduation rate is lower if those holding a high school equivalency certificate are not considered high school graduates (e.g., 78 percent for 19- and 20-year-olds) than if all high school completers, regardless of the method of completion, are counted as graduates (e.g., 83 percent for 19- and 20-year-olds) (table A).

- Generally, graduation rates are higher for older age groups (e.g., 81 percent for 23- and 24-year-olds) than for younger ones (e.g., 34 percent for 17- and 18-year-olds).

- A substantial proportion of students older than traditional graduation age are still enrolled in high school. Therefore, in considering who is a potential graduate at a specific point in time, if those still enrolled in high school are excluded from the population base, the completion rates for all age groups would be somewhat higher (e.g., 86 percent vs. 83 percent for the high school completion rate for 19- and 20-year-olds).

Table A.—High school completion rates and method of completion by age: 1990

Completion method	Age			
	17-18	19-20	21-22	23-24
	(percent)			
Completed	35.8	82.8	86.1	85.6
Diploma	34.2	78.1	81.0	80.6
Alternative	1.7	4.8	5.2	5.2

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1990, unpublished tabulations.

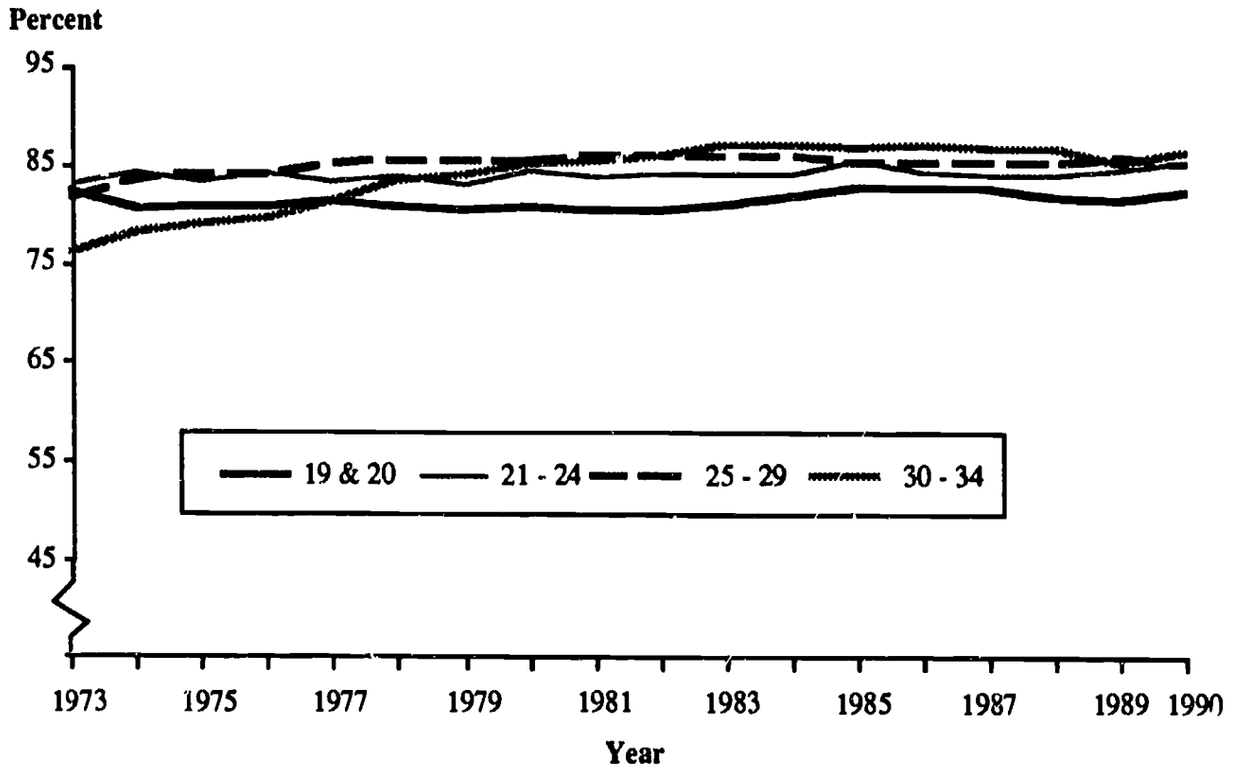
High School Completion and Graduation

- The high school completion rate for all persons age 19 and 20 who have completed high school by receiving a high school diploma or equivalency certificate was fairly constant from 1973 to 1982, at about 82 percent (figure C). However, between 1982 and 1990 there was a small but statistically significant increase in the completion rate—to about 83 percent in 1990.

- The high school completion rate for white 19- and 20-year-olds increased 1 percentage point, from 86 percent in 1973 to about 87 percent in 1990. Over the same time interval, the high school completion rate for black 19- and 20-year-olds showed a relative increase of about 15 percent, from 68 to 78 percent, thus narrowing the gap between black and white high school completion rates for this age group. The high school completion rate for Hispanic 19- and 20-year-olds was consistently lower than that for whites.

- The completion rate for 30- through 34-year-olds rose from 76 percent in 1973 to 88 percent in 1984, reflecting a general increase in the educational achievement of earlier cohorts (figure C).

Figure C.—High school completion rates for persons 19 and 20 years old, 21-24 years old, 25-29 years old, and 30-34 years old: October 1973 through October 1990



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

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INTRODUCTION

Each and every student who drops out of school faces a decreased opportunity for assuming a successful and fully functional place in the American workplace, indeed in American society at large. As the United States faces its role in the international economy of the 21st century, the demand for highly skilled and educated workers is greater than ever before. The nation can ill-afford to have members of the American work force handicapped by incomplete preparation. The possible severity of this problem is compounded by the fact that the proportion of students who are potentially at risk of school failure—those from non-English language backgrounds, who come from single-parent households, or who come from poor families—is on the rise in our nation's schools.[1] Thus, the rate at which students drop out of school nationwide is well recognized as a major educational and economic problem.

In response to the gravity of this problem, the President and governors in 1990 included high school completion as one of the six national education goals adopted for the year 2000. The specific goal is to increase the high school graduation rate to at least 90 percent by the year 2000. Two additional objectives have been identified as part of the aim to meet the high school completion goal:

- The nation must dramatically reduce its dropout rate and 75 percent of those students who drop out will successfully complete a high-school degree or its equivalent.

- The gap in high school graduation rates between American students from minority backgrounds and their nonminority counterparts will be eliminated.[2]

Monitoring progress toward this goal and the related objectives requires standard, reliable time series data on high school graduation and completion rates, as well as consistent time series on dropout rates. Toward this end, the National Forum on Education Statistics report, "A Guide to Improving the National Education Data System," recommends that

- NCES, in cooperation with state departments of education, should obtain and periodically report comparable state-by-state data on school dropouts and completers by race-ethnicity, sex, and other important subgroups.

In recent years the National Center for Education Statistics (NCES) has taken a number of steps to ensure the availability of improved dropout data. For example, NCES conducted a field test of a dropout data collection from 1989 to 1991. As a result, a dropout statistics collection is planned for the NCES Common Core of Data (CCD) starting in the 1992-93 school year. In addition, in 1988 the Hawkins-Stafford Elementary and Secondary School Improvement Amendments (P.L. 100-297) (20 U.S.C. 1221e-1)

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[1]A. Pallas, G. Natriello, and E. McDill, "The Changing Nature of the Disadvantaged Population: Current Dimensions and Future Trends," *Educational Researcher*, June-July 1989.

[2]Office of the Press Secretary, the White House, "National Education Goals," Press release, January 31, 1990.

included provisions for NCES to report a dropout rate for a 12-month period to Congress on an annual basis starting in 1989.

Over the last 2 years NCES has published annual reports to Congress on dropout and retention rates.[3] The present publication is the third annual high school dropout report to Congress. This report contains three main sections. First, it provides an update on data on three measures—event, status, and cohort dropout rates—presented in the first and second annual reports. The second section of the report focuses its discussion on the Current Population Survey data on high school completion and graduation. In the third section, new NCES data collection efforts related to high school dropouts are described. At the end of the report, technical appendices provide a discussion of the statistical methodology used and also present standard errors for all estimates.

This year's dropout report differs in several ways from previous years' reports to Congress on dropout and retention rates. The last 2 years' reports presented 3-year average event dropout rates, while this year's report presents only single-year event rates. Although single-year rates show more year-to-year fluctuation than do 3-year averages, it is difficult to interpret year-to-year changes with 3-year average rates. Consequently, to simplify the interpretation of the event dropout rates, single-year event rates are presented in this year's report.

Furthermore, prior to 1989 the Current Population Survey (CPS) inquired as to the enrollment status of persons 14 years old and older. Starting in 1989, CPS asked this question of persons 15 years old and older. Last year's report presented event dropout rates for 14- through 24-year-olds for the years 1968-1988 and for 15- through 24-year-olds for the year 1989. This year's report presents the event dropout data for 15- through 24-year-olds for all of the years 1973-1990.

Finally, this year's report presents data separately for racial-ethnic categories that are mutually exclusive. That is, three categories of race-ethnicity are presented here: 1) white, non-Hispanic, 2) black, non-Hispanic, and 3) Hispanic. In previous years' reports, Hispanics could be of any race.

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[3]P. Kaufman & M. Frase, *Dropout Rates in the United States: 1989*, U.S. Department of Education, National Center for Education Statistics, (September 1990); and M. Frase, *Dropout Rates in the United States: 1988*, U.S. Department of Education, National Center for Education Statistics, (September 1989).

EVENT, STATUS, AND COHORT DROPOUT RATES

Event Rates

Event dropout rates measure the proportion of individuals who have dropped out of school over a specified time interval, such as a 12-month period. Using the October Current Population Survey (CPS), data are available on the number or proportion of students who were enrolled in high school a year ago, are not enrolled in grades 10–12 now, and have not completed high school—that is, the number or proportion of students who dropped out in the past year.[4] The event dropout and school retention rates are shown below for the most recent years, along with trends in the event dropout rate from 1973–1990.

Event Rate: 1990

Table 1 shows the single-year event rates for 1988-1990. In 1990, approximately 347,000 students or 4.1 percent of all high school students 15 through 24 years old dropped out of grades 10–12. Related to this, the school retention rate, or the proportion of 15- through 24-year-old students completing high school or remaining in school from one year to the next, was 95.9 percent for 1990. Table 1 also shows that the percentage of students dropping out in 1990 is essentially unchanged from the annual rate for 1989.[5]

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[4]Specifically, the numerator of the single-year event rate for 1990 is the number of persons 15 through 24 years old surveyed in 1990 who were enrolled in high school in October 1989, were not enrolled in high school (grades 10-12) in October 1990, and who also did not complete high school (i.e., had not received a high school diploma or an equivalency certificate) between October 1989 and 1990. 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 were in grades 10, 11, and 12 last year and successfully completed the grade.

[5]Standard errors for all tables are provided in appendix A of this report.

Table 1.—Single-year event dropout and retention rates and number of dropouts for ages 15-24 in grades 10-12: 1988 through 1990

Type of rate and year ending	Event dropout rate (percent)	School retention rate (percent)	Number of dropouts (in thousands)
1988	4.9	95.1	462
1989	4.5	95.5	403
1990	4.1	95.9	347

NOTE: Percentages may not sum to 100 percent due to rounding.

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

Table 2 shows the 1990 event dropout and school retention rates for persons 15 through 24 years old with varying demographic characteristics. Dropout rates for Hispanic students were higher than those for white students and were higher for students 20 through 24 years old than for younger students.[6] Students residing in central cities dropped out at a higher rate than did students in suburban areas.[7]

[6]Unlike the two previous annual reports on high school dropouts, the racial-ethnic categories in the tables and figures based on CPS data *are* mutually exclusive. Whites are white, non-Hispanic; blacks are black, non-Hispanic.

[7]The statistical significance of these comparisons were assessed with Student's t-test with a Bonferroni correction for multiple comparisons. For a full discussion of the statistical methods used in this report, see appendix B.

Table 2.—Single-year event dropout and retention rates and number and distribution of dropouts from grades 10-12, ages 15-24, by sex, race-ethnicity, age, region, and metropolitan status: 1990

	Event dropout rate (percent)	School retention rate (percent)	Number of dropouts (thousands)	Percent of all dropouts
Total	4.1	95.9	347	100.0
Sex				
Male	4.1	95.9	177	51.0
Female	4.0	96.0	170	49.0
Race-ethnicity[1]				
White, non-Hispanic	3.4	96.6	208	59.9
Black, non-Hispanic	5.1	94.9	64	18.4
Hispanic	8.1	91.9	64	18.4
Age[2]				
15	3.0	97.0	7	2.0
16-17	2.6	97.4	129	37.2
18-19	5.4	94.6	165	47.6
20-24	16.7	83.3	46	13.3
Region				
Northeast	3.3	96.8	58	16.7
Midwest	3.3	96.7	74	21.3
South	4.6	95.4	131	37.8
West	4.7	95.3	84	24.2
Metropolitan status				
Central city	5.7	94.3	138	39.8
Suburban	3.2	96.8	134	38.6
Nonmetropolitan	3.5	96.5	75	21.6

1 Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

2 Age when a person dropped out may be 1 year younger, because the dropout event could occur at any time over a 12-month period.

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1990, unpublished data.

While students living in central cities, Hispanic students, and older students were more likely to drop out than their peers in grades 10–12, the majority of all students are white, do not live in central cities, and are under 20 years old. Therefore, the majority of students who dropped out over the year were not from minority backgrounds and did not

live in central cities. On average, 60 percent were white, 86 percent were 15- through 19-year-olds, and 60 percent lived in suburban or nonmetropolitan areas.

Trends over Time

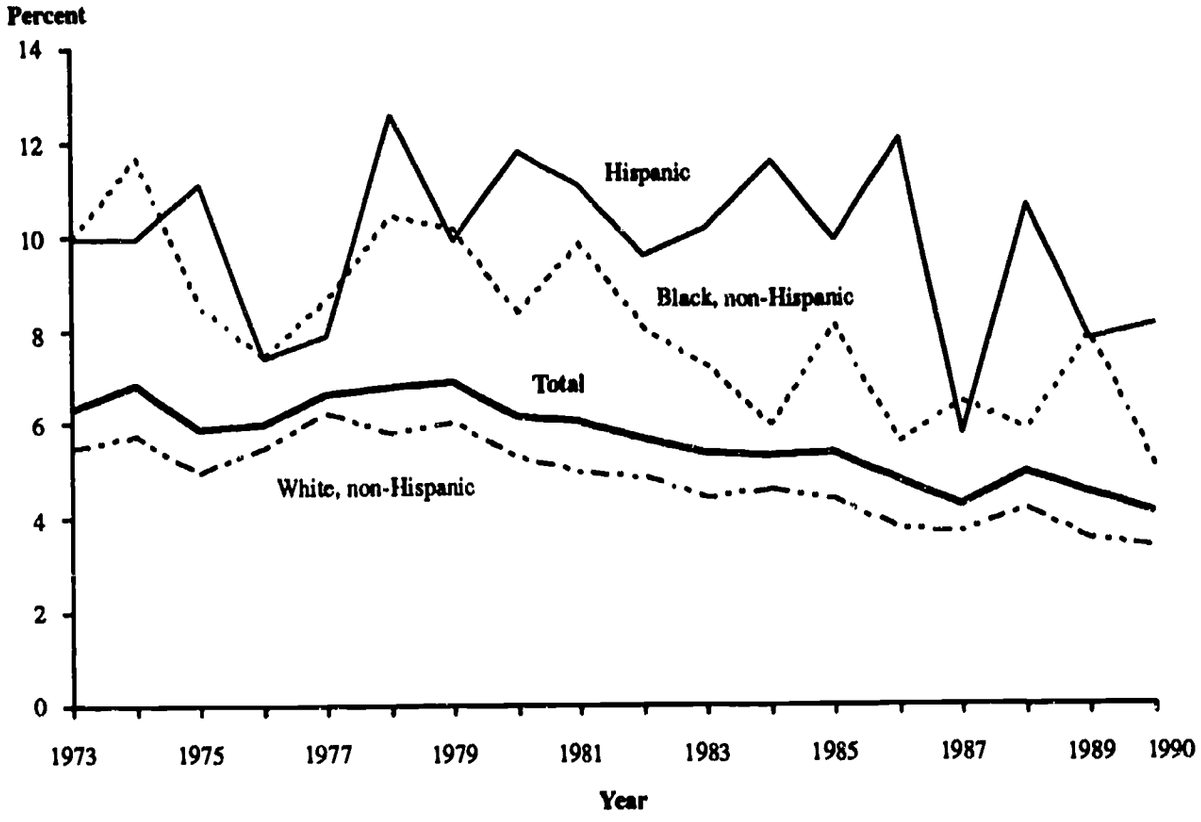
Figure 1 shows the single-year event rates for the years 1973–1990.[8] The event rates indicate that the incidence of dropping out has fallen over the last decade. Specifically, in the late 1970s, the event rate was over 6 percent. By 1990, it was only 4.1 percent.[9] Furthermore, dropout rates for white and black students have generally fallen during the last decade. For example, in 1980 some 8.4 percent of black students 15 through 24 years old dropped out of high school, whereas in 1990 some 5.1 percent of black students in this age group did so. For white students, the percent of 15- through 24-year-olds who dropped out of high school was 5.3 percent in 1980 and 3.4 percent in 1990. Estimates of the Hispanic dropout rate evidence no apparent statistical trend, but are consistently higher than comparable rates for whites over this period.[10]

[8]Supporting data and standard errors for all figures are provided in appendix A of this report.

[9]The statistical significance of the trends presented in this section was assessed using weighted least squares regression analyses on the trends in single-year rates. For a full discussion of the statistical methods used in this report, see appendix B.

[10]The erratic nature of the Hispanic event rate reflects, in part, the small sample size of Hispanics in CPS.

Figure 1.—Single-year event dropout rates for grades 10-12, ages 15-24, by race-ethnicity: 1973 through 1990



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

Event dropout rates for white and black students have declined among both males and females (table 3). For example, the single-year event rates for both white male and female students fell over the last decade.[11] The white male rate has declined from about 6 percent in 1980 to about 4 percent in 1990. The white female rate also has declined over this time period from about 5 percent in 1980 to 3 percent in 1990. Black male rates fell from 8 percent in 1980 to about 4 percent in 1990. The black female rate declined from 9 percent in 1980 to 6 percent in 1990.

[11]While table 3 displays data for the even years between 1980 and 1990, the statistical analysis of the trends in the event rates was conducted on the data for all of the years from 1980–1990. Data for the years 1973–1990 are presented in appendix A.

Table 3.—Single-year event dropout rates from grades 10-12, ages 15-24, by sex and race-ethnicity: 1980 through 1990

Year	White non-Hispanic		Black non-Hispanic		Hispanic	
	Male	Female	Male	Female	Male	Female
			(percent)			
1980	5.7	4.9	7.8	8.9	17.7	6.8
1982	5.1	4.7	9.1	6.9	9.9	9.2
1984	5.0	4.2	6.2	5.8	13.0	10.4
1986	3.8	3.7	5.2	6.0	12.6	11.5
1988	4.3	4.1	6.5	5.2	12.5	8.4
1990	3.6	3.2	4.3	5.8	8.9	7.4

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

Status Rates

In contrast to event dropout rates that measure the proportion of students dropping out over the course of a single year, status dropout rates measure the proportion of individuals who are dropouts at any one given time, regardless of when they dropped out of school. For example, CPS data can be used to calculate the number or proportion of individuals in a specified age range who, as of October of any given year, have not completed high school and are not currently enrolled in school.[12] Those persons who are still in school and those who completed high school after dropping out are not dropouts. The rate and number of status dropouts for 16- through 24-year-olds in 1990 are presented below, followed by an examination of trends in the status rate from 1973–1990.

Status Rate: 1990

In 1990 about 3.8 million persons in the United States ages 16 through 24 were high school dropouts, representing approximately 12.1 percent of all persons in this age group (table 4). The proportion of dropouts in 1990 was essentially unchanged from the previous year's rate of 12.6 percent and the 1988 rate of 12.9 percent.[13]

[12]The numerator of this rate is the number of individuals in a specified age range who, as of October of any given year, have not completed high school and are not currently enrolled in school. The denominator is the number of persons in that age group in October of that year.

[13]The differences in the number of status dropouts and the number of persons in the population 16 through 24 years old between 1989 and 1990 are not statistically significant.

Table 4.—Rate and number of status dropouts, ages 16-24: October 1988 through October 1990

	October		
	1988	1989	1990
Status dropout rate (percent)	12.9	12.6	12.1
Number of status dropouts (in thousands)	4,231	4,038	3,797
Population (in thousands)	32,893	32,007	31,443

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

Table 5 shows the status dropout rates for persons age 16 through 24 with different demographic characteristics. In October 1990, there were similar numbers of male and female dropouts.[14] Persons living in central cities, and in the southern or western regions of the country, were more likely than others to be status dropouts.[15] The status dropout rate for Hispanics was higher than for others, and the rate for black 16- through 24-year-olds was higher than the rate for whites. About one-third of all Hispanics ages 16 through 24 had not finished high school and were not enrolled in school. Moreover, white status rates were lower than both black and Hispanic rates.

Table 6 indicates that the general racial-ethnic patterns seen in table 5 vary according to place of residence. Whites residing in the South were more likely to be status dropouts than were whites in other regions. In contrast, Hispanics living in the West were more likely to be status dropouts than were Hispanics in the Northeast or South.

[14]In 1989 the difference in the proportion of males and females who were status dropouts was statistically significant. In that year, 13.6 percent of males and 11.7 percent of females were status dropouts. However, in 1990 the difference in the male and female status rates is not statistically significant due to a decrease in the estimate of the male status rate for 1990. Nevertheless, this decrease in the male rate from 1989 to 1990 is not statistically significant.

[15]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.

Table 5.—Rate and number of status dropouts, by sex, race-ethnicity, age, region, and metropolitan status: October 1990

	Status dropout rate (percent)	Number of status dropouts (in thousands)	Population (in thousands)	Percent of all dropouts	Percent of population
Total	12.1	3,797	31,443	100.0	100.0
Sex					
Male	12.3	1,909	15,502	50.3	49.3
Female	11.8	1,887	15,941	49.7	50.7
Race-ethnicity[1]					
White, non-Hispanic	9.0	2,007	22,360	52.9	71.1
Black, non-Hispanic	13.2	594	4,487	15.6	14.3
Hispanic	32.4	1,114	3,443	29.3	11.0
Age					
16	4.3	143	3,294	3.8	10.5
17	8.4	275	3,297	7.2	10.5
18	14.0	480	3,419	12.6	10.9
19	14.3	523	3,645	13.8	11.6
20	12.9	472	3,649	12.4	11.6
21	12.6	446	3,534	11.7	11.2
22	13.6	463	3,405	12.2	10.8
23	13.8	491	3,565	12.9	11.3
24	13.9	504	3,635	13.3	11.6
Region					
Northeast	8.7	543	6,240	14.3	19.9
Midwest	9.1	690	7,616	18.2	24.2
South	14.5	1,586	10,944	41.8	34.8
West	14.7	977	6,643	25.7	21.1
Metropolitan status					
Central city	15.5	1,582	10,234	41.7	32.6
Suburban	9.9	1,427	14,462	37.9	46.0
Nonmetropolitan	11.7	787	6,746	20.7	21.5

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1990, unpublished data.

Table 6.—Status dropout rate, ages 16-24, by region and race-ethnicity: October 1990

	Total	Race-ethnicity[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
		(percent)		
Total	12.1	9.0	13.2	32.4
Region				
Northeast	8.7	6.5	10.8	26.0
Midwest	9.1	7.4	14.3	31.1
South	14.5	12.7	14.2	27.5
West	14.7	7.7	8.8	37.9

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

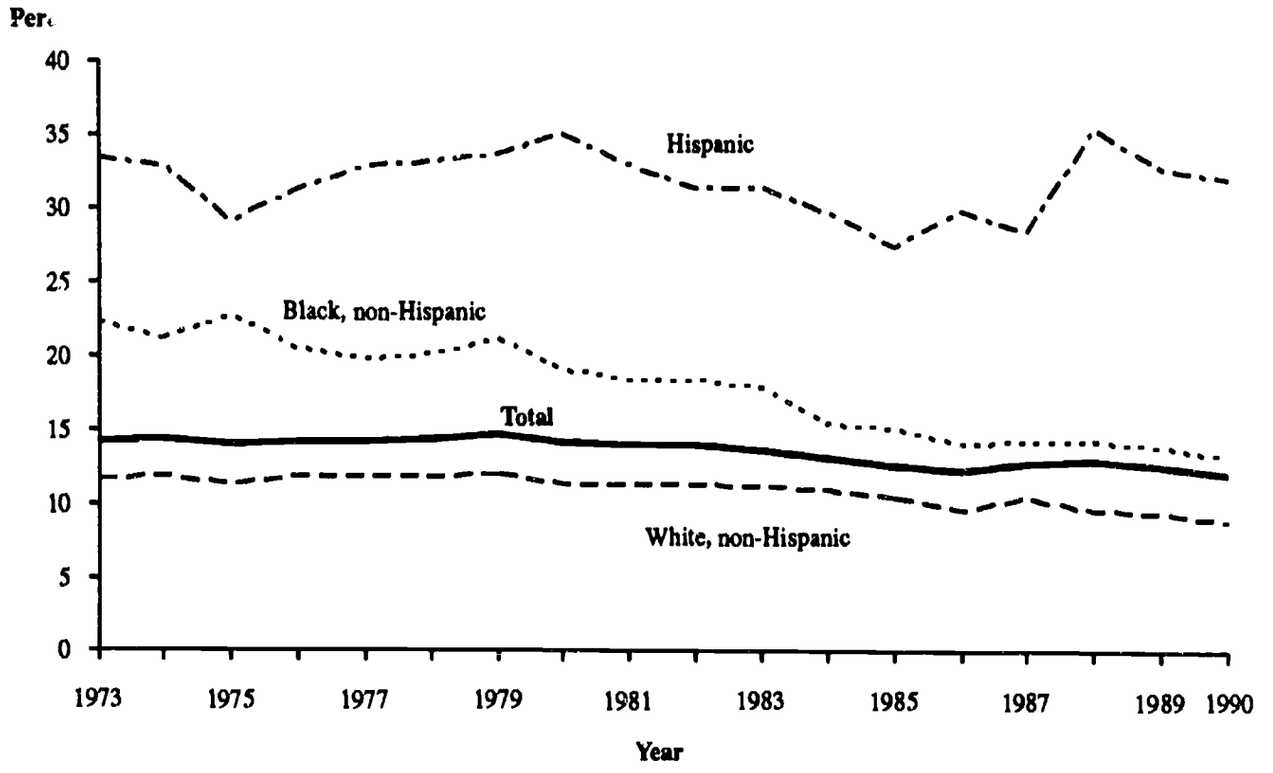
SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1990, unpublished data.

Trends over Time

The percentage of young persons who are status dropouts has generally declined over the last two decades (figure 2). In 1973, approximately 14 percent of persons 16 through 24 years old had not completed high school and were not currently enrolled, while in 1990 a little more than 12 percent were dropouts.[16]

[16]The statistical significance of the trends presented in this section was assessed using weighted least squares regression analyses on the trends. For a full discussion of the statistical methods used in this report, see appendix B.

Figure 2.—Status dropout rates for persons ages 16-24, by race-ethnicity: October 1973 through October 1990

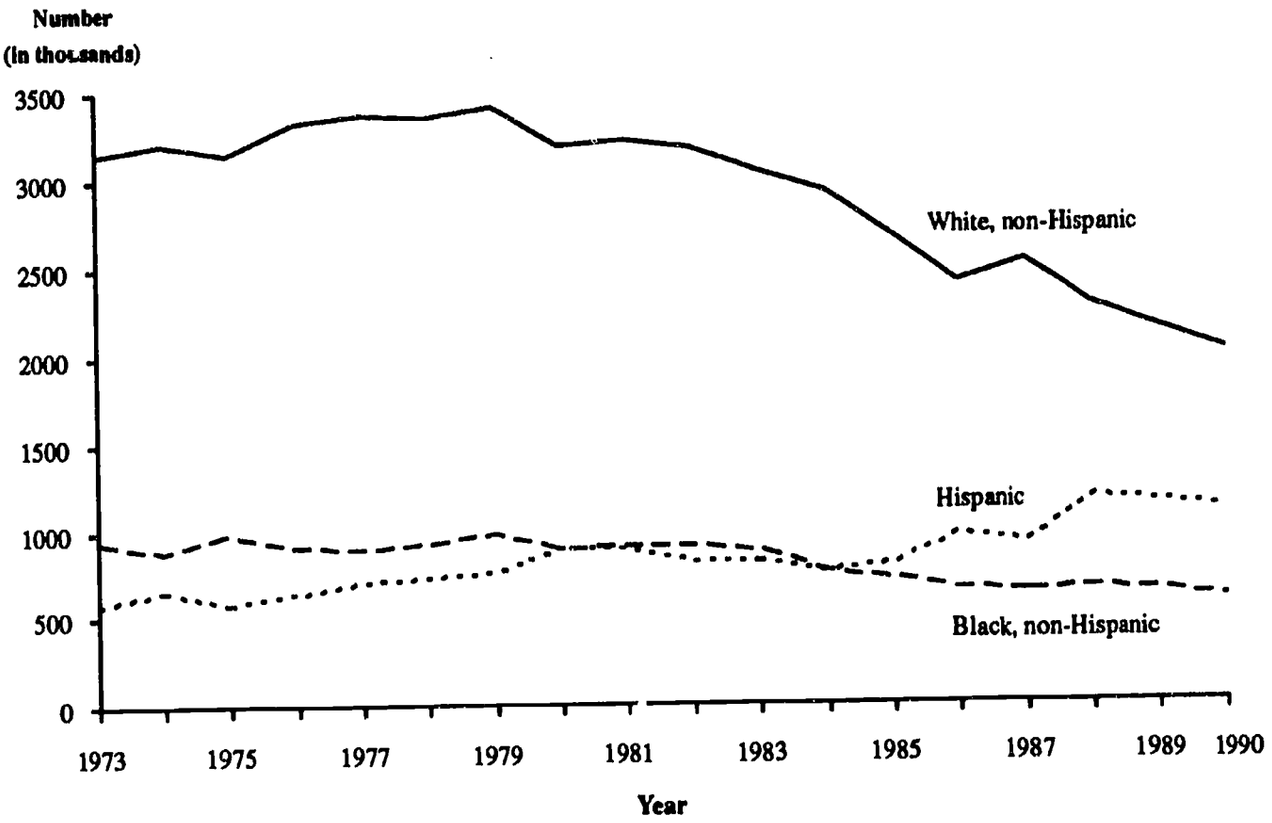


SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

Figure 2 also shows that the percentage of blacks who were status dropouts has decreased substantially since the early 1970s (from 22 percent in 1973 to 13 percent in 1990), while the status dropout rate for whites has decreased less (from 12 percent in 1973 to 9 percent in 1990). Although the year-to-year estimates fluctuate, the Hispanic status rate showed no trend and has been consistently higher than the status rates for whites and blacks.[17] However, Hispanics make up an increasing proportion of all dropouts (figure 3), due mainly to the changing composition of the population ages 16 through 24. While the population of whites ages 16 through 24 has decreased from approximately 28 million in 1980 to around 22 million in 1990, the population of Hispanics ages 16 through 24 has increased from approximately 2.5 million in 1980 to around 3.4 million in 1990. (The black population of this age range has held constant at approximately 4 million persons.) Because Hispanics now make up a larger proportion of the population, even without the decreases in the status dropout rates for whites and blacks, Hispanics would constitute a larger proportion of status dropouts.

[17]The erratic nature of the Hispanic status rate reflects, in part, the small sample size of Hispanics in CPS.

Figure 3.—Number of status dropouts, ages 16-24, by race-ethnicity: October 1973 through October 1990

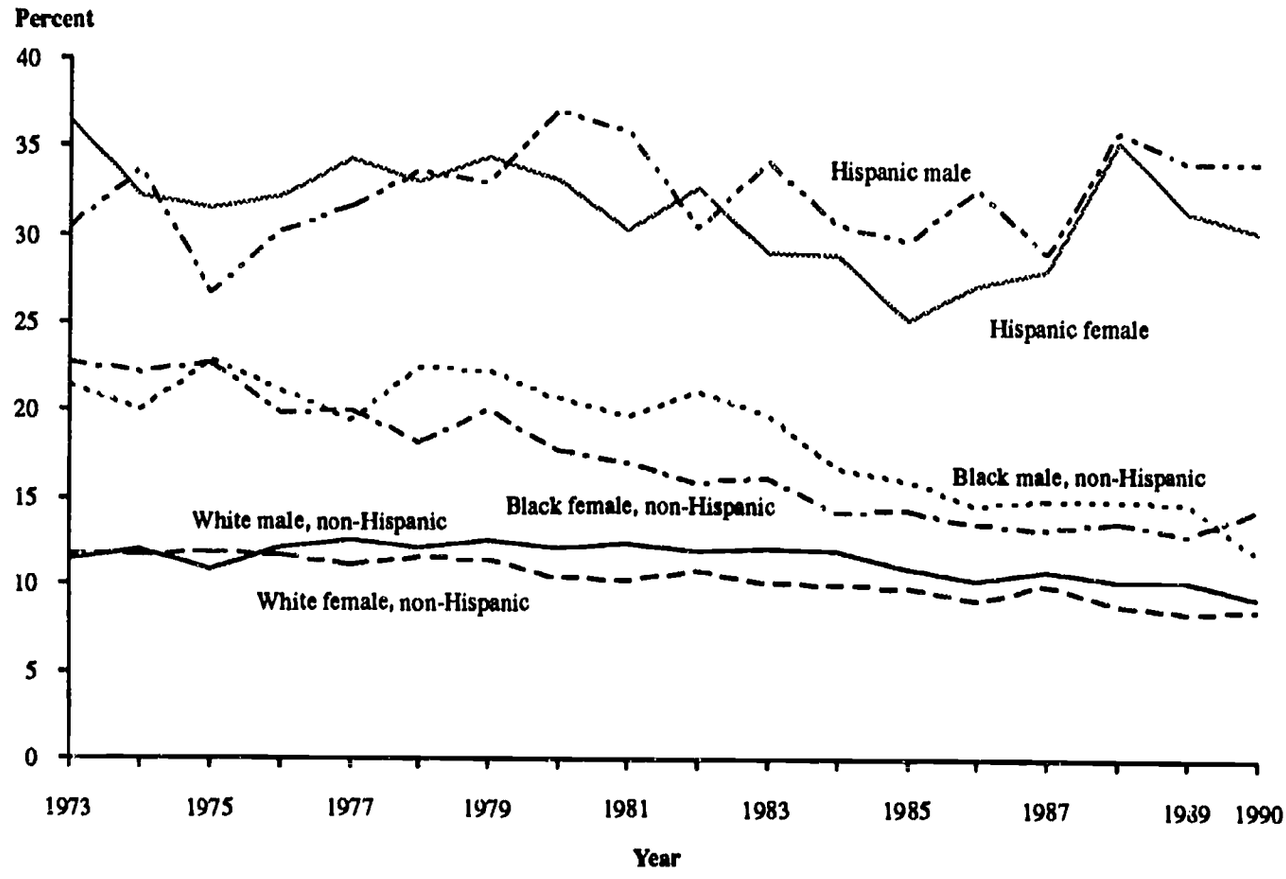


SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

The relationship between white male and female status rates changed over the last 17 years (figure 4). White female status rates declined from around 12 percent in 1973 to only 9 percent in 1990. White male rates remained fairly constant from 1973 to 1977, but have declined since, from about 13 percent in 1977 to around 9 percent in 1990.[18] Over the same time span, the status rates of both black males and black females declined—black male rates declined from about 22 percent in 1973 to just under 12 percent in 1990, and black female rates declined from approximately 23 percent in 1973 to 14 percent in 1990.

[18]As was shown in some detail in the 1988 dropout report, some of the difference in male and female trends may reflect the influence of the military buildup during the Vietnam War. Since CPS covers only the civilian, noninstitutionalized population, the CPS estimates for the number of 16- through 24-year-old males in the population and the number of male dropouts do not reflect the large proportion of males in this age group in military service during the period 1968–1974.

Figure 4.—Status dropout rate, ages 16-24, by race-ethnicity and sex: October 1973 through October 1990



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

Table 7 shows the trends over time for status rates for persons 16 through 24 years old residing in different regions of the country and for persons residing in central cities, suburban, and nonmetropolitan settings. While the status rate decreased in the Northeast and the South from 1975 to 1990, there was no evidence of a trend in the West and the Midwest. The rate declined by 23 percent in the Northeast and the South. Although the status rate decreased substantially in nonmetropolitan areas, it remained fairly constant in central cities and suburban areas. Between 1975 and 1990 the percentage of status dropouts in nonmetropolitan areas declined by 30 percent.

Table 7.—Status dropout rate, ages 16-24, by region and metropolitan status: Selected years, October 1975 through October 1990

	October				
	1975	1980	1985	1989	1990
	(percent)				
Total	13.9	14.1	12.6	12.6	12.1
Region					
Northeast	11.3	10.4	9.9	9.3	8.7
Midwest	10.9	11.5	9.8	9.0	9.1
South	18.9	18.2	15.2	15.1	14.5
West	13.0	14.9	14.6	16.2	14.7
Metropolitan status					
Central city	15.7	16.9	15.3	15.4	15.5
Suburban	10.2	11.1	10.0	10.7	9.9
Nonmetropolitan	16.8	15.3	13.6	12.6	11.7

SOURCE: U.S. Department of Commerce, Bureau of the Census, "School Enrollment--Social and Economic Characteristics of Students, October (various years)," *Current Population Reports*, Series P-20, and unpublished tabulations.

Cohort Rates

Cohort rates measure what happens to a single group (or cohort) of students over a period of time. For example, over the last decade NCES has conducted the High School and Beyond study (HS&B)—a longitudinal study of the high school sophomore class of 1980. The data from the HS&B third followup indicate that 17.3 percent of the 1980 sophomore cohort dropped out of high school by the end of their senior year—14.8 percent of white students, 22.2 percent of black students, and 27.9 percent of Hispanic students. By 1986 about 46 percent of these dropouts—8 percent of all students in the cohort—had returned to school and either earned a high school diploma or its equivalent.[19]

The most recent NCES longitudinal study, The National Education Longitudinal Study of 1988 (NELS:88), is the first of its longitudinal education studies to begin surveying students as early as eighth grade. NELS:88 provides the unprecedented opportunity to study young dropouts on a national scale. NELS:88 also provides a basis for examining the contextual factors associated with dropping out, especially those related to the school. In addition, it provides data needed to profile the movement of students in and out of school, including alternative high school programs.

NELS:88 started with the base-year data collection in which students, parents, teachers, and school administrators were selected to participate in the survey. 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

[19]See M. Frase, *Dropout Rates in the United States: 1988*, U.S. Department of Education, National Center for Education Statistics, September 1989, for a full discussion of the cohort rate from High School and Beyond.

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 followup 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 followup data for the computation of 8th- to 10th-grade cohort dropout rates.[20]

This process of tracking the education outcomes of a national sample of students will be continued with future followups; during the second followup in 1992 most of the students in this cohort will be near the end of their senior year of high school and by the third followup in 1994 most will have completed high school. These longitudinal data will provide an opportunity to study the movements of students dropping out and then returning to school, as well as the progress of students staying in school until high school completion. Data from the second and third followups can then be compared to the earlier results from HS&B, and the overall dropout rates and high school completion rates will provide a first opportunity to study the outcomes of an individual cohort as its members make the transition from eighth grade to high school and then to alternative postsecondary outcomes.

Cohort Rates from NELS:88—1988-1990

Table 8 shows the cohort dropout and retention rates for the eighth-grade class of 1988 for the spring of 1990. Some 6.8 percent of this cohort dropped out of school between the 8th grade and the 10th grade. While there were no significant differences in the percentage of males and females dropping out, cohort rates were significantly higher among blacks and Hispanics than among whites and Asians.[21]

[20]For a more detailed definition of the cohort rate presented here, see appendix B.

[21]While the estimate for American Indians was as high as the rate for blacks and Hispanics, the difference between the American Indian rate and that for whites and Asians was not statistically significant. This was due to the relatively small sample size of American Indians in the NELS:88 survey.

Table 8.—NELS:88 eighth-grade cohort dropout and retention rates, by sex, race-ethnicity, metropolitan status, region, and control of school: Spring 1990

	Cohort dropout rate	School retention rate
	(percent)	
Total	6.8	93.2
Sex		
Male	7.2	92.8
Female	6.5	93.5
Race-ethnicity[1]		
Asian/Pacific Isl.	4.0	96.0
Hispanic	9.6	90.4
Black, non-Hispanic	10.2	89.8
White, non-Hispanic	5.2	94.8
American Indian	9.2	90.8
Metropolitan status		
Central city	8.9	91.1
Suburban	5.4	94.6
Nonmetropolitan	7.1	93.0
Region		
Northeast	5.9	94.1
Midwest	5.5	94.5
South	8.9	91.2
West	5.8	94.2
Eighth-grade school		
Public	7.6	92.4
Catholic	1.3	98.7
Private, nonreligious	0.5	99.5
Private, other religious[2]	0.4	99.6

[1] Not shown separately are 434 persons (approximately 2 percent of the unweighted sample) whose race-ethnicity are unknown.
[2] A school affiliated with a religion other than Catholicism.

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, unpublished data.

Compared with students in the suburbs, students from central cities were more likely to drop out between the 8th and 10th grades. Likewise, students residing in the South were more likely than most other students to have dropped out.[22] Furthermore, students who attended public schools in the eighth grade were more likely to drop out of school than were students who attended Catholic, private nonreligious, or other private religious schools.

Summary

According to the data presented in this section, two national dropout rates—status and event—have been declining over the last decade. In 1980, approximately 14.1 percent of persons 16 through 24 years old were status dropouts, while in 1990, 12.1 percent had left school without completing high school. Moreover, the event rates for 10th- through 12th-grade students declined by over two percentage points in the past decade—from 6.2 percent for 1980 to 4.1 percent for 1990.

Analyses of dropout rates by selected demographic characteristics reveal consistent patterns in 1990 across the three types of national dropout rates—event, status, and cohort. In particular, male and female dropout rates are comparable, central city rates are higher than suburban rates, and Hispanic rates are higher than white rates. The status and cohort rates in the South are higher than those in the Northeast and Midwest and are higher for blacks than for whites.

Even though the data indicate that dropout rates have declined over the last decade, it is important to emphasize that the "dropout problem" is still serious; important subgroup differences persist. As a result, during 1990 students in large numbers continued to drop out of high school before obtaining a diploma or an alternative credential. About 7 percent of the eighth-grade class of 1988 dropped out of school before the end of their sophomore year in high school, while 10.2 percent of black and 9.6 percent of Hispanic eighth graders dropped out before the end of their sophomore year in high school. Overall in 1990, 347,000 students 15 through 24 years old dropped out of grades 10–12. Furthermore, in 1990 more than 3.8 million 16- through 24-year-olds were status dropouts. For these young people, entering a work force that offers fewer employment opportunities for the unskilled is a dismal prospect indeed.

[22]The difference between the dropout rate for students in the South and students in the West is not statistically significant.

HIGH SCHOOL COMPLETION AND GRADUATION RATES

Another set of rates, frequently used to derive estimates of dropout rates, are high school "graduation" or "completion" rates, which are measures of related concepts. A graduation rate measures the proportion of a population group that has received a high school diploma, while a completion rate measures the proportion of a population group that has completed high school—either by receiving a traditional high school diploma or by earning an alternative credential.

It is not correct to conclude that the dropout rate is equal to 100 minus the completion or graduation rate. A noncompleter is not necessarily a dropout. Students who, based on their age or grade in a prior year, might be expected to have completed high school may not have done so, even though they have never dropped out. For example, students may take longer than the norm to finish high school because they repeat courses or grades, because of illness or injury, or because they started school at an older age than other students.

Although completion or graduation rates cannot be used to derive dropout rates, they are of interest for other reasons. It is important to know what proportion of young people are finishing high school and how long it is taking them to do so. In addition, because one of the national education goals set by the President and the governors is that by the year 2000 the high school graduation rate will increase to at least 90 percent, the subject of completion or graduation rates deserves further attention. Toward this end, this section includes a variety of high school completion and graduation rates based on data from the October Current Population Survey (CPS).

Completion and Graduation Rates

As demonstrated previously, dropout rates can be calculated in various ways. Similarly, graduation or completion rates can be calculated in several ways. The event dropout rate compares the number of students dropping out during a year to the number of students present at the beginning of the year to measure the proportion of students who drop out in a single year without completing high school. The comparable event graduation rate compares the number of students who graduate at the end of a school year to the number of students eligible to graduate, assuming a successful completion, at the start of the year. Data from the NCES 1987-88 Schools and Staffing Survey (SASS) show an event graduation rate of 91.5 percent for graduates in the spring of 1987.[23]

The cohort dropout rate measures what happens to a single group (or cohort) of students over a period of time by comparing the number of students who have left school prior to completion to the number of students present at the start of the study period in question. The comparable cohort graduation rate compares the number of students who graduate to the number of students present at the start of the study period. While the NELS:88 eighth grade cohort has not yet reached high school graduation, data from the High School and Beyond 1980 sophomore cohort reveal that 83.4 percent of this cohort

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[23]Schools and Staffing Survey, 1987-88, *Comparisons of Public and Private Schools*, 1987-88, E.D. Tabs, July 1990 Data Series DR-SAS-97/88-2.1, NCES 90-075.

graduated "on time" at the end of their senior year. And, by 1986 an additional 8.2 percent of the original cohort earned either a high school diploma or the equivalent.[24]

The status dropout rate compares the number of 16- through 24-year-olds who have not completed high school but are not still enrolled to the total number of 16- through 24-year-olds to measure the proportion of individuals 16 through 24 years old who are dropouts at any one given time. The comparable status graduation rate or completion rate compares the number of graduates or completers in a specific age group to the number of persons in that age group. The discussion below presents status graduation and completion rates computed from CPS data for various age groups.[25] However, explicit definitions are required of what it means to "graduate" and who should be included as "potential graduates."

What Does It Mean to Graduate?

There are two major paths to high school completion. Most students receive a regular high school diploma after completing the requisite secondary school coursework. However, other students, regardless of the number of high school courses they have completed, receive an alternative credential such as a General Educational Development (GED) certificate, Individual Education Plan (IEP), or certificate of attendance. Data from the High School and Beyond study show that a substantial number of high school completers hold alternative credentials. For example, in 1986 almost 7 percent of the high school completers from the high school class of 1982 held alternative credentials.[26] Thus, a high school graduation rate can be computed based solely on students receiving regular high school diplomas. Alternatively, a high school completion rate can be calculated by combining data for students receiving regular high school diplomas with data for students receiving alternative credentials.

Who Is Included?

Another issue in developing these rates is who to include in the base population. Since there are persons well into their 30s and 40s working to complete high school, the age group that is chosen will affect the completion rate. Using an older rather than a younger age group as a base will generally produce a higher completion rate (table 9). In October 1990, approximately 7 percent of 17-year-olds, 62 percent of 18-year-olds, 80 percent of 19-year-olds, and 86 percent of 20- through 22-year-olds had completed high school by earning a diploma or receiving an alternative credential.

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[24]High School and Beyond, Educational Experiences of the 1980 Sophomore Class, Tabulation, November 1987.

[25]See appendix B of the 1988 dropout report for an extended discussion of different types of graduation and completion rates currently in use.

[26]U.S. Department of Education, National Center for Education Statistics, High School and Beyond study, unpublished tabulations.

Table 9.—High school enrollment status, by age: October 1990

Age	Completed high school	Still in high school	Out of high school not completed
		(percent)	
17	7.1	84.6	8.4
18	62.3	23.6	14.0
19	79.7	6.0	14.3
20	85.8	1.3	12.9
21	86.3	1.1	12.6
22	85.9	0.5	13.6

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1990, unpublished data.

One reason for the relatively low completion rates for 17- and 18-year-olds shown in table 9 is that many of these youths are still enrolled in high school or below. In October 1990, approximately 85 percent of 17-year-olds and 24 percent of 18-year-olds were still enrolled in school at or below the 12th grade. Moreover, a substantial proportion of students older than traditional graduation age were also still enrolled in high school.[27] For example, 6 percent of 19-year-olds and approximately 1 percent of 20- and 21-year-olds were still enrolled in high school.

The proportion of high school students who were older than traditional graduation age varied by sex and race-ethnicity (table 10). Males and blacks and Hispanics were more likely to be in high school at age 18 than were females and whites. At age 19, blacks were more likely than whites to be in high school. As a result of these differences in enrollment patterns, the age group chosen to define the base for a graduation rate can affect the extent of subgroup differences in completion rates.

[27]Because the CPS education supplement is conducted in October of each year, anyone 18 years old or older is at least 1 year older than traditional graduation age.

Table 10.—Percentage of persons in high school by sex, race-ethnicity, and age: October 1990

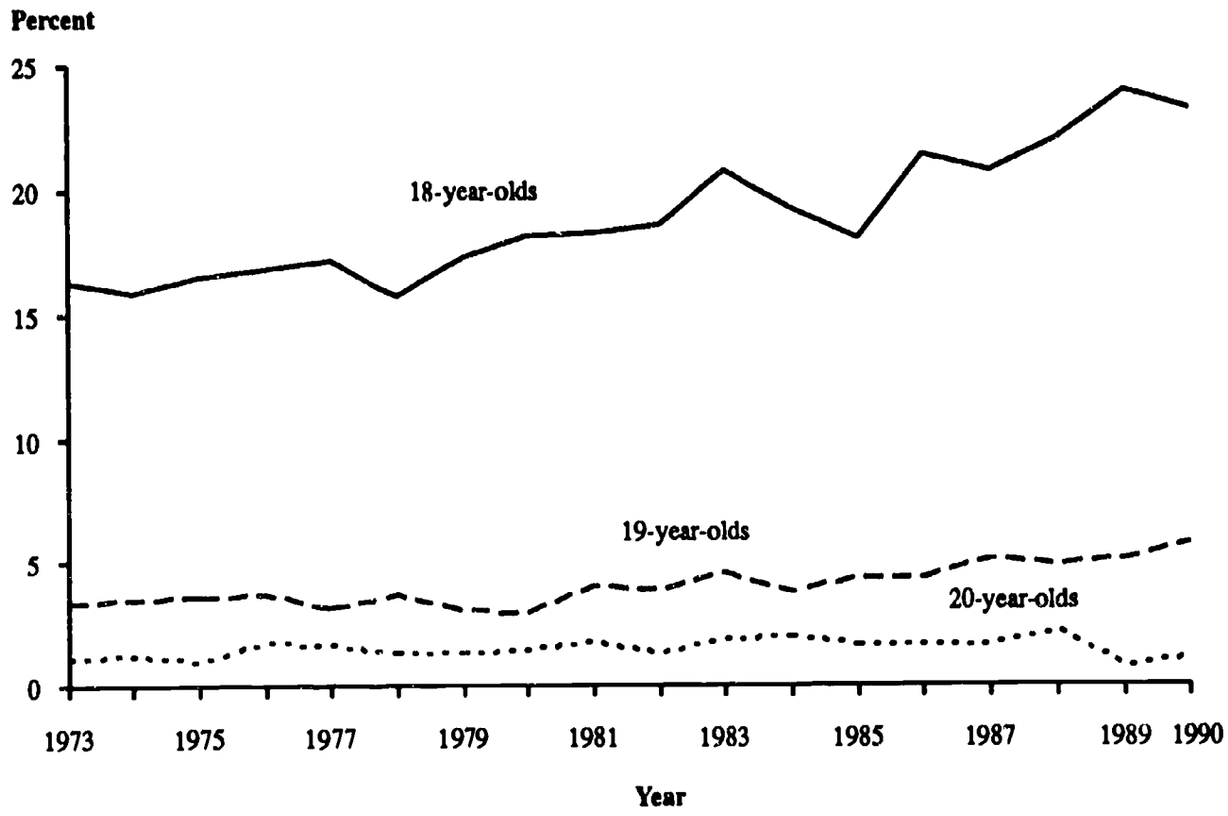
Sex and race-ethnicity	Age		
	18	19	20
		(percent)	
Total			
Male	27.7	6.8	1.3
Female	19.5	5.2	1.2
White, non-Hispanic	19.0	4.1	0.7
Black, non-Hispanic	30.7	12.5	2.0
Hispanic	38.1	9.8	3.1

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1990, unpublished data.

Furthermore, the proportion of older students still enrolled in school has increased over time. For example, figure 5 shows that the proportion of 18- and 19-year-olds enrolled in high school or below has increased since 1973.[28] While approximately 16 percent of 18-year-olds were enrolled in high school in 1973, more than 23 percent of this age group were enrolled in 1990. The proportion of 19-year-olds enrolled in high school or below has increased from just over 3 percent in 1973 to approximately 6 percent in 1990.

[28]The proportion of 20-year-olds enrolled in high school or below increased to 2.2 percent in 1988, but has declined again to 1.1 percent in 1990.

Figure 5.—Percentage of persons enrolled in school below the college level, by age: October 1973 through October 1990



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

Many of these older students will eventually complete high school either by earning a diploma or obtaining an equivalency certificate. However, as the data in table 11 demonstrate, the probability of students doing so decreases with age. In 1988, approximately 37 percent of the 17- and 18-year-olds had completed high school. By comparison, in 1990 some 83 percent of 19- and 20-year-olds had completed high school. The completion rates for those persons 21 through 30 years old were all between 85 to 87 percent in both years.

Table 11.—High school completion rates, by age: October 1988 and October 1990

Age	Year	
	1988	1990
	(percent)	
17-18	37.2	35.8
19-20	82.1	82.8
21-22	84.1	86.1
23-24	85.8	85.8
25-26	85.9	85.0
27-28	85.1	85.6
29-30	87.3	86.5

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1988 and 1990, unpublished data.

High School Completion Rates: 1990

Currently, the October Supplement to CPS asks high school completers age 24 and under about the type of high school credential they hold.[29] In October 1990, approximately 34 percent of persons 17 and 18 years old had completed high school by receiving a high school diploma (table A2). An additional 1.7 percent in this age group completed high school after passing an equivalency test (such as a GED). For persons 19 and 20 years old, approximately 78 percent had received a diploma, while nearly 5 percent had obtained an alternative credential. For persons 21 and 22 years old and persons 23 and 24 years old, approximately 81 percent had received a diploma, while slightly more than 5 percent had earned an alternative credential.

[29]The item on the education supplement is: "Did...complete high school by means of an equivalency test, such as a GED?"

Table 12.—High school completion rates, by method of completion and age: October 1988 through October 1990

Year and completion method	Age			
	17-18	19-20	21-22	23-24
	(percent)			
1988				
Completed	37.2	82.1	84.1	85.8
Diploma	35.5	78.2	80.1	80.9
Alternative	1.7	3.8	4.0	5.0
1989				
Completed	36.1	81.8	85.2	85.5
Diploma	34.1	77.5	81.4	81.1
Alternative	2.0	4.3	3.8	4.1
1990				
Completed	35.8	82.8	86.1	85.8
Diploma	34.2	78.1	81.0	80.6
Alternative	1.7	4.8	5.2	5.2

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1988 through 1990, unpublished data.

In 1990, completion and graduation rates were higher for white students than for black students and higher for black students than for Hispanic students (table 13). This was generally true for all ages between 17 and 24 years old.[30] Some 87.3 percent of white 19- and 20-year-olds had completed high school compared to 77.6 percent of black and 59.7 percent of Hispanic 19- and 20-year-olds. Just over 90 percent of white 23- and 24-year-olds had completed high school, while 85.4 percent of black and 55.6 percent of Hispanic 23- and 24-year-olds had completed high school.[31]

[30]The difference between the completion and graduation rates of black and white 23- and 24-year-olds is not statistically significant.

[31]The difference between the percentage of white, black, and Hispanic persons holding alternative credentials is not statistically significant.

Table 13.—High school completion rates and method of completion, by age and race-ethnicity[1]: October 1990

Completion method	Age			
	17-18	19-20	21-22	23-24
	(percent)			
Total				
Completed	35.8	82.8	86.1	85.8
Diploma	34.2	78.1	81.0	80.6
Alternative	1.7	4.8	5.2	5.2
White, non-Hispanic				
Completed	39.5	87.3	90.5	90.2
Diploma	37.5	82.5	85.6	85.2
Alternative	2.0	4.8	4.9	4.9
Black, non-Hispanic				
Completed	31.6	77.6	83.3	85.4
Diploma	30.3	72.0	77.9	79.5
Alternative	1.3	5.6	5.5	5.9
Hispanic				
Completed	19.1	59.7	61.1	55.6
Diploma	18.3	57.0	56.1	50.0
Alternative	0.8	2.7	5.0	5.6

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1990, unpublished data.

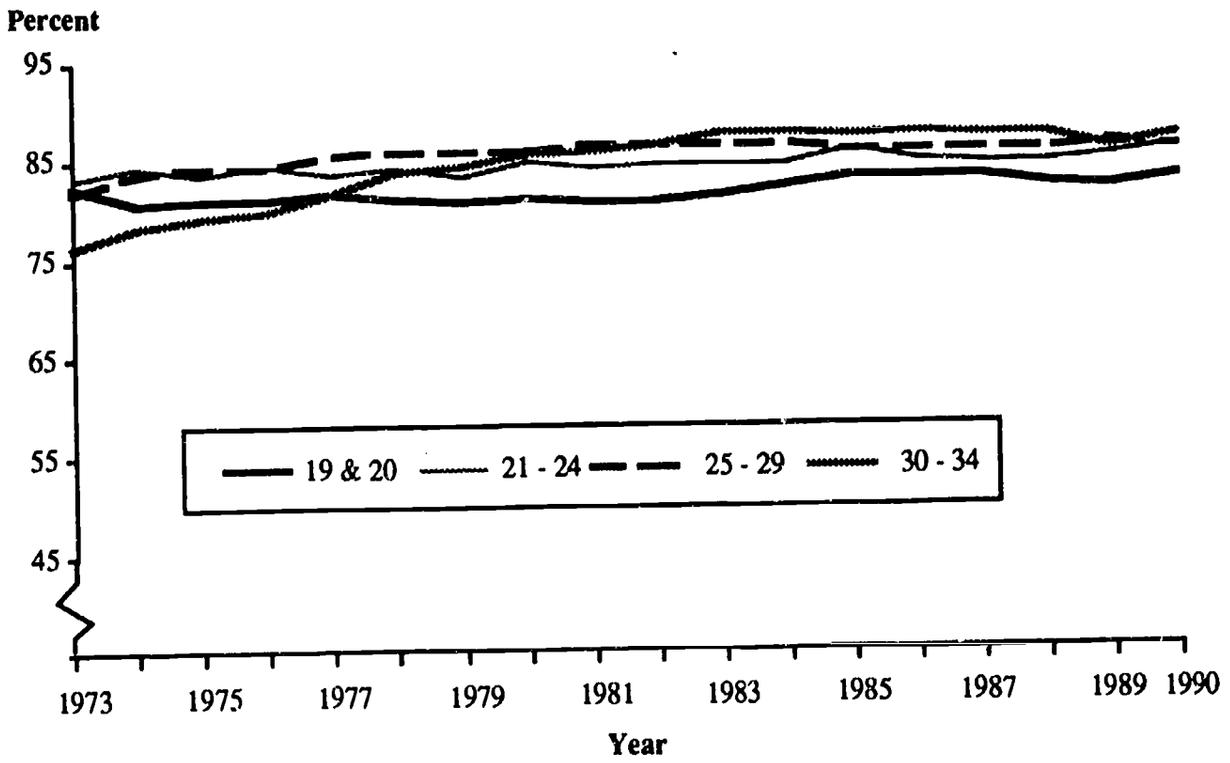
Trends over Time

CPS began differentiating between these two types of completers—those with diplomas and those with alternative credentials—in 1988. Therefore, in order to examine trends in high school graduation and completion with CPS data, only completion rates can be used. Consequently, estimates of the number and proportion of high school completers in the trend data from CPS will be higher than estimates based solely on measures of regular high school graduates.

Figure 6 shows the trends over time for the high school completion rate, defined as the percentage of persons who have completed high school by receiving a high school diploma or an equivalency certificate. To demonstrate the effect of examining different age groups on trends in completion rates, four age groups are presented: 19- and 20-year-olds, 21- through 24-year-olds, 25- through 29-year-olds, and 30- through 34-year-olds. Examining trends for only the 19- and 20-year-olds leads one to conclude that the completion rate remained fairly stable over the last 17 years at about 82 percent. However, between 1982 and 1990, there was a small increase in the completion rate—to about 83

percent in 1990.[32] On the other hand, using 30- through 34-year-olds as the population base leads one to conclude that there has been a much larger increase in the completion rate over the same time period. Reflecting a general growth in the educational achievement of earlier cohorts, the completion rate for 30- through 34-year-olds rose from approximately 76 percent in 1973 to 87 percent in 1983. Completion rates for this age group have remained fairly constant since 1983.

Figure 6.—High school completion rates for persons 19 and 20 years old, 21-24 years old, 25-29 years old, and 30-34 years old: October 1973 through October 1990



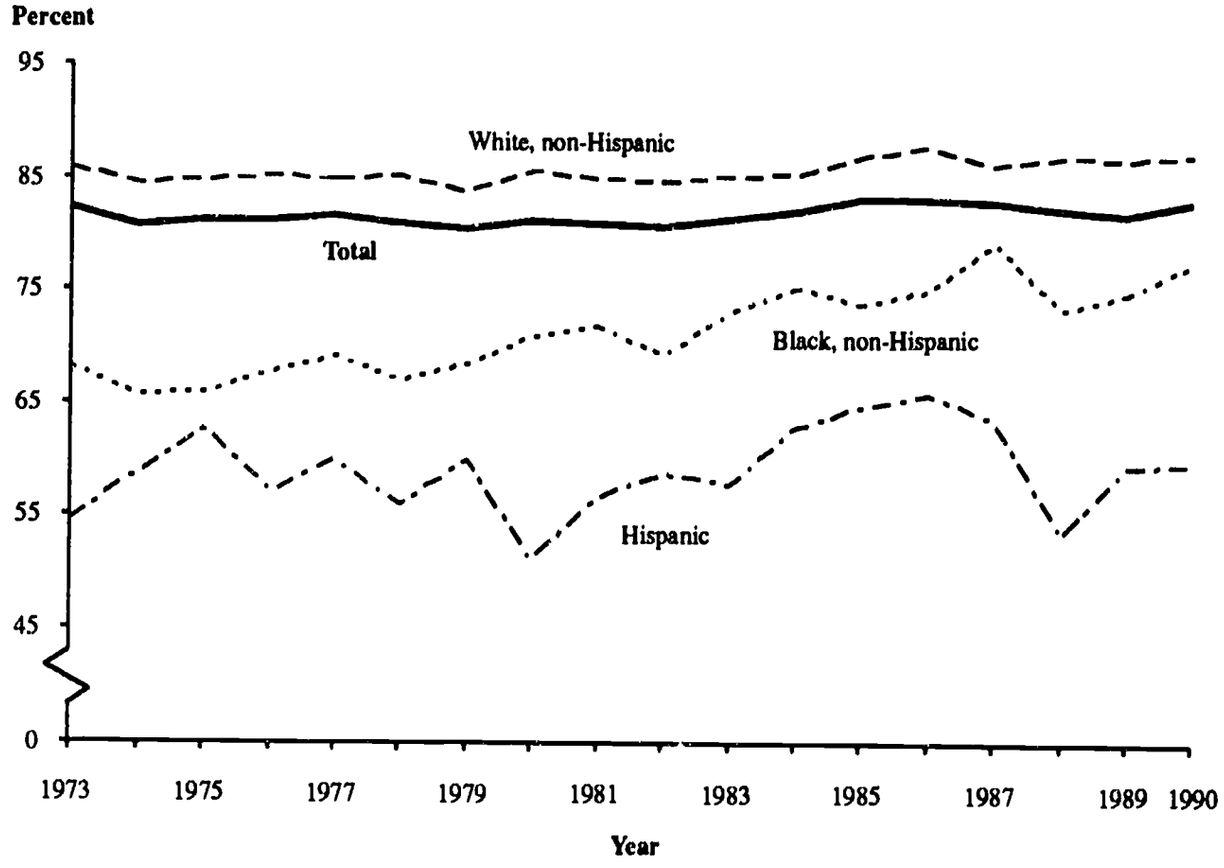
SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years), unpublished data.

Trends in the completion rates for white and black 19- and 20-year-olds (figure 7) and 30- through 34-year-olds (figure 8) show larger increases for blacks than for whites, narrowing the difference between the two groups. Completion rates for white 19- and 20-year-olds rose slightly from approximately 86 percent in 1973 to approximately 87 percent in 1990. Completion rates for black 19- and 20-year-olds rose about 10 percentage points from approximately 68 percent in 1973 to almost 78 percent in 1990. The completion rate

[32]The statistical significance of the trends presented in this section were assessed using weighted least squares regression analyses. For a full discussion of the statistical methods used in this report, see appendix B.

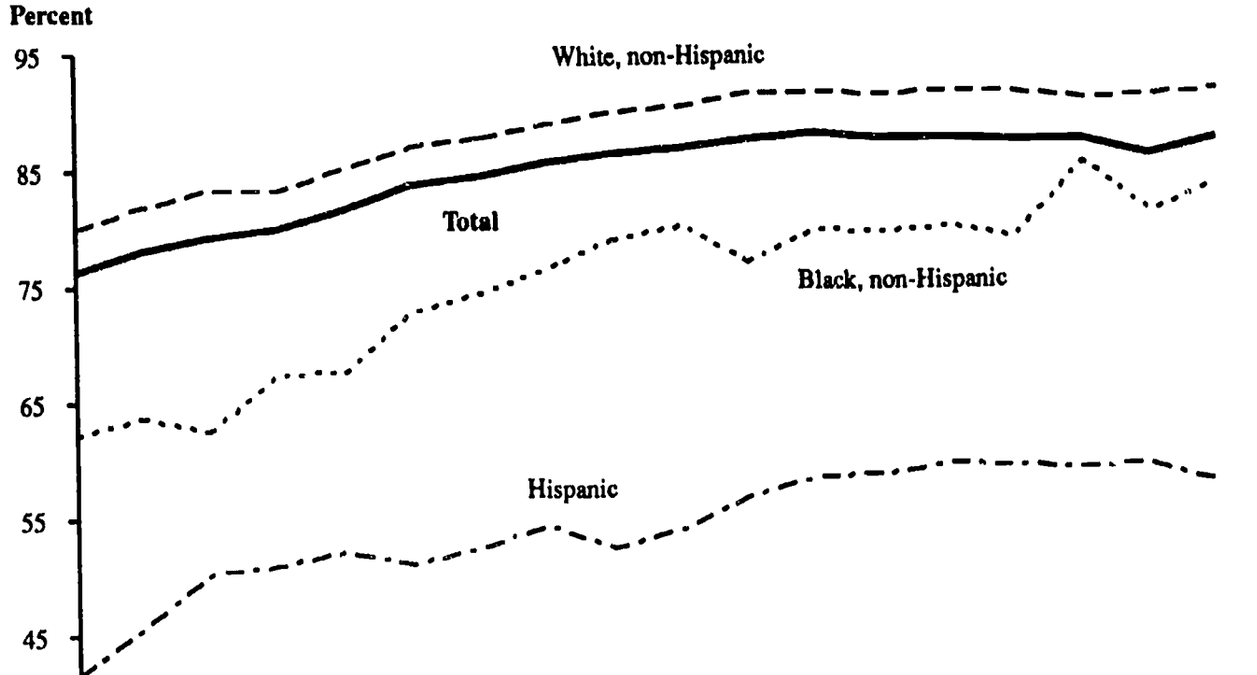
for white 30- through 34-year-olds increased from 80 percent in 1973 to approximately 91 percent in 1984—an increase of 14 percent, and has remained relatively constant since. The completion rate for black 30- through 34-year-olds increased from approximately 62 percent in 1973 to approximately 79 percent in 1984—an increase of 27 percent—and has remained relatively constant since. Hispanic completion rates for both of these age groups evidence no apparent statistical trend, but are consistently lower than comparable rates for whites and blacks over this period.

Figure 7.—High school completion rates for persons 19 and 20 years old, by race-ethnicity: October 1973 through October 1990



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

Figure 8.—High school completion rates for persons 30-34 years old, by race-ethnicity: October 1973 through October 1990



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

Summary and Discussion

Table 14 illustrates how much the specific definitions of what constitutes "graduation" from high school and who are the "potential graduates" can affect completion rates. Using the same data source, the graduation rates in 1990 range from 34 percent for 17- and 18-year-olds to 81 percent for the 21- and 22-year-olds and the 23- and 24-year-olds. When persons with alternative credentials are included, completion rates range from 36 percent at ages 17 and 18 to rates between 85 and 87 percent at ages 21 through 30. The data in the second panel of table 14 illustrate the effect of excluding persons still in school from the computation of the rates. This has the greatest impact on the youngest ages where a larger proportion of the population is still in school. For example, in 1990 some 72 percent of the 17- and 18-year-olds who had already left school had graduated, and 75 percent of them had completed high school or held an alternative credential. When persons still enrolled in high school or below are excluded, the aggregate high school completion rate for persons 17 through 24 years old is 84.7 percent, and the graduation rate for this age group is 79.8 percent.

Table 14.—Alternative high school completion and graduation rates, by age: October 1990

Type	Age						
	17-18	19-20	21-22	23-24	25-26	27-28	29-30
	(As percent of age group)						
Completion	35.8	82.8	86.1	85.8	85.0	85.6	86.5
Graduation	34.2	78.1	81.0	80.6	—	—	—
	(As percent of those in age group not currently enrolled in high school or below)						
Completion	75.2	85.7	86.7	86.1	85.3	85.9	86.7
Graduation	71.7	80.7	81.5	80.9	—	—	—

— Not available.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1990, unpublished data.

However, these are not the only types of completion/graduation rates possible, nor is CPS the only data set available. For example, cohort graduation rates could be calculated by using a specific grade cohort (e.g., 9th or 10th graders) as a base and examining the proportion of students within this cohort who graduate on time. In fact, school districts, using institutional records, often adopt this approach. Furthermore, longitudinal data, such as those collected in the High School and Beyond study or the National Education Longitudinal Study of 1988, follow specific grade cohorts through their educational careers and beyond. These data sets allow analysts to examine not only completion/graduation rates for these specific cohorts, but also the characteristics and experiences of those who drop out. Longitudinal data can also be used to see what proportion of dropouts later return to school to earn a high school diploma or an equivalency certificate.[33]

Nevertheless, regardless of the specific definition of a graduation rate or the data set used, the older the cohort used to define the population base, the higher the graduation rate. Furthermore, if graduation from high school is defined as holding a high school diploma and not an equivalency certificate, then the graduation rate is lower than the completion rate for the same population group.

[33]Data from the High School and Beyond study indicate that a substantial proportion of dropouts return to school. See the chapter "Returning to School" presented in M. Frase, *Dropout Rates in the United States: 1988*, U.S. Department of Education, National Center for Education Statistics, September 1989, for an extended discussion of these students.

STATUS OF POSSIBLE FUTURE NCES DATA COLLECTION EFFORTS

NCES has made a great deal of progress over the last several years in developing reliable and policy-relevant data on school dropouts. The next section discusses three NCES surveys that may collect extensive and accurate dropout data in the near future. These surveys will provide the data relevant to the national high school completion goal and the related objectives. In particular, the Common Core of Data dropout collection will provide national-, state-, and district-level dropout rates for the entire population and for various subgroups. The High School and Beyond study will provide data on the percentage of dropouts who successfully obtain a high school diploma or its equivalent, as well as data on the occupational status of dropouts. And, the National Household Education Survey can provide important contextual data on the at-risk factors for students dropping out of school.

Common Core of Data

The Common Core of Data (CCD) administered by NCES is an annual universe 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 field test of dropout data collection took place in 27 states and two territories (a total of approximately 300 school districts) during the 1989-90 school year. The data were gathered through administrative records maintained at school districts and schools. The data did not produce national (or state) representative statistics, but instead provided information needed to decide upon the definition and procedure that will add a dropout statistics collection to the CCD starting in the 1991-92 school year.

The dropout statistics will make it possible to report the number and rate of event dropouts from public schools by school districts, states, major subpopulations, and the nation. Data will be collected by grade for grades 7-12 and by sex within race-ethnicity categories. Dropouts from both regular and special education will be included in the counts, but not reported separately.

The field test explored three different approaches to calculate the dropout rate. Participating districts reported student-membership counts at the beginning and end of the school year studied, and in the fall of the following school year. These data produced three different "denominators" for calculating the dropout rate. At the conclusion of the field test, both accuracy of data and collection burden to the states and school districts were weighed in selecting the method of computing the dropout rate.

A school dropout is defined as an individual who was enrolled in school at some time during the previous school year, was not enrolled at the beginning of the current school year, has not graduated from high school or completed an approved educational program, and does not meet any of the following exclusionary conditions:

- death;
- temporary absence due to suspension or illness;

- transfer to another public school district, private school, or a state- or district-approved education program.[34]

For the purpose of this definition:

- a school year is the 12-month period of time beginning with the normal opening of school in the fall, with dropouts from the previous summer reported for the year in which they fail to enroll;
- an individual has graduated from high school or completed an approved education program upon receipt of formal recognition from school authorities;
- a state- or district-approved education program may include special education programs, home-based instruction, and school-sponsored GED preparation.

The dropout definition and procedures are expected to be implemented with little change from the field-test version. States will be asked to begin counting dropouts during the 1991-92 school year. These data will be collected on the CCD survey in the 1992-93 year and published in November 1993 CCD reports (dropouts, like graduates, are reported for the preceding school year).

National Household Education Survey

A field test for the NHES dropout data collection was conducted during the fall of 1989. The purpose of this field test was to examine the feasibility of using a random digit dialing (RDD) and computer-assisted telephone interviewing (CATI) methodology to collect data on in-school and out-of-school experiences of dropouts and to estimate the number and percentage of event and status dropouts. (Status and event dropouts were identified by the same definitions used in CPS.)

The field test addressed a number of issues related to the use of NHES methodology for collecting data about dropouts. One major issue was the adequate coverage of the targeted population. Surveys that use the telephone for sampling and data collection fail to cover persons who live in households without telephones, estimated to be about 7 percent of all persons nationwide. If a large percentage of the population is not covered and differences in characteristics between those covered and those not covered are large, the biases from using data collected only from telephone households to estimate the characteristics of the entire population may have important consequences.

During the field test, data from the CPS were used to analyze the bias associated with telephone undercoverage. The overall telephone coverage rate for 14- through 21-year-olds is about 92 percent, which is close to the 93 percent coverage for the total population. However, the coverage rate for persons classified as either status or event dropouts was much lower—approximately 70 percent for status dropouts and 75 percent for event dropouts. Moreover, the dropout rates among persons living in the telephone and nontelephone households are quite discrepant. Thus, both conditions necessary for

[34]This is a statistical definition, which is being tested as the basis for collecting comparable national and state dropout data. It is similar to the definition developed for the purposes of the School Dropout Demonstration Assistance Program, established under Sec. 6201 (a) of the Hawkins-Stafford School Improvement Amendments.

producing significant bias in estimates derived from a survey restricted to telephone households are present.

In an effort to increase the sample size and improve the coverage for 14- through 21-year-olds, especially dropouts, a random multiplicity sample of 25 percent of all households was selected. In these households, all females 28 through 65 years old were asked to enumerate and complete a Household Respondent Interview (HRI) for each of their 14- through 21-year-old children who did not currently live in their households, as well as for those 14- through 21-year-old children living in the household. The remaining 75 percent of the selected households were asked to only complete HRIs for the 14- through 21-year-old children living in the household.

The second issue examined was the correspondence between the estimates of dropouts based on information provided by Household Respondents completing the HRI and estimates based on information provided by the 14- through 21-year-olds in Youth Interviews (YI). In general, estimates of dropouts based on information provided by Household Respondents are smaller than similar estimates based on data from the YI for status dropouts. The opposite is true for event dropouts. Also, the relative reporting reliability of the estimates for status dropouts was greater than for event dropouts.

Analyses of dropout data from the CPS show that blacks and Hispanics have higher high school dropout rates; thus, the NHES field test oversampled blacks and Hispanics in order to increase the sample size for these groups. Oversampling increased the number of Hispanics in the sample by 34 percent and the number of blacks in the sample by 47 percent.

The field test of the NHES has demonstrated that an RDD survey of high school dropouts is feasible if it is carefully planned and executed. However, the potential for bias in the estimates due to telephone undercoverage is an issue which could not be fully resolved in the field test. To acquire information needed to assess the feasibility in the future of collecting dropout data via telephone, a dual frame data collection approach is recommended. The dual frame approach would include both an RDD telephone household survey and an in-person survey with nontelephone households.

High School and Beyond

High School and Beyond (HS&B) is the NCES national longitudinal survey of 1980 high school seniors and sophomores. A probability sample of 1,015 high schools was selected with a target number of 36 seniors and 36 sophomores in each school. Over 58,000 students—30,000 sophomores—participated in the base-year survey. Students completed questionnaires and took a battery of cognitive tests. Subsamples of the two cohorts were resurveyed in the springs of 1982 (first followup), 1984 (second followup), and 1986 (third followup). High school transcripts were obtained in 1982 for more than half the sophomore cohort. HS&B is representative of the nation's high school sophomores of 1980 (for Census regions as well as nationally) with substantial oversampling of special populations. Over 2,000 of the sophomore cohort were identified as dropouts at the time of the first followup (spring of 1982).

Fourth followup data from HS&B will be collected in the fall of 1992. With the release of these data, further information will become available on the occupational and educational status of high school dropouts from the sophomore class of 1980. Furthermore, some of the members of this cohort who were dropouts at the time of the last followup in 1986 may have returned and completed high school by the fall of 1992.

SUMMARY AND CONCLUSIONS

This report has presented data on high school dropout and completion rates in the United States. Three types of dropout rates have been described—event, status, and cohort—as well as several graduation/completion rates. In addition, the report has outlined the status of NCES data collection efforts related to dropouts.

Dropout Rates

Rates. Three types of dropout rates were examined in this report.

1) The *event dropout rate* represents the share of students who leave school without completing high school during a single year. In 1990, the event dropout rate was *4.1 percent* for students ages 15 through 24 in grades 10–12. The *number of event dropouts* from grades 10-12 in 1990 was approximately *347,000.*

2) The *status dropout rate* represents the proportion of individuals at any given time who are not enrolled in school and have not completed high school. In October 1990, *12.1 percent* of 16- through 24-year-olds were status dropouts. This represented about *3.8 million* persons in this age group who had not completed high school and were not currently enrolled in school.

The status dropout rate is a cumulative rate. It is much higher than the event rate because it counts as dropouts all individuals who have not completed high school (and are not currently enrolled in school), regardless of when they last attended school.

3) A third type of dropout rate—the cohort rate—measures what happens to a single group (or cohort) of students over a period of time. About 7 percent of the eighth-grade cohort of 1988 dropped out of school between the 8th and 10th grades. The cohort dropout rates were about 10 percent for Hispanic students and about 9 percent for black students, and they were higher than the rates for whites and Asians.

Trend. Nationally, dropout rates have been declining. The single-year event rate declined 34 percent between 1980 and 1990, from 6.2 percent to 4.1 percent. The status rate in 1990 was about 14 percent lower than it had been in 1980—14.1 percent in 1980 and 12.1 percent in 1990.

Dropout rates have been declining for blacks and whites but not for Hispanics. The event dropout rates for whites and blacks declined between 1980 and 1990. The status dropout rates for blacks have declined considerably since 1973—from 22.2 percent in 1973 to 13.2 percent in 1990—while the rates for whites decreased slightly—from 11.6 percent in 1973 to 9.0 percent in 1990. Thus, the differences between the status dropout rates for whites and blacks have narrowed over the same time period—from a difference of about 10.6 percentage points in 1973 to a difference of 4.2 percentage points in 1990. Hispanic dropout rates—event and status—have shown no consistent trend, but have remained high throughout the last 17 years.

High School Completion and Graduation

The calculation of graduation rates is affected by what is considered to constitute "graduation" from high school and by the specific definition of "potential graduates." Different definitions applied to the same data source yield graduation/completion rates ranging from 34 to 86 percent in 1990.

Many students do not complete high school until their early 20s, and sometimes not until their 30s or 40s. Therefore, the older the cohort used to define the population base, the higher is the graduation rate. For example, while only 36 percent of all 17- and 18-year-olds had completed high school in some form in 1990, 87 percent of 29- and 30-year-olds had a high school diploma or an equivalency certificate.

Furthermore, if graduation from high school is defined as holding a high school diploma (and equivalency certificates are not included), that definition yields a graduation rate that is lower than the completion rate (which includes equivalency certificates) for the same population group. For example, while 86 percent of all 21- and 22-year-olds had completed high school, only 81 percent of all 21- and 22-year-olds had a high school diploma in 1990.

The high school graduation rate in 1990 for persons 17 through 24 years old not currently enrolled in high school was 79.8 percent. The high school completion rate—which includes those with an alternative certificate—for persons 17 through 24 years old not currently enrolled in high school was 84.7 percent. Age-specific rates reveal that the percentage of the age group having graduated from high school is approximately 80 percent at age 19 through 24. When persons completing alternative credentials are included, the percentage increases to between 85 and 87 percent of the population between 21 and 30 years old.

Since 1973, the high school completion rate has increased slightly for 19- and 20-year-olds (from 81 to 83 percent), but increased much more for the 30- through 34-year-olds (from 76 percent in 1973 to 88 percent in 1984). Comparable trends for white and black 19- and 20-year-olds show that, while the rates for all students follow the same general pattern within each age group, the rates for black students increased at a greater rate. As a result of these changes, the gap between the high school completion rates of white and black students is narrowing.

New Data Sources

The data presented in this report on dropout and high school completion rates provide important insights for educators and policymakers. However, there are several weaknesses in these data. For example, the sample sizes in CPS may result in imprecise estimates of dropout and completion rates for important subgroups, including subregional areas and some minority subpopulations. Furthermore, the cross-sectional nature of the data does not allow the examination of factors that lead to dropping out of school and its consequences. Therefore, NCES is working to improve the availability of reliable and policy-relevant data on dropouts.

The Common Core of Data (CCD) field tested a dropout data collection in 27 states and two territories. The collection of dropout data through the CCD will make it possible to report the number and rate of event dropouts from grades 7-12 for public schools by school districts, states, the nation, and major subpopulations.

Furthermore, several other surveys, including the National Household Education Survey and planned followups of the National Education Longitudinal Survey of 1988 and the High School and Beyond study, can provide additional sources of data on dropouts and high school completers in the future. In particular, data from the two longitudinal studies will provide important data needed to monitor the percentage of dropouts who successfully complete a high school diploma or its equivalent.

Conclusion

In terms of the number of young people involved, the data reveal that the dropout problem is substantial. Although dropout rates have been falling for the past 10 years, they remain unacceptably high, particularly for some groups. Generally, dropout rates are higher in cities, and in the South and West, and for blacks and Hispanics. In particular, dropout rates are highest for young Hispanics and have not declined in recent years, while overall rates and those for blacks and whites have been declining.

High school completion rates measure the proportion of a population group that has completed high school—either by receiving a traditional high school diploma or by earning an alternate credential. Changes over time in the high school completion rate for 19- and 20-year-olds show that the gap between black and white students is narrowing while the completion rate for Hispanic students remains consistently higher than that for whites. Many dropouts complete high school in some manner within a few years after dropping out. By way of example, in 1990 only 75 percent of the 17- and 18-year-olds not currently enrolled in school had completed high school, compared with 87 percent of the 21- and 22-year-olds.

APPENDIX A

Time Series and Standard Error Tables

Table A1.—Standard errors for Table 1: Single-year event dropout and retention rates and number of dropouts for ages 15-24 in grades 10-12: 1988 through 1990

Type of rate and year ending	Event dropout rate	School retention rate	Number of dropouts (in thousands)
1988	0.37	0.37	35
1989	0.36	0.36	32
1990	0.35	0.35	30

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

Table A2.—Standard errors and sample sizes for Table 2: Single-year event dropout and retention rates and number and distribution of dropouts from grades 10-12, ages 15-24, by sex, race-ethnicity, age, region, and metropolitan status: 1990

	Event dropout and retention rate		Percent of all dropouts	
	Standard error	Sample size (in thousands)	Standard error	Sample size (in thousands)
Total	0.35	8,557	†	340
Sex				
Male	0.50	4,298	4.45	177
Female	0.50	4,258	4.45	170
Race-ethnicity[1]				
White, non-Hispanic	0.38	6,137	4.36	208
Black, non-Hispanic	1.09	1,225	3.66	64
Hispanic	1.70	797	3.66	64
Age[2]				
15	1.86	232	1.25	7
16-17	0.37	5,027	4.30	129
18-19	0.68	3,053	4.44	165
20-24	3.73	274	3.02	46
Region				
Northeast	0.72	1,664	3.32	58
Midwest	0.64	2,197	3.64	74
South	0.66	2,779	4.31	131
West	0.86	1,714	3.81	84
Metropolitan status				
Central City	0.78	2,407	4.35	138
Suburban	0.45	4,049	4.33	134
Non-metropolitan	0.66	2,125	3.66	75

† Not applicable.

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

[2] Age when a person dropped out may be 1 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 1990, unpublished data.

Table A3.—Supporting data for Table 3: Single-year event dropout rates from grades 10-12, ages 15-24, by sex and race-ethnicity: 1980 through 1990

Year	White non-Hispanic		Black non-Hispanic		Hispanic	
	Male	Female	Male	Female	Male	Female
	(percent)					
1973	6.2	4.9	12.0	8.0	8.2	11.5
1974	6.7	4.9	10.9	12.3	12.9	7.1
1975	4.6	5.4	8.4	8.7	10.4	11.8
1976	6.1	4.9	8.7	6.2	7.8	7.1
1977	6.7	5.7	7.8	9.4	10.0	5.4
1978	6.5	5.2	11.2	9.8	16.1	8.8
1979	6.4	5.7	7.9	12.1	10.6	9.2
1980	5.7	4.9	7.8	8.9	17.7	6.8
1981	5.3	4.6	9.5	10.2	11.0	11.1
1982	5.1	4.7	9.1	6.9	9.9	9.2
1983	4.8	4.1	7.2	7.3	14.0	6.3
1984	5.0	4.2	6.2	5.8	13.0	10.4
1985	4.6	4.1	8.5	7.7	9.5	10.3
1986	3.8	3.7	5.2	6.0	12.6	11.5
1987[1]	4.2	3.2	6.2	6.7	5.2	6.4
1988[1]	4.3	4.1	6.5	5.2	12.5	8.4
1989[1]	3.7	3.3	7.0	8.7	7.8	7.8
1990[1]	3.6	3.2	4.3	5.8	8.9	7.4

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

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

Table A4.—Standard errors for Table A3: Supporting data for Table 3

Year	White non-Hispanic		Black non-Hispanic		Hispanic	
	Male	Female	Male	Female	Male	Female
1973	0.52	0.48	1.99	1.59	2.74	3.07
1974	0.54	0.46	1.83	1.82	3.09	2.33
1975	0.45	0.49	1.64	1.59	2.61	2.86
1976	0.52	0.47	1.61	1.38	2.38	2.12
1977	0.54	0.50	1.46	1.59	2.47	2.03
1978	0.53	0.48	1.81	1.57	3.24	2.62
1979	0.53	0.50	1.60	1.78	2.73	2.53
1980	0.50	0.48	1.53	1.57	3.41	2.06
1981	0.50	0.47	1.70	1.62	2.54	2.49
1982	0.50	0.48	1.58	1.41	2.35	2.49
1983	0.53	0.49	1.61	1.51	3.02	2.15
1984	0.55	0.51	1.50	1.37	3.18	2.53
1985	0.54	0.51	1.71	1.66	2.59	2.48
1986	0.49	0.48	1.35	1.45	2.76	2.61
1987[1]	0.55	0.49	1.60	1.68	2.01	2.23
1988[1]	0.56	0.57	1.62	1.50	2.94	2.68
1989[1]	0.55	0.52	1.73	1.88	2.36	2.46
1990[1]	0.55	0.53	1.44	1.62	2.57	2.25

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

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

Table A5.—Standard errors for Table 4: Rate and number of status dropouts, ages 16-24: October 1988 through October 1990

	October		
	1988	1989	1990
Status dropout rate (percent)	0.31	0.31	0.30
Number of status dropouts (in thousands)	101	98	96

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

Table A6.—Standard errors for Table 5: Rate and number of status dropouts, by sex, race-ethnicity, age, region, and metropolitan status: October 1990

	Status dropout rate	Number of status dropouts (in thousands)	Percent of all dropouts	Percent of population
Total	0.30	96	†	†
Sex				
Male	0.44	68	1.34	1.34
Female	0.42	68	1.34	1.34
Race-ethnicity[1]				
White, non-Hispanic	0.32	71	1.34	1.22
Black, non-Hispanic	0.89	40	1.04	1.00
Hispanic	1.40	48	1.30	0.89
Age				
16	0.59	19	0.51	0.82
17	0.80	26	0.70	0.82
18	0.98	34	0.89	0.84
19	0.96	35	0.93	0.86
20	0.92	34	0.89	0.86
21	0.93	33	0.87	0.85
22	0.97	33	0.88	0.84
23	0.96	34	0.90	0.85
24	0.95	35	0.91	0.86
Region				
Northeast	0.59	37	0.94	1.07
Midwest	0.54	41	1.04	1.15
South	0.56	61	1.33	1.28
West	0.72	48	1.18	1.10
Metropolitan status				
Central city	0.59	61	1.33	1.26
Suburban	0.41	59	1.30	1.34
Non-metropolitan	0.65	44	1.09	1.10

† Not applicable.
[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1990, unpublished data.

Table A7.—Standard errors for Table 6: Status dropout rate, ages 16-24, by region and race-ethnicity: October 1990

	Total	Race-ethnicity[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
Total	0.30	0.32	0.89	1.40
Region				
Northeast	0.59	0.59	2.05	3.33
Midwest	0.54	0.55	2.05	5.21
South	0.56	0.65	1.22	2.42
West	0.72	0.69	2.68	2.12

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1990, unpublished data.

Table A8.—Standard errors for Table 7: Status dropout rate, ages 16-24, by region and metropolitan status: Selected years, October 1975 through October 1990

	October				
	1975	1980	1985	1989[1]	1990[1]
Total	0.26	0.26	0.27	0.31	0.30
Region					
Northeast	0.51	0.49	0.53	0.60	0.59
Midwest	0.45	0.45	0.48	0.53	0.54
South	0.53	0.50	0.51	0.57	0.56
West	0.61	0.61	0.66	0.76	0.72
Metropolitan status					
Central city	0.50	0.52	0.56	0.59	0.59
Suburban	0.37	0.37	0.38	0.42	0.41
Non-metropolitan	0.51	0.48	0.51	0.67	0.65

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

SOURCE: U.S. Department of Commerce, Bureau of the Census, "School Enrollment—Social and Economic Characteristics of Students, October (various years)," *Current Population Reports*, Series P-20, and unpublished tabulations.

Table A9.—Standard errors for Table 8: NELS:88 eighth-grade cohort dropout and retention rates, by sex, race-ethnicity, metropolitan status, region, and control of school: Spring 1990

	Cohort dropout rate	School retention rate
Total	0.40	0.40
Sex		
Male	0.55	0.55
Female	0.51	0.51
Race-ethnicity[1]		
Asian/Pacific Isl.	1.02	1.02
Hispanic	0.84	0.84
Black, non-Hispanic	1.51	1.51
White, non-Hispanic	0.44	0.44
American Indian	2.32	2.32
Metropolitan status		
Central city	0.87	0.87
Suburban	0.53	0.53
Nonmetropolitan	0.76	0.76
Census region		
Northeast	0.84	0.84
Midwest	0.71	0.71
South	0.69	0.69
West	1.05	1.05
Eighth-grade school		
Public	0.45	0.45
Catholic	0.38	0.38
Private, nonreligious	0.30	0.30
Private, other religious[2]	0.18	0.18

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

[2] A school affiliated with a religion other than Catholicism.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, unpublished data.

Table A10.—Standard errors for Table 9: High school enrollment status, by age: October 1990

Age	Completed high school	Still in high school	Out of high school not completed
17	0.73	1.04	0.84
18	1.39	1.21	1.10
19	1.09	0.74	0.97
20	1.04	0.29	0.91
21	1.03	0.25	0.94
22	1.04	0.23	0.97

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1990, unpublished data.

Table A11.—Standard errors for Table 10: Percentage of persons in high school by sex, race-ethnicity, and age: October 1990

Sex and race-ethnicity	Age		
	18	19	20
Total			
Male	1.76	0.98	0.38
Female	1.64	0.94	0.39
White, non-Hispanic	1.26	0.64	0.31
Black, non-Hispanic	3.38	2.61	1.03
Hispanic	4.41	2.73	1.48

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1990, unpublished data.

Table A12.—Standard errors for Table 11: High school completion rates, by age: October 1988 and October 1990

Age	Year	
	1988	1990
17 to 18	0.95	0.97
19 to 20	0.75	0.73
21 to 22	0.73	0.69
23 to 24	0.66	0.68
25 to 26	0.64	0.66
27 to 28	0.64	0.63
29 to 30	0.59	0.60

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1988 and 1990, unpublished data.

Table A13.—Standard errors for Table 12 and Table A: High school completion rates by method of completion and age: October 1988 through October 1990

Year and completion method	Age			
	17-18	19-20	21-22	23-24
1988				
Completed	0.95	0.75	0.73	0.66
Diploma	0.92	0.78	0.77	0.74
Alternative	0.24	0.37	0.37	0.38
1989				
Completed	0.95	0.75	0.71	0.67
Diploma	0.93	0.78	0.77	0.74
Alternative	0.31	0.37	0.36	0.36
1990				
Completed	0.97	0.73	0.69	0.68
Diploma	0.99	0.78	0.76	0.75
Alternative	0.33	0.38	0.38	0.37

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

Table A14.—Standard errors for Table 13: High school completion rates and method of completion, by age, and race-ethnicity: October 1990

Completion method	Age			
	17-18	19-20	21-22	23-24
Total				
Completed	1.00	0.70	0.70	0.70
Diploma	1.00	0.80	0.80	0.80
Alternative	0.30	0.40	0.40	0.40
White				
Completed	1.19	0.76	0.69	0.68
Diploma	1.18	0.87	0.83	0.81
Alternative	0.34	0.49	0.51	0.50
Black				
Completed	2.46	2.26	2.16	2.04
Diploma	2.44	2.44	2.41	2.33
Alternative	0.61	1.25	1.32	1.36
Hispanic				
Completed	2.53	3.11	3.03	3.09
Diploma	2.49	3.14	3.08	3.11
Alternative	0.58	1.03	1.35	1.43

SOURCE: U.S. Deparment of Commerce, Bureau of the Census, Current Population Survey, October 1990, unpublished tabulations.

Table A15.—Standard errors for Table 14: Alternative high school completion and graduation rates, by age: October 1990

Type	Age						
	17-18	19-20	21-22	23-24	25-26	27-28	29-30
			(As percent of age group)				
Completion	0.97	0.73	0.69	0.68	0.66	0.63	0.60
Graduation	0.99	0.78	0.75	0.75	—	—	—
			(As percent of those in age group not currently enrolled in high school)				
Completion	1.31	0.74	0.73	0.74	0.69	0.64	0.63
Graduation	1.29	0.78	0.79	0.78	—	—	—

— Not available.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1990, unpublished data.

Table A16.—Data for Figure 1 and Figure A: Single-year event dropout rates for grades 10-12, ages 15-24, by race-ethnicity: 1973 through 1990

Year	Total	Race-ethnicity[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
		(percent)		
1973	6.3	5.5	9.9	9.9
1974	6.8	5.8	11.7	10.0
1975	5.9	5.0	8.5	11.1
1976	6.0	5.5	7.4	7.4
1977	6.6	6.2	8.6	7.9
1978	6.8	5.8	10.4	12.6
1979	6.9	6.1	10.2	9.9
1980	6.2	5.3	8.4	11.8
1981	6.0	5.0	9.9	11.0
1982	5.6	4.9	8.0	9.6
1983	5.3	4.5	7.2	10.2
1984	5.3	4.6	6.0	11.6
1985	5.3	4.4	8.1	9.9
1986	4.8	3.7	5.6	12.1
1987[2]	4.2	3.7	6.5	5.8
1988[2]	4.9	4.2	5.9	10.6
1989[2]	4.5	3.5	7.9	7.8
1990[2]	4.1	3.4	5.1	8.1

1 Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.
2 Numbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

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

Table A17.—Standard errors for Figure 1 and Figure A: Single-year event dropout rates for grades 10-12, ages 15-24, by race-ethnicity: 1973 through 1990

Year	Total	Race-ethnicity[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
1973	0.34	0.35	1.26	2.07
1974	0.34	0.36	1.29	1.94
1975	0.32	0.33	1.14	1.93
1976	0.32	0.35	1.06	1.58
1977	0.33	0.37	1.08	1.64
1978	0.34	0.36	1.19	2.12
1979	0.34	0.36	1.21	1.86
1980	0.33	0.35	1.10	1.95
1981	0.33	0.34	1.17	1.78
1982	0.35	0.35	1.14	1.84
1983	0.34	0.36	1.10	1.88
1984	0.35	0.38	1.01	1.99
1985	0.35	0.37	1.19	1.79
1986	0.33	0.34	0.99	1.90
1987[2]	0.34	0.37	1.16	1.50
1988[2]	0.37	0.40	1.11	2.02
1989[2]	0.36	0.38	1.28	1.70
1990[2]	0.35	0.38	1.09	1.70

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

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

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

Table A18.—Data for Figure 2 and Figure B: Status dropout rates for persons ages 16-24, by race-ethnicity: October 1973 through October 1990

Year	Total	Race-ethnicity[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
		(percent)		
1973	14.1	11.6	22.2	33.5
1974	14.3	11.8	21.2	33.0
1975	13.9	11.4	22.8	29.2
1976	14.1	11.9	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	11.3	19.2	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	14.1	30.1
1987[2]	12.7	10.4	14.2	28.6
1988[2]	12.9	9.6	14.3	35.8
1989[2]	12.6	9.4	13.9	33.0
1990[2]	12.1	9.0	13.2	32.4

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

[2] Numbers for these years reflect new editing procedures instituted by the Bureau of the Census in 1986 for cases with missing data on school enrollment items.

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

Table A19.—Standard errors for Figure 2 and Figure B: Status dropout rates for persons ages 16-24, by race-ethnicity: October 1973 through October 1990

Year	Total	Race-ethnicity[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
1973	0.27	0.28	0.96	1.71
1974	0.27	0.28	0.95	1.59
1975	0.26	0.27	0.96	1.54
1976	0.26	0.27	0.91	1.53
1977	0.26	0.27	0.89	1.53
1978	0.26	0.27	0.89	1.51
1979	0.26	0.27	0.90	1.50
1980	0.26	0.27	0.87	1.43
1981	0.25	0.27	0.83	1.36
1982	0.28	0.29	0.89	1.47
1983	0.28	0.29	0.88	1.47
1984	0.27	0.29	0.84	1.46
1985	0.27	0.29	0.84	1.34
1986	0.27	0.29	0.82	1.30
1987[2]	0.30	0.32	0.91	1.40
1988[2]	0.31	0.32	0.91	1.47
1989[2]	0.31	0.32	0.90	1.40
1990[2]	0.30	0.32	0.89	1.40

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

[2] Numbers for these years reflect new editing procedures instituted by the Bureau of the Census in 1986 for cases with missing data on school enrollment items.

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

Table A20.—Data for Figure 3: Number of status dropouts, ages 16-24, by race-ethnicity: October 1973 through October 1990

Year	Total	Race-ethnicity[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
1973	4,716	3,150	930	576
1974	4,849	3,205	877	653
1975	4,824	3,154	978	573
1976	4,981	3,330	904	646
1977	5,031	3,366	891	701
1978	5,114	3,361	923	728
1979	5,265	3,416	974	758
1980	5,085	3,189	889	885
1981	5,143	3,221	899	891
1982	5,055	3,184	902	823
1983	4,905	3,042	878	816
1984	4,626	2,928	754	762
1985	4,324	2,671	719	797
1986	4,142	2,405	660	966
1987[2]	4,230	2,533	644	926
1988[2]	4,232	2,277	653	1,168
1989[2]	4,038	2,151	639	1,142
1990[2]	3,797	2,007	594	1,114

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

[2] Numbers for these years reflect new editing procedures instituted by the Bureau of the Census in 1986 for cases with missing data on school enrollment items.

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

Table A21.—Standard errors for Figure 3: Number of status dropouts, ages 16-24, by race-ethnicity: October 1973 through October 1990

Year	Total	Race-ethnicity[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
		(in thousands)		
1973	90	75	40	29
1974	91	75	39	31
1975	91	75	41	30
1976	93	77	40	32
1977	93	77	40	33
1978	94	77	41	33
1979	95	78	42	34
1980	94	75	40	36
1981	94	76	41	37
1982	100	76	44	38
1983	99	79	43	38
1984	96	78	41	37
1985	93	74	40	39
1986	92	71	38	42
1987[2]	92	72	38	41
1988[2]	101	75	42	48
1989[2]	98	73	41	49
1990[2]	96	71	40	48

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

[2] Numbers for these years reflect new editing procedures instituted by the Bureau of the Census in 1986 for cases with missing data on school enrollment items.

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

Table A22.—Data for Figure 4: Status dropout rate, ages 16-24, by race-ethnicity and sex: October 1973 through October 1990

Year	Race-ethnicity[1] and sex					
	White, non-Hispanic		Black, non-Hispanic		Hispanic	
	Male	Female	Male	Female	Male	Female
	(percent)					
1973	11.5	11.8	21.5	22.8	30.4	36.4
1974	12.0	11.7	20.1	22.1	33.7	32.2
1975	10.9	11.8	22.9	22.8	26.7	31.6
1976	12.1	11.7	21.2	19.9	30.3	32.3
1977	12.6	11.2	19.5	20.1	31.6	34.3
1978	12.2	11.5	22.5	18.2	33.6	33.1
1979	12.6	11.4	22.4	20.1	33.0	34.5
1980	12.2	10.5	20.8	17.8	37.2	33.2
1981	12.5	10.2	19.8	17.2	36.0	30.4
1982	12.0	10.8	21.1	15.9	30.5	32.8
1983	12.2	10.1	20.0	16.2	34.3	29.1
1984	12.0	10.1	16.9	14.3	30.6	29.0
1985	11.0	9.9	16.1	14.4	29.9	25.2
1986	10.2	9.1	14.7	13.5	32.8	27.2
1987[2]	10.8	10.0	14.9	13.3	29.1	28.1
1988[2]	10.3	8.9	15.0	13.7	36.0	35.4
1989[2]	10.3	8.5	14.9	13.0	34.4	31.6
1990[2]	9.3	8.7	11.9	14.4	34.3	30.3

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

[2] Numbers for these years reflect new editing procedures instituted by the Bureau of the Census in 1986 for cases with missing data on school enrollment items.

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

Table A23.—Standard errors for Figure 4: Status dropout rate, ages 16-24, by race-ethnicity and sex: October 1973 through October 1990

Year	Race-ethnicity[1] and sex					
	White, non-Hispanic		Black, non-Hispanic		Hispanic	
	Male	Female	Male	Female	Male	Female
1973	0.39	0.39	1.39	1.34	2.41	2.41
1974	0.40	0.39	1.37	1.32	2.28	2.21
1975	0.38	0.39	1.42	1.31	2.16	2.18
1976	0.39	0.38	1.36	1.23	2.24	2.10
1977	0.40	0.37	1.30	1.22	2.19	2.14
1978	0.39	0.38	1.37	1.17	2.18	2.11
1979	0.40	0.38	1.36	1.21	2.14	2.10
1980	0.39	0.36	1.31	1.15	2.06	1.98
1981	0.39	0.36	1.25	1.11	1.97	1.88
1982	0.42	0.40	1.37	1.15	2.09	2.07
1983	0.43	0.39	1.34	1.17	2.17	1.99
1984	0.43	0.40	1.25	1.12	2.12	2.00
1985	0.42	0.40	1.25	1.13	1.92	1.86
1986	0.42	0.39	1.21	1.11	1.85	1.83
1987[2]	0.47	0.45	1.35	1.21	1.95	2.00
1988[2]	0.47	0.43	1.36	1.23	2.05	2.12
1989[2]	0.47	0.43	1.34	1.21	1.98	1.99
1990[2]	0.46	0.44	1.24	1.27	1.98	1.98

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

[2] Numbers for these years reflect new editing procedures instituted by the Bureau of the Census in 1986 for cases with missing data on school enrollment items.

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

Table A24.—Data for Figure 5: Percentage of persons enrolled in school below the college level, by age: October 1973 through October 1990

Year	Age		
	18	19	20
1973	16.3	3.4	1.1
1974	15.9	3.5	1.2
1975	16.5	3.6	1.0
1976	16.8	3.7	1.8
1977	17.2	3.2	1.7
1978	15.7	3.7	1.3
1979	17.3	3.1	1.4
1980	18.1	3.0	1.5
1981	18.2	4.1	1.8
1982	18.6	4.0	1.4
1983	20.7	4.6	1.9
1984	19.2	3.8	2.0
1985	18.0	4.4	1.7
1986	21.4	4.4	1.7
1987[1]	20.7	5.1	1.7
1988[1]	22.0	4.9	2.2
1989[1]	24.0	5.1	0.8
1990[1]	23.2	5.8	1.1

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

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

Table A25.—Standard errors for Figure 5: Percentage of persons enrolled in school below the college level, by age: October 1973 through October 1990

Year	Age		
	18	19	20
1973	0.98	0.49	0.29
1974	0.95	0.50	0.29
1975	0.96	0.49	0.27
1976	0.97	0.49	0.35
1977	0.96	0.46	0.34
1978	0.93	0.49	0.30
1979	0.97	0.45	0.31
1980	1.00	0.44	0.31
1981	0.98	0.53	0.34
1982	1.02	0.51	0.30
1983	1.06	0.56	0.36
1984	1.07	0.52	0.37
1985	1.06	0.57	0.35
1986	1.13	0.58	0.35
1987[1]	1.11	0.62	0.36
1988[1]	1.11	0.61	0.41
1989[1]	1.18	0.60	0.25
1990[1]	1.16	0.63	0.29

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

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

Table A26.—Data for Figure 6 and Figure C: High school completion rates for persons 19 and 20 years old, 21-24 years old, 25-29 years old, and 30-34 years old: October 1973 through October 1990

Year	Age group			
	19-20	21-24	25-29	30-34
	(percent)			
1973	82.2	83.2	81.8	76.1
1974	80.6	84.3	83.6	78.1
1975	81.0	83.5	84.2	79.1
1976	81.1	84.6	84.4	79.8
1977	81.4	83.5	85.4	81.5
1978	80.9	84.0	85.7	83.4
1979	80.4	83.2	85.9	84.1
1980	81.1	84.7	85.7	85.2
1981	80.8	84.1	86.2	85.9
1982	80.6	84.2	86.2	86.4
1983	81.2	84.3	86.2	87.2
1984	82.0	84.5	86.2	87.5
1985	83.1	86.0	85.7	87.1
1986	83.0	84.9	85.8	87.2
1987[1]	82.9	84.6	85.6	87.0
1988[1]	82.1	84.9	85.9	87.0
1989[1]	81.8	85.0	86.4	85.6
1990[1]	82.8	86.1	85.7	86.9

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

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

Table A27.—Standard errors for Figure 6 and Figure C: High school completion rates for persons 19 and 20 years old, 21-24 years old, 25-29 years old, and 30-34 years old: October 1973 through October 1990

Year	Age group			
	19-20	21-24	25-29	30-34
1973	0.74	0.63	0.48	0.63
1974	0.75	0.61	0.45	0.59
1975	0.74	0.61	0.43	0.58
1976	0.72	0.59	0.42	0.56
1977	0.72	0.60	0.41	0.52
1978	0.73	0.59	0.40	0.49
1979	0.73	0.60	0.40	0.47
1980	0.72	0.57	0.39	0.45
1981	0.73	0.56	0.38	0.43
1982	0.73	0.61	0.38	0.42
1983	0.73	0.60	0.38	0.40
1984	0.73	0.60	0.38	0.40
1985	0.72	0.60	0.38	0.39
1986	0.74	0.62	0.38	0.39
1987[1]	0.74	0.69	0.38	0.38
1988[1]	0.76	0.69	0.40	0.38
1989[1]	0.75	0.69	0.39	0.39
1990[1]	0.80	0.68	0.40	0.38

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

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

Table A28.—Data for Figure 7: High school completion rates for persons 19 and 20 years old, by race-ethnicity: October 1973 through October 1990

Year	Total	Race-ethnicity[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
		(percent)		
1973	82.2	85.9	68.2	54.7
1974	80.6	84.6	65.6	58.8
1975	81.0	84.7	66.0	62.6
1976	81.1	85.2	67.6	57.3
1977	81.4	84.9	69.1	60.0
1978	80.9	85.2	67.1	56.1
1979	80.4	83.8	68.5	59.8
1980	81.1	85.6	71.0	51.3
1981	80.8	84.8	71.8	56.8
1982	80.6	84.7	69.4	58.8
1983	81.2	85.2	73.2	57.9
1984	82.0	85.4	75.3	63.0
1985	83.1	87.0	73.8	64.8
1986	83.0	87.8	75.0	65.8
1987[2]	82.9	86.4	79.3	63.7
1988[2]	82.1	87.1	73.5	53.6
1989[2]	81.8	86.8	74.8	59.4
1990[2]	82.8	87.3	77.6	59.7

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

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

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

Table A29.—Standard errors for Figure 7: High school completion rates for persons 19 and 20 years old, by race-ethnicity: October 1973 through October 1990

Year	Total	Race-ethnicity[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
1973	0.74	0.63	2.38	4.00
1974	0.75	0.66	2.40	3.53
1975	0.74	0.65	2.25	3.53
1976	0.72	0.63	2.16	3.35
1977	0.72	0.64	2.18	3.33
1978	0.73	0.63	2.17	3.39
1979	0.73	0.65	2.17	3.33
1980	0.72	0.62	2.15	3.04
1981	0.73	0.65	2.08	2.98
1982	0.73	0.69	2.27	3.29
1983	0.73	0.70	2.17	3.22
1984	0.73	0.71	2.09	3.39
1985	0.72	0.69	2.17	3.20
1986	0.74	0.69	2.16	3.02
1987[2]	0.74	0.72	2.08	2.88
1988[2]	0.76	0.78	2.55	3.31
1989[2]	0.75	0.78	2.34	3.17
1990[2]	0.80	0.76	2.26	3.11

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

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

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

Table A30.—Data for Figure 8: High school completion rates for persons 30-34 years old, by race-ethnicity: October 1973 through October 1990

Year	Total	Race-ethnicity[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
		(percent)		
1973	76.1	80.0	62.3	41.5
1974	78.1	81.9	63.6	45.6
1975	79.1	83.2	62.6	50.1
1976	79.8	83.3	67.2	50.9
1977	81.5	85.1	67.6	52.0
1978	83.4	87.0	72.6	50.9
1979	84.1	87.7	74.1	52.3
1980	85.2	88.8	76.3	54.1
1981	85.9	89.5	78.7	52.1
1982	86.4	90.2	79.7	53.6
1983	87.2	91.2	76.7	56.3
1984	87.5	91.2	79.3	57.9
1985	87.1	91.1	79.2	58.1
1986	87.2	91.3	79.6	59.1
1987[2]	87.0	91.2	78.8	58.8
1988[2]	87.0	90.5	85.0	58.6
1989[2]	85.6	90.8	80.8	58.8
1990[2]	86.9	91.2	82.9	57.1

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

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

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

Table A31.—Standard errors for Figure 8: High school completion rates for persons 30-34 years old, by race-ethnicity: October 1973 through October 1990

Year	Total	Race-ethnicity[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
1973	0.63	0.55	1.99	2.88
1974	0.59	0.52	1.94	2.80
1975	0.58	0.50	1.91	2.65
1976	0.56	0.49	1.85	2.62
1977	0.52	0.45	1.80	2.57
1978	0.49	0.42	1.67	2.51
1979	0.47	0.40	1.60	2.38
1980	0.45	0.38	1.51	2.30
1981	0.43	0.36	1.39	2.19
1982	0.42	0.37	1.45	2.33
1983	0.40	0.36	1.48	2.22
1984	0.40	0.35	1.38	2.30
1985	0.39	0.35	1.37	2.09
1986	0.39	0.34	1.33	1.98
1987[2]	0.38	0.34	1.33	1.94
1988[2]	0.38	0.38	1.24	2.03
1989[2]	0.39	0.37	1.36	1.95
1990[2]	0.38	0.36	1.29	1.93

[1] Not shown separately are non-Hispanics who are neither black nor white, but who are included in the total.

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

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

APPENDIX B

Technical Notes

Definition of Who Is a Dropout

One of the concerns addressed in the new dropout data collections is the development and implementation of a nationally consistent definition of a dropout. Currently, considerable variation exists in local, state, and federal data collections raising questions about issues such as:

- Whether those below the legal school-leaving age are identified as dropouts;
- Whether students entering the military or correctional institutions are considered dropouts;
- Whether those in GED programs or with an equivalency certificate are considered dropouts;
- Whether those not graduating with their class (but never leaving school) are considered dropouts; and
- Whether those leaving high school early to enter college are considered dropouts.

Variations in dropout definitions are embedded, for example, in the existing data sources—CPS, HS&B, and NELS:88. The age or grade span examined and the type of dropout rate—status, event, or cohort—also vary across the data sources. Furthermore, as outlined below, CPS procedures changed in 1986 and 1988. While the new collection through the NCES Common Core of Data (CCD) is designed to be consistent with the current CPS procedures, the CCD will include all dropouts in grades 7-12 versus 10-12 and will be based on administrative records rather than a household survey. Thus, dropout reporting will have some discontinuities as the new and more consistent data become available.

Defining and Calculating Event Dropout Rates Using CPS

The October Supplement to the Current Population Survey (CPS) is the only current national data source that can be used to estimate an annual national dropout rate (event) or the number of dropouts nationally, regardless of when they dropped out (status). 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. An adult member of each household serves as the informant, supplying data for each member of that household. In addition, supplementary questions regarding school enrollment are asked about eligible household members 3 years old and over. Some interviews are conducted by telephone.

The sampling frame is a complete list of dwelling-unit addresses maintained by the Bureau of the Census and which is updated to show demolitions, new construction, and field listings. The population surveyed is referred to as the civilian, non-institutionalized population and excludes members of the Armed Forces, inmates of correctional institutions, and patients in long-term medical or custodial facilities. Typically, about 4 percent of dwelling units are not interviewed, because, after repeated callbacks, occupants are not found at home or for some other reason.

The October Supplement obtains information about school enrollment and educational attainment for each member of a household. To identify dropout events, it also asks about enrollment 1 year prior to the interview. Thus, CPS can provide the number and proportion of dropouts, defined either as an event or a status, and some information about the characteristics of dropouts. Several questionnaire items are used to calculate these dropout rates, including:

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

Based on the household informant's response to these items, event dropouts are defined as those 15 through 24 years old who are not currently enrolled in school, who were enrolled a year ago, and who are not high school graduates. To calculate an event rate using CPS, the number of dropouts is divided by an estimate (obtained in the current October) of the number of students enrolled the previous October. This estimate is the sum of those students who completed the previous grade last year and are enrolled in high school or below this October, or who completed high school, plus those students who were enrolled last year, are not currently enrolled in school, but did not complete high school. The dropout interval is defined to include the previous summer and the current school year. That is, once a grade is completed, the student is then at-risk of dropping out of the next grade. Not captured in the CPS rate are students who drop out and return to school within the 12-month period and students who enrolled after the first week of October the previous year. The definition NCES is field testing in the Common Core of Data (CCD) includes all students enrolled at any time during the previous school year.

The limitations of CPS as a data source on dropouts stem from the size of the sample and the survey's broad scope. 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 and estimating national dropout rates. It is also the only source of time series data on dropout rates. Data are available since 1967 to calculate event rates and earlier for status rates.

Before 1989, the CPS question on enrollment the previous October asked about individuals 14 years old and older. As of October 1989, however, CPS asks this question about individuals 15 years old and older. This report focuses on event dropout rates for secondary school students ages 15 through 24 who dropped out of grades 10-12. Included in the grades 10-12 event rate are students in the 15 through 24 age range who completed the 9th grade the previous year, but did not return in the fall to begin the 10th grade. The status dropout rates in this report include all persons 16 through 24 years old who have not completed high school and are not currently enrolled in school.

To improve the quality of the data, the Bureau of the Census in 1986 instituted new editing procedures for cases with missing data on school enrollment items. The effect of the editing changes for 1986—a bridge year in which the data were edited using both the old

and new procedures—was to increase the number of students enrolled in school and decrease the number of students enrolled last year but not enrolled in the current year. The new editing procedures lowered the 1986 event rate for grades 10-12, ages 14 through 24, by about 0.4 percent, from 4.69 to 4.28 percent. While a difference of 0.4 percent is large relative to the observed year-to-year changes in the event rate, it is not statistically significant. The changes in the editing procedures made less 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. The data for 1986 presented in this report are based on the old editing procedures.

Defining and Calculating Cohort Dropout Rates Using NELS:88

The NELS:88 baseline comprised a national probability sample of all regular public and private eighth-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 quite small impact on national estimates. As reported earlier, data on the education outcomes of a representative sample of the base-year ineligible students were added to comparable data from the base-year respondents for the computation of nationally representative cohort dropout rates. Thus the cohort dropout rates in this report reflect the full student population of eighth-grade schools in the United States in the spring of 1988 as represented through the 1,052 participating schools in the NELS:88 Base Year. Missing from the cohort rate for grades 8-10 is anyone who had dropped out prior to the spring of their eighth-grade year. Thus, the overall cohort rate reported here may be lower than it would have been if a younger cohort were used. This may be particularly important for Hispanics, given CPS data which 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 nonparticipants and participants, to the extent that this information could be obtained.

According to the definition used in NELS:88, a dropout is

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 (= has not been in school for 4 consecutive weeks or more and is not absent due to accident or illness).

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 consecutive school weeks or more and had returned to school (that 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 table 8, information on 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. The 7 sample cases who were deceased and the 103 sample cases who had left the country were excluded from the computation of the 8th- through 10th-grade cohort dropout rate.

Accuracy of Estimates

The estimates in this report are derived from samples and are subject to two broad classes of error — sampling and nonsampling. Sampling errors occur because the data are collected from a sample of the 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.

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 are 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; and that the difference would be less than 1.96 times the standard error, about 95 out of 100.

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

Single-year rate:

$$\text{s.e.} = \sqrt{(b/N)(p)(100-p)},$$

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 2,744 for total or white population 14-34 years old and 3,086 for black or Hispanic population 14-34. For the years 1973-1981, the b parameter is multiplied by 0.73; for years 1982-1987, the b parameter is multiplied by 0.84.

Number of persons

$$\text{s.e.} = \sqrt{(bx)(1 - x/T)},$$

where x = the number of persons (i.e., dropouts),
T = population in the category (i.e., blacks 16 to 24), and
b = as above.

Standard errors for many of the estimates in the tables appear in appendix A.

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.

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

where cov $(P_1, P_2) = \rho(se_1 se_2) = .35(se_1 se_2)$, and where P_1 and P_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors. The correlation of .35 is based on estimates of sample overlap provided by the Bureau of the Census.

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, would involve the following steps:

- 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 over time. Regression analysis was used to test for trends in the CPS time series data. 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 single-year event rates and the status rates. The single-year 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 editing procedure (0 = years 1973 to 1986, 1 = 1987 to 1990) used as independent variables. However, in these data some of the observations were less reliable than others, i.e, some year's standard errors were larger than other year's. 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 that 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 LOTUS 1-2-3. Each of the variables in the analysis were transformed by dividing each by the standard error of the relevant year's rate (event or status). 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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