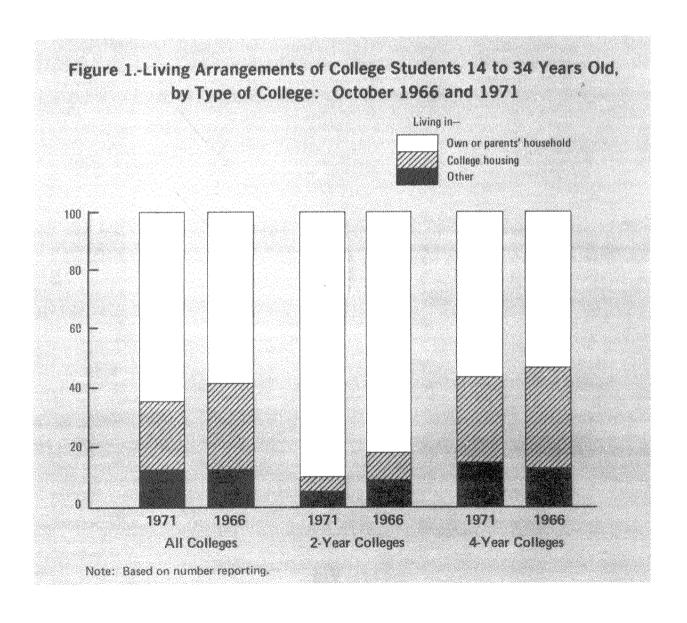


Population Characteristics

Series P-20, No. 245 January 1973 U. S. DEPARTMENT OF COMMERCE . Social and Economic Statistics Administration . BUREAU OF THE CENSUS

LIVING ARRANGEMENTS OF COLLEGE STUDENTS OCTOBER 1971



U. S. DEPARTMENT OF COMMERCE

Peter G. Peterson, Secretary James T. Lynn, Under Secretary

Harold C. Passer, Assistant Secretary for Economic Affairs and Administrator,

Social and Economic Statistics Administration BUREAU OF THE CENSUS

George Hay Brown, Director
Robert L. Hagan, Deputy Director
Daniel B. Levine, Associate Director for Demographic Operations

POPULATION DIVISION

Meyer Zitter, Chief

ACKNOWLEDGMENTS

This report was prepared by Jerry T. Jennings of the Education and Social Stratification Branch, Population Division. The report was prepared under the direct supervision of Larry E. Suter, Acting Chief of the Education and Social Stratification Branch. Overall direction was provided by Charles E. Johnson, Jr., Assistant Division Chief (Demographic and Social Statistics Programs), Population Division, and Paul C. Glick, Senior Demographer, Population Division.

SUGGESTED CITATION

U.S. Bureau of the Census, <u>Current Population Reports</u>, Series P-20, No. 245, "Living Arrangements of College Students: October 1971," U.S. Government Printing Office, Washington, D.C., 1973.

CONTENTS

Rela Def	roduction ated reports initions and explanations. rce and reliability of the estimates.	1 5 5 9
	TEXT TABLES	
Tab	ole	
А. В.	Living arrangements of college students 14 to 34 years old, by sex: October 1971 Living arrangements of college students 14 to 34 years old by type of college: October	1
C. D.	1971, 1966, and 1958	2 3
E. F.	enrolled in college: October 1971	4 6
	college graduates 14 to 34 years old not enrolled in college, by year of graduation Standard errors for estimated numbers of persons enrolled in college in 1971 (Total or	7
H.	white population)	10 10
	Standard errors of estimated percentages of persons enrolled in college in 1971 (Total or white population	11
	Standard errors of estimated percentages of persons enrolled in college in 1971 (Negro and other races)	11 12
	FIGURES	
Figu	ire	
1.	Living arrangements of college students 14 to 34 years old, by type of college: October 1966 and 1971	ver
	Percent of college students 14 to 34 years old living in own household, by type of college: October 1971 and 1966	3
	rercent of college students 14 to 34 years old with identical living arrangements in summer 1971 and October 1971: October 1971.	5
4.	Residence during last year in college and in October 1971, for persons 14 to 34 years old who graduated from college during 1971: October 1971.	7
Tabl		
	Living arrangements of college students 14 to 34 years old, by age, sex, race, marital status, and type of college: October 1971	13
	status: October 1966	16
3.	Living arrangements of college students 14 to 34 years old in October 1971 and in summer	

1971, by age, sex, and race: October 1971

 17

24

26

Page

LIVING ARRANGEMENTS OF COLLEGE STUDENTS: OCTOBER 1971

The number of college students who lived in their own households increased from 1.4 million in 1966 to 2.4 million in 1971, an increase of 66 percent. However, the number of college students who lived in college housing (dormitories or fraternity or sorority houses), 1.8 million in 1971, was about the same as in 1966. These findings are based on a study of summer, fall, and post-graduation living arrangements of college students conducted by the Bureau of the Census in the October 1971 Current Population Survey.

Other highlights of the survey findings were:

- 1. College students were fairly evenly divided in their living arrangements. About one-third lived in their own households, one-third lived with their parents or relatives, and one-third lived away at college.
- 2. The women enrolled in college were more likely to be living in college housing than the men--29 percent and 20 percent, respectively.
- 3. Most college students who were married and living with their spouse lived in their own households, 94 percent.

- 4. Only a little over half, 56 percent, of the students enrolled in college in October 1971 were living with their parents or other relatives during the preceding summer.
- 5. There was some net movement back to the county of residence of parents following college graduation; for example, the proportion of the 1971 college graduates who were living in the same county as their parents increased from 48 percent during their last year in college to 58 percent in October 1971.

Living arrangements while attending college. College students in October 1971 were more likely to live with their parents or other relatives or in their own households than in college housing. In October 1971, there were 8.1 million students 14 to 34 years old enrolled in college. Of these college students, 2.6 million were living with their parents or other relatives, 2.4 million were living in their own households, 1.8 million were living in college housing, and 940,000 were living in other quarters, primarily rooming and boarding houses.¹ The men enrolled in college were more

Table A. LIVING ARRANGEMENTS OF COLLEGE STUDENTS 14 TO 34 YEARS OLD, BY SEX: OCTOBER 1971

(Numbers in thousands. Civilian noninstitutional population)

Timing among and	Both	sexes	Ma	le	Female		
Living arrangements	Number	Percent ¹	Number	Percent ¹	Number	Percent 1	
Total	8,087	100.0	4,850	100.0	3,236	100.0	
Living at home	5,237	67.8	3,292	70.5	1,945	63.6	
In own household	2,379	30.8	1,599	34.2	779	25.5	
With parents or relatives	2,574	33.3	1,515	32.4	1,059	34.6	
With nonrelatives only	284	3.7	178	3.8	107	3.5	
Living away at college	2,490	32.2	1,378	29.5	1,113	36.4	
In college housing	1,801	23.3	921	19.7	880	28.8	
With relatives	33	0.4	18	0.4	14	0.5	
Other	657	8.5	439	9.4	218	7.1	
Living arrangements not reported	359	(X)	180	(X)	179	(x)	

X Not applicable.

¹About 359,000 college students, or 4.4 percent, did not report on their living arrangements.

¹Excludes students who did not report on living arrangements.

likely to be living in their own households than were the women enrolled in college--34 percent of men and 26 percent of women who reported on their living arrangements were living in their own households. Conversely, women were more likely than men to be living in college dormitories while attending college (29 percent for women as compared with 20 percent for men).

In the past 5 years, there has been a decline in the proportion of students living in college housing. In 1966, the last time before the 1971 survey that the Bureau of the Census asked a question on the living arrangements of college students in its Current Population Survey, 29 percent of all college students were living in college housing. By 1971, however, this proportion had dropped to 23 percent. Among students enrolled in 2-year colleges -- who constituted a much larger proportion of total college enrollment in 1971 than in 1966--the proportion of students living in college housing dropped from 9 percent in 1966 to 5 percent in 1971 (table B).

The decline in the proportion of college students who lived in college housing did not occur because students were more likely to remain at their parental homes and commute to the campus, but because college students were more likely to live in their own households. Both in 1966 and 1971. the proportion of all college students who lived with their parents or relatives was about at the same level--around 34 percent. However, the proportion of college students who maintained their own homes increased. The relative increase in the proportion of college students who lived in their own households was greater among those enrolled in 2-year colleges than among those enrolled in 4-year colleges. In 1966, 19 percent of the 2-year college students maintained their own home, but in 1971, 31 percent of the 2year college students lived in their own households. A somewhat smaller proportionate increase occurred among 4-year college students. In 1966, 26 percent of all students enrolled in 4-year colleges maintained their own homes, but in 1971, 31 percent did so. Unchanged over this period, however, was the proportion of college students who lived alone or with nonrelatives. which remained at about 12 percent in both 1966 and 1971, although the proportion of 2-year college students with such living arrangements declined from 9 percent to 4 percent.

Table B. LIVING ARRANGEMENTS OF COLLEGE STUDENTS 14 TO 34 YEARS OLD BY TYPE OF COLLEGE: OCTOBER 1971, 1966, AND 1958

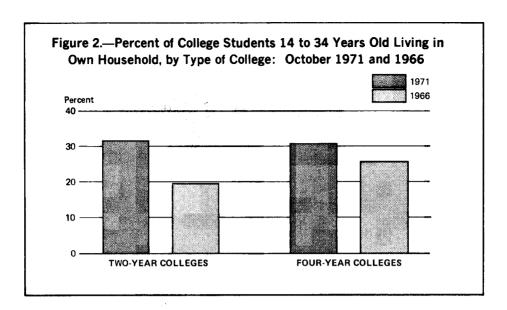
(Numbers in	thousands.	Civilian	noninstitu	itional pop	oulation)			
Living arrangements	A	ll college	s	Two-year	colleges	Four-year colleges		
	1971	1966	1958	1971	1966	1971¹	1966	
Total enrolled	8,087	5,999	3,242	1,830	1,047	6,257	4,952	
In own household	2,379 2,607 1,801	1,429 1,991 1,725	852 1,114 958	575 1,086 87	197 663 96	1,804 1,521 1,721	1,232 1,328 1,629	
In college housing Other Not reported	941 359	718 136	318 (NA)	80 3	91 -	854 356	627 136	
PERCENT DISTRIBUTION		-						
Total enrolled ²	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
In own household	30.8 33.7	24.4 34.0	26.3 34.4	31.5 59.4	18.8 63.3	30.6 25.8	25.6 27.6	
In college housing	23.3 12.2	29.4 12.2	29.5 9.8	4.8 4.4	9.2 8.7	29.2 14.5	33.8 13.0	

NA Not available. - Represents zero.

²Excluding the 4.4 percent who did not report on their living arrangements in 1971 and the 2.3 percent who did not report in 1966.

¹Includes 299,000 students who did not report on type of college.

²Excludes students who did not report on living arrangements.



Most married students lived in their own households. In October 1971, there were 2.0 million college students who were married and living with their spouse. The vast majority of the remaining 6.1 million college students were single. Of the students who were married and living with their spouse, 94 percent were living in their own households, 3 percent were living with parents or other relatives, and 1 percent were living in college housing. Of the students who were not "married, spouse present," 10 percent lived in their own households, 44 percent lived with their parents or other relatives, 31 percent lived in college housing, and 16 percent lived in rooming or boarding houses (table C).

Living arrangements during summer. Many students who were enrolled in college in the fall had not lived in their parents' households in the preceding summer. Of all the students in college in October 1971, a little over half, 56 percent, were living with their parents or other relatives in the summer of 1971. Many of the college students who did not live with their parents in the summer were living in their own households. In October 1971, during the school year, only about one third, 34 percent, of the college students were living with their parents or other relatives (table D). However, the majority of college students who lived at home during the summer continued to live with their parents after they entered college in the fall. Among students 14 to 34 years old in October 1971 who had lived with their parents during the summer, 56 percent were

still living at home in the fall while attending college. About a third (35 percent) had moved into college housing for the school year. Most (72 percent) of those who had lived in college housing during the summer continued to live in college housing in the fall.

Table C. LIVING ARRANGEMENTS OF COLLEGE STUDENTS 14 TO 34 YEARS OLD, BY MARITAL STATUS: OCTOBER 1971

(Numbers in thousands. Civilian noninstitutional

por	ulation)	noninsti	
		Marital	status
Living arrangements	Total enrolled	Married, spouse present	Other marital status
Total	8,087	2,029	6,058
In own household With parents or	2,379	1,813	566
relatives	2,607	61	2,547
In college housing	1,801	19	1,782
Other	941	29	912
Not reported	359	109	251
PERCENT DISTRIBUTION			
Total ¹	100.0	100.0	100.0
In own household With parents or	30.8	94.4	9.7
relatives	33.7	3.2	43.9
In college housing	23.3	1.0	30,7
Other	12.2	1.5	15.7
	·	L	l

 $^{^{1}}$ Excludes students who did not report on living arrangements.

³Excluding the 4.4 percent who did not report on their living arrangements.

Table D. LIVING ARRANGEMENTS IN OCTOBER 1971 AND SUMMER 1971 OF PERSONS 14 TO 34 YEARS OLD ENROLLED IN COLLEGE: OCTOBER 1971

(Numbers in thousands. Civilian noninstitutional population)

(Numbers in thous	Living arrangements in October 1971								
Living arrangements in summer 1971	Total enrolled	In own household	With parents or relatives	In college housing	Other	Not reported			
Total	8,087	2,379	2,607	1,801	941	359			
In own household	1,791	1,771	_	7	10	3			
With parents or relatives	4,332	_	2,426	1,521	375	10			
In college housing	165	19	6	118	21	_			
Other	1,442	581	175	155	531	-			
Not reported	357	7	-		3	347			
		ļ	ere e		' v				
PERCENT DISTRIBUTION									
Total ¹	100.0	30.8	33.7	23.3	12.2	(X)			
In own household	100.0	99.0	_	0.4	0.6	(x)			
With parents or relatives	100.0	-	56.1	35.2	8.7	(X)			
In college housing	100.0	11.5	3.6	71.5	12.7	(X)			
Other	100.0	40.3	12.1	10.7	36.8	(X)			
Total ²	100.0	100.0	100.0	100.0	100.0	(B)			
In own household	23.2	74.7	_	0.4	1.1	(B)			
With parents or relatives	56.0	-	93.1	84.5	40.0	(B)			
In college housing	2,1	0.8	0.2	6.6	2.2	(B)			
Other	18.7	24.5	6.7	8.6	56.6	(B)			

recent college graduates not now attending school, there is a relatively small net movement back to the county of residence of the parents following For example, among the college graduation. college graduates of 1971, 48 percent were living in the same county as their parents during their final year in college, but in October 1971, 58 percent of these graduates were living in the same county as their parents.⁴ The proportion of these 1971 college graduates who lived in their parents' household increased from 16 percent during their last year in college to 26 percent in October 1971 (table E). Graduates who lived in the same county

Living arrangements after graduation. Among

county as their parents. Among the 1971 college graduates who had lived in the same county as their parents during their last year in college, 87 percent were still living in that county in October 1971. A similar proportion of students who had graduated a year earlier (1970) were still living in the county of their parents' residence in October 1971, nearly a year and a half after graduation. 5 Among the 1971 college graduates, 52 percent lived in a different county from their parents during the year they received their degree, and only about 31 percent of these students, many of whom may have been married and living in their own households, had returned to live in the same county as their parents in October 1971 (table F).

graduates who lived in a different county from

their parents did not return to live in the same

as their parents during their last year in college

were likely to continue living in that county for a

year or two following graduation, but most

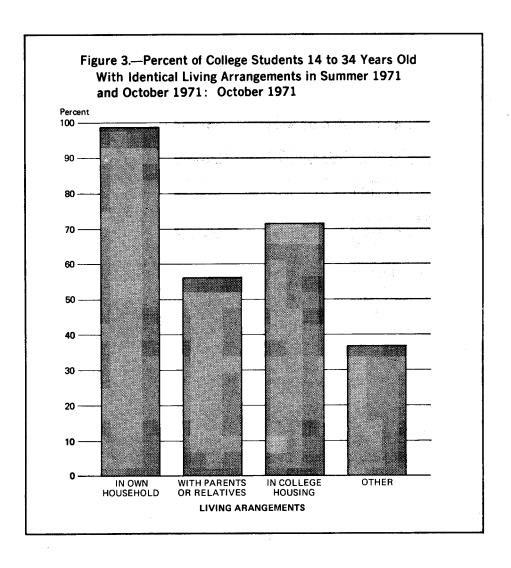
⁻ Represents zero. B Base less than 75,000. X Not applicable.

¹Excludes students who did not report on living arrangements in October 1971.

²Excludes students who did not report living arrangements for summer 1971.

Excluding the 5.1 percent of the 1971 graduates who did not report on their living arrangements.

⁵Excluding the 4.4 percent of 1970 graduates who did not report on their living arrangements.



RELATED REPORTS

Data on undergraduate college enrollment for October 1971 and 1970 by type of college, age, sex, marital status, and family income were published in Current Population Reports, Series P-20, Nos. 236 and 231. Data on school enrollment for all levels in October 1971 were published in Current Population Reports, Series P-20, Nos. 234 and 241. enrollment for all levels for Data on school October 1970 were presented in Series P-20, No. 222. Statistics on school enrollment for October in 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 for living arrangements in 1958 were published in, "School Enrollment: October 1958," <u>Current Population</u> Reports, Series P-20, No. 93.

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 from the 1970 census are shown in U.S. Census of Population, Series PC(1)-C, General Social and Economic Characteristics, which consists of Part 1 for the United States and parts 2 through 52 for the 50 States and the District of Columbia.

DEFINITIONS AND EXPLANATIONS

Population coverage. The figures shown are for the civilian population excluding the relatively small number of inmates of institutions.

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 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 re-Third, the census was taken in a spondents. spring term (April 1970) and relates to enrollment since February 1, whereas the surveys were taken in October and relate to enrollment in the fall term (October 1966 and 1971). 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

Table E. RESIDENCE OF COLLEGE GRADUATES 20 TO 34 YEARS OLD NOT ENROLLED IN COLLEGE: OCTOBER 1971

(Civilian noninstitutional population)

Year of			Same county as parents				
graduation and residence	Total ¹	Total	In parents' house- hold	county from parents			
1971							
Residence: During last year in college In October 1971	100.0	48.2 58.0	15.8 25.8	51.8 42. 0			
1970							
Residence: During last year in							
college	100.0	49.0	16.3	51.0			
In October 1971	100.0	54.3	14.4	45.7			

¹Excludes persons not reporting on residence.

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.

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.

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.

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.

Residence of college students. In the Current Population Survey, persons living away from home while attending college who are not married and living with their spouse are counted as members of their parental households. However, the data on living arrangements of college students in this report are based on special questions asked in the October 1971 CPS and relate to the actual place where the students were staying in the summer of 1971 and at the time of the survey in October 1971 while they were attending college.

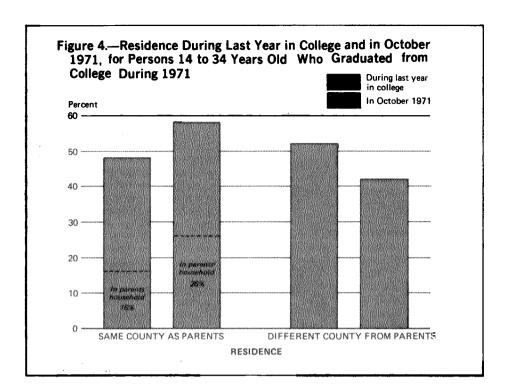


Table F. LIVING ARRANGEMENTS IN OCTOBER 1971 BY LIVING ARRANGEMENTS LAST YEAR IN COLLEGE FOR COLLEGE GRADUATES 14 TO 34 YEARS OLD NOT ENROLLED IN COLLEGE, BY YEAR OF GRADUATION

(Numbers in thousands. Civilian noninstitutional population)

			. populación	• /				
		Percent distribution						
Year of graduation and living			Residence in October 1971					
arrangements and residence during last year in college	Total Total		Same county	Different				
		10141	In parents' household	Not in parents' household	county from parents			
1971								
Total	599	100.0	25.9	32.2				
Same county as parents	290	100.0	33.8	53.1	13.1			
In parents' household	93	100.0	72.0	11.8	16.1			
Different county from parents	310	100.0	18.1	12.6	69.0			
In college housing	88	100.0	33.0	6.8	60.2			
Other	221	100.0	12.2	14.9	72.9			
1970								
Total	524	100.0	15.5	38.7				
Same county as parents	26 0	100.0	25.8	61.2	12.7			
In parents' household	87	100.0	36.8	48.3	16.1			
Different county from parents	262	100.0	5.3	16.0	79.0			
In college housing	88	100.0	6.8	17.0	76.1			
Other	175	100.0	4.6	15.4	79.4			

Note: Table excludes 32,000 1971 graduates and 26,000 1970 college graduates who did not report living arrangements or year of college graduation.

Residence in October 1971. Information on place of residence of persons enrolled in college was obtained from the following direct question:

While attending college, does . . . live:
Here 0
In college housing 0
With relatives 0
Someplace else 0

The enumerators were instructed to mark "here" if the person was residing in the sample unit being enumerated; to mark "in college housing" if the person lived in a dormitory, fraternity, or sorority house affiliated with the college or university; to mark "with relatives" if the person lived with relatives other than those in the sample unit; and to mark "someplace else" if the person lived in any other type of quarters, whether owned and operated by the university or by private firms or individuals. Included in this category were rooming houses, lodging houses, private homes, etc.

From replies to the question on residence in October 1971 and the question on relationship to head of household, college students were classified according to the type of place where they lived while attending school. Four categories of living arrangements were delimited: (1) In own household, which includes students who were living in a sample household and had reported they lived "here" -- most being heads of households or wives of heads; (2) with parents or other relatives, which includes students who reported that they lived "here" and were a relative (but not the wife) of the head, and students who were reported as living away from home with relatives (table A separates these categories); (3) in college housing (dormitories, or fraternity or sorority houses); and (4) other, which includes students who were in a sample household but were living with nonrelatives and those students away at college who were reported as living "someplace else."

<u>Residence</u> in <u>summer 1971</u>. Information on place of residence of college students in the summer of 1971 was obtained from responses to the following question:

During most of last summer, did...live:

Here 0
In college housing 0
With relatives 0
At college, but not in college housing 0
Someplace else 0

Enumerators were instructed to mark the first applicable category; that is, "here" if the person stayed most of the summer of 1971 in the same unit being enumerated; "in college housing" if the person lived in a dormitory, or fraternity or sorority house affiliated with the college or university; "with relatives" if the person lived at college with relatives; "at college, but not in college housing" if the person lived at school most of the summer, but not in a dormitory, or fraternity or sorority house; and to mark "someplace else" if the person lived or stayed in quarters not specified above. Included in this category were persons who travelled, persons who stayed with friends or relatives not at school. persons who lived in summer apartments not located at school, etc.

Residence at time of graduation--Information on place of residence of persons not currently enrolled in school who had graduated from college in 1970 or 1971 was obtained from responses to the following question:

 In the first column please indicate where you lived during the last year you were working toward this degree. In the second column indicate where you live at present. (Mark one box in each column)

(-	mark one box in each colum	1117	
CAME	COUNTY AS	Year before receiving degree	At present
PARE			
	Same household as parents	10	١.
	With other relatives (including spouse)	2 🗀	2 🗆
	In college housing (dorms, fraternities, sororities)	3 🗆	3 🗀
	Someplace else	4 🗆	40
FROM	ERENT COUNTY PARENTS (OR NTS NOT LIVING):		
	With other relatives	5 🗀	5 🗆
	In college housing	6 🗆	6 🗆
	Someplace else	7 🗆	7 🗆

This item was included in a questionnaire on employment and training of recent college graduates which was left at the household of each respondent. The form was filled in by the respondent and returned to the Bureau of the Census.

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 are based on data obtained in October 1966 and October 1971 in the Current Population Survey of the Bureau of the Census. In 1971 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 47,000 occupied housing units were eligible for interview each month. Of this number, 2,000 occupied units. on the average, were visited but interviews were not obtained because the occupants are not found at home after repeated calls or were unavailable for some other reason. In addition to the 47,000 there were also about 8,000 sample units in an average month which were visited but were found to be vacant or otherwise not to be interviewed. In 1966 the sample was spread over 357 areas comprising 701 counties in each of the 50 States and the District of Columbia; approximately 35,000 occupied housing units were eligible for inter-In 1958 the sample was spread over 330 areas comprising 638 counties in the 48 continental United States and the District of Columbia.

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 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 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.

Since Current Population Survey interviewers are to obtain data about a student from persons at the student's usual place of residence, a student's parents must determine whether or not the student considers their home to be his or her usual residence. This may at times lead to reporting errors.

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 G, H, I, and J are approximations to the standard errors of various estimates for 1971 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 item. Tables G and H contain the standard errors of estimated numbers for a given class of persons age 14 to 34 who are enrolled in college or are recent college graduates. For 1966 data, multiply the standard errors by 1.2.

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 I and J show the standard errors of estimated percentages for 1971 estimates. For 1966 estimates, multiply the standard errors by 1,2.

Illustration of the use of tables of standard errors. Table 2 of this report shows there were about 6,204,000 college students, aged 14 to 34 who lived in what they considered their home in the summer of 1971. Using table I to obtain 65,213,000 as the number of persons 14 to 34, interpolation in table G shows the standard error of 6,204,000 to be approximately 109,000. The chances are 68 out of 100 that the estimate would differ from a complete census figure by less than 109,000. The chances are 95 out of 100 that the estimate would differ from a complete census figure by less than 218,000, i.e., this 95 percent confidence interval would be from 5,986,000 to 6,422,000.

Of these 6,204,000 students 4,256,000 or 68.6 percent reported that they lived at home in

Table G. STANDARD ERRORS FOR ESTIMATED NUMBERS OF PERSONS ENROLLED IN COLLEGE IN 1971

Total or White Population

(Numbers in thousands. 68 chances out of 100)

										
Estimated number				Total	persons	in age	group			
of persons	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	_	-	_ 1	l _	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	_	_	l _	_	_		75.0	95.0	98.0	100.0
			1 _	l _	l -	i -	65.0	109.0	119.0	121.0
7,500	_	_	-	_	-	-	-	116.0	134.0	139.0

⁻ Represents zero.

Note: To estimate standard errors for 1966 and 1958 estimates, multiply these standard errors by 1.2.

Table H. STANDARD ERRORS FOR ESTIMATED NUMBERS OF PERSONS ENROLLED IN COLLEGE IN 1971

Negro and Other Races

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

Estimated number	Total persons in age group									
of persons	100	250	500	1,000	2,500	5,000	10,000			
10	5.0	5.1	5.2	5.2	5,2	5.2	5.3			
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.			
10	8.2	9.6	10.1	10.3	10.4	10.5	10.			
50	8.3	10.5	11.1	11.4	11.6	11.7	11.			
75	7.3	12.1	13.3	13.8	14.2	14.3	14.			
100		12.9	14.9	16.0	16.0	16.0	17.			
200	_	10.7	18.0	21.0	23.0	23.0	23.			
	_		18.0	24.0	27.0	28.0	28.			
300		l	15.0	26.0	30.0	32.0	33.			
400		_ [_0.0	26.0	33.0	35.0	36.			
750	-		_	23.0	38.0	42.0	44.			

⁻ Represents zero.

Note: To estimate standard errors for 1966 and 1958 estimates, multiply these standard errors by 1.2.

October 1971. Interpolation in table I shows the standard error of 68.6 percent on a base of 6,204,000 to be approximately 0.9. Consequently, chances are 68 out of 100 that the 68.6 percent would be within 0.9 percentage points of a complete census figure, and chances are 95 out of 100 that the estimate would be within 1.8 percentage points of a complete census figure, i.e., this 95 percent confidence interval would be from 66.8 to 70.4 percent.

<u>Differences</u>. 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 characteristic 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 overstate the true standard error.

Illustration of the computation of the standard error of a difference. Table 2 also shows that 972,000 students reported they lived away from home in the summer of 1971 and lived at home in October 1971. This is about 63.7 percent of the

Table I. STANDARD ERRORS OF ESTIMATED PERCENTAGES OF PERSONS ENROLLED IN COLLEGE IN 1971

Total or White Population

(68 chances out of 100)

Estimated percentage	Base of percentages (thousands)									
	100	250	500	1,000	2,500	5,000	10,000	25,000	50,000	100,000
2 or 98		1.3	0.9	0.6	0.4	0,3	0.2	0.1	0.1	0.1
5 or 95	3.1 4.3	2.0 2.7	1.4	1.0	0.6	0.4	0.3	0.2	0.1	0.1 0.1
25 or 75	6.2 7.2	3.9 4.5	2.8 3.2	2.0 2.3	1.2 1.4	0.9 1.0	0.6 0.7	0.4 0.5	0.3 0.3	0.2 0.2

Note: To estimate standard errors for 1966 and 1958 estimates, multiply these standard errors by by 1.2.

Table J. STANDARD ERRORS OF ESTIMATED PERCENTAGES OF PERSONS ENROLLED IN COLLEGE IN 1971

Negro and Other Races

(68 chances out of 100)

Estimated	Base of percentages (thousands)									
percentage	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 and 1958 estimates, multiply these standard errors by 1.2.

1,526,000 students who were reported to have lived away from home in summer. We will now compare this to the 68.6 percent we obtained for students who lived at home in summer 1971. The apparent difference of percent living at home in October 1971 is 4.9 percent. The standard error of the difference is approximated by the

formula $\sqrt{(0.9)^2 + (1.8)^2} = 2.0$. In this expression, 0.9 is the standard error on 68.6 percent, as calculated above; and 1.8 is the standard error of the 63.7 percent on a base of 1,526,000 as found by interpolation in table I. This means the chances are 68 out of 100 that the estimated

difference based on the sample would vary from the difference derived using complete census figures by less than 2.0 percent. The 68 percent confidence interval around the 4.9 percent difference is from 2.9 to 6.9, i.e., 4.9 ± 2.0 . A conclusion that the average estimate of the difference derived from all possible samples lies within this range would be correct for roughly 68 percent of all possible samples. The 95 percent confidence interval is 0.9 to 8.9 percent. Thus, we can conclude with 95 percent confidence that the proportion living at home in October 1971 is larger for students who lived at home in the previous summer.

Table K. INDEPENDENT ESTIMATES OF AGE-SEX-RACE CATEGORIES

(Numbers in thousands)

Year and age group	Total			Negro		
	Total	Male	Female	Total	Male	Female
1966						
14 to 34	55,322	26,310	29,012	6,280	2,908	3,372
14 to 17	14,191	7,168	7,023	1,791	891	900
18 and 19	6,724	3,187	3,537	759	350	409
20 and 21	5,126	2,251	2,875	602	270	332
22 to 24	7,663	3,453	4,210	853	385	468
25 to 34	21,618	10,251	11,367	2,275	1,012	1,263
1971						
14 to 34	65,213	31,514	33,699	7,659	3,590	4,069
14 to 17	16,027	8,100	7,927	2,083	1,029	1,053
18 and 19	7,231	3,503	3,728	908	423	485
20 and 21	6,408	2,886	3,522	803	356	447
22 to 24	10,029	4,703	5,326	1,154	539	615
25 to 34	25,518	12,322	13,196	2,712	1,243	1,469

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