

# Population Characteristics

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## SCHOOL ENROLLMENT: OCTOBER 1962

About 3 million persons 16 to 21 years old, or approximately 20 percent of the civilian noninstitutional population in that age range, had not finished high school and were not enrolled in school in October 1962, according to data from the Current Population Survey conducted by the Bureau of the Census. The percentage of these out-of-school youths ranged from approximately 9 percent of the 16-year-olds to 26 percent of the 21-year-olds. A sizable number of 16- and 17-year-olds who were still enrolled in elementary or high school in October 1962 will drop out before completing high school since the vast majority of dropouts leave school while enrolled in the 9th to 12th grades.

Data are lacking on the trend in the annual number of school dropouts, but other information is available which throws light on trends

in school attrition. For example, table B indicates that the proportion of teenagers not enrolled in school has fallen sharply over the

Table A.--CIVILIAN NONINSTITUTIONAL POPULATION 16 TO 21 YEARS OLD, BY ENROLLMENT STATUS AND AGE: OCTOBER 1962

(Numbers in thousands)

Age	Civilian noninstitutional population	Not enrolled and not a high school graduate		Enrolled in school below the college level
		Number	Percent	
16 years.....	2,953	270	9.1	2,670
17 years.....	2,669	412	15.4	1,834
18 years.....	2,589	541	20.9	420
19 years.....	2,541	599	23.6	107
20 years.....	2,392	621	26.0	44
21 years.....	2,261	576	25.5	30

Table B.--PERCENT OF THE POPULATION 5 TO 34 YEARS OLD ENROLLED IN SCHOOL, BY AGE, FOR THE UNITED STATES: OCTOBER 1947 TO 1962

Year	Total, 5 to 34 years <sup>1</sup>	5 years <sup>1</sup>	6 years <sup>1</sup>	7 to 9 years	10 to 13 years	14 and 15 years	16 and 17 years	18 and 19 years	20 to 24 years	25 to 29 years	30 to 34 years
1962.....	57.8	66.8	97.9	99.2	99.3	98.0	84.3	41.8	15.6	5.0	2.6
1961.....	56.8	66.3	97.4	99.4	99.3	97.6	83.6	38.0	13.7	4.4	2.0
1960.....	56.4	63.7	98.0	99.6	99.5	97.8	82.6	38.4	13.1	4.9	2.4
1959.....	55.5	62.9	97.5	99.4	99.4	97.5	82.9	36.8	12.7	5.1	2.2
1958.....	54.8	63.8	97.3	99.5	99.5	96.9	80.6	37.6	13.4	5.7	2.2
1957.....	53.6	60.2	97.4	99.5	99.5	97.1	80.5	34.9	14.0	5.5	1.8
1956.....	52.3	58.9	97.0	99.4	99.2	96.9	78.4	35.4	12.8	5.1	1.9
1955.....	50.8	58.1	98.2	99.2	99.2	95.9	77.4	31.5	11.1	4.2	1.6
1954.....	50.0	57.7	96.8	99.2	99.5	95.8	78.0	32.4	11.2	4.1	1.5
1953.....	48.8	58.4	97.7	99.4	99.4	96.5	74.7	31.2	11.1	2.9	1.7
1952.....	46.8	57.8	96.8	98.7	98.9	96.2	73.4	28.7	9.5	2.6	1.2
1951.....	45.4	53.8	96.0	99.0	99.2	94.8	75.1	26.3	8.3	2.5	0.7
1950.....	44.2	51.8	97.0	98.9	98.6	94.7	71.3	29.4	9.0	3.0	0.9
1949.....	43.9	55.1	96.2	98.5	98.7	93.5	69.5	25.3	9.2	3.8	1.1
1948.....	43.1	55.0	96.2	98.3	98.0	92.7	71.2	26.9	9.7	2.6	0.9
1947.....	42.3	53.4	96.2	98.4	98.6	91.6	67.6	24.3	10.2	3.0	1.0

<sup>1</sup> Includes children enrolled in kindergarten.

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past 15 years. The proportion of 14- and 15-year-olds not enrolled in school decreased from 8 to 2 percent during the period while that of 16- and 17-year-olds fell from 32 to 16 percent and that of 18- and 19-year-olds fell from 76 to 52 percent. During the same time, the percentages not enrolled at ages 6 to 13 remained steadily low, reflecting the enforcement of compulsory school attendance laws in nearly all States.

Dropout trends are also suggested by 1960 Census data on educational attainment for persons 21 to 24 years old at the time of the census, who should have completed high school by the census date (table C). The percent of this population who were not high school graduates was smaller at each successively younger single year of age. The pattern at ages 18 to 20 was less clear because some persons at those ages were still enrolled in high school; however, the indication was that the downward trend in the dropout rate before completion of high school would continue for the younger age groups.<sup>1</sup>

Table C.--HIGH SCHOOL GRADUATION STATUS, FOR PERSONS 21 TO 24 YEARS OLD, FOR THE UNITED STATES: APRIL 1960

Age	Population	Not a high school graduate	
		Number	Percent of population
21 years.....	2,188,555	782,095	35.7
22 years.....	2,145,137	774,604	36.1
23 years.....	2,092,828	775,785	37.1
24 years.....	2,128,166	808,609	38.0

Source: 1960 Census of Population, Detailed Characteristics, United States Summary, Final Report PC(1)-1D, tables 166, 168, and 172.

Data from the October 1962 survey, not shown in this report, indicate that most dropouts leave school in the middle and late high school years. Those who fail to finish high school are clearly at a disadvantage in the labor market and are disproportionately represented among the unemployed.<sup>2</sup>

<sup>1</sup> Census and Current Population Survey data, particularly for persons of college and military age, are not entirely comparable because of differences in population coverage, in sampling estimating and data collection procedures, and in the period of the year to which the data refer. For example, census population coverage includes the entire population of the United States whereas the Current Population Survey includes only the civilian noninstitutional population.

<sup>2</sup> See Jacob Schiffman, "Employment of High School Graduates and Dropouts in 1962," Special Labor Force Report, No. 32, reprinted from the Monthly Labor Review, July 1963.

They tend also to rank low on measures of ability and to come from families with low socioeconomic status.<sup>3</sup>

Half of 1962 high school graduates went on to college in the fall.--Of those youths who did graduate from high school in June 1962, about half were enrolled in college in October 1962, most of them on a full-time basis (table D). A higher proportion of boys than girls started college (53 percent vs. 42 percent). Of course, some of the high school graduates who did not enroll in college in October 1962 will do so at a later date, and many of those who enrolled in college immediately will have dropped out before completing the first year.<sup>4</sup>

Table D.--PERCENT OF JUNE 1962 HIGH SCHOOL GRADUATES ENROLLED IN COLLEGE IN OCTOBER 1962, FOR THE UNITED STATES

Sex	Enrolled in college		Not enrolled in college
	Full time	Part time	
Total.....	47.0	2.0	51.0
Male.....	52.8	2.4	44.8
Female.....	41.7	1.7	56.6

School enrollment rates varied by sex and color.--Approximately 62 percent of the male population 5 to 34 years old were enrolled in schools and colleges in October 1962, as compared with 54 percent of the female population at the same ages. The differences by sex in proportions enrolled were greatest at ages 18 and 19 at which 51 percent of the males were enrolled compared with 34 percent of the females, and at ages 20 to 24 at which 23 percent of the males compared with 9 percent of the females were enrolled in schools and colleges. Over time, the percentages enrolled at these ages have increased for both sexes (tables 2 and E). The proportion of nonwhite youths enrolled at each age level 16 years and over was smaller than the proportion of white youths (table 3), but pronounced gains in enrollment rates for both whites and nonwhites have occurred over the past several years.

Total school and college enrollment at all levels reached 48.7 million in October 1962.--Of the total enrollment, 2.3 million were in kindergarten, 30.7 million were enrolled in elementary

<sup>3</sup> Charles B. Nam and James D. Cowhig, "Factors Related to College Attendance of Farm and Nonfarm High School Graduates: 1960," Farm Population, Series Census-ERS (P-27), No. 32, June 15, 1962.

<sup>4</sup> Donald S. Bridgman, The Duration of Formal Education for High-Ability Youths, National Science Foundation Report NSF 61-36.

Table E.--PERCENT OF THE POPULATION 5 TO 34 YEARS OLD ENROLLED IN SCHOOL, BY AGE AND SEX, FOR THE UNITED STATES:  
OCTOBER 1950, 1953, 1956, 1959, AND 1962

Year and sex	Total, 5 to 34 years <sup>1</sup>	5 years <sup>1</sup>	6 years <sup>1</sup>	7 to 9 years	10 to 13 years	14 and 15 years	16 and 17 years	18 and 19 years	20 to 24 years	25 to 29 years	30 to 34 years
<b>MALE</b>											
1962.....	61.7	67.1	98.5	99.1	99.2	98.8	87.1	51.2	23.4	8.6	3.9
1959.....	59.1	62.1	97.3	99.2	99.4	97.8	84.8	45.6	19.6	8.9	3.3
1956.....	56.3	58.2	96.7	99.2	99.1	97.1	79.9	45.1	20.6	8.9	2.7
1953.....	52.7	57.6	97.0	99.3	99.1	96.4	76.5	37.7	18.5	5.5	2.0
1950.....	47.5	51.6	96.1	98.8	98.7	95.2	72.8	35.2	14.2	5.9	1.5
<b>FEMALE</b>											
1962.....	54.0	66.5	97.3	99.3	99.4	97.3	81.6	33.7	9.1	1.8	1.4
1959.....	52.0	63.7	97.7	99.6	99.5	97.0	81.0	29.2	7.1	1.7	1.3
1956.....	48.7	59.7	97.3	99.5	99.4	96.8	76.9	27.4	6.8	1.7	1.2
1953.....	45.2	59.2	98.4	99.5	99.7	96.6	72.9	25.9	6.4	0.5	1.4
1950.....	41.0	51.9	97.9	99.0	98.4	94.3	69.8	24.3	4.6	0.4	0.4

<sup>1</sup> Includes children enrolled in kindergarten.

schools (grades 1 to 8), 11.5 million were in high school (grades 9 to 12), and 4.2 million were attending colleges and universities (table 5). Although the total number enrolled in schools and colleges has increased each year during the last ten years, the overall annual rates of increase tended to decline during the 10-year period.

In addition to enrollment in regular schools and colleges, there were 1.2 million persons 5 to 34 years old enrolled in "special" schools.--"Special" schools are those in which a person takes trade, business, or vocational courses, or other courses which are not taken for a regular diploma or degree or for social or recreational purposes. Most of those under 14 who were taking such courses were enrolled in schools for the mentally and physically handicapped. Data from the 1962 Current Population Survey, not shown in this report, show that persons 14 years of age and over in "special" schools attend schools of nursing, beauty culture classes, technical and business schools, secretarial schools, courses in improved farm practices, and the like.

Of those 16 to 24 years old enrolled in special schools, 87 percent were high school graduates and 13 percent were not, indicating that "special" schooling most often takes the form of training beyond the high school level. More females than males 16 to 24 years were enrolled in special schools. Girls, who consistently have lower rates of college attendance than boys, tend to enroll in commercial and semiprofessional courses in large numbers after high school graduation.

#### RELATED REPORTS

Advance data on school enrollment for October 1962 were presented in Series P-20, No. 120. Statistics on school enrollment for October of years

prior to 1962 have been published in the following reports in Series P-20: No. 117 (1961), No. 110 (1960), No. 101 (1959), No. 93 (1958), No. 80 (1957), No. 74 (1956), No. 66 (1955), No. 54 (1954), No. 52 (1953), No. 45 (1952), No. 40 (1951), No. 34 (1950), No. 30 (1949), No. 24 (1948), No. 19 (1947), No. 1 (1946); and in Series P-S, No. 9 (1945). Enrollment data for April 1947 were published in Series P-20, No. 12. Data on educational attainment for persons 14 years old and over in March 1962 have been published in Series P-20, No. 121. Projections of the educational attainment of the population through 1980 have been published in Series P-20, No. 91. Estimates of illiteracy for States, as of 1960, appear in Series P-23, No. 8.

Statistics on the economic characteristics of students are presented in an article entitled "The Employment of Students: October 1962" in the August 1963 issue of the Monthly Labor Review, published by the Bureau of Labor Statistics. Data concerning the college plans of high school seniors, their major fields of study, and the educational characteristics of persons 16 to 24 years old who were not enrolled in school as of October 1959 have been presented in the Census-ERS Series (P-27) No. 30. Additional data on the realization of college plans in relation to ability and socioeconomic factors have been presented in No. 32 of the Census-ERS Series (P-27).

1950 and 1960 Census data.--Statistics on school enrollment and educational attainment for cities, standard metropolitan statistical areas, States, regions, and the United States appear in volumes of the decennial censuses. Detailed statistics on school enrollment and educational attainment by age and socioeconomic characteristics for regions and the United States are presented in special reports of these censuses.

Figures on school enrollment from the October Current Population Surveys differ from decennial census data for reasons in addition to the difference in the dates. In the first place, the survey data exclude the institutional population and members of the Armed Forces. These two groups were included in the census. Second, there were differences in field work. The small group of Current Population Survey enumerators were more experienced and had more intensive training and supervision than the large number of temporary census enumerators and may have more often obtained more accurate answers from respondents. Third, the census was taken in April and relates to enrollment since February 1, whereas the surveys were taken in October and relate to enrollment in the current term. This difference in months of the year affects not only the extent of school enrollment (through "dropouts" during the school year, etc.) but also the level of school in which persons of a given age are enrolled.

Data from school systems.--Information on school enrollment and educational attainment is also collected and published by Federal, State, and local governmental agencies, and by independent research organizations. This information is generally obtained from reports of school systems and institutions of higher learning, and from other surveys and censuses. These data are only roughly comparable with data collected by the Bureau of the Census by household interviews, however, because of differences in definitions, subject matter covered, time references, and enumeration methods. To illustrate, the enrollment figures of the Bureau of the Census tend to be lower than those in the Biennial Survey of Education conducted by the United States Office of Education, largely because the census data refer to shorter time periods and count a person only once, although he may have attended more than one school during the reporting period. In the biennial survey, some persons are included in the enrollment figures more than once, such as those enrolled in both public and private schools and, generally, those enrolled in two different States at any time during the school year. On the other hand, the census data are subject to sampling variability, which may be relatively large where numbers for specific age or population groups, or for given school categories, are small.

#### DEFINITIONS AND EXPLANATIONS

Population coverage.--The figures shown are for the civilian population excluding the relatively small number of inmates of institutions. The population covered in this survey includes residents of Alaska and Hawaii.

Age.--The age classification is based on the age of the person at his last birthday.

Color.--The term "color" refers to the division of the population into two groups, white and nonwhite. The nonwhite group includes Negroes, Indians, Japanese, Chinese, and other nonwhite races.

Marital status.--The marital status category shown in this report, "married, spouse present," includes persons who are currently married and living with their spouse.

School enrollment.--The school enrollment statistics from the current surveys are based on replies to the enumerator's inquiry as to whether the person had been enrolled at any time during the current term or school year in any type of graded public, parochial, or other private school in the regular school system. Such schools include kindergartens, elementary schools, high schools, colleges, universities, and professional schools. Attendance may be on either a full-time or part-time basis and during the day or night. Thus, regular schooling is that which may advance a person toward an elementary or high school diploma, or a college, university, or professional school degree. Beginning with 1954, children enrolled in kindergarten have been included in the enrollment figures for "regular" schools, and have also been shown separately. Figures shown in this report on school enrollment for years prior to 1954 have been revised to include children in kindergarten.

Persons attending "special" schools not in the regular school system, such as trade schools or business colleges, are not included in the enrollment figures. Persons enrolled in classes which do not require physical presence in school, such as correspondence courses or other courses of independent study, and in training courses given directly on the job, are also excluded from the count of those enrolled in school, unless such courses are being counted for credit at a "regular" school.

Level of school.--The statistics on level of school indicate the number of persons enrolled at each of four levels: Kindergarten, elementary school (first to eighth grades), high school (ninth to twelfth grades), and college or professional school. The last group includes graduate students in colleges or universities. Persons enrolled in junior high school through the eighth grade are classified as in elementary school, and the others as in high school.

Public or private school.--In this report, a public school is defined as any educational institution operated by publicly elected or appointed school officials and supported by public funds.

Private schools include educational institutions established and operated by religious bodies, as well as those which are under other private control. In cases where enrollment was in a school or college which was both publicly and privately controlled or supported, enrollment was counted according to whether it was primarily public or private.

Full-time and part-time attendance.--College students were classified, in this report, according to whether they were attending school on a full-time or part-time basis. A student was regarded as attending college full time if he was taking 12 or more hours of classes during the average school week, and part time if he was taking less than 12 hours of classes during the average school week.

High school graduation status.--For persons who were enrolled in college, according to the Current Population Survey, the year in which they graduated from high school was determined. Similar information was obtained for those persons 16 to 24 years not enrolled in school who had graduated from high school.

The April 1960 Census data on high school graduation status, shown in table C, were based on replies to questions on the highest grade of school the persons had ever attended and whether or not he finished that grade. (For definitions and explanations of these census items, see one of the reports in Series PC(1)-C or PC(1)-D of the 1960 Census.) Thus, a high school graduate was defined as a person who had completed the last year of high school (usually grade 12).

Rounding of estimates.--Individual figures are rounded to the nearest thousand without being adjusted to group totals, which are independently rounded. Percentages are based on the rounded absolute numbers.

#### SOURCE AND RELIABILITY OF THE ESTIMATES

Source of data.--The estimates for 1947 to 1962 presented in this report are based on data obtained in connection with the monthly population sample survey of the Bureau of the Census. The statistics for 1957 to 1959 are based on an expanded sample design instituted in May 1956. That sample was spread over 330 primary sample units (PSU's) comprising 638 counties and independent cities, with some coverage in every State and the District of Columbia. In January 1960, three sample areas representing Alaska and Hawaii were added to the sample, bringing the total to 333 sample areas comprising 641 counties and independent cities. Approximately 35,000 households are

interviewed each month. Another 1,500 occupied households, on the average, are households for which information should be obtained but is not (i.e., households temporarily absent, households living in areas with impassable roads, etc.). There are about 5,500 sample units in an average month which are visited but are found to be vacant or otherwise not to be enumerated. The data for 1954 to 1956 and for 1947 to 1953, years for which similar information was obtained, are based on different samples: the former on 230 areas, and the latter on 68 sample areas, with about 21,000 interviewed households in each.

The estimating procedure used in this survey involved the inflation of the weighted sample results to independent estimates of the civilian noninstitutional population of the United States by age, color, and sex. These independent estimates were based on statistics from the 1960 Census of Population; statistics of births, deaths, immigration and emigration; and statistics on the strength of the Armed Forces living off post or with their families on post and the institutional population in 1960.

Sample design, October 1962.--The Bureau of the Census, in December 1961, began the introduction of modifications of the Current Population Survey sample design. These modifications involve the use of resources and information made available by the 1960 Census as well as data on new construction from permits issued since the census date. It is expected that some gains may be obtained in the reduction of the variance of the estimate from the revision in the within-PSU sampling to take advantage of the recent census information. The number of sample areas will be increased from 333 to 357 as a result of the revision, but the total number of interviewed households in the sample will remain at approximately 35,000 per month.

Reliability of the estimates.--Since the figures, except the independent estimates and complete census data, are based on sample data, they are subject to sampling variability. As calculated for this report, the standard error also partially measures the effect of response and enumeration errors but does not reflect any systematic biases in the data. The chances are 68 out of 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 out of 100 that the difference due to sampling would be less than twice the standard error and about 99 out of 100 that it would be less than  $2\frac{1}{2}$  times the standard error. The estimates of standard errors shown in the following tables are approximations for the sample design used in October 1962.

Caution should be exercised in considering trends or comparisons of the data from one year to the next. Comparisons over longer periods will generally provide more reliable evidence of change because the amount of change will usually be larger and the relative error in the measurement of this change will generally be smaller. Estimates of annual change are sensitive to small errors in estimates of the total in a category. The joint effect of sampling variability and any biases in response or coverage on the total number of persons in a given category for each year may, therefore, be large in relation to the amount of annual change.

In order to derive standard errors which would be applicable to a wide variety of population characteristics and which would be prepared at moderate cost, a number of approximations were required. As a result, the tables of standard errors should be interpreted as providing an indication of the order of magnitude of standard errors rather than as providing a precise standard error for any specific item.

Table F contains the standard error of estimate of the number of persons in a given class.

Table F.--STANDARD ERROR OF ESTIMATED NUMBER OF PERSONS ENROLLED IN SCHOOL

(68 chances out of 100)

Level of estimate	Standard error	Level of estimate	Standard error
25,000.....	6,000	1,000,000.....	35,000
50,000.....	8,000	2,500,000.....	60,000
100,000.....	12,000	5,000,000.....	85,000
250,000.....	19,000	10,000,000.....	115,000
500,000.....	25,000	25,000,000.....	125,000

The reliability of an estimated percentage, computed by using sample data for both numerator and denominator, depends upon both the size of percentage and the size of the total on which the percentage is based. Estimated percentages are

relatively more reliable than the corresponding absolute estimates of the numerator of the percentage, particularly if the percentage is 50 percent or greater.

Table G shows the standard error of estimated percentage for different sizes of the base of the percentage.

Table G.--STANDARD ERROR OF ESTIMATED PERCENTAGE OF PERSONS ENROLLED IN SCHOOL

(68 chances out of 100)

Estimated percentage	Base of estimated percentage (thousands)						
	500	1,000	5,000	10,000	25,000	50,000	75,000
2 or 98.....	0.8	0.5	0.2	0.2	0.1	0.1	0.1
5 or 95.....	1.2	0.8	0.4	0.3	0.2	0.1	0.1
10 or 90.....	1.6	1.1	0.5	0.4	0.2	0.2	0.1
25 or 75.....	2.3	1.7	0.7	0.5	0.3	0.2	0.2
50.....	2.7	1.9	0.9	0.6	0.4	0.3	0.2

Illustration: Table 2 shows an estimated 1,070,000 males and females 20 and 21 years of age enrolled in school in the United States. By interpolation in table 5, the standard error of this estimate is approximately 36,000. Consequently, the chances are about 68 out of 100 that the figure obtained from a complete census would have differed from the sample estimate by less than 72,000. The chances are about 95 out of 100 that a complete census would have disclosed a figure differing from the estimate by less than 90,000.

From table 2 we also see that these estimated 1,070,000 males and females 20 and 21 years of age enrolled in school represented 23.0 percent of the total (4,653,000) estimated males and females in the United States. Linear interpolation in table G shows that the standard error of the 23.0 percent is approximately 0.7 percent. Thus, the chances are about 68 out of 100 that a complete census would show that the percentage lies between 22.3 and 23.7 percent.

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