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# UNDERGRADUATE ENROLLMENT IN TWO-YEAR AND FOUR-YEAR COLLEGES: OCTOBER 1971

U.S. DEPARTMENT OF COMMERCE
Social and Economic Statistics Administration
Bureau of the Census

# U. S. DEPARTMENT OF COMMERCE

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## DETAILED TABLES

# UNDERGRADUATE ENROLLMENT IN TWO-YEAR AND FOUR-YEAR COLLEGES: OCTOBER 1971

There were 6.9 million students 14 to 34 years old enrolled in the first four years of college in October 1971. In addition, there were 1.2 million students enrolled in the fifth or higher year of college. About 2.4 million, or 34 percent, of all undergraduate students reported that they were enrolled in the first two years of four-year colleges.[1] The number of undergraduates attending two-year colleges has increased appreciably in the past several years. In the fall of 1966, there were approximately 1.0 million students attending two-year colleges. The 1971 figure of 1.8 million, thus, represents almost a doubling of two-year college enrollment in just the past 5 years. In 1966, two-year college students represented 31 percent of all students enrolled in the first two years of college, while in 1971, the proportion was 42 percent (table A and figure 1). These findings are based on results from the Current Population Surveys conducted by the Bureau of the Census in October 1971 and October 1966 and relate to the civilian noninstitutional population 14 to 34 years old enrolled in college.

There were 631,000 Negroes enrolled in the first four years of college in October 1971. About 155,000, or 25 percent, of these Negro students were enrolled in two-year colleges. Negro students comprised 9 percent of all undergraduate students and a similar proportion of the two-year college students in 1971 (table B).

[1]There were 299,000 undergraduate students in 1971 who did not report whether they were attending a two-year or a four-year college.

**Table A. Type of College for Persons 14 to 34 Years Old Enrolled in the First Two Years of College: October 1971 and 1966**

(Numbers in thousands. Civilian noninstitutional population)

| Year and sex | Total enrolled in first two years of college | Type of college | | Percent distribution | | |
|---|---|---|---|---|---|---|
| | | 2-year colleges | 4-year colleges | Total | Type of college | |
| | | | | | 2-year colleges | 4-year colleges |
| 1971 | | | | | | |
| Total, 14 to 34 years old | 4,062 | 1,703 | 2,359 | 100.0 | 41.9 | 58.1 |
| Male | 2,306 | 1,006 | 1,300 | 100.0 | 43.6 | 56.4 |
| Female | 1,756 | 697 | 1,059 | 100.0 | 39.7 | 60.3 |
| 1966 | | | | | | |
| Total, 14 to 34 years old | 3,348 | 1,046 | 2,302 | 100.0 | 31.2 | 68.8 |
| Male | 1,959 | 612 | 1,347 | 100.0 | 31.2 | 68.8 |
| Female | 1,390 | 435 | 955 | 100.0 | 31.3 | 68.7 |

Note: Excludes 260,000 students who did not report on type of college.

**Figure 1.--Type of College for Persons 14 to 34 Years Old Enrolled in the First Two Years of College: October 1971 and 1966**

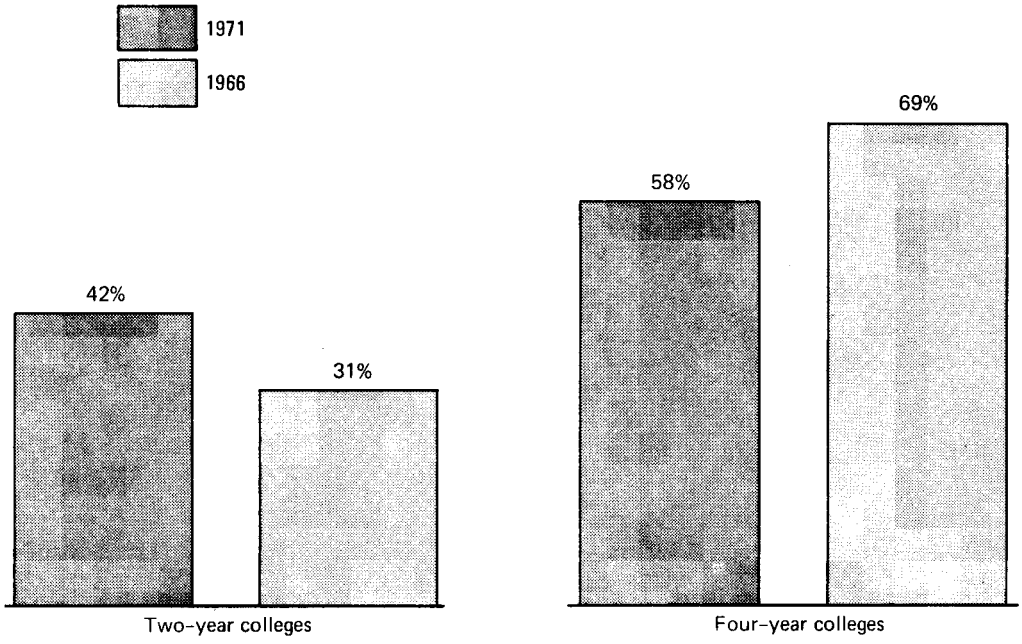



**Table B. Type of College, Age, and Race of Persons 14 to 34 Years Old Enrolled in the First Four Years of College: October 1971**

(Number in thousands. Civilian noninstitutional population)

| Race and age | Total, undergraduate enrollment | Type of college | | |
|---|---|---|---|---|
| | | 2-year colleges | 4-year colleges | Not reported |
| ALL RACES | | | | |
| Total, 14 to 34 years old.... | 6,895 | 1,830 | 4,766 | 299 |
| Percent..... | 100.0 | 26.5 | 69.1 | 4.3 |
| 14 to 19 years old..... | 3,008 | 928 | 1,940 | 140 |
| 20 and 21 years old..... | 1,936 | 307 | 1,583 | 46 |
| 22 to 24 years old..... | 1,019 | 263 | 709 | 47 |
| 25 to 34 years old..... | 931 | 331 | 534 | 66 |
| NEGRO | | | | |
| Total, 14 to 34 years old.... | 631 | 155 | 374 | 102 |
| Percent..... | 100.0 | 24.6 | 59.3 | 16.2 |
| 14 to 19 years old..... | 233 | 50 | 167 | 16 |
| 20 and 21 years old..... | 198 | 36 | 122 | 40 |
| 22 to 24 years old..... | 99 | 29 | 46 | 24 |
| 25 to 34 years old..... | 102 | 40 | 40 | 22 |

## FACTORS RELATED TO TWO-YEAR COLLEGE ATTENDANCE

Students who elect to attend a two-year college exhibit different social, economic, and demographic characteristics, on the average, from those of students who enroll in four-year colleges.

Age. The median age of students enrolled in two-year colleges is slightly greater than that of students enrolled in the first two years of four-year colleges. In 1971, the median age of men enrolled in two-year colleges was 20.4 years and of women, 19.7 years. The corresponding median ages for students enrolled in the first two-years of four-year colleges were 19.4 years and 19.0 years, respectively. Moreover, 37 percent of the men and 25 percent of the women attending two-year colleges were 22 to 34 years old and, thus, beyond the primary ages of college attendance (table C and figure 2).

**Table C. Age and Sex of Persons 14 to 34 Years Old Enrolled in Two-Year Colleges and the First Two Years of Four-Year Colleges: October 1971**

(Numbers in thousands. Civilian noninstitutional population)

| Age and sex | 2-year colleges | 1st and 2nd year of 4-year colleges | Percent distribution | |
|---|---|---|---|---|
| | | | 2-year colleges | 1st and 2nd year of 4-year colleges |
| Male, 14 to 34 years old..... | 1,087 | 1,300 | 100.0 | 100.0 |
| 14 to 19 years old..... | 505 | 908 | 46.5 | 69.8 |
| 20 and 21 years old..... | 175 | 137 | 16.1 | 10.5 |
| 22 to 24 years old..... | 191 | 132 | 17.6 | 10.2 |
| 25 to 34 years old..... | 216 | 123 | 19.9 | 9.5 |
| Median[1]..... years.. | 20.4 | 19.4 | (X) | (X) |
| Female, 14 to 34 years old... | 743 | 1,059 | 100.0 | 100.0 |
| 14 to 19 years old..... | 423 | 865 | 56.9 | 81.7 |
| 20 and 21 years old..... | 133 | 113 | 17.9 | 10.7 |
| 22 to 24 years old..... | 72 | 30 | 9.7 | 2.8 |
| 25 to 34 years old..... | 116 | 51 | 15.6 | 4.8 |
| Median[1].....years.. | 19.7 | 19.0 | (X) | (X) |

X Not applicable.
[1]Median computed from data by single years of age.

Residence. In 1971, in the West 43 percent of all undergraduates were attending two-year colleges. This was greater than the proportion for any other region of the country.

Further, since two-year colleges are more likely to be located in metropolitan areas, two-year college students were more likely to live in metropolitan areas than were students enrolled in the first two years of four-year colleges, 74 percent and 66 percent, respectively (tables D and 5).

Education of family head. The education of the family head has some impact on a student's decision on whether to enter a two-year or a four-year college. It is most noticeable among the first and second year students whose family head had completed college. Among students from families whose head had completed four or more years of college, 27 percent were attending a two-year college in 1971, while 73 percent were enrolled in the first two years of a four-year college. Among students whose family head had not completed four or more years of college, 42 percent were enrolled in a two-year college, while 58 percent were enrolled in the first two years of a four-year college[2] (table E and figure 3).

[2]Excludes family members who are family heads and family members who are married, spouse present.

**Table D. Type of College, Year of Enrollment, Sex, and Residence of Persons 14 to 34 Years Old Enrolled in the First Four Years of College: October 1971**

(Numbers in thousands. Civilian noninstitutional population)

| Residence and sex | Total, undergraduate enrollment | Type of college | | | |
|---|---|---|---|---|---|
| | | 2-year colleges | 4-year colleges (year) | | Not reported |
| | | | 1st and 2nd | 3rd and 4th | |
| Total, 14 to 34 years..... | 6,895 | 1,830 | 2,359 | 2,407 | 299 |
| Male..... | 4,017 | 1,087 | 1,300 | 1,469 | 161 |
| Female..... | 2,878 | 743 | 1,059 | 938 | 138 |
| Residence | | | | | |
| Metropolitan areas..... | 4,822 | 1,349 | 1,567 | 1,684 | 222 |
| Inside central cities..... | 2,075 | 550 | 662 | 760 | 103 |
| Outside central cities..... | 2,746 | 799 | 905 | 923 | 119 |
| Nonmetropolitan areas..... | 2,073 | 481 | 792 | 723 | 77 |
| PERCENT BY TYPE AND YEAR OF COLLEGE | | | | | |
| Total, 14 to 34 years old.. | 100.0 | 26.5 | 34.2 | 34.9 | 4.3 |
| Male..... | 100.0 | 27.1 | 32.4 | 36.6 | 4.0 |
| Female..... | 100.0 | 25.8 | 36.8 | 32.6 | 4.8 |
| Residence | | | | | |
| Metropolitan areas..... | 100.0 | 28.0 | 32.5 | 34.9 | 4.6 |
| Inside central cities..... | 100.0 | 26.5 | 31.9 | 36.6 | 5.0 |
| Outside central cities..... | 100.0 | 29.1 | 33.0 | 33.6 | 4.3 |
| Nonmetropolitan..... | 100.0 | 23.2 | 38.2 | 34.9 | 3.7 |
| PERCENT BY SEX AND RESIDENCE | | | | | |
| Total, 14 to 34 years old.. | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Male..... | 58.3 | 59.4 | 55.1 | 61.0 | 53.8 |
| Female..... | 41.7 | 40.6 | 44.9 | 39.0 | 46.2 |
| Residence | | | | | |
| Metropolitan..... | 69.9 | 73.7 | 66.4 | 70.0 | 74.2 |
| Inside central cities..... | 30.1 | 30.1 | 28.1 | 31.6 | 34.4 |
| Outside central cities..... | 39.8 | 43.7 | 38.4 | 38.3 | 39.8 |
| Nonmetropolitan..... | 30.1 | 26.3 | 33.6 | 30.0 | 25.8 |

Marital status. Undergraduate students who are married and living with their spouse are more likely than unmarried students to be attending a two-year college. In 1971, about 33 percent of these married students attended a two-year college, as compared with 25 percent of the other students.

Comparing married students with other students enrolled in two-year colleges shows that in 1971 about 25 percent of the students in two-year colleges were married and living with their spouse, whereas 12 percent of the students in the first two years of four-year colleges were married and living with their spouse. Further, married students in two-year colleges outnumbered those in the first two years of four-year colleges by about 62 percent. Among the remaining students, most of whom were single, those in the first two years of four-year colleges outnumbered the two-year college students by about 52 percent (table F).

## Table E. Years of School Completed by Family Head of Primary Family Members 14 to 34 Years Old Enrolled in Two-Year Colleges and the First Two Years of Four-Year Colleges: October 1971

(Numbers in thousands. Civilian noninstitutional population. Excludes family members who are family heads and family members who are married, spouse present. Excludes persons in families whose head is a member of the Armed Forces)

| Years of school completed by family head | 2-year colleges | 1st and 2nd year of 4-year colleges | Percent distribution | |
|---|---|---|---|---|
| | | | 2-year colleges | 1st and 2nd year of 4-year colleges |
| Total | 1,179 | 1,916 | 100.0 | 100.0 |
| Elementary: 0 to 7 years | 76 | 103 | 6.4 | 5.4 |
| 8 years | 71 | 113 | 6.0 | 5.9 |
| High school: 1 to 3 years | 159 | 206 | 13.5 | 10.8 |
| 4 years | 462 | 688 | 39.2 | 35.9 |
| College: 1 to 3 years | 210 | 264 | 17.8 | 13.8 |
| 4 years or more | 202 | 543 | 17.1 | 28.3 |
| Median years of school completed | 12.6 | 12.8 | (X) | (X) |

X Not applicable.

Note: Excludes 190,000 students who did not report on type of college.

## Table F. Marital Status, Sex, and Full-Time and Part-Time Enrollment of Persons 14 to 34 Years Old Enrolled in Two-Year Colleges and the First Two Years of Four-Year Colleges: October 1971

(Numbers in thousands. Civilian noninstitutional population)

| Sex, marital status, and full-time and part-time enrollment | 2-year colleges | 1st and 2nd year of 4-year colleges | Percent distribution | |
|---|---|---|---|---|
| | | | 2-year colleges | 1st and 2nd year of 4-year colleges |
| Male | 1,087 | 1,300 | 100.0 | 100.0 |
| Married, wife present | 311 | 195 | 28.6 | 15.0 |
| Enrolled full time | 101 | 83 | 9.3 | 6.4 |
| Enrolled part time | 210 | 112 | 19.3 | 8.6 |
| Other marital status | 776 | 1,105 | 71.4 | 85.0 |
| Enrolled full time | 625 | 1,026 | 57.5 | 78.9 |
| Enrolled part time | 151 | 80 | 13.9 | 6.2 |
| Female | 743 | 1,059 | 100.0 | 100.0 |
| Married, husband present | 152 | 90 | 20.5 | 8.5 |
| Enrolled full time | 42 | 52 | 5.7 | 4.9 |
| Enrolled part time | 110 | 38 | 14.8 | 3.6 |
| Other marital status | 591 | 969 | 79.5 | 91.5 |
| Enrolled full time | 431 | 908 | 58.0 | 85.7 |
| Enrolled part time | 160 | 61 | 21.5 | 5.8 |

Family income. In 1971, students enrolled in two-year colleges were about as likely as students enrolled in the first two years of four-year colleges to be from families with incomes of $10,000 or more--63 percent and 66 percent, respectively. These data provide some evidence of an increase over the 57 percent of two-year college students in 1970 who were from families with incomes of $10,000 or more. About 38 percent of the students enrolled in the first two years of four-year colleges in 1971 were from families with incomes in the highest range, $15,000 and over, as compared with 30 percent of the two-year college students (table G and figure 5).

**Figure 2.--Age of Persons 14 to 34 Years Old Enrolled in Two-Year Colleges and the First Two Years of Four-Year Colleges: October 1971**

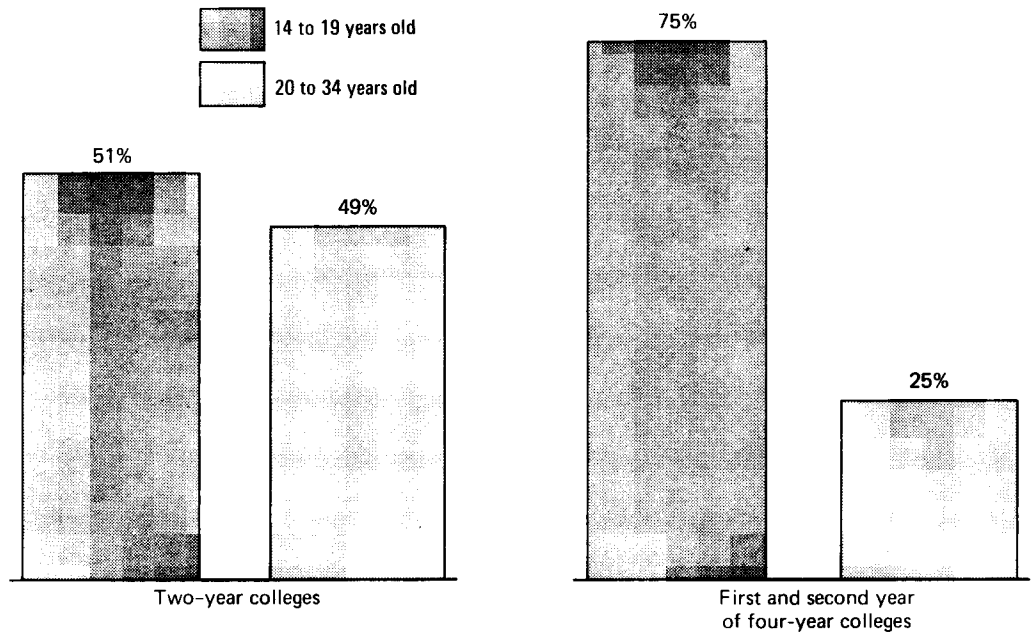
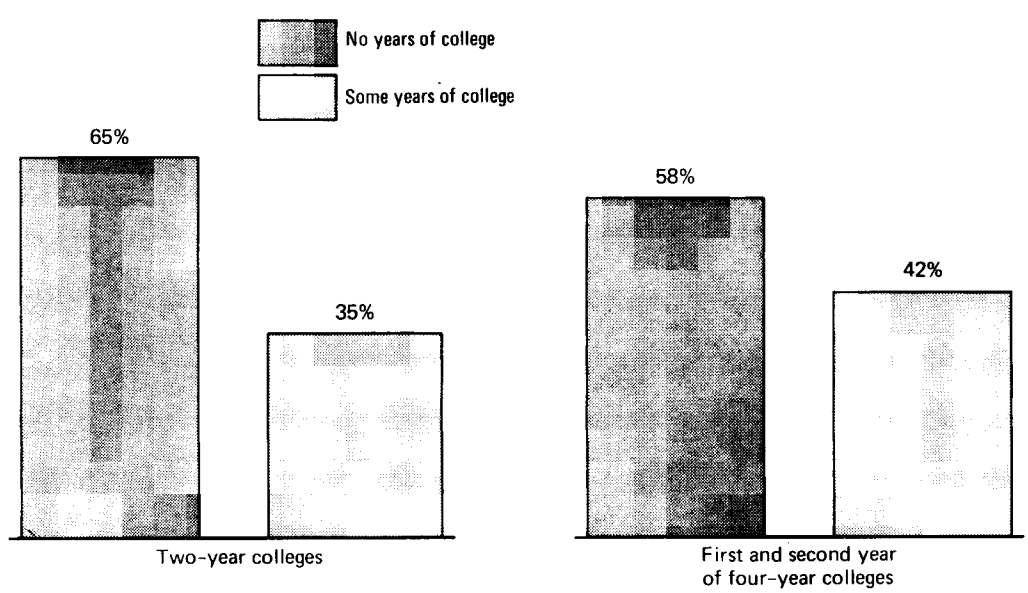
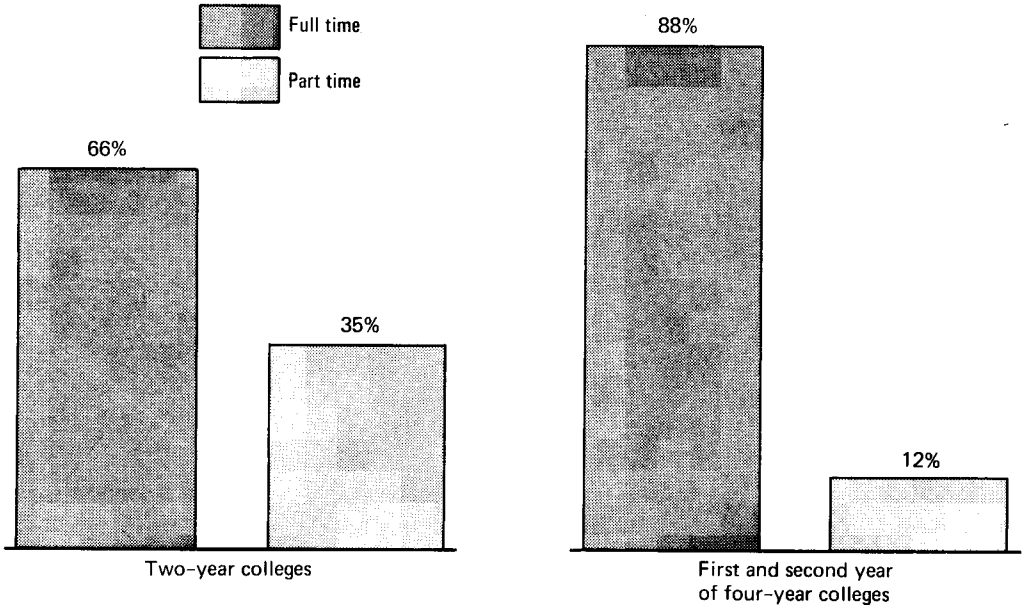



**Figure 3.--Years of School Completed by Family Head for Primary Family Members 14 to 34 Years Old Enrolled in Two-Year Colleges and the First Two Years of Four-Year Colleges: October 1971**

(Excludes family members who are family heads and family members who are married, spouse present)



## Figure 4.--Full-Time and Part-Time Enrollment of Persons 14 to 34 Years Old Enrolled in Two-Year Colleges and the First Two Years of Four-Year Colleges: October 1971




## Figure 5.--Family Income of Primary Family Members 18 to 24 Years Old Enrolled in Two-Year Colleges and the First Two Years of Four-Year Colleges: October 1971

(Excludes family members who are married, spouse present. Income for preceding 12 months)

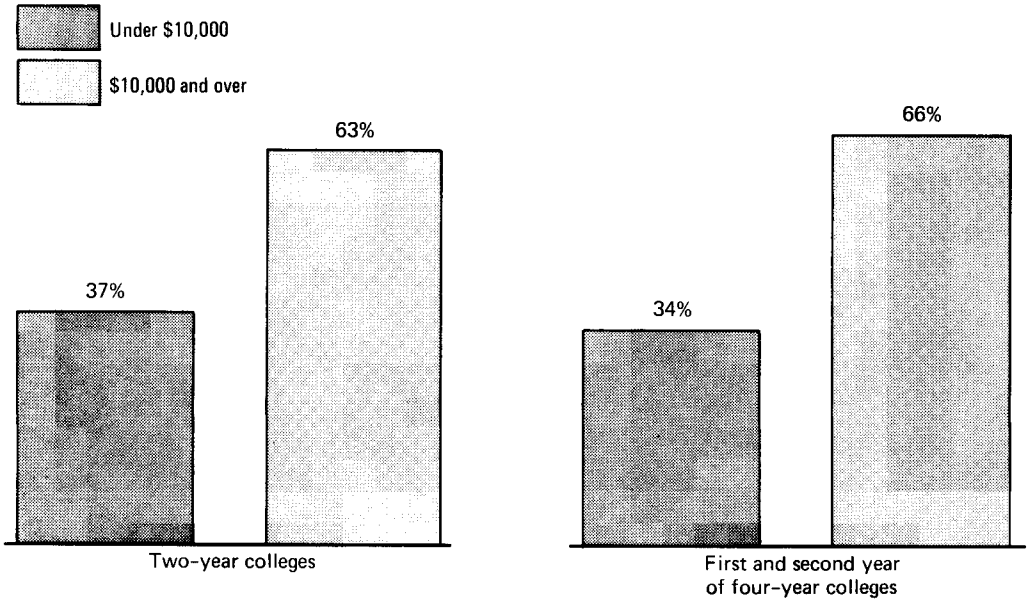


**Table G. Family Income of Primary Family Members 18 to 24 Years Old Enrolled in Two-Year Colleges and the First Two Years of Four-Year Colleges: October 1971**

(Numbers in thousands. Civilian noninstitutional population. Excludes family members who are married, spouse present. Income for preceding 12 months)

| Family income | 2-year colleges | 1st and 2nd year of 4-year colleges | Percent distribution[1] | |
|---|---|---|---|---|
| | | | 2-year colleges | 1st and 2nd year of 4-year colleges |
| Total | 1,100 | 1,759 | 100.0 | 100.0 |
| Under $3,000 | 31 | 50 | 3.1 | 3.0 |
| $3,000 to $4,999 | 62 | 104 | 6.2 | 6.3 |
| $5,000 to $7,499 | 134 | 176 | 13.3 | 10.6 |
| $7,500 to $9,999 | 145 | 238 | 14.4 | 14.4 |
| $10,000 to $14,999 | 328 | 460 | 32.6 | 27.8 |
| $15,000 and over | 304 | 625 | 30.2 | 37.7 |
| Not reported | 95 | 103 | (X) | (X) |
| Median[1] | $11,989 | $12,826 | (X) | (X) |

X Not applicable.
[1]Excluding those "not reported" on family income.

Note: Excludes 178,000 students who did not report on type of college.

## PATTERNS OF ATTENDANCE IN TWO-YEAR COLLEGES

Continuity of enrollment. Students who attend a two-year college show a somewhat less continuous attendance pattern than students who attend four-year colleges. In 1971, about 14 percent of all students in two-year colleges who had already completed one or more years of college had not been enrolled in college the previous year. Among those enrolled in the first two years of four-year colleges, about 6 percent of those who had completed one or more years of college had not been enrolled the previous year (table H).

Part-time attendance. In 1971, about 34 percent of all two-year college students, and 12 percent of all students enrolled in the first two years of four-year colleges, were attending part time. At the same time, students who were attending college only part time were about twice as likely to be attending two-year colleges as to be attending the first two years of four-year colleges, 68 percent versus 32 percent (tables F and 6).

## RELATED REPORTS

Data on two-year and four-year college enrollment for October 1970 were presented in Series P-20, No. 231.

Data on school enrollment for all levels for October 1970 were presented in Series P-20, No. 222. Statistics on school enrollment for October in the years prior to 1970 have been published in other reports in Series P-20. 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.

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 are presented in Subject Reports of the 1960 census, especially in PC(2)-5A, School Enrollment.

Figures on school enrollment from the October Current Population Survey 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

**Table H. Enrollment Status in 1971 by Enrollment Status in 1970 of Persons 14 to 24 Years Old Enrolled in the First Four Years of College Who Had Completed One or More Years of College, by Sex and Type of College: October 1971**

(Numbers in thousands. Civilian noninstitutional population)

| Enrollment status in 1970 and sex | Total enrolled in 1971 | Type of college | | | |
|---|---|---|---|---|---|
| | | 2-year colleges | 4-year colleges (year) | | Not reported |
| | | | 1st and 2nd | 3rd and 4th | |
| Both sexes | 3,826 | 695 | 1,008 | 2,042 | 81 |
| Enrolled in 1970 | 3,565 | 601 | 952 | 1,942 | 70 |
| Not enrolled in 1970 | 261 | 94 | 56 | 100 | 11 |
| Percent | 6.8 | 13.5 | 5.6 | 4.9 | 13.6 |
| Male | 2,212 | 416 | 563 | 1,189 | 44 |
| Enrolled in 1970 | 2,043 | 356 | 525 | 1,123 | 39 |
| Not enrolled in 1970 | 169 | 60 | 38 | 66 | 5 |
| Percent | 7.6 | 14.4 | 6.7 | 5.6 | (B) |
| Female | 1,613 | 279 | 444 | 854 | 36 |
| Enrolled in 1970 | 1,521 | 245 | 426 | 820 | 30 |
| Not enrolled in 1970 | 92 | 34 | 18 | 34 | 6 |
| Percent | 5.7 | 12.2 | 4.1 | 4.0 | (B) |

B Base less than 75,000.

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 cenus 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 college enrollment 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, and enumeration methods. 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.

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 1960 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, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

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

College enrollment. The college enrollment statistics are based on replies to the enumerator's inquiry as to whether the person was enrolled in college. Enumerators were instructed to count as enrolled anyone who had been enrolled at any time during the current term or school year in any type of regular college or university. Attendance may be on either a full-time or part-time basis and during the day or night. Thus, regular college is school that may advance a person toward a college or university degree. The statistics on college enrollment shown in this report refer only to undergraduate enrollment, that is to enrollment in the first four years of college.

Two-year and four-year college. Students enrolled in the first three years of college were asked to report whether the college in which they were enrolled was a two-year college (junior or community college). Those who replied "yes" were classified as enrolled in a two-year college. Those who replied "no" were classified as enrolled in a four-year college.

Public or private college. In this report, a public college is defined as any institution of higher education operated by publicly elected or appointed officials and supported by public funds. Private colleges included institutions established and operated by religious bodies, as well as those which are under other private control. In cases where enrollment was in a 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.

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.

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

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.

Family members. For the purpose of this report, the term "family members" is often used to include only relatives of the household head, excluding the head's wife or any other relative who is married with a spouse present. Such persons are generally sons and daughters of the household head. However, members who are living away from home while attending college are also counted as family members, if they are not married with a spouse present. Whenever the term "family members" is used in this restricted

sense an appropriate footnote is included. These "family members" are identical with the universe of "dependent family members" used in previous school enrollment reports.

Years of school completed. 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 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.

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.

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 rounded absolute numbers.

## SOURCE AND RELIABILITY OF THE ESTIMATES

Source of data. The estimates in this report for 1970 and 1971 are based on data obtained in the Current Population Survey (CPS) of the Bureau of the Census. The sample was spread over 449 areas comprising 863 counties and independent cities, with coverage in each of the 50 States and the District of Columbia. Approximately 50,000 households are eligible for interview each month. Of this number 2,250 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 50,000, there are also about 8,500 sample units in an average month which are visited but are found to be vacant or otherwise not to be interviewed.

The estimates for 1966 in this report were based on data obtained in October 1966 in the Current Population Survey of the Bureau of the Census. The sample was spread over 357 areas comprising 701 counties and independent cities, with coverage in each of the 50 States and the District of Columbia. Approximately 35,000 occupied housing units were designated for interview each month.

The estimation 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 1960 Census of Population; statistics of births, deaths, immigration and emigration; and statistics on the strength of the Armed Forces.

Reliability of the estimates. Since the estimates in this report are based on a sample, they may differ somewhat from the figures that would have been obtained from a complete census, 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. The chances are about 68 out of 100 that an estimate from the survey differs from a complete census figure by less than the standard error. The chances are about 90 out of 100 that this difference would be less than 1.6 times the standard error, and 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, and most are significant at a level of more than 2.0 standard errors. This means that 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 the 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 provided are an indication of the order of magnitude, rather than the precise standard error for any specific item. As calculated for this report the standard error also partially measures the effect of response and interviewer errors but does not measure any systematic biases in the data. The figures presented in table M are estimates of the total numbers of persons in age-sex-race groups which are to be used in the calculation of standard errors from tables I, J, K, and L.

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. Estimated percentages are relatively more reliable than the corresponding estimates of the numerators of the percentages, particularly if the percentages are 50 percent or more. Tables K and L contain the standard errors of the estimated percentages.

Illustration of the use of tables of standard errors. Table A of this report shows that 1,703,000 persons 14 to 34 years old were enrolled in the first two years of two-year colleges. Table M shows there are 65,213,000 persons 14 to 34 years old. Interpolation in table I shows the standard error on 1,703,000 in an age-sex group containing 65,213,000 to be approximately 58,000. The chances are 68 out of 100 that the estimate would differ from a complete census

**Table I. Standard Errors for Estimated Numbers, Total or White Population: 1970 and 1971**

(Numbers in thousands. 68 chances out of 100)

| Estimated number of persons | Total persons in age, sex 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 | 10.9 | 11.9 | 12.1 | 12.3 | 12.3 | 12.4 | 12.4 | 12.4 | 12.4 |
| 100 | - | 11.6 | 13.4 | 13.9 | 14.1 | 14.2 | 14.3 | 14.3 | 14.3 | 14.3 |
| 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 | 109.0 | 119.0 | 121.0 |
| 10,000 | - | - | - | - | - | - | - | 116.0 | 134.0 | 139.0 |
| 20,000 | - | - | - | - | - | - | - | 95.0 | 164.0 | 190.0 |
| 30,000 | - | - | - | - | - | - | - | - | 164.0 | 217.0 |
| 40,000 | - | - | - | - | - | - | - | - | 134.0 | 232.0 |
| 50,000 | - | - | - | - | - | - | - | - | - | 237.0 |
| 75,000 | - | - | - | - | - | - | - | - | - | 205.0 |

Note: To estimate standard errors for 1966 estimates, multiply these standard errors by 1.2.

figure by less than 58,000. The chances are 95 out of 100 that the estimate would differ from a complete census figure by less than 116,000, i.e., this 95 percent confidence interval would be from 1,587,000 to 1,819,000.

Of these 1,703,000 students, 697,000, or 40.9 percent, were females. Interpolation in table K shows the standard error of 40.9 percent on a base of 1,703,000 to be approximately 1.8 percent. Consequently, chances are 68 out of 100 that the 40.9 percent would be within 1.8 percentage points of a complete census figure, and chances are 95 out of 100 that the estimate would be within 3.6 percentage points of a complete census figure, i.e., this 95 percent confidence interval would be from 37.3 to 44.5 percent.

Table A of this report shows that in 1966 there were 1,046,000 persons 14 to 34 years old enrolled in the first two years of two-year colleges. Thus, the apparent change in the number of persons enrolled in two-year colleges in 1971 and 1966 is 657,000. The standard error of 1,703,000 is 58,000 as shown above. Table M shows there were 55,322,000 persons 14 to 34 years old in 1966. Interpolation in table I shows the standard error on an estimate of 1,046,000 to be approximately 46,000. Multiplying the 46,000 by the factor 1.2 for 1966 estimates ($46,000 \times 1.2 = 55,000$) produces an approximation to the standard error on the estimate of 1,046,000. The standard error of the estimated change of 657,000 is about $80,000 = \sqrt{(58,000)^2 + (55,000)^2}$. This means the chances are 68 out of 100 that the estimated difference based on the samples would differ from the change derived using complete census figures by less than 80,000. The 68 percent confidence interval around the 657,000 change is from 577,000 to 737,000, i.e., 657,000 ± 80,000. A conclusion that the average estimate of the change 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 497,000 to 817,000 and thus we can conclude with 95 percent confidence that the number of students enrolled in the first two years of two-year colleges in 1966 is actually less than those enrolled in 1971.

**Table J. Standard Errors for Estimated Numbers, Negro and Other Races: 1970 and 1971**

(Numbers in thousands. 68 chances out of 100)

| Estimated number of persons | Total persons in age, sex 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 | 11.1 | 11.4 | 11.6 | 11.7 | 11.7 |
| 75 | 7.3 | 12.1 | 13.3 | 13.8 | 14.2 | 14.3 | 14.3 |
| 100 | - | 12.9 | 14.9 | 16.0 | 16.0 | 16.0 | 17.0 |
| 200 | - | 10.7 | 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 | - | - | - | - | - | - | - |

Note: To estimate standard errors for 1966 estimates, multiply these standard errors by 1.2.

## Table K. Standard Errors of Estimated Percentages, Total or White Population: 1970 and 1971

(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 | 0.1 | 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 |

Note: To estimate standard errors for 1966 estimates, multiply these standard errors by 1.2.

## Table L. Standard Errors of Estimated Percentages, Negro and Other Races: 1970 and 1971

(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 |

Note: To estimate standard errors for 1966 estimates, multiply these standard errors by 1.2.

## Table M. Independent Estimates of Age-Sex-Race Categories: 1966, 1970, and 1971

(In thousands)

| Year and age group | Total | | Negro | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| 1970 AND 1971 | | | | |
| 14 to 34 years..... | 31,514 | 33,699 | 3,590 | 4,069 |
| 14 and 15 years..... | 4,133 | 4,025 | 538 | 539 |
| 16 to 19 years..... | 7,470 | 7,630 | 914 | 999 |
| 20 and 21 years..... | 2,886 | 3,522 | 356 | 447 |
| 22 to 24 years..... | 4,703 | 5,326 | 539 | 615 |
| 25 to 34 years..... | 12,322 | 13,196 | 1,243 | 1,469 |
| 1966 | | | | |
| 14 to 34 years..... | 26,310 | 29,012 | 2,908 | 3,372 |
| 14 and 15 years..... | 3,687 | 3,582 | 455 | 462 |
| 16 to 19 years..... | 6,668 | 6,978 | 786 | 847 |
| 20 and 21 years..... | 2,251 | 2,875 | 270 | 332 |
| 22 to 24 years..... | 3,453 | 4,210 | 385 | 468 |
| 25 to 34 years..... | 10,251 | 11,367 | 1,012 | 1,263 |

Note: These figures are approximate levels of various population categories for use with tables I, J, K, and L in determining sampling errors of percentages and totals.