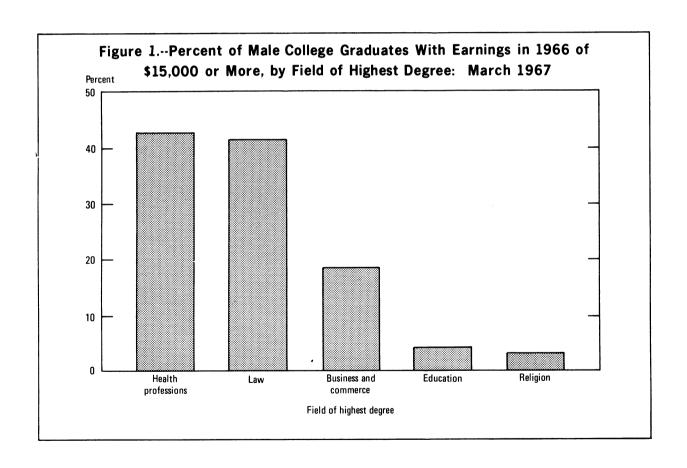




Population Characteristics

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CHARACTERISTICS OF MEN WITH COLLEGE DEGREES: 1967



BUREAU OF THE CENSUS

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CHARACTERISTICS OF MEN WITH COLLEGE DEGREES: 1967

Approximately 6.4 million men in the United States in the spring of 1967 held college degrees. Of these men, 4.2 million had a bachelor's degree as their highest degree, 1.1 million a master's degree, and 1.1 million a doctorate or professional degree.

The male college graduates had considerably more education than their fathers. For 62 percent, the father had completed no years of college, including 31 percent whose father had not even completed a year of high school. Only 17 percent were sons of college graduates.

This report shows selected characteristics of men with college degrees on the basis of data which were collected by the Bureau of the Census in the Current Population Survey of March 1967 and by a followup questionnaire in April 1967. In general, data on men who received more than one degree are presented according to the highest degree only. The degrees are ranked as bachelor's, master's, or "other." "Other" is the highest category and includes doctor's degrees, law degrees, and divinity degrees.

EARNINGS

The quality of the college where a man receives his highest degree is related to the subsequent level of his earnings. Among male college graduates with earnings in 1966, those who graduated from a high-ranking college, as measured by the average aptitude of entering freshmen, had higher earnings than those who graduated from a low-ranking college. Median earnings in 1966 for men with earnings who graduated from a high-ranking college were \$11,678, whereas the median earnings for men who graduated from a low-ranking college were \$7,881, a difference of \$3,797 (table A). (See definitions section for a description of the method of ranking colleges.)

Comparison of the distributions of earnings between the two groups of graduates emphasizes the advantage of having graduated from a high-ranking college rather than from a low-ranking college, Among graduates of a high-ranking college (with earnings in 1966), about 32 percent earned \$15,000 or more as compared with only 8 percent of the graduates of low-ranking colleges. Moreover, about 16 percent of the graduates of a high-ranking college earned \$20,000 or more, but only 4 percent of the graduates of a low-ranking college had earnings at

this level. At the lower end of the earnings distribution, 42 percent of the graduates of a low-ranking college earned less than \$7,000, including 20 percent who earned less than \$5,000; however, for graduates of a high-ranking college, the corresponding percentages were 21 and 14 percent, respectively.

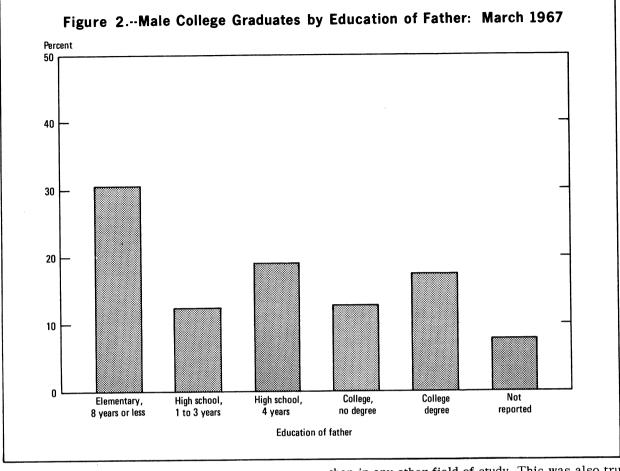
Table A.--EARNINGS--MALE COLLEGE GRADUATES WITH EARNINGS IN 1966, BY RANK OF COLLEGE: MARCH 1967

(Numbers in thousands)

Earnings	Total ¹	ľ	f college d highes	e where t degree
		Low	Medium	High
Total, with earnings	6,043	1,227	3,091	1,181
Percent	100.0	100.0	100.0	100.0
Under \$3,000 \$3,000 to \$4,999 \$5,000 to \$6,999 \$7,000 to \$9,999 \$10,000 to \$14,999.	8.7 6.9 14.5 23.9 26.7	10.7 9.4 21.8 28.0 22.2	7.9 5.7 13.8 24.7 28.8	19.7
\$15,000 to \$19,999. \$20,000 to \$24,999. \$25,000 to \$34,999. \$35,000 to \$49,999. \$50,000 and over Median earnings	9.9 4.1 3.6 1.3 0.3 \$9,489	3.9 1.9 1.9 0.2 0.2 \$7,881	9.9 4.5 3.4 1.2 0.2 \$9,752	6.4 6.3 2.5 1.0

¹Total includes those in unranked colleges.

There were also variations in the earnings of male college graduates by level of highest degree and field of study. The graduates with earnings in 1966 who held a doctorate or professional degree had median earnings that were 42 percent higher than the median of those with a bachelor's degree only. Among graduates whose highest degree was in either the health or legal professions, mostly graduates of medical and law schools, 42 percent had earnings of \$15,000 or more, whereas among men whose highest degree was in other fields, only 15 percent had earnings of this magnitude (table B and figure 1). One reason for the higher earnings of persons with advanced degrees is no doubt the fact that persons with two or more college degrees were on the average older than those with only a bachelor's degree, and, therefore, likely to have been employed longer in their profession. Persons with an advanced degree were also more likely to have majored in the health or legal areas than were those with only a bachelor's degree.



FIELD OF STUDY

Field of highest degree--More men held their highest degree in the field of business and commerce

Table B.--MEDIAN EARNINGS--MALE COLLEGE GRADUATES WITH EARNINGS IN 1966, BY FIELD OF SPECIALIZATION: MARCH 1967

(Numbers in thousands)

Field of highest degree	Total with earnings	Median earnings
Total	6,043	\$9 , 489
Biological sciences Business and commerce Education Engineering Health professions Humanities	275 1,145 912 940 458 364	7,030 9,870 7,783 11,555 13,298 7,227
Law Physical sciences Religion Social sciences All other fields Not reported	385 504 133 643 168 115	13,404 9,985 6,171 8,617 9,877 9,736

than in any other field of study. This was also true for those men whose highest degree was a bachelor's degree. For the men whose highest degree was a master's degree, their most common field of study was education. Among the holders of "other" degrees, the areas of law and health clearly predominated as the most common fields of study (table C).

Residence at high school graduation -- Of all the male college graduates, 35 percent were residing in a city of less than 100,000 population at the time of their high school graduation, 32 percent resided in cities of 100,000 or more, 15 percent in suburbs near a large city, and the rest either in open country or on a farm. Those who resided on a farm at the time of their high school graduation were more likely to hold their highest degree in education (29 percent) than in any other specific field of study. Those who resided in a suburb near a large city were more likely to hold their highest degree in business and commerce than in any other specific field, and those who resided in a city of less than 100,000 population were about equally likely to have received their highest degree in business and commerce, education, or engineering-about 18 percent in each field (table 5).

(Numbers in thousands)

Detailed field of highest degree	Num- ber	Per- cent	Detailed field of highest degree	Num- ber	Per- cent
Total	6,352	100.0		380	
Biological sciences	136 16	4.5 2.1 0.2 0.3 1.8	English and journalism	174 31 53 47 74 406	2.7 0.5 0.8 0.7 1.2 6.4
Business and commerce	1,171 236 935	18.4 3.7 14.7	1 022011111 022011 020100 00	533 124 223 93	8.4 2.0 3.5 1.5
Education Elementary education Educational administration	976 24 75	15.4 0.4 1.2	Geology	38 55	0.6
Industrial arts (educational) Physical education	37 58 781	0.6 0.9 12.3	Religion. Theology. All other religion ¹ .	142 110 32	2.2 1.7 0.5
Engineering. Civil engineering. Electrical engineering. Mechanical engineering. All other engineering ¹	1,000 111 173 188 528	15.7 1.7 2.7 3.0 8.3	Economics. History. Political science.	679 95 174 158 61 55 135	10.7 1.5 2.7 2.5 1.0 0.9 2.1
Health professions. Dentistry (D.D.S. and D.M.D.) MedicineM.D Pharmacy All other health professions ¹	477 93 235 80 69	7.5 1.5 3.7 1.3 1.1	Other fields. Architecture. All other. Not reported.	178 54 124 126	2.8 0.8 2.0 2.0

¹Includes not specified.

Control of high school--Overall, 82 percent of the male college graduates had graduated from a public high school. There was, however, some variation in the control of high school from which the graduates in differing fields of study graduated. For instance, among those whose highest degree was in education, 89 percent had graduated from a public high school, as contrasted with around 70 percent of those who majored in the humanities (table 8).

First job after graduation—Men whose college training prepared them for work in established, specific occupations were more likely to work at a job directly related to their field of study in their first year after graduation than were the men whose training had been more general. Thus, men whose highest degree prepared them for work in the health professions, religion, education, law, and engineering were the most likely to have worked in their field of study during the first year after receiving their highest degree (tables Dand 13).

Men who majored in the humanities or the social sciences, with skills applicable to a wide variety of areus, were less likely to have worked in their field of study during the first year after their graduation. Among men who graduated with their highest degree in the humanities (language, the arts, etc.) or one of the social sciences (sociology,

psychology, etc.) only about two out of every five worked in their field of study during the first year following their graduation.

Table D.--PERCENT WORKED IN FIELD OF HIGHEST DE-GREE DURING FIRST YEAR AFTER RECEIVING DE-GREE--MALE COLLEGE GRADUATES, BY FIELD OF HIGHEST DEGREE: MARCH 1967

			d in fie	
Field of highest degree	Total	Yes	No	Not re- ported
Total	100.0	69.6	28.8	1.7
Biological sciences Business and commerce. Education Engineering Health professions Humanities	100.0 100.0 100.0 100.0 100.0	62.4 71.2 79.5 79.5 90.4 49.2	37.0 27.7 18.9 19.9 6.0 49.0	0.6 1.1 1.6 0.6 3.7 1.8
Law Physical sciences Religion Social sciences All other fields Not reported	100.0 100.0 100.0 100.0 100.0	73.3 62.3 84.0 40.2 70.0 57.5	24.6 34.9 16.0 57.7 28.9 37.9	2.1 2.8 - 2.1 1.1 4.5
D1				

⁻ Rounds to zero.

A part of these differences in the likelihood of working in the field of highest degree is undoubtedly a function of the level as well as the field of highest degree. That is, the men who obtained a professional or doctorate degree would probably be more likely than the holders of a bachelor's degree to be trained for a specific type of occupation.

Father's occupation--About 29 percent of the male college graduates reported that their father's occupation at the time the graduate finished high school was that of a blue-collar worker (including farm laborers). About 17 percent reported that their father was a professional, with like percenttheir father's occupation as ages reporting managerial and other white-collar. A comparison of father's occupation by field of study of the college graduate shows that, for example, among the graduates who received their highest degree in education, about half of their fathers were either farm or other blue-collar workers, whereas, among those whose field of study was law, only onefourth were the sons of farmers or other blue-collar workers. About half of the law graduates were the sons of professional or managerial workers (table 14).

OCCUPATION

Of the 6,003,000 male college graduates 20 to 64 years old in 1967, about 55 percent worked in professional and technical occupations and about 21 percent worked in managerial occupations (managers, officials, and proprietors). About 5 percent were not in the experienced civilian labor force. The youngest graduates were more likely to be in professional occupations, and less likely to be managers than were the oldest graduates. About 60 percent of the graduates 20 to 34 years old worked in professional occupations, as compared with 51 percent of those 45 to 64 At the same time, the proportion of years old. male college graduates who were in managerial occupations comprised only 13 percent of those 20 to 34 years old but 27 percent of those 45 to 64 years old. A part of this age difference in occupation is undoubtedly the result of the older graduates having moved into managerial positions as their careers advanced.

Father's occupation, however, had some effect in determining whether the graduates were in professional or managerial occupations. Among sons of professional workers, about 59 percent were in professional occupations. Among sons of managers, on the other hand, only 46 percent were in professional occupations.

Table E.--PERCENT IN PROFESSIONAL OCCUPATIONS--MALE COLLEGE GRADUATES 20 TO 64 YEARS OLD, BY FATHER'S OCCUPATION: MARCH 1967

Father's occupation	Perce	nt in p		ional			
	20 to 34 years	35 to 44 years	45 to 54 years	55 to 64 years			
Total	59.8	53. 8	53.7	46.3			
Professional	63.4 53.9 55.8 63.8 58.9	57.7 40.3 46.8 61.4 60.1	60.9 41.0 55.6 57.9 61.8	48.2 (B) (B) 41.1 (B)			
Other, not specified Not reported	59.4 (B)	54.7 (B)	45.4 (B)	(B) (B)			

B Base less than 100,000.

Table F.--PERCENT IN MANAGERIAL OCCUPATIONS-MALE COLLEGE GRADUATES 20 TO 64 YEARS OLD, BY FATHER'S OCCUPATION: MARCH 1967

		tions	rial			
20 to	35 to	45 to	55 to			
34	44	54	64			
years	years	years	years			
13.2	24.9	26.5	27.3			
10.1	28.6	20.6	24.2			
18.2	30.5	43.4	(B)			
15.7	32.0	24.0	(B)			
9.0	21.0	21.9	28.7			
16.3	15.5	11.3	(B)			
16.9	18.8	37.9	(B)			
(B)	(B)	(B)	(B)			
	34 years 13.2 10.1 18.2 15.7 9.0 16.3 16.9	34 years years 13.2 24.9 10.1 28.6 18.2 30.5 15.7 32.0 9.0 21.0 16.3 15.5 16.9 18.8	34 44 54 years years years 13.2 24.9 26.5 10.1 28.6 20.6 18.2 30.5 43.4 15.7 32.0 24.0 9.0 21.0 21.9 16.3 15.5 11.3 16.9 18.8 37.9			

B Base less than 100,000.

MIGRATION

In 1967, about 27 percent of the graduates resided in each of the three regions Northeast, North Central, and South, and around 20 percent resided in the West. Altogether, about 79 percent were residing in the same region as that in which they had graduated from high school (table 6).

In general, the men who held both a bachelor's and a higher degree were likely to have obtained their highest degree in the same region of the country where they received their bachelor's degree-about 73 percent. However, the men who received their bachelor's degree in the Northeast and South were more likely to migrate to another

region for their advanced degree than were the men who received their bachelor's degree in the North Central or West. The men with both bachelor's and higher degrees were more likely to have received their highest degree in the North Central Region, 34 percent, than in any of the other three regions of the Nation (table 7).

AGE AND MARITAL STATUS

Age--The median age of male college graduates in 1967 was 38.8 years. Approximately half (55 percent) of the graduates were between 30 and 50 years old, about 23 percent were under 30 years old, and a similar percent were 50 years old and over (table 1).

Marital status--Only 11 percent of the male college graduates were still single in 1967, 86 percent were married, and 3 percent were either widowed or divorced. Those whose highest degree was a bachelor's were more likely to be single, 13 percent, than were the holders of a doctorate or professional degree, 6 percent. This probably occurred in part because the holders of doctorate or professional degrees are likely to be older and to have higher incomes than those with a bachelor's degree (table 10).

COLLEGE CHARACTERISTICS AND YEAR RECEIVED DEGREE

Of the 6,352,000 men with college degrees, 51 percent graduated from a college of medium ranking as determined by the index of freshman aptitude, 20 percent graduated from a low-ranking college, a like percent graduated from a high-ranking college, and 9 percent graduated from a college for which no index of freshmen aptitude was available. The graduates whose father was also a college graduate were much more likely to have obtained their highest degree at a high-ranking college (33 percent) than a low-ranking college (12 percent). Among graduates whose father was not a college graduate, 17 percent graduated from a high-ranking college (table 17).

About half of the graduates received their highest degree from a college with an enrollment of 10,000 students or more, whereas the other half graduated from smaller colleges. Moreover, about half graduated from public colleges, and about half graduated from private colleges. About 6 out of every 10 graduates received their highest degree at a university, with the remainder receiving their highest degree at a liberal arts college, teachers college, or other type of college (table 9).

Year received degree--The men whose highest degree was a master's degree were more likely to be recent degree recipients than were either the

men whose highest degree was a bachelor's or those whose highest degree was a doctorate or professional degree. Men whose highest degree was a doctorate or professional degree were least likely to be recent graduates. Around half of the men whose highest degree was a master's received their degree in the 1960's, but only 36 percent of the men whose highest degree was a bachelor's, and 24 percent of the men whose highest degree was a doctorate or professional degree received their degree in the 1960's (table 4).

PROCEDURES

Men who reported that they had completed 4 years of college or more and were in both the April and March 1967 Current Population Survey, were asked to fill out a supplemental questionnaire which was left at their address. The supplemental questionnaire obtained information for each degree on: Level of degree; field of specialization; year degree received; name and address of college; whether the person worked in the field of his specialization during the first year after graduation; address of high school; whether his high school was public, parochial, or other private school; residence at high school graduation; father's occupation when respondent finished high school; and highest grade of school completed by parents.

All other information on the social and economic characteristics of the graduates was obtained from the March 1967 CPS questionnaire.

Data on the characteristics of the colleges were obtained from the U.S. Office of Education (see below).

RELATED REPORTS

Advance data on the characteristics of men with college degrees were published in <u>Current Population Reports</u>, Series P-20, No. 180. Statistics on educational attainment and earnings in 1967 of family heads are presented in <u>Current Population Reports</u>, Series P-60, No. 59; similar data for 1966 are available in Series P-60, No. 53. Detailed statistics on income and educational attainment of men in the United States were published in <u>Current Population Reports</u>, Series P-60, No. 56, "Annual Mean Income, Lifetime Income, and Educational Attainment of Men in the United States, for Selected Years, 1956 to 1966."

The publication, "Characteristics of Students and Their Colleges: October 1966," Current Population Reports, Series P-20, No. 183, presents data related to college attendance including data on the family income and on the occupation and education of the family head of college students.

Data on intergenerational educational mobility were presented in "Educational Change in a Generation: March 1962, "Current Population Reports, Series P-20, No. 132. Data on intergenerational occupational mobility were presented in "Lifetime Occupational Mobility of Adult Males," Current Population Reports, Series P-23, No. 11.

The publication, "Factors Related to High School Graduation and College Attendance: 1967," Current Population Reports, Series P-20, No. 185, presents data related to the social and economic characteristics of those who do and do not attend college.

Data on educational attainment of persons 14 years old and over in March 1968, March 1967, March 1965 and 1966, March 1964, March 1962, and March 1959 were published in <u>Current Population Reports</u>, Series P-20, Nos. 182, 169, 158, 138, 121, and 99, respectively. Educational attainment as determined in the Current Population Survey is related to labor force characteristics in publications of the Bureau of Labor Statistics, as in "Educational Attainment of Workers, March 1968," published in the February 1969 issue of Monthly Labor Review.

Statistics on educational attainment, occupations, and earnings are also available in several reports of the 1960 Census of Population, the most relevant of which are PC(2)-5B, Educational Attainment and PC(2)7B, Occupation by Earnings. Volume I, Characteristics of the Population, chapter C, "General Social and Economic Characteristics," and chapter D, "Detailed Characteristics," also include statistics on educational attainment.

DEFINITIONS AND EXPLANATIONS

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

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

<u>Northeast</u>: 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.

Residence at high school graduation--Information on where the college graduate lived at the time of his graduation from high school was indicated by the respondent on the followup questionnaire from a list of residence categories provided him and was not independently coded from his address at his graduation. The residence categories were:

In a suburb near a large city
In a large city (100,000 population or more)
In a middle or small size city (under 100,000 population)
Open country (but not on a farm)
On a farm

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

Marital status -- The marital status classification identifies four major categories: Single, married, widowed, and divorced. These terms refer to the marital status at the time of the enumeration.

The category "married" is further divided into "married, wife present," "separated," and "other married, wife absent." A person was classified as "married, wife present" if the wife was reported as a member of the household, even though she may have been temporarily absent on business or on vacation, visiting, in a hospital, etc., at the time of the enumeration. Persons reported as separated included those with legal separations, those living apart with intentions of obtaining a divorce, and persons permanently, or temporarily separated because of marital discord. The group "other married, wife absent" includes married persons living apart because the wife was employed and living at a considerable distance from home. was residing in an institution, had moved to another area, or had a different place of residence for any other reason except separation as defined above.

Degree--A title conferred by a college or university as official recognition for the completion of a program of studies. In this report, the degrees are ranked as bachelor's, master's, or "other degree." "Other degree" is the highest category and includes doctor's degrees, law degrees, and divinity degrees.

<u>Bachelor's degree</u>--A degree customarily conferred upon the successful completion of a course of study normally requiring 4 academic years of college work (generally, B.A., A.B., or B.S.).

Master's degree -- A degree customarily conferred upon successful completion of one (sometimes two) academic years of work beyond the bachelor's degree, such as, master of arts or master of science.

Other degree--The "other degree" classification in this report includes degrees carrying the title of "doctor," such as, doctor of medicine, doctor of dental medicine, doctor of philosophy (in any field); plus professional degrees, such as, bachelor of laws, juris doctor, or bachelor of divinity.

Year degree received--Information on the year in which the male college graduate received each degree was obtained from a direct question in the supplemental questionnaire. In general, the data on year of receipt of highest degree are presented in 5-year groups.

<u>Field of specialization</u>--Information on the male college graduate's specialization for his highest degree was obtained from an open-ended question on the supplemental questionnaire. The reported fields were combined, in this report, into 11 major fields and 40 detailed fields.

Worked in field of highest degree--The male college graduates were asked in the supplemental questionnaire whether or not they had worked mainly at a job in the same field as their highest degree during the year following the degree.

Type of control of high school--In this report, the term "type of control" refers to the legal control over the high school. The male college graduates indicated on the supplemental questionnaire whether the high school from which they graduated was a public, parochial, or other private school.

College characteristics--Information provided by the U.S. Office of Education was used to classify the colleges attended by the male graduates according to type of college, type of control, and enrollment size, as described in the following paragraphs.

Type of college--Colleges are classified as universities, liberal arts colleges, teachers' colleges, independent technical schools, theological schools, fine arts schools, other professional schools, and all other types.

Type of control—In this report, the term "type of control" refers to the legal control over the college. A public college is an institution of higher education operated under public legal control. Private colleges include institutions of higher

education established and operated by religious bodies, as well as those which are under other private legal control. Private secular colleges are those whose legal control is not public or church related.

Enrollment size -- This term refers to the enrollment size of colleges in the fall of 1965. Enrollment includes all full and part-time students whose programs consisted of work normally creditable toward a bachelor's or higher degree. Counted in enrollment size are undergraduate, graduate, resident, extension, day and evening students.

Rank of college by index of freshman aptitude --The colleges from which the men graduated were ranked on the basis of a study connected with the "Project Talent" survey of high school students conducted in 1960 and subsequent years. "Project Talent" was conducted by the American Institute for Research and the University of Pittsburgh with the financial support of the U.S. Office of Education. The aptitude scores on reading comprehension, abstract reasoning, and mathematics of students from each successive high school class (1960 to 1963) entering college were obtained and combined into a composite score. These composite scores were standardized to a distribution with a mean of 50 and a standard deviation of 10. The standardized scores for all of the students in the "Project Talent" survey attending a given college were then averaged and the resultant score was assigned to that institution as the index of freshman aptitude. In this report, institutions with an index of 50 to 55 were classified as "medium" rank colleges, those with an index of less than 50 were ranked as "low," and those with an index of 56 or higher were ranked as "high." In general, institutions with less than 10 freshmen in the "Project Talent" survey were not ranked. The rank assigned a college in this survey is, in part, a rank of entering students.

The criteria for determining the relative ranking of colleges differ somewhat from those used in "Characteristics of Students and Their Colleges: October 1966," Series P-20, No. 183. In ranking colleges in which the October 1966 students were enrolled, those institutions with an index of 47 to 52 were classified as "medium" rank colleges, those with an index of less than 47 were ranked as "low," and those with an index of 53 or higher were ranked as "high."

Different criteria were used in determining the relative rank of colleges in the two surveys because the 1966 survey included all students enrolled in 2-year and 4-year colleges, whereas the 1967 survey of male college graduates included only male graduates of 4-year colleges. Moreover, there were substantial differences in the proportion in

unranked colleges in the 1966 survey of college students (19 percent) and in the 1967 survey of male college graduates (9 percent).

Of the male college graduates in the March 1967 survey, 51 percent were graduates of colleges of medium rank, 20 percent of colleges of low rank, 20 percent of colleges of high rank, and 9 percent of unranked colleges. If the same criteria had been used in ranking the colleges of the graduates in the 1967 survey as were used in ranking colleges in the 1966 survey of college students, 39 percent would have been counted as enrolled in colleges of medium rank, 7 percent in colleges of low rank, 44 percent in colleges of high rank, and 9 percent in unranked colleges.

Education of father and mother--Information on the education of the male college graduates fathers and mothers was obtained from replies to the question: "What is the highest grade or year of school completed by your parents (or guardians)?" Respondents indicated their answers separately for fathers and mothers from the categories:

8th grade or less
1 to 3 years of high school
4 years of high school
College, no degree
College, bachelor degree
College, master or doctor degree
Don't know.

Father's occupation--Information on father's occupation was obtained from answers to the question: "What was your father's (or guardian's) occupation at the time you finished high school?" The male college graduates indicated their answers by checking one of the following categories:

Professional
Managerial
Other white collar
Farmer or farm manager
Blue collar (including farm laborers)
Other, not specified above.

Labor force and employment status--The definitions of labor force and employment status in this report relate to the population 14 years old and over.

Employed—Employed persons comprise (1) all civilians who, during the specified week, did any work at all as paid employees or in their own business or profession, or on their own farm, or who worked 15 hours or more as unpaid workers on a farm or in a business operated by a member of the family, and (2) all those who were not working but who had jobs or businesses from which they were temporarily absent because of illness, bad weather, vacation, or labor-management dispute,

or because they were taking time off for personal reasons, whether or not they were paid by their employers for time off, and whether or not they were seeking other jobs. Excluded from the employed group are persons whose only activity consisted of work around the house (such as own home housework, painting or repairing own home, etc.) or volunteer work for religious, charitable, and similar organizations.

Unemployed --Unemployed persons are those civilians who, during the survey week, had no employment but were available for work and (1) had engaged in any specific jobseeking activity within the past 4 weeks, such as registering at a public or private employment office, meeting with prospective employers, checking with friends or relatives, placing or answering advertisements, writing letters of application, or being on a union or professional register; (2) were waiting to be called back to a job from which they had been laid off; or (3) were waiting to report to a new wage or salary job within 30 days.

<u>Labor force</u>--Persons are classified as in the labor force if they were employed as civilians, unemployed, or in the Armed Forces during the survey week. The "civilian labor force" is comprised of all civilians classified as employed or unemployed.

Not in the labor force--All civilians who are not classified as employed or unemployed are defined as "not in the labor force." This group who are neither employed nor seeking work includes persons engaged only in own home housework, attending school, or unable to work because of long-term physical or mental illness; persons who are retired or too old to work; seasonal workers for whom the survey week fell in an off season; and the voluntarily idle. Persons doing only unpaid family work (less than 15 hours) are also classified as not in the labor force.

Experienced civilian labor force -- The experienced civilian labor force comprises employed civilian workers and experienced unemployed workers.

Occupation and class of worker--The data on occupation and class of worker of employed male college graduates refer to the civilian job held during the survey week. Persons employed at two or more jobs were reported in the job at which they worked the greatest number of hours during the week.

The data on industry of employment refer to the civilian job held during the survey week. Persons who held two jobs or more were reported in the job at which they worked the greatest number of hours. In tables 11 and 12, two or more of the major occupation groups are subdivided by class of worker into two groups: wage and salary workers and self-employed workers. The former refers to persons who worked for wages, salaries, commissions, tips, pay "in kind," or at piece-rates for a private employer, or for any governmental unit. The latter refers to persons who worked in their own business, profession or trade, for profit or fees. Included in the self-employed groups in tables 11 and 12 are unpaid family workers, i.e., persons working without pay in a business operated by a member of the household to whom they are related by blood, marriage, or adoption.

The occupational categories used are combinations of the major groups in the classification system used in the 1960 Census of Population. "Professional" workers include professional, technical, and kindred workers; "Managerial" workers include managers, officials, and proprietors, except farm; "Clerical and sales workers" include clerical and kindred workers and sales workers; "Blue-collar" workers include craftsmen, foremen, and kindred workers, operatives and kindred workers, laborers, except farm and mine; "Farm workers" include farmers (owners and tenants), farm managers, farm laborers, and foremen; "Service workers" include private household workers and service workers, except private household. The specific occupations composing these groups are described in Volume I, Characteristics of the Population, Part 1, United States Summary, chapter D.

Total money earnings--These are defined as the algebraic sum of money wages or salary and net income from farm and nonfarm self-employment.

Median--A median is the value which divides a distribution into two equal parts, one-half the cases falling below this value and one-half the cases exceeding this value.

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 and medians are based on figures rounded to the nearest one hundred.

SOURCE AND RELIABILITY OF THE ESTIMATES

Source of data--The estimates are based on data obtained in March 1967 in the Current Population Survey of the Bureau of the Census. The sample is 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 occupied housing units are

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

Reliability of the estimates—Since the estimates are based on a sample, they may differ somewhat from figures 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.

The figures presented in tables G and H 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

Table G.--STANDARD ERRORS FOR ESTIMATED NUMBER
OF MALE COLLEGE GRADUATES

Size of estimate	Standard	Size of	Standard
	error	estimate	error
10,000	5,000	1,000,000	52,000
	8,000	2,500,000	83,000
	12,000	5,000,000	116,000
	17,000	10,000,000	162,000
	26,000	25,000,000	250,000
	37,000	50,000,000	330,000

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.

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. Table H contains the standard errors of estimated percentages.

<u>Illustration of the use of table of standard errors</u>--Table 15 shows that 1,005,000 male college graduates 20 to 64 years old are sons of pro-

fessionals. Table G shows that the standard error of an estimate of this size to be approximately 52,000. The chances are 68 out of 100 that the estimate would have been a figure differing from a complete census by less than 52,000. The chances are 95 out of 100 that the estimate would have been a figure differing from a complete census by less than 104,000.

Of these 1,005,000 male college graduates who were sons of professionals, 595,000 or 59.2 percent were also professionals. Table H shows the standard error of 59.2 percent on a base of 1,005,000 to be approximately 2.5 percent. Consequently, chances are 68 out of 100 that the estimated 59.2 percent would be within 2.5 percent of a complete census figure. Chances are 95 out of 100 that the estimate would be within 5.0 percent of a census figure. This 95 percent confidence interval would be from 54.2 to 64.2.

Table H. -- STANDARD ERRORS OF ESTIMATED PERCENTAGES OF MALE COLLEGE GRADUATES

Estimated percentage		Base of percentage (in thousands)						
Es tima ted percentage	250	500	1,000	5,000	10,000	25,000	50,000	
2 or 98	1.5 2.3 3.1 4.5 5.2	1.0 1.6 2.2 3.2 3.7	0.7 1.1 1.6 2.3 2.6	0.3 0.5 0.7 1.0 1.2	0.2 0.4 0.5 0.7 0.8	0.1 0.2 0.3 0.5 0.5	0.1 0.2 0.2 0.3 0.4	