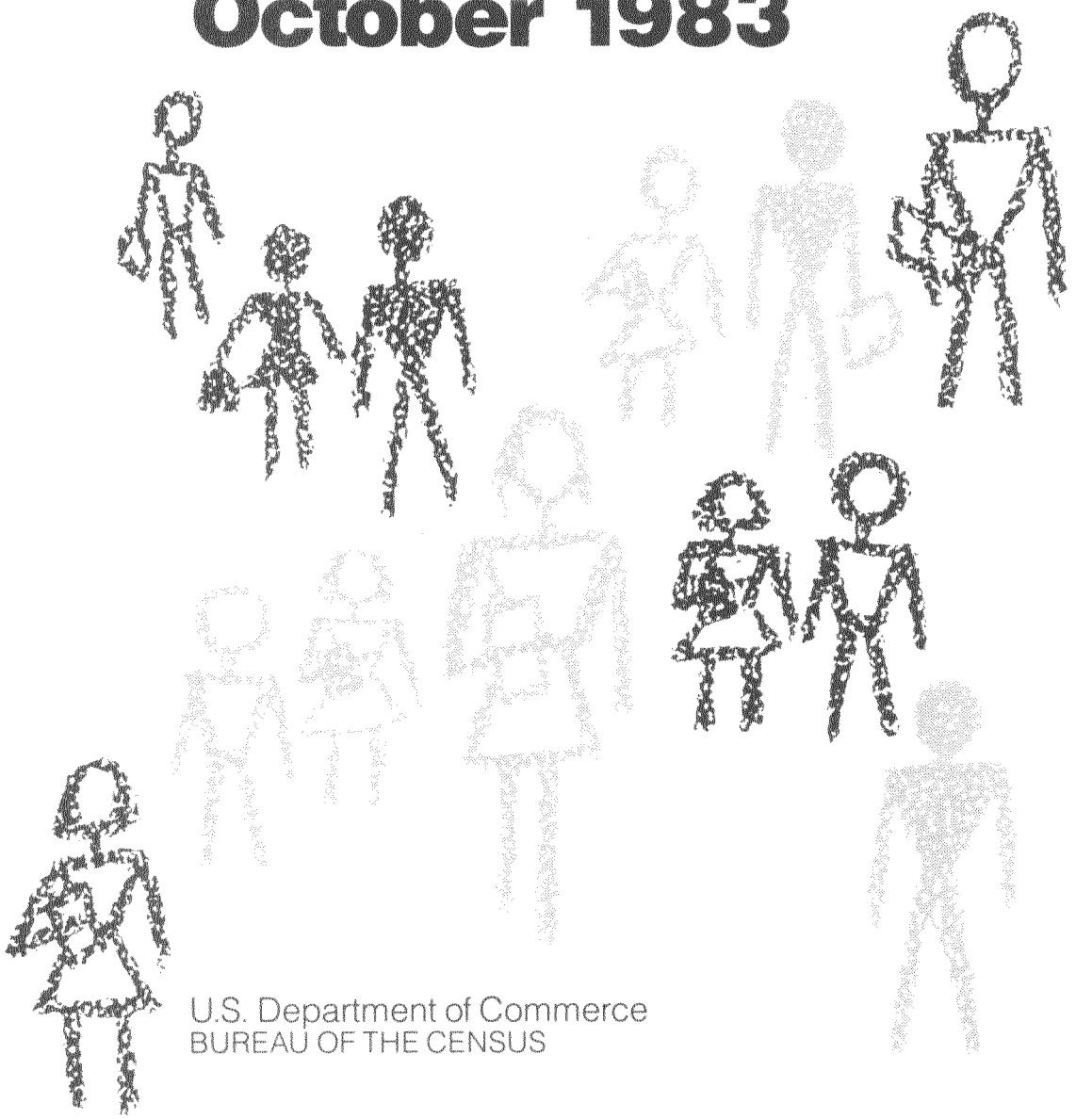
CURRENT POPULATION REPORTS

Population Characteristics

Series P-20, No. 413

School Enrollment – Social and Economic Characteristics of Students: October 1983



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Acknowledgments

This report was prepared in the Education and Social Stratification Branch of the Population Division. Table preparation was provided by **Brenda R. Jeffries** and statistical testing was performed by **Andrea E. Adams**. **Marion Porter-Gordon** performed publication review. Programming support was provided by **Phyllis C. Swanson**, and survey operations were coordinated by **Greg Weyland** and **Kathleen P. Creighton** of Demographic Surveys Division. Sampling review and source and reliability text were provided by **Lloyd W. Hicks, Jr.** and **Thomas F. Moore** of Statistical Methods Division. Overall direction was provided by **Arthur J. Norton**, Assistant Chief for Demographic and Social Statistics Programs, Population Division.

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Series P-20, No. 413
Issued March 1987

School Enrollment—Social and Economic Characteristics of Students: October 1983

by Robert Kominski

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SUGGESTED CITATION

U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 413, *School Enrollment – Social and Economic Characteristics of Students: October 1983*, U.S. Government Printing Office, Washington, DC, 1987.

Contents

TEXT TABLES

DETAILED TABLES

DETAILED TABLES—Continued

APPENDIXES

APPENDIX TABLES

APPENDIX TABLES—Continued

School Enrollment—Social and Economic Characteristics of Students: October 1983

INTRODUCTION

This report presents detailed tabulations from the October 1983 Current Population Survey on the topic of school enrollment, including the social and economic characteristics of students. In addition, several special topics are discussed. These include racial differences in preprimary enrollments, an estimate of high school dropout rates, changes in the sex composition of college students, and the proportions of students who are returning to college after some period of time out of school.

ENROLLMENT

Many of the general enrollment trends and basic student characteristics have been previously discussed in the Advance Report on school enrollment (Current Population Reports P-20, No. 394). These are briefly summarized here:

- In October 1983, 57,745,000 persons aged 3 to 34 were enrolled in schools ranging from nursery and kindergarten to college. Total enrollment has decreased by 3.2 million students since 1975.
- Most of the decrease in the aggregate number of students is due to smaller cohorts of persons of elementary through high school ages (5 to 17 years).
- Enrollment numbers at different levels of schooling were distributed as follows: 2.3 million nursery schoolers; 3.4 million kindergarten students; 27.2 million children in elementary school; 14.0 million persons in high school; and 10.8 million college students.
- The number of nursery school students has increased by 75 percent in the past ten years. This increase is principally due to an increase in rates of nursery school attendance.
- Elementary school enrollments, at 27.2 million, are approaching the point at which they will stop decreasing and begin rising, as the size of younger age cohorts begin to increase again.
- High school enrollments of 14 million are down substantially from 1977, when there were 15.8 million students. Most of the change in the number of high school students is accounted for by decreases in the size of high-school-age cohorts. By 1990, the 14 to 17 age group is projected to shrink in size by about 1.5 million persons from the 1983 estimate. At prevailing enrollment rates, this implies a drop between 1983 and 1990 of well over 1 million high school students.
- There were 10.8 million persons 14 to 34 years old enrolled in college in October 1983. This was a substantial increase over the 8.2 million students enrolled in 1973. Increases in college enrollment have occurred in part because of rising participation rates of women. An estimated 28.2 percent of all women 18 to 21 years old were in college in 1973; by 1983, this figure had risen to 34.5 percent.
- An additional 1.5 million persons 35 and older were also attending college in 1983. This older adult group is one of the fastest-growing components of college enrollments, having increased by over 700,000 persons and nearly doubling in size in the past 10 years. These older students now account for over 12 percent of all college students.

PREPRIMARY ENROLLMENTS

Over the past 10 years, both the number and proportion of very young children in school have increased substantially. Over 50 percent of children 3 to 5 years old were enrolled in school in 1983, as opposed to about 44 percent in 1973. The top panel of table A shows the proportions enrolled in school by single year of age and race for 1973 and 1983. Most of the enrollment for 5-year-olds is in kindergarten or first grade, while most of the enrollment for 3- and 4-year-olds is in nursery school (note table 15). In general, there are few significant racial differences in enrollment rates by age for these young children. While both groups experienced an increase in enrollment rates during the 10-year period, the absence of a substantial racial difference has persisted.

The second panel of table A shows the proportion of preprimary students who attend school full time. As is seen for the total and each age group in each year, black students are twice as likely as whites to be full-day students. While in the period from 1973 to 1983 the overall proportion of full-time students increased for both races, the discrepancy between black and white proportions did not narrow.

The third panel of the table presents another view of these young students. Blacks are far more likely than whites to be attending a public nursery school, and again, this is a strong difference that is evident in both 1973 and 1983. In kindergarten this difference is less apparent, but it still exists. This is likely due to the fact that kindergarten is offered by most public school systems, but public nursery school has not yet reached the same near-universal level of availability.

Table A. Enrollment Characteristics of Young Students by Race: October 1973 and 1983

(Numbers in thousands)

Age and grade	Proportions enrolled--any type of school							
	1983				1973			
	White		Black		White		Black	
	Total persons	Proportion enrolled	Total persons	Proportion enrolled	Total persons	Proportion enrolled	Total persons	Proportion enrolled
Age								
3 to 5 years	8,336	[1].552	1,555	[1].531	8,698	.439	1,467	.450
3 years	2900	[1].281	558	[1].278	2,977	.140	523	.172
4 years	2768	[1].476	513	.452	2,903	.326	490	.414
5 years	2668	[1].926	484	[1].907	2,818	.876	454	.808
	Proportion of preprimary students attending full day							
	1983				1973			
	White		Black		White		Black	
	Students	Proportion full day	Students	Proportion full day	Students	Proportion full day	Students	Proportion full day
Age								
3 to 5 years	4,430	[1].265	758	[1].575	3520	.181	618	.448
3 years	814	.297	156	.617	417	.297	90	.578
4 years	1,318	.222	231	.570	946	.190	202	.525
5 years	2,298	[1].279	371	[1].560	2157	.154	326	.365
	Proportion of all preprimary students attending public school							
	1983				1973			
	White		Black		White		Black	
	Total	Proportion public	Total	Proportion public	Total	Proportion public	Total	Proportion public
Grade								
Nursery	1,932	.291	326	.660	1,087	.223	210	.695
Kindergarten	2,769	.788	476	.897	2,584	.828	423	.924

[1]Estimate is significantly different from 1973 value at p = .05.

Note: All 1973 data taken from Current Population Reports, Series P-20, No. 272, Social and Economic Characteristics of Students: October 1973.

What does this information tell us generally about the schooling of young children? First, there is an overall increase in enrollment of young children, and second, greater levels of full-time enrollment may reflect a different utilization of preprimary school, say, as a substitute for day-care among working mothers.

DROPOUTS

The number of high school dropouts reflects an important facet of the total national education picture. At various times in the past 20 years, major efforts have been made to reduce what is sometimes presented as a frighteningly large national dropout rate. Estimating the dropout rate, however, is not an easy task. Ideally, one would need a longitudinal survey in order to see how many of the people who were in school at some beginning date were still enrolled at a later date. The Current Population Survey (CPS), because it is a cross-sectional survey, provides information primarily as of the survey date, but we can approximate longitudinal data by asking persons what their enrollment status currently is, and what it was at some defined point in the past. In the CPS, this retrospective question is, "Were you enrolled in school last October?" (one year ago). Based on the answers to this question and the current enrollment item, we can estimate the number of persons who were enrolled a year ago but who presently are not. In fact, tabulations of these data have been

produced regularly by Bureau of Labor Statistics (see, for example, *Monthly Labor Review,* August 1983, table 4, p. 31).[1]

In October 1973, 683,000 persons ages 14 to 24 reported that they had completed 9, 10, or 11 years of school, had been enrolled in October of the previous year, but were not currently enrolled. They are referred to here as "high school dropouts" from grades 10, 11, and 12, respectively. In October 1983, the corresponding figure was 535,000 people. In terms of raw numbers, there was a substantial decrease in the number of dropouts, about a 22 percent change. The decrease in the number, however, tells only part of the story. Since the total number of students also fell, the decrease in the number of dropouts may simply be a function of the decline in the "population at risk" of dropping out. An estimate of the dropout rate gives a better representation of what is actually occurring. The rate is estimated here by dividing the dropouts as defined above by the total number of persons assumed to have been enrolled the year before in grades 10, 11, and 12. This number is estimated as all current enrollees in grades 11 and 12, plus all high school graduates in the past year, plus all estimated dropouts in the past year. A further exposition of this computation is given in the technical note.

Table B shows the estimated annual national high school dropout rate for the 1972-73 and 1982-83 periods, for all persons aged 14 to 24 and various race/sex combinations, as well as for each of the three specific high school grades. The data indicate that the dropout rate was significantly lower in 1983 than it had been 10 years earlier, that is, 5.2 vs. 6.3 percent.

[1]Since the survey is of persons who are in the civilian noninstitutional population, people who have dropped out in the past year but who are now institutionalized or in the military are not in the sample. This may have the effect of biasing the estimated number of dropouts, and the dropout rate. However, a sensitivity analysis of this problem indicates that the overall rate is not significantly affected, and temporal and race differences are maintained. The technical note outlines the procedure for computing the rate, and shows the results of this sensitivity analysis.

While computation of the rate for specific race/sex subpopulations yields estimates which are consistently smaller for 1983 than 1973, only the decline for black males is statistically significant. The estimated national grade-specific rates of 3.7, 4.5, and 7.5 percent imply that for a given group of new 10th grade students, about 15 percent will not graduate. That is, if a hypothetical group of 1000 students entered the 10th grade, about 37 (1000 X .037) would drop out during the the first year; of the remaining 963 who complete the 10th grade, about 43 (963 X .045) would drop out in the next year; and of the remaining 920 students finishing that grade about 69 (920 X .075) would drop out in the final year, leaving about 851 graduating, for an overall 3-year dropout proportion of 15 percent. Using the overall 3-year combined rate (because grade-specific rates by race are unreliable) the corresponding figure for black males in 1983 is about 20 percent, while in 1973, the figure for this group would be about 32 percent. The estimate for white males is 15 percent in 1983 and 17 percent in 1973.

Although the figures here are estimates, they do provide evidence that the national dropout situation is better now than it was 10 years ago. Overall, the dropout rate decreased in grades 10 and 11 and showed no change in grade 12. In terms of total years of education, this means that even dropouts have more educational experience than their counterparts of 10 years ago. One might accept this finding as an indication that the efforts towards equal opportunity and increased education expenditures have to some extent worked. On the other hand, a decrease in the national dropout rate may not mean a better-educated population, but that educational requirements may have fallen during the last decade. In this view, the reduction in the dropout rate might be due to less challenging programs of study, making graduation from high school easier to accomplish. These data are not designed to, and cannot, confirm or invalidate either of these complex alternate scenarios.

Table B. Annual High School Dropout Rates, by Race, Sex, and Grade: October 1973 and 1983

(Numbers in thousands)

Race, sex, and grade	1983			1973		
	High school students	Number of dropouts	Rate	High school students	Number of dropouts	Rate
Total	10,331	535	[1]5.2	10,851	683	6.3
White	8,528	409	[2]4.8	9,357	536	5.7
Male	4,264	232	5.4	4,708	288	6.1
Female	4,264	177	[2]4.2	4,649	248	5.3
Black	1,487	103	[2]6.9	1,375	139	10.1
Male	687	48	[1]7.0	650	78	12.0
Female	800	55	6.8	725	61	8.4
Grade 10	3,468	129	[1]3.7	3,899	210	5.4
Grade 11	3,601	162	[1]4.5	3,631	237	6.5
Grade 12	3,262	244	7.5	3,321	236	7.1

[1]Estimate is significantly different from 1973 value at p = .05.
[2]Estimate is significantly different from 1973 value at p = .10.

SEX COMPOSITION OF THE COLLEGE POPULATION

One of the most widely recognized recent changes in higher education has been the growing participation of women. Generally, this change has been documented by reference to the increasing enrollment rates of women across time (see, for example Current Population Reports P-20, No. 392). In table C, this growth is shown in a different way, using the sex composition of distinct college grades as the measure of interest. The total figures for 1973 and 1983 in row one bear out the most fundamental change; in this 10-year period, the male proportion of all college students 14 to 34 years old went from 57 percent to 51 percent. What is also notable, however, is that this overall change is reflected in corresponding changes at every college grade level (except college year 4), indicating a move toward parity not only in enrollment, but in persistence as well. When the analysis is restricted to full-time students, the overall change from 1973 is still evident. Among older students (ages 35+), women represented about two-thirds of the college population, up from about 53 percent in 1973.

Table C. Proportion of College Students Who are Males, by Age, College Grade, Race, and Full-Time Enrollment Status: October 1973 and 1983

(Numbers in thousands)

Age, college, grade, race, and status	1983		1973	
	Students	Proportion male	Students	Proportion male
Persons 14 to 34 years old	10,818	[1].509	8,174	.572
College grade:				
Year 1	2,980	[1].463	2,276	.529
Year 2	2,624	[1].501	1,807	.564
Year 3	1,805	[1].509	1,476	.577
Year 4	1,595	.546	1,230	.581
Year 5 or higher	1,814	[1].561	1,385	.640
Race:				
White	9,236	[1].511	7,317	.576
Black	1,102	[2].451	685	.514
Enrolled full time	7,703	[1].524	6,081	.576
Persons 35 years old and older	1,492	[1].338	851	.468

[1]Estimate is significantly different from 1973 value at p = .05.
[2]Estimate is significantly different from 1973 value at p = .10.

Comparison of the proportions for whites and blacks ages 14 to 34 shows that in 1983 black women accounted for a larger proportion of their race's college population than white women did of theirs. Between 1973 and 1983, there is some evidence that black women increased their share of the black college student population significantly, from 48.6 to 54.9 percent. The corresponding figures for white women were 42.4 percent in 1973 and 48.9 percent in 1983, a statistically significant increase.

RETURNING COLLEGE STUDENTS

The stereotypic image of college freshmen is often of individuals who graduate from high school in the Spring and go onto the university campus the following Fall, with no interruption in their schooling. As the data in table D show, however, only about 50 percent of persons ages 14 to 34 who were enrolled in their first year of college in October 1983 had graduated from high school sometime in 1983. For nearly as many other freshmen, some factor—employment, marriage, cost, disinterest, or something else—intervened to cause a delay in schooling. When compared to 1973, the proportion of first-year college students who were not recent high school graduates had increased significantly (38.1 vs. 47.9 percent). Among various race/sex subpopulations, white females experienced a significant rise in the proportion of their first-year students who were returnees (that is, not recently graduated from high school), 35.5 vs. 47.5 percent, while white males showed some evidence of an increase.

Table D. Proportions of First-Year College Students by Recency of High School Graduation, by Race and Sex: October 1973 and 1983

(Numbers in thousands)

Race and sex	1983		1973	
	Number of students	Graduating this year	Number of students	Graduating this year
All persons	2,980	[1].521	2,277	.619
White male	1,152	[2].567	1,079	.627
White female	1,353	[1].525	948	.645
Black male	149	.307	96	.458
Blace female	206	.505	110	.545
Hispanic	185	[2].427	107	.598

[1]Estimate is significantly different from 1973 value at p = .05.
[2]Estimate is significantly different from 1973 value at p = .10.

The overall increase in the proportion of first-year college students who were returning students occurred despite an increased proportion of recent high school graduates who did go directly to college; 52.3 percent in 1983 versus 46.3 percent in 1973. In fact, both recent and non-recent graduates showed at least some evidence of greater numerical representation in 1983 than in 1973, as the size of the freshman class increased from 2.3 million to about 3 million. But while recent graduates accounted for 140,000 more freshmen, returnees contributed an additional 560,000 first-year students.

As persons delay their entry into college they become different from continuous students, not only in age, but probably in many other social and value-related aspects as well. The large increase in college students 35 years and older in the past decade (most of whom can be reasonably assumed to have experienced some disruption in schooling) has drawn attention to the fact that the college population is not as homogeneous as it once was. However, it is important to note that non-continuous students also constitute a sizable minority of the more traditional, younger groups of students. Table E shows that about 1 in 8 of all current undergraduate college students (i.e., those with 0 to 3 years of college completed) ages 14 to 24 had not been enrolled in the previous year. This is a small but significant increase from the propor-

Table E. Undergraduate College Students Who Were Not Enrolled in Previous Year, by Age, Race, and Sex: October 1973 and 1983

(Numbers in thousands)

Age, race, and sex	1983			1973		
		Returnees			Returnees	
	Total	Number	Proportion	Total	Number	Proportion
Students 14 to 24 years old						
All persons	7,088	895	[1].126	5,753	616	.107
White males	3,076	367	.119	2,810	333	.119
White females	2,639	385	[1].146	2,325	218	.094
Blace males	328	47	.143	255	26	.102
Black females	400	54	.135	249	26	.104
Hispanics	341	61	.179	207	21	.101
Persons 18 to 21 years old						
Students	5,434	523	[1].096	4,590	332	.072
Non-students in previous year	7,240	523	[1].072	6,743	332	.049

[1]Estimate is significantly different from 1973 value at p = .05.

tion 10 years earlier. Looking at specific race/sex subgroups, it is interesting to note that, as with first-year students, only white females experienced a significant increase in the proportion of students who were returnees. Restricting the universe even further shows that about 1 in 10 of all college students ages 18 to 21 are returnees. The last line of table E shows these returnees as a proportion of the eligible population they come from. About 7 percent of persons 18 to 21 years old who were not enrolled in 1982 had returned to college in the Fall of 1983. As with the earlier figures, this proportion had also increased significantly from its 1973 level. These data, when considered together, lend strong credence to the idea that college students, even young ones, represent an increasingly diverse mix of experiences and backgrounds.

TECHNICAL NOTE—COMPUTING THE DROPOUT RATE

Basic Computation

Dropout rates shown in table B are computed using data from tables 7 and 8 of this report. Corresponding tables have been published in reports dating back to 1968. This appendix details the steps necessary to compute the rate, the asumptions that are made, and the relative impact of some of these assumptions. Responses to the item on enrollment in school one year ago are tabulated by enrollment status as of the survey date. A dropout is defined as anyone not currently enrolled, who has not completed high school, and who was enrolled the previous year. Using the panel of table 7 that elaborates years of school completed, it is possible to compute the number of dropouts from a specific year of school.

For example, for the panel of all races, both sexes, in October 1983, there are 129,000 persons who have completed 9 years of school (i.e., 1 year of high school), who are not currently enrolled, but who were enrolled one year ago. These people are considered to have dropped out of the 10th grade sometime in the past year. Individuals counted as 10th grade dropouts include not only those persons who entered the 10th grade in the Fall of 1982 and left sometime during the year, but also those persons who finished the 9th grade in the Spring of 1983 and never continued on to the 10th grade. Another 845,000 persons completed 1 year of high school and were enrolled neither this fall nor last. These individuals are assumed to have dropped out more than a year ago, and are not a part of the current rate.

The denominator for the rate is composed of two parts. The first is the count of dropouts, persons who were in school and did not stay (that is, the 129,000 persons identified above). The second part is the count of persons who did stay in. This is estimated using the current number of enrollees who have completed the "dropout grade" in question—in this case, grade 10 (3,339,000).[2] Then, the dropout rate out of the 10th grade becomes:

129,000 / (129,000 + 3,339,000) = 3.7 percent

For the dropout rate from the 12th grade, the method is different. One cannot use the number of persons enrolled at the next highest grade (college 1) as part of the denominator, since

[2]The simple assumption here is that grades are not repeated, and persons either drop out or move on to the next grade. However, to the extent that this is not true, error is still minimized with a secondary assumption, that grade failures constitute equal proportions of the grades involved. Since any two adjoining grade years are of approximately equal size, error created by uncounted grade failure will be to a large extent "cancelled out" by the two elements of error in any given grade year, one positive, the other negative. Thus, error in the dropout rate due to grade failure is considered to be minimal. Moreover, when the overall dropout rate for all high school grade years (grades 10, 11, 12) is computed, this individual grade-year error is negated.

not all persons will be going to college, and therefore, this number is incomplete. The complement of this number, persons completing high school who do not go on to college, is not correctly estimated by the number of persons with 12 years of school completed, not currently enrolled, who were enrolled last year, since some unknown proportion of these persons are individuals who were attending the first year of college in the previous year, but did not complete that grade. A more direct indicator for the denominator is obtained from Table 8, where an estimate of the number of high school graduates in the previous school year is given. Using these figures, we find that there were 3,018,000 high school graduates in 1983 through October. From table 7, we find that there were 244,000 persons who were enrolled in October 1982, not enrolled in October 1983, and had completed 11 years of schooling; i.e., 12th grade dropouts. The estimated 12th-grade dropout rate is then computed as:

244,000 / (244,000 + 3,018,000) = 7.5 percent

Military Population Impact

Because the CPS is a survey of the civilian noninstitutional population, the universe covered by the survey is to some extent incomplete with respect to high school dropouts. The largest potential error in basing the dropout rate on the CPS sample derives from the exclusion of the military population. The reason is straight forward—every year, many young persons enter the military shortly after leaving high school. October CPS data are gathered about 4 months after the likely time of graduation. To the extent that the fraction of dropouts among new recruits is very different from the fraction of those not entering the military, the estimated rate will be systematically biased. In an attempt to estimate the magnitude of the bias, a sensitivity analysis was conducted on the two groups most susceptible to this effect, white and black males, as well as the total.

Table F shows the effect on the estimated dropout rate of including the relevant military population assuming different hypothetical dropout fractions. Because accessions by month by educational status are not directly available, an estimate for the 1-year period (October to October) is derived from military reports of the age structure of current enlistees. In this analysis, new enlistees, ages 17 to 20, are considered to either have dropped out or graduated from high school in the past year. This number, because it relies on such a large age group, is probably an overestimate; therefore, the potential impact of the the military is maximized in the sensitivity analysis. The results of the analysis indicate that even under extreme assumptions about the dropout rate of persons in the military, the overall rate is not substantively different from that computed using the civilian data only. To the extent that the military does not accept dropouts, the civilian-based rate may be too high. If in the earlier period (1973) dropouts were more prevalent in the military than in the civilian population, then the 1973 civilian-based rate may be too low. If both of these assumptions are accurate representations of the true conditions, then the true decrease in the rate between 1973 and 1983 may be larger than that estimated using the unadjusted civilian rates. Without specific detailed information on the educational level of new recruits, however, a definitive answer is not available, and historical and trend analysis of the rates must be made with this limitation in mind. Nevertheless, under more realistic assumptions of a military population with a dropout rate that ranges between one-half and twice that of the civilian rate, the effect of excluding the military from the calculation of the rate is small, and it appears quite reasonable to use as an estimate the rate which is based on the civilian population only.

Comparisons to Other Dropout Data

There are estimates of dropouts other than the estimated dropout rate developed in this report which are frequently cited. One such measure is the ratio of high school graduates to persons 17 years old. Data from the National Center for Education Statistics (NCES) show that this measure has fallen

Table F. Sensitivity Analysis of the Effect of Military Data

Item	1973			1983		
	Total	Male		Total	Male	
		White	Black		White	Black
Civilians at risk (000's)	10,851	4,708	650	10,331	4,264	687
Civilian dropouts	683	288	78	535	232	48
Unadjusted dropout rate	6.3	6.1	12.0	5.2	5.4	7.0
Estimated number of new military 17 to 20 years old (000's)	213	156	39	164	119	25
Estimated dropout rate if frequency of dropouts among recruits is:						
50 percent	7.1	7.5	14.2	5.9	6.7	8.6
2 times civilian rate	6.4	6.3	12.6	5.3	5.6	7.3
Same as civilian rate	6.3	6.1	12.0	5.2	5.4	7.0
1/2 civilian rate	6.2	6.0	11.6	5.1	5.4	6.9
0 percent	6.2	5.9	11.3	5.1	5.3	6.7

from a high of 76.7 percent in 1967-68, to its last reported level of 71.8 percent, in 1980-81. This measure is lacking in several respects: first, it is not a rate, since it does not refer to a fixed measure of time, and because the persons in the numerator are not necessarily a part of the denominator. Second, it takes into account neither that some persons younger than age 17 graduate (in October 1983, 8.8 percent of all persons enrolled in grade 12 were age 16 or younger), nor that many persons older than age 17 are still enrolled in high school (in October 1983, 20.7 percent of all persons 18 years old were enrolled in high school). This latter factor may account for as much as half of the difference in the computed value from its theoretical maximum of 100 percent. In short, the measure tells little more than the extent of adherence to some theoretical norm; that in an ideal world, all children would graduate from high school at age 17.

A second dropout measure often used is the ratio of high school graduates in year t to the number of 9th-grade students in year t-4. In recent years, this figure has hovered between 70 and 75 percent. The measure counts anyone who does not go through school in a regular progression as a dropout. This includes not only true dropouts, but persons who fail a grade and remain in school, as well as a very small number of persons who finish high school earlier than would be expected. In this respect, the measure is flawed in the same manner as the high school graduation rate described above. Additionally, the numerator (the number of high school graduates), is based on administrative reports of high school diplomas awarded by States. It is not known if State awards of GED's (high school equivalency diplomas) are included in these counts. Data for private high schools are not collected on a statewide basis, but are instead estimated from a sample survey of private schools. This measure is not a rate, but a biased estimate of the proportion of persons who complete high school in the allotted "normal" time.

One of the more common measures of the dropout "rate" is a basic pool measure which tells what proportion of the population of a given age is not currently enrolled and have not completed high school. Since there is no time reference to when the dropout might have occurred, the measures are not actually rates. For example, the Digest of Education Statistics 1983-84 uses Current Population Survey (CPS) data from October 1981 to show the proportions of persons of various ages who are high school dropouts. These are: 14 to 15 years old, 2.0 percent; 16 to 17 years old, 7.8 percent; 18 to 19 years old, 16.0 percent. At each age there are progressively larger proportions of dropouts. However, while it is reasonable that a 14- or 15-year-old dropped out in the recent past, 18- and 19-year-olds could have dropped out anytime in the past 4 or 5 years. Thus, the 16.0 percent is a compounded summary of each age-specific dropout rate, minus some rate of re-entry. For example, in 1983, the dropout pool measure for all 18- and 19-year-olds is 14.5 percent. If we compound the grade-specific rates in table B along with a rate of 1.4 percent for grade 9 (not shown in table B), we come up with a 4-year compounded rate of 16.1 percent, which is not statistically significant from the 14.5 percent figure. However, if we continue the age-specific series, we we see that the pool proportions are: 20 to 21 years old, 15.8 percent; 22 to 24 years old, 15.2 percent; 25 to 29 years old, 13.8 percent. (Note that the estimates for 20- to 21- and 22- to 24-year-olds are not statistically different.) This illustrates another problem with the measure, namely, that dropouts may later finish their schooling through a GED or other mechanism, and are no longer counted as a part of the dropout pool. Thus, the accuracy of the pool measure as an indicator of the dropout rate is compromised as the population ages.

As has been noted already, an ideal measure of the dropout rate would be based on longitudinal data, that is, data which follows individuals over time. Data such as these are seldom available, which is the motivation behind trying to derive a cross-sectionally based estimate of the longitudinal rate. One recent longitudinal survey, however, provides data that allows one to derive a dropout rate. The High School and Beyond Study (HSB), sponsored by the National Center for Education Statistics (NCES), is a longitudinal study designed to follow students out of high school and into their early adult lives. The study was initially fielded in the spring of 1980, with follow-up surveys planned every 2 years, the first of which was in the fall of 1982. The survey consists of two different subgroups, a group of persons who in the spring of 1980 were seniors, and a second group who were then sophomores. Using the data from both 1980 and the 1982 follow-up, we can determine what the dropout rate was for the sophomores in the study. NCES has recently published such a tabulation in *The Condition of Education, 1985.* Table G compares dropout rates for sophmores from High School and Beyond to the corresponding estimates based on CPS data. Because HSB was fielded during the school year, in the period of February to May 1980, some unknown proportion of the entering sophomore class had already dropped out before the survey began. Consequently, we use only the estimated dropout rates from grades 11 and 12 in calculating the CPS rates for comparison. This should have the effect of generating CPS estimates that are slightly smaller than the HSB rate, and as the table shows, this is what in fact happens. Keeping in mind this limitation, however, it is clear that the CPS estimate is very close to the dropout rate obtained from longitudinal data. Thus, in the one case where a "true" rate is possible, the CPS estimate compares favorably.

Table G. Estimated Dropout Rates from CPS and HSB Data

Item	Total	Male	Female
HSB	13.6	14.6	12.6
CPS	11.7	13.3	10.2