CURRENT POPULATION REPORTS

Population Characteristics

COLLEGE PLANS OF HIGH SCHOOL SENIORS: OCTOBER 1972

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COLLEGE PLANS OF HIGH SCHOOL SENIORS: OCTOBER 1972

Overview. This report presents data on the post-high school educational plans of seniors enrolled in high school in October 1972. Information is presented on college and vocational school plans of seniors by their sex, race, metropolitan and nonmetropolitan residence, region of residence, the educational attainment of their family heads, and family income. The data presented are based on responses of high school seniors in the Current Population Survey conducted in October 1972 by the Bureau of the Census. Similar data were most recently collected by the Census Bureau in the October 1965 Current Population Survey.

The first part of the text highlights the characteristics of students who planned to attend college and the type of college they planned to attend. The second part deals with the relationship of college plans to actual college attendance in light of past data.

Post-high school plans of seniors. Plans to definitely attend college at some time after graduation were expressed by one and one-half million, or 45 percent, of the 3.3 million students enrolled as high school seniors in October 1972 (table A). Another 27 percent, or 880,000 students, indicated that they "may" attend college upon completion of their high school education.

The seniors with definite college plans were much more likely to indicate that they wanted to attend only a four-year college or university (59 percent), than only a two-year community or junior college (15 percent); the remaining 27 percent with definite college expectations said that they planned to attend both a two-year and four-year college. In contrast, two-thirds of the 880,000 students who reported that they "may" attend college in the future indicated an interest in both two-year and four-year institutions if they pursue college careers.

Although 862,000 students, or 26 percent of all high school seniors in October 1972, did not plan to attend a college or university, a large proportion of this group did plan to attend a business, technical, or trade school. Forty-five percent of students without college plans, representing 12 percent of all high school seniors, planned or indicated that they may enter a business or vocational school.

The college aspirations of young women were similar to those of young men in October 1972. Comparable proportions of both had definite plans to attend; however, a slightly higher percentage of young men than young women reported that they "may" attend a college or university after high school graduation (29 percent and 24 percent, respectively).

Table A. Plans to Attend College of High School Seniors 14 to 34 Years Old by Sex and Race: October 1972

Sex and race	Number[1] (thousands)	Percent of total			
		Plan to attend college	May attend college	Do not plan to attend college	
				Total	Plan or may attend other school
SEX					
Total.....................	3,300	45.4	26.7	26.2	11.8
Male....................	1,713	45.0	29.0	23.4	10.0
Female..................	1,587	45.9	24.1	29.0	13.7
RACE					
White.....................	2,834	45.6	25.9	26.7	11.8
Negro.....................	420	43.8	32.9	22.1	11.2

[1] Includes "not reported," not shown separately.

The proportions of white and Negro students with definite college plans were not statistically different. There was, however, some evidence that a larger proportion of white than Negro students would enroll in a four-year college, for those seniors with college plans.

The college expectations of high school seniors living outside of metropolitan areas in October 1972 were lower than those of students living within such areas (table B). Forty-eight percent of students in metropolitan areas compared with 39 percent of those living outside these areas definitely planned to attend college upon graduation from high school. There was no significant difference between high school seniors living in central cities of metropolitan areas and students living in metropolitan areas outside of central cities in terms of the proportion with definite college plans. There was some evidence to indicate that students in the West had somewhat higher educational aspirations than high school seniors living in other regions combined; about 51 percent of that region's students reported that they planned to attend college compared with 44 percent of high school seniors in the rest of the Nation.

About two-thirds (65 percent) of the 280,000 high school seniors enrolled in private high schools expressed definite plans to attend college in the future compared with 44 percent of students enrolled in public high schools. About one-half of the seniors enrolled in private schools expected to attend a four-year college or university, whereas only about 25 percent of public high school students expressed similar intentions. About 14 percent of seniors at private high schools did not expect to attend college, compared with 27 percent of students at public schools.

Sixty-four percent of the high school seniors in October 1972 who reported that they planned to attend college were members of families with incomes of $10,000 or more in the preceding 12 months, whereas 45 percent of the students who did not plan to attend college were in families with comparably high incomes (table C). For students who planned to attend a four-year college or university, the figure was even higher; 71 percent were living in families with incomes over $10,000. There was a tendency for the percentage of seniors who planned to attend college to increase as family income increased. For example, 35 percent of the students in families with incomes under $10,000 had definite college aspirations, compared with 45 percent of students whose families had incomes between $10,000 and $15,000 and 64 percent of high school seniors in families with income over $15,000.

Table B. Plans to Attend College of High School Seniors 14 to 34 Years Old by Type of Residence, Region, and Control of School: October 1972

Residence, region, and control of school	Number[1] (thousands)	Percent of total		
		Plan to attend college	May attend college	Do not plan to attend college
TYPE OF RESIDENCE				
Metropolitan..........................	2,257	48.3	26.4	23.4
In central cities....................	937	47.7	29.0	21.1
Outside central cities..............	1,320	48.7	24.5	25.0
Nonmetropolitan.......................	1,041	39.3	27.3	32.1
REGION				
Northeast.............................	807	44.1	27.5	25.7
North Central........................	999	42.9	26.9	29.4
South................................	924	46.1	25.4	26.1
West.................................	568	50.7	27.1	21.0
CONTROL OF SCHOOL				
Public high school...................	3,018	43.7	27.3	27.3
Private high school..................	280	64.6	19.6	13.6

[1] Includes "not reported," not shown separately.

Table C. Plans to Attend College of High School Seniors 14 to 34 Years Old by Family Income in Preceding 12 Months: October 1972

Family income	All seniors[1]	Plan to attend college	May attend college	Do not plan to attend college
PERCENT DISTRIBUTION BY FAMILY INCOME				
Total..............................	100.0	45.6	26.7	26.2
Under $10,000..........................	100.0	35.3	30.8	31.3
$10,000 to $14,999.....................	100.0	45.5	26.5	27.1
$15,000 or more........................	100.0	63.9	19.1	15.4
PERCENT DISTRIBUTION BY COLLEGE PLANS				
Total................thousands..	3,300	1,499	880	862
Percent.......................	100.0	100.0	100.0	100.0
Under $10,000..........................	46.2	35.9	53.4	55.3
$10,000 to $14,999.....................	28.9	29.0	28.8	30.0
$15,000 or more........................	24.8	34.8	17.7	14.6

[1]Includes "not reported," not shown separately.

Table D. Plans to Attend College of High School Seniors by Years of School Completed of the Family Head: October 1972

Years of school completed by family head	All seniors[1]	Plan to attend college	May attend college	Do not plan to attend college
PERCENT DISTRIBUTION BY YEARS OF SCHOOL COMPLETED				
Total...............thousands..	3,217	1,462	865	834
Percent.......................	100.0	100.0	100.0	100.0
Elementary: 0 to 8 years.............	18.7	12.0	22.8	25.7
High school: 1 to 3 years.............	18.6	12.4	22.3	25.5
4 years..................	34.1	32.8	35.3	36.1
College: 1 to 3 years.............	11.0	14.2	9.4	7.1
4 years.................	17.6	28.6	10.3	5.6
PERCENT DISTRIBUTION BY COLLEGE PLANS				
Total.............................	100.0	45.4	26.9	25.9
Elementary: 0 to 8 years.............	100.0	29.3	32.8	35.6
High school: 1 to 3 years.............	100.0	30.3	32.3	35.6
4 years..................	100.0	43.7	27.8	27.4
College: 1 to 3 years.............	100.0	58.8	22.9	16.7
4 years.................	100.0	73.7	15.7	8.3

[1]Includes "not reported," not shown separately.

College aspirations of high school seniors in 1972 appeared to be associated with the educational attainment of the heads of their respective families. Three-fourths (74 percent) of students who were members of families in which the head had completed four or more years of college indicated that they had definite college plans compared with only 44 percent of students in families in which the head had completed four years of high school only (table D). However, plans to attend college were reported by many young persons whose family head had only a moderate to small amount of education; over half (57 percent) of the seniors who definitely planned to enroll in a college or university were members of families in which the head had never attended college, and 24 percent were members of families in which the head had not graduated from high school.

College plans as an indicator of college attendance. As mentioned previously, about 45 percent of high school seniors in October 1972 indicated that they had definite plans to attend college at some time after graduation. At this time, it is not possible to ascertain whether these students' college aspirations were fulfilled. The Census Bureau has, however, collected longitudinal data relating to college plans and actual college attendance of two previous groups of high school students, namely those who were seniors

Table E. Year of High School Graduation and Proportion of Graduates Attending College in Same Year, for Persons 16 to 34 Years Old, by Sex and Race: 1968 to 1972

(Numbers in thousands)

Sex, race, enrollment status in October of graduation year	Year of high school graduation				
	1972	1971	1970	1969	1968
BOTH SEXES					
Total, high school graduates..	3,000	2,902	2,794	2,875	2,642
Enrolled in college...............	1,465	1,540	1,434	1,519	1,449
Percent enrolled..................	48.8	53.1	51.3	52.8	54.8
Male					
Total, high school graduates..	1,436	1,377	1,363	1,365	1,202
Enrolled in college...............	752	791	743	813	749
Percent enrolled..................	52.4	57.4	54.5	59.6	62.3
Female					
Total, high school graduates..	1,564	1,525	1,431	1,510	1,440
Enrolled in college...............	713	749	691	706	700
Percent enrolled..................	45.6	49.1	48.3	46.8	48.6
RACE					
White					
Total, high school graduates..	2,648	2,614	2,493	(NA)	(NA)
Enrolled in college...............	1,299	1,408	1,290	(NA)	(NA)
Percent enrolled..................	49.1	53.9	51.7	(NA)	(NA)
Negro					
Total, high school graduates..	323	267	261	(NA)	(NA)
Enrolled in college...............	143	112	114	(NA)	(NA)
Percent enrolled..................	44.3	41.9	43.7	(NA)	(NA)

NA Not available.

in October 1965 and in October 1959.[1] Data from these studies indicate that 68 percent of the high school seniors in 1959 who planned to attend college did so in 1960, a figure not statistically different from that for the 1965 seniors who planned to attend and had done so by February 1967 (70 percent).[2] These data do not necessarily suggest that some of these students were overly optimistic about attending college. Some for instance, may plan to defer college entrance for a year or longer after graduation from high school. For example, by 1971, 77 percent of the 1965 seniors with college plans had attended college.[3] Furthermore only about 63 percent of the college freshmen in October 1972 had graduated from high school that same year.

Although some students in both previous studies indicated that they would not attend college, a small but significant proportion of these seniors in both 1960 and 1965 had actually attended college in the year following graduation. Of all the high school seniors in 1959 who graduated, 42 percent were attending college in 1960. For the high school seniors of 1965, 47 percent had attended college by February 1967.

More recent independent data show that of the 3 million students who graduated from high school in 1972, 49 percent were enrolled in college in October 1972 (table E). Typically these would be students who graduated in June 1972 and enrolled in college in September 1972. For the five years (1968 through 1972) for which comparable data are available, the percentage of students who enrolled in college in the same year as their graduation from high school has fluctuated around 50 percent. The proportion of young men enrolled in college in the same year as their graduation from high school has decreased from 62 percent in 1968 to 52 percent in 1972. This decrease may in part be due to a relaxation of conscription into the Armed Forces in recent years.

Comparability with earlier studies. Data on the college plans of high school seniors in October 1965 presented in Current Population Reports, Series P-20, No. 185 and for seniors in October 1959 presented in Farm Population, Series Census-ERS (P-27), No. 30 and 32 are not strictly comparable to the data for seniors in October 1972 presented here or to each other, for several reasons. Slightly different response categories were used in all three surveys. In 1972 the response categories to the question on college plans were "yes," "maybe," and "no." In 1965, the alternative responses were "yes, definitely," "yes, maybe," "no," and "don't know," and in 1959 the possible responses were "yes," "no," and "undecided." The data in the P-20, No. 185 report for high school seniors in 1965 cannot be directly compared to the 1972 or 1959 data because the "yes, definitely" and "yes, maybe" responses were combined into one category; however, the "yes" response categories in 1972 and 1959 are similar (table F). In 1959, 959,000 or 47 percent of the 2.1 million high school seniors indicated by a "yes" response that they planned to attend college, a proportion not statistically different from the 45 percent reported by seniors in October 1972.

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[1] See the reports "Factors Related to High School Graduation and College Attendance: 1967," Current Population Reports, Series P-20, No. 185; "Factors Related to College Attendance of Farm and Nonfarm High School Graduates: 1960," Farm Population, Series Census--ERS (P-27), No. 32; and "Educational Status, College Plans, and Occupational Status of Farm and Nonfarm Youths: October 1959," Farm Population, Series Census--ERS (P-27), No. 30.

[2] Even though the figures appear similar, the data for high school seniors in 1965 and 1959 are not strictly comparable due to the nature of the question. See discussion of differences in question wording.

[3] 1971-72 Progress Report and Findings: Follow-up of Cross-section of 1965-66 High School Seniors and Related Higher Educational Materials by A. J. Jaffe and Walter Adams, Bureau of Applied Social Research, Columbia University, July 1972, page 30.

Table F. Percent Distribution of Plans to Attend College of High School Seniors: October 1972, 1965, and 1959

Response categories	Total	Male	Female
Whether planning to attend college in October 1972:			
Yes.............................	45.4	45.0	45.9
Maybe............................	26.7	29.0	24.1
No...............................	26.2	23.4	29.0
Not reported....................	1.8	2.5	0.9
Whether planning to attend college in October 1965:			
Yes, definitely and yes, maybe.	57.3	64.4	49.8
No, undecided, and not reported	42.7	35.6	50.2
Whether planning to attend college in October 1959:			
Yes.............................	47.1	49.1	45.2
No...............................	33.0	28.7	37.3
Undecided and not reported.....	19.9	22.2	17.5

RELATED REPORTS

Advance data on school enrollment for October 1972 were presented in Series P-20, No. 247. Statistics on school enrollment in October for years prior to 1971 have been published annually in the P-20 Series of Current Population Reports.

Data on characteristics of high school seniors by graduation status and high school graduates by college attendance status are presented in "Factors Related to High School Graduation and College Attendance: 1967," Current Population Reports, Series P-20, No. 185. Data on college plans and college attendance of high school graduates were also presented in "Factors Related to College Attendance of Farm and Nonfarm High School Graduates: 1960," Farm Population, Series Census-ERS (P-27), No. 32 and "Educational Status, College Plans, and Occupational Status of Farm and Nonfarm Youths: October 1959," Farm Population, Series Census-ERS (P-27), No. 30. Statistics on college attendance and related factors, including type of college, living arrangements, marital status, field of specialization and college rank, can be found in "Characteristics of Students and Their Colleges: October 1966," Current Population Reports, Series P-20, No. 183.

1960 and 1970 census data. Statistics on school enrollment for cities, standard metropolitan statistical areas, States, regions and the United States appear in reports of the decennial censuses. Detailed statistics on school enrollment by age and socioeconomic characteristics for regions and the United States will be presented in Subject Reports of the 1970 census, especially in PC(2)-5A, School Enrollment.

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 "drop-outs" during the school year, etc.) but also the level of school in which persons of a given age are enrolled.

DEFINITIONS AND EXPLANATIONS

Population coverage. The data presented here are for the civilian noninstitutional population 14 to 34 years old.

Metropolitan-nonmetropolitan residence. The population residing in standard metropolitan statistical areas (SMSA's) constitutes the metropolitan population. Except in New England, an SMSA is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more, or "twin cities" with a combined population of at least 50,000. In addition to the county, or counties, containing such a city or cities, contiguous counties are included in an SMSA if, according to certain criteria, they are essentially metropolitan in character and are socially and economically integrated with the central city. In New England, SMSA's consist of towns and cities, rather than counties. The metropolitan population in this report is based on SMSA's as defined in the 1970 census and does not include any subsequent additions or changes.

The population inside SMSA's is further classified as "in central cities" and "outside central cities." With a few exceptions, central cities are determined according to the following criteria:

1. The largest city in an SMSA is always a central city.

2. One or two additional cities may be secondary central cities on the basis and in the order of the following criteria:

   a. The additional city or cities have at least 250,000 inhabitants.

   b. The additional city or cities have a population of one-third or more of that of the largest city and a minimum population of 25,000.

Geographic regions. The four major regions of the United States, for which data are presented in this report, represent groups of States, as follows:

Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

North Central: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Mississippi, Maryland, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

West: Alaska, Arizona, Colorado, California, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

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

Race. The population is divided into three groups on the basis of race: white, Negro, and "other races." The last category includes Indians, Japanese, Chinese, and any other race except white and Negro.

Persons of Spanish origin. Persons of Spanish origin in this report are those persons who indicated that their origin was Mexican-American, Chicano, Mexican, Puerto Rican, Cuban, or "Other Spanish."

Family. The term "family," as used here, refers to a group of two persons or more related by blood, marriage, or adoption and residing together; all such persons are considered as members of one family.

Head of family. One person in each family residing together was designated as the head. The head of a family is usually the person regarded as the head by members of the family. Women are not classified as heads if their husbands are resident members of the family at the time of the survey.
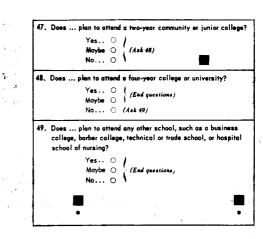
High school seniors. Persons were classified as high school seniors who were enrolled in the fourth year of a "regular" high school in October 1972. As defined in the survey, a "regular" high school is one which may advance a person toward a high school diploma. Examples of schools which are not regarded as "regular" schools are private business and trade schools, such as television repair schools, beautician schools, and secretarial schools.

College plans. Information on college plans was derived from responses of high school seniors in October 1972 to questions as to whether they planned to attend college, and if so the type of college they planned to attend (two-year, four-year or both). If the students did not plan to attend college, they were asked whether they planned to attend any other type of school (see facsimile of questions below).

In not all of the cases was the respondent to these items the high school senior himself. If the student were not present, the typical proxy reporting would be his or her mother. A relative of the specific individual, reporting for the student, would likely have some idea of the person's future educational plans.

The table below lists possible combinations of responses to items 47 and 48 and the column in tables 1 through 3 in which the students were classified:

Column heads in tables 1 to 3	Responses to--	
	Item 47	Item 48
Plan to attend college:		
2-year college only............	yes	no
	yes	blank
4-year college only............	no	yes
	blank	yes
Both 2-year and 4-year college.	yes	yes
	yes	maybe
	maybe	yes
May attend college:		
2-year college only............	maybe	no
	maybe	blank
4-year college only............	no	maybe
	blank	maybe
Both 2-year and 4-year college.	maybe	maybe
Do not plan to attend college....	no	blank
	no	no
	blank	no
Not reported.....................	blank	blank

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 included 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.

Years of school completed for family head. Data on years of school completed in this report were derived from the combination of answers to two questions: (a) "What is the highest grade of school he has ever attended?" and (b) "Did he finish this grade?"

The questions on educational attainment apply only to progress in "regular" schools. Such schools include graded public, private, and parochial elementary and high schools (both junior and senior high), colleges, universities, and professional schools, whether day schools or night schools. Thus, regular schooling is that which may advance a person toward an elementary school certificate or a high school diploma, or a college, university, or professional school degree. Schooling in other than regular schools was counted only if the credits obtained were regarded as transferable to a school in the regular school system.

Year of high school graduation. The data in table E are based in part on responses to a question asking high school graduates which year they graduated from high school. This question has been asked annually in the October Current Population Survey.

Family income. Income as defined in this report represents the combined total money income of the family before deductions for personal taxes, Social Security, bonds, etc. It is the algebraic sum of money wages and salaries, net income from self-employment, and income other than earnings received by all family members during the 12 months prior to the surveys. It should be noted that, although the family income statistics refer to receipts during the previous 12 months, the characteristics of the person, such as age, marital status, etc., and the composition of families refer to the date of the survey.

The income tables include in the lowest income group (under $3,000) those who were classified as having no income in the previous 12 months and those reporting a loss in net income from farm and nonfarm self-employment or in rental income.

The income tables in this report include a separate category for families for whom no income information was obtained. In most of the other Current Population Survey Reports showing income data, the missing income data have been allocated.

The money income level of families shown in this report may be somewhat understated. Income data from the October control card are based on the respondent's estimate of total family money income for the preceding 12 months coded in broad, fixed income intervals (table G). Income data collected in the March supplement to the Current Population Survey are based on responses to 8 direct questions asked of all persons 14 years old and over identifying 14 different sources of income and cover the preceding calendar year.

Table G. Income Intervals on the Control Card Used in the October Current Population Survey

Under $1,000	$6,000 to $7,499
$1,000 to $1,999	$7,500 to $9,999
$2,000 to $2,999	$10,000 to $14,999
$3,000 to $3,999	$15,000 to $24,999
$4,000 to $5,999	$25,000 and over

Previous research has shown that the use of broad income intervals to record money income tends to reduce the rate of nonreporting while increasing the likelihood that the amounts reported will be significantly understated as compared with results from more detailed questions (table H).

Rounding of estimates. Individual figures are rounded to the nearest thousand without being adjusted to group totals, which are independently rounded. With few exceptions, percentages are based on the unrounded absolute numbers.

Table H. October CPS Control Card Family Income and March CPS Supplement Family Income for 1967 Through 1972

Year	Median family income, October control card	Percent change	Median family income, March supplement	Percent change	October-March ratio
1967.................................	$6,811	(X)	$7,974	(X)	.85
1968.................................	7,189	+5.5	8,632	+8.3	.83
1969.................................	7,770	+8.1	9,433	+9.3	.82
1970.................................	8,268	+6.4	9,867	+4.6	.84
1971.................................	8,680	+5.0	10,285	+4.2	.84
1972.................................	9,275	+6.9	11,116	+8.1	.83

X Not applicable.

SOURCE AND RELIABILITY OF THE ESTIMATES

Source of data. The estimates are based on data obtained in October of 1972 in the Current Population Survey of the Bureau of the Census. The current sample is spread over 461 areas comprising 923 counties and independent cities with coverage in each of the 50 States and the District of Columbia. Approximately 47,000 occupied housing units are eligible for interview each month. Of this number, 2,000 occupied units, on the average, are visited but interviews are not obtained because the occupants are not found at home after repeated calls or are unavailable for some other reason. In addition to the 47,000 there are also about 8,000 sample units in an average month which are visited but are found to be vacant or otherwise not to be interviewed.

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, race and sex. These independent estimates were based on statistics from the 1970 Census of Population; statistics of births, deaths, immigration, and emigration; and statistics on the strength of the Armed Forces.

The 1959 data are from a sample spread over 330 areas with approximately 35,000 eligible households. The 1965 data are from a sample spread over 357 areas with approximately 35,000 households.

Reliability of the estimates. Since the estimates are based on a sample, they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same schedules, instructions, and enumerators. As in any survey work, the results are subject to errors of response and of reporting as well as being subject to sampling variability.

The standard error is primarily a measure of sampling variability, that is, of the variations that occur by chance because a sample rather than the whole of the population is surveyed. As calculated for this report, the standard error also partially measures the effect of response and enumeration errors but does not measure any systematic biases in the data. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census figure by less than the standard error. The chances are about 95 out of 100 that the difference would be less than twice the standard error.

All statements of comparison appearing in the text are significant at a 1.6 standard error level or better. Most are significant at a level of more than 2.0 standard errors. Thus, for most differences cited in the text, the estimated difference is greater than twice the standard error of the difference. Statements of comparison qualified in some way (e.g., by use of the phrase "some evidence") have a level of significance between 1.6 and 2.0 standard errors.

The figures presented in tables I, J, K and L are approximations to the standard errors of various estimates shown in this report. In order to derive standard errors that would be applicable to a wide variety of items and could be prepared at a moderate cost, a number of approximations were required. As a result, the tables of standard errors provide an indication of the order of magnitude of the standard errors rather than the precise standard error for any specific items. Tables I and J contain the standard errors of estimated numbers for a given class of persons age 3 to 34 enrolled in school.

The reliability of an estimated percentage, computed by using sample data for both numerator and denominator, depends upon both the size of the percentage and the size of the total upon which the percentage is based. Tables K and L show the standard errors of estimated percentages.

Standard errors for data collected in 1959 and 1965 can be approximated by finding the appropriate standard error in table I, J, K or L, and multiplying it by a factor of 1.2.

Illustration of the use of the tables of standard errors. Table B of this report shows that in October 1972, 280,000 of the 67,770,000 persons 14 to 34 years old were enrolled as seniors in private high schools. Interpolation in table I shows the standard error on an estimate of this size to be approximately 24,000. The chances are 68 out of 100 that the estimate would differ from a complete census figure by less than 24,000. The chances are 95 out of 100 that the estimate would differ from a complete census figure by less than 48,000, i.e., this 95 percent confidence interval would be from 232,000 to 328,000.

Of these 280,000 private high school seniors, 181,000 or 64.6 percent, planned to attend college. Interpolation in table K shows that the standard error of the estimated 64.6 percent is approximately 4.0 percent. Consequently, chances are 68 out of 100 that the estimated 64.6 percent would be within 4.0 percentage points of a complete census figure, and chances are 95 out of 100 that the estimate would be within 8.0 percentage points of a census figure. That is, this 95 percent confidence interval would be between 56.6 and 72.6 percent.

Differences. For a difference between two sample estimates, the standard error is approximately equal to the square root of the sum of the squares of the standard errors of each estimate considered separately. This formula will represent the actual standard error quite accurately for the difference between two estimates of the same characteristics in two different areas, or for the difference between separate and uncorrelated characteristics in the same area. If, however, there is a high positive correlation between the two characteristics, the formula will overestimate the true standard error.

Table I. Standard Errors for Estimated Numbers of Persons Enrolled in School

Total or White Population

(All numbers in thousands. 68 chances out of 100)

Estimated number of persons	Total persons in age group									
	100	250	500	1,000	2,500	5,000	10,000	25,000	50,000	100,000
10................	4.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
20................	6.0	6.3	6.3	6.4	6.4	6.4	6.4	6.4	6.4	6.4
30................	6.9	7.6	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8
40................	7.4	8.6	8.8	8.9	9.0	9.0	9.0	9.0	9.0	9.0
50................	7.5	9.5	9.8	10.0	10.1	10.1	10.1	10.1	10.1	10.1
75................	6.5	11.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
100...............	-	12.0	13.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
200...............	-	9.5	16.0	19.0	20.0	20.0	20.0	20.0	20.0	20.0
300...............	-	-	16.0	22.0	24.0	24.0	25.0	25.0	25.0	25.0
400...............	-	-	13.0	23.0	27.0	28.0	28.0	28.0	29.0	29.0
500...............	-	-	-	24.0	30.0	31.0	32.0	32.0	32.0	32.0
750...............	-	-	-	21.0	34.0	38.0	38.0	39.0	39.0	39.0
1,000.............	-	-	-	-	37.0	42.0	44.0	45.0	45.0	45.0
2,000.............	-	-	-	-	30.0	52.0	60.0	63.0	63.0	64.0
3,000.............	-	-	-	-	-	52.0	69.0	76.0	77.0	78.0
4,000.............	-	-	-	-	-	42.0	74.0	86.0	88.0	89.0
5,000.............	-	-	-	-	-	-	75.0	95.0	98.0	100.0
7,500.............	-	-	-	-	-	-	65.0	110.0	120.0	120.0
10,000............	-	-	-	-	-	-	-	120.0	130.0	140.0
20,000............	-	-	-	-	-	-	-	95.0	160.0	190.0
30,000............	-	-	-	-	-	-	-	-	160.0	220.0
40,000............	-	-	-	-	-	-	-	-	130.0	230.0
50,000............	-	-	-	-	-	-	-	-	-	240.0
75,000............	-	-	-	-	-	-	-	-	-	210.0

- Represents zero.

Table J. Standard Errors for Estimated Numbers of Persons Enrolled in School

Negro and Other Races

(All numbers in thousands. 68 chances out of 100)

Estimated number of persons	Total persons in age group						
	100	250	500	1,000	2,500	5,000	10,000
10.............................	5.0	5.1	5.2	5.2	5.2	5.2	5.2
20.............................	6.6	7.1	7.3	7.3	7.4	7.4	7.4
30.............................	7.6	8.5	8.8	9.0	9.0	9.1	9.1
40.............................	8.2	9.6	10.1	10.3	10.4	10.5	10.5
50.............................	8.3	10.5	11.0	11.0	12.0	12.0	12.0
75.............................	7.3	12.0	13.0	14.0	14.0	14.0	14.0
100.............................	-	13.0	15.0	16.0	16.0	16.0	17.0
200.............................	-	11.0	18.0	21.0	23.0	23.0	23.0
300.............................	-	-	18.0	24.0	27.0	28.0	28.0
400.............................	-	-	15.0	26.0	30.0	32.0	33.0
500.............................	-	-	-	26.0	33.0	35.0	36.0
750.............................	-	-	-	23.0	38.0	42.0	44.0
1,000.............................	-	-	-	-	41.0	47.0	50.0
2,000.............................	-	-	-	-	34.0	58.0	66.0
3,000.............................	-	-	-	-	-	58.0	76.0
4,000.............................	-	-	-	-	-	48.0	82.0
5,000.............................	-	-	-	-	-	-	83.0
7,500.............................	-	-	-	-	-	-	73.0
10,000.............................	-	-	-	-	-	-	-

- Represents zero.

Table K. Standard Errors of Estimated Percentages of Persons Enrolled in School

Total or White Population

(68 chances out of 100)

Estimated percentage	Base of percentage (thousands)									
	100	250	500	1,000	2,500	5,000	10,000	25,000	50,000	100,000
2 or 98........	2.0	1.3	0.9	0.6	0.4	0.3	0.2	0.1	0.1	0.1
5 or 95........	3.1	2.0	1.4	1.0	0.6	0.4	0.3	0.2	o.1	0.1
10 or 90.......	4.3	2.7	1.9	1.4	0.9	0.6	0.4	0.3	0.2	0.1
25 or 75.......	6.2	3.9	2.8	2.0	1.2	0.9	0.6	0.4	0.3	0.2
50.............	7.2	4.5	3.2	2.3	1.4	1.0	0.7	0.5	0.3	0.2

Table L. Standard Errors of Estimated Percentages of Persons Enrolled in School

Negro and Other Races

(68 chances out of 100)

Estimated percentage	Base of percentage (thousands)							
	50	100	250	500	1,000	2,500	5,000	10,000
2 or 98.................	3.3	2.3	1.5	1.0	0.7	0.5	0.3	0.2
5 or 95.................	5.1	3.6	2.3	1.6	1.2	0.7	0.5	0.4
10 or 90................	7.1	5.0	3.2	2.2	1.6	1.0	0.7	0.5
25 or 75................	10.2	7.2	4.6	3.2	2.3	1.4	1.0	0.7
50.....................	11.8	8.4	5.3	3.7	2.6	1.7	1.2	0.8

Illustration of the computation of the standard error of a difference. Table B shows that 43.7 percent of the 3,018,000 high school seniors 14 to 34 years old attending public high school planned to attend college. The apparent difference between the percentages of public and private high school seniors who planned to attend college is 20.9 percent. Interpolation in table K shows that the standard error on 43.7 percent is approximately 1.3 percent. The standard error on the 64.6 percent of private high school seniors who planned to attend college is approximately 4.0 percent, as shown above. The standard error of the estimated difference of 20.9 percent is about $4.2 = \sqrt{(4.0)^2 + (1.3)^2}$. This means the

chances are 68 out of 100 that the estimated difference based on the sample would differ from the change derived using complete census figures by less than 4.2 percent. The 68-percent confidence interval around the 20.9 percent difference is from 16.7 percent to 25.1 percent; i.e., 20.9 ± 4.2 percent. A conclusion that the average estimate of the difference derived from all possible samples lies within a range computed in this way would be correct for roughly 68 percent of all possible samples. The 95-percent confidence interval is from 12.5 percent to 29.3 percent or 20.9 ± (2 x 4.2) percent. Thus we can conclude with 95-percent confidence that in October 1972 a larger proportion of private high school seniors than of public high school seniors planned to attend college.