



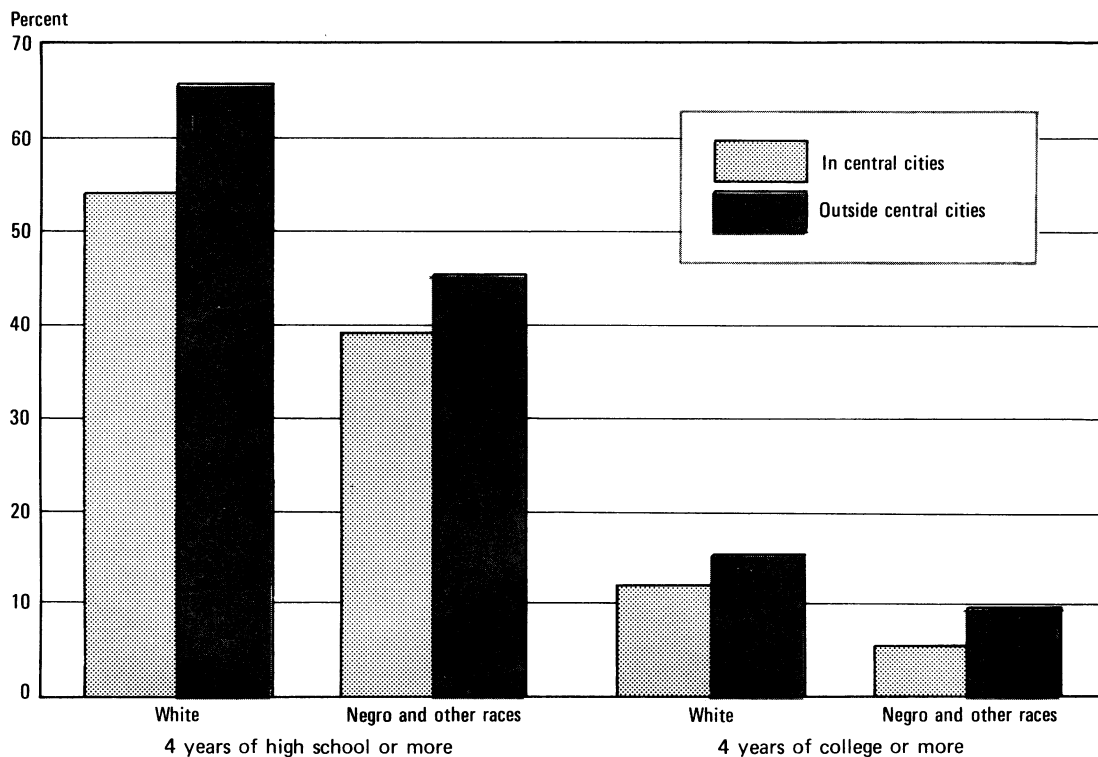
# Population Characteristics

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U.S. DEPARTMENT OF COMMERCE / Bureau of the Census

## EDUCATIONAL ATTAINMENT IN 30 SELECTED STANDARD METROPOLITAN STATISTICAL AREAS: 1968

**Percent of the Population 25 Years Old and Over in 30 Selected SMSA's Who Had Completed at Least 4 Years of High School or 4 Years of College or More, by Residence and Race: 1968**



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# Educational Attainment in 30 Selected Standard Metropolitan Statistical Areas: 1968

Metropolitan adults living outside the central cities of 30 of the Nation's large standard metropolitan statistical areas (SMSA's) in 1968 had a higher level of educational attainment than did those living inside the central cities (table A). About 65 percent of the persons 25 years old and over residing in these 30 SMSA's, but outside of the central cities, had completed 4 years of high school or more as compared with 51 percent of those residing inside the central cities. Moreover, about 28 percent of the adults living outside the central cities had completed some college as compared with 21 percent of the adults living in central cities.

The data in this report on the educational attainment of the population 25 years old and over in each of these SMSA's are based on the annual average of the 1968 monthly statistics on years of school completed collected in the Current Population Survey. The SMSA's included in this report by region are:

## North (Northeast and North Central Regions combined)

- Boston, Mass.
- Buffalo, N.Y.
- Chicago, Ill.
- Cincinnati, Ohio-Ky.
- Cleveland, Ohio
- Columbus, Ohio
- Detroit, Mich.
- Indianapolis, Ind.
- Kansas City, Mo.-Kans.
- Milwaukee, Wis.
- Minneapolis-St. Paul, Minn.
- New York, N.Y.
- Newark, N.J.
- Philadelphia, Pa.-N.J.
- Pittsburgh, Pa.
- St. Louis, Mo.-Ill.

## South

- Atlanta, Ga.
- Baltimore, Md.
- Dallas, Tex.
- Houston, Tex.
- Memphis, Tenn.
- New Orleans, La.
- San Antonio, Tex.
- Washington, D.C.-Md.-Va.

## West

- Denver, Colo.
- Los Angeles-Long Beach, Calif.
- Phoenix, Ariz.
- San Diego, Calif.
- San Francisco-Oakland, Calif.
- Seattle, Wash.

Both whites and persons of Negro and other races residing in these 30 SMSA's, but outside of the central cities, had a higher level of educational attainment than did those residing in the central cities. About 66 percent of these metropolitan whites 25 years old and over living outside of the central cities were high school graduates as compared with 54 percent of those living in the central cities. Moreover, 28 percent of adult whites residing outside the central cities had completed some college as compared with 23 percent of those residing in the central cities. Among adults of Negro and other races, 45 percent of those living outside the central cities were high school graduates as compared with 39 percent of those living in the central cities. Furthermore, 19 percent of the adults of Negro and other races residing outside the central cities had completed some college as compared with 13 percent of those residing in the central cities.

The educational attainment of persons 25 years old and over in these 30 SMSA's varied by region (table B). In general, persons living in these SMSA's in the West were likely to have a higher level of educational attainment than were those living in the South. Persons living in the SMSA's in the South were likely to have a higher level of educational attainment than were those living in the North. About 67 percent of the metropolitan adults living in the West had completed 4 years of high school or more as compared with 57 percent of those living in the South and 55 percent of those living in the North. Persons living in the SMSA's in both the West and the South were more likely to have completed 4 years of college or more than were those living in the North. About 15 percent of the metropolitan adults living in the West and a similar proportion of those living in the South had completed 4 years of college or more as compared with 12 percent of those living in the North.

**Table A. PERCENT DISTRIBUTION OF PERSONS 25 YEARS OLD AND OVER BY YEARS OF SCHOOL COMPLETED, BY RACE, FOR 30 SELECTED STANDARD METROPOLITAN STATISTICAL AREAS: 1968**

(Annual average of monthly data)

Area and race	Total	Not high school graduate	High school graduate			
			Total	Some college		
				Total	1 to 3 years	4 years or more
30 Selected SMSA's						
Total.....	100.0	41.8	58.2	24.3	11.4	12.9
White.....	100.0	39.2	60.8	25.8	12.0	13.8
Negro and other races.....	100.0	59.6	40.3	14.1	7.7	6.4
In Central Cities						
Total.....	100.0	49.0	50.9	20.7	10.2	10.6
White.....	100.0	45.8	54.2	22.9	10.9	12.0
Negro and other races.....	100.0	60.8	39.2	13.1	7.5	5.6
Outside Central Cities						
Total.....	100.0	35.2	64.8	27.6	12.6	15.0
White.....	100.0	34.3	65.7	28.0	12.8	15.2
Negro and other races.....	100.0	54.7	45.3	18.7	8.9	9.8

**Table B. PERCENT DISTRIBUTION OF PERSONS 25 YEARS OLD AND OVER BY YEARS OF SCHOOL COMPLETED, FOR 30 SELECTED STANDARD METROPOLITAN STATISTICAL AREAS, BY REGION: 1968**

(Annual average of monthly data)

Region of SMSA <sup>1</sup>	Total	Not high school graduate	High school graduate			
			Total	Some college		
				Total	1 to 3 years	4 years or more
North.....	100.0	44.6	55.3	21.4	9.6	11.8
South.....	100.0	42.6	57.4	27.2	12.3	14.8
West.....	100.0	32.6	67.5	31.3	16.5	14.9

<sup>1</sup>See text for listing of SMSA's.

Although the population in some of the SMSA's in the South had a relatively low level of educational attainment, the Washington, D.C.-Md.-Va., SMSA which is included in the South had the highest proportion of adults of any of these selected SMSA's who had completed 4 years of college or more--25 percent.

A comparison of the years of school completed by the adult population in the Nation's three largest SMSA's (New York, N.Y., Los Angeles-Long Beach, Calif., and Chicago, Ill.) also shows

differences in the level of educational attainment (table C). In general, persons living in the Los Angeles-Long Beach SMSA were likely to have a higher level of educational attainment than were those living in the Chicago SMSA. And persons living in the Chicago SMSA were likely to have a slightly higher level of educational attainment than those living in the New York SMSA. About 67 percent of the adults living in the Los Angeles-Long Beach SMSA had completed 4 years of high school or more as compared with 57 percent of those in the Chicago SMSA and 55 percent of

**Table C. PERCENT DISTRIBUTION OF HIGH SCHOOL GRADUATES 25 YEARS OLD AND OVER BY YEARS OF SCHOOL COMPLETED, FOR 30 SELECTED STANDARD METROPOLITAN STATISTICAL AREAS: 1968**

(Annual average of monthly data)

Standard metropolitan statistical area	4 years of high school or more			Standard metropolitan statistical area	4 years of high school or more		
	Total	1 to 3 years of college	4 years of college or more		Total	1 to 3 years of college	4 years of college or more
30 selected SMSA's.....	58.2	11.4	12.9	Memphis, Tenn.....	53.5	12.3	9.3
Atlanta, Ga.....	55.0	13.2	13.0	Milwaukee, Wis.....	57.4	10.3	10.2
Baltimore, Md.....	45.4	7.0	9.5	Minneapolis-St. Paul, Minn.....	67.5	12.0	15.7
Boston, Mass.....	67.4	11.1	16.0	New Orleans, La.....	43.9	9.3	8.9
Buffalo, N.Y.....	51.4	9.0	11.4	New York, N.Y.....	54.6	9.0	12.6
Chicago, Ill.....	56.6	12.1	12.3	Newark, N.J.....	52.6	8.5	11.1
Cincinnati, Ohio-Ky.....	51.5	8.7	10.7	Philadelphia, Pa.-N.J.....	53.4	7.7	11.2
Cleveland, Ohio.....	56.1	9.6	12.5	Phoenix, Ariz.....	61.4	15.3	13.2
Columbus, Ohio.....	63.9	11.3	13.0	Pittsburgh, Pa.....	52.6	6.4	8.9
Dallas, Tex.....	63.1	14.0	16.0	St. Louis, Mo.-Ill.....	47.3	8.5	9.4
Denver, Colo.....	69.0	16.1	16.1	San Antonio, Tex.....	53.9	12.1	10.7
Detroit, Mich.....	51.4	9.1	9.4	San Diego, Calif.....	63.0	15.0	11.9
Houston, Tex.....	59.0	15.1	13.5	San Francisco-Oakland, Calif.....	69.8	15.8	17.6
Indianapolis, Ind.....	55.9	11.1	11.4	Seattle, Wash.....	67.8	16.0	15.4
Kansas City, Mo.-Kans.....	60.7	14.3	11.7	Washington, D.C.-Md.-Va.....	70.9	14.4	25.0
Los Angeles-Long Beach, Calif.....	67.5	17.1	14.1				

those in the New York SMSA. Moreover, about 31 percent of the adults in the Los Angeles-Long Beach SMSA had completed some college as compared with 24 percent of those in the Chicago SMSA and 22 percent of those in the New York SMSA.

## RELATED REPORTS

Data for 1967 on educational attainment for persons 25 years old and over in the same 30 SMSA's covered in this report were published in Current Population Reports, Series P-20, No. 209.

Data on educational attainment for persons 14 years old and over in the United States in March 1959, 1962, 1964, 1965 and 1966, 1967, 1968, 1969, and 1970, were published in Current Population Reports, Series P-20, Nos. 99, 121, 138, 158, 169, 182, 194, and 207, respectively. Data on the age, sex, and color composition of the population of all standard metropolitan statistical areas of the United States for 1960 to 1966 were presented in Current Population Reports, Series P-20, No. 163. Comparable statistics with components of change for 1960 to 1969 were published in the same series in report No. 197.

Statistics on educational attainment of the Negro population in 1967 are presented in Current Population Reports, Series P-20, No. 175. Further information on educational attainment is presented in "Educational Change in a Generation: March 1962," Series P-20, No. 132. In addition, 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 are also available in several reports of the 1960 Census of Population, the most relevant of which is PC(2)-5B, Educational Attainment. Volume I, Characteristics of the Population, chapter C, "General Social and Economic Characteristics," and chapter D, "Detailed Characteristics," also include statistics on educational attainment. Report PC(2)-1C, Nonwhite Population by Race, includes educational data for selected races.

Apart from the different dates at which the statistics were collected, the education data from the 1968 Current Population Survey may differ

from those from the 1960 census and from projections based on the census for the following reasons: (1) Members of the Armed Forces are excluded from the survey. All members of the Armed Forces in the United States and the inmates of institutions are included in the census data. (2) Statistics from both the census and the CPS are subject to sampling and response errors. There are differences in coverage, enumeration techniques (self-enumeration versus direct enumeration), and the methods of allocating non-responses.

The Content Evaluation Study of the 1960 census is a major source of information about the accuracy of census data on educational attainment. A comparison by detailed categories of years of school reported for each level suggests a net overreporting on years of school completed for about 6 percent of the population 25 years old and over.<sup>1</sup> A comparison of CPS with 1960 census figures shows that the CPS figures include more persons with 12 years or more of school completed and fewer with less than 12 years. If the Content Evaluation Study is taken as a standard, the 1960 census figures on educational attainment show a slight upward bias. The CPS figures are still higher than the census figures and may, therefore, be more biased in the direction of high educational attainment.

Because of the differences mentioned above, care should be exercised in comparing the data for 1968 with those from the 1960 census.

## DEFINITIONS AND EXPLANATIONS

Population coverage. The figures in this report for 1968 are sample survey data and relate to the civilian noninstitutional population.

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

Race. The term "race" in this report refers to the division of population into two groups, white and Negro and other races. The group designated as "other races" consists of Indians, Japanese, Chinese, and any other race except white and Negro.

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.

The median years of school completed is defined as the value which divides the population into two equal parts--one-half having completed more schooling and one-half having completed less schooling than the median. This median was computed after the statistics on years of school completed had been converted to a continuous series of numbers (e.g., completion of the first year of high school was treated as completion of the 9th year and the completion of the first year of college as completion of the 13th year). The persons completing a given school year were assumed to be distributed evenly within the interval from .0 to .9 of the year (for example, persons completing the 12th year were assumed to be distributed evenly between 12.0 and 12.9). Because of the inexact assumption as to the distribution within an interval, this median is more appropriately used for comparing groups and the same group at different dates than as an absolute measure of educational attainment.

Assignment of educational attainment for those not reporting. When information on either the highest grade attended or completion of the grade was not reported in the 1968 surveys, entries for the items were assigned using an edit in the computer. The general procedure was to assign an entry for a person that was consistent with entries for other persons with similar characteristics. The specific technique used in the 1968 surveys was as follows:

1. The computer stored reported data on highest grade attended by color and age, and on completion of the grade by age and highest grade attended, for persons 14 years old and over in the population.

2. Each stored value was retained in the computer only until a succeeding person having the same characteristics (e.g., same color and age, in the case of assignments for highest grade attended)

<sup>1</sup>Evaluation and Research Program of the U.S. Censuses of Population and Housing, 1960: Accuracy of Data on Population Characteristics as Measured by Reinterviews, Series ER 60, No. 4, table 12.

and having the item reported, was processed through the computer. Then the reported data for the succeeding person were stored in place of the one previously stored.

3. When one or both of the education items for a person 14 years old and over was not reported, the entry assigned to this person was that stored for the last person who had the same characteristics.

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.

Rounding of estimates. The population figures in table 1 have been rounded to the nearest 100,000. Individual percentages are rounded to the nearest tenth without being adjusted to group totals, which are independently rounded. The percentages are based on numbers rounded to the nearest thousand.

## SOURCE AND RELIABILITY OF THE ESTIMATES

Source of data. The estimated percentages shown in this report are based on an annual average of 1968 monthly data from a subset (i.e., 30 selected standard metropolitan statistical areas) of the Current Population Survey of the Bureau of the Census. The national 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. Households in 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, 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 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 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 D contains the standard errors of estimated percentages. Table 1 contains the base numbers of the percentages to be used in conjunction with table D.

Illustration of use of table of standard errors. Table A of this report shows that in 1968, 59.6 percent of persons of Negro and other races 25 years old and over in the 30 selected SMSA's

were not high school graduates. Table 1 shows that in the 30 selected SMSA's there were 5,000,000 persons of Negro and other races 25 years old and over in 1968. Table D shows the standard error of 59.6 percent on a base of 5,000,000 to be approximately 0.4 percent. Consequently, chances are 68 out of 100 that the estimated 59.6 percent would be within 0.4 percentage points of a complete census figure, and chances are 95 out of 100 that the estimate would be within 0.8 percentage points of a census figure; i.e., this 95 percent confidence interval would be from 58.8 to 60.4 percent.

**Table D. STANDARD ERRORS FOR ESTIMATED PERCENTAGES IN 30 SELECTED STANDARD METROPOLITAN STATISTICAL AREAS**

(68 chances out of 100)

Estimated percentage of persons	Base of percentage (thousands)									
	50	100	250	500	1,000	2,000	5,000	10,000	15,000	20,000
2 or 98.....	0.41	0.31	0.21	0.14	0.10	0.07	0.04	0.03	0.02	0.02
5 or 95.....	0.93	0.79	0.44	0.30	0.20	0.2	0.1	0.07	0.05	0.05
10 or 90.....	1.7	1.3	0.79	0.52	0.39	0.3	0.2	0.1	0.1	0.09
25 or 75.....	2.8	2.0	1.3	0.81	0.59	0.4	0.3	0.2	0.1	0.1
50.....	3.7	2.5	1.6	1.2	0.74	0.5	0.4	0.3	0.2	0.2