

# Population Estimates

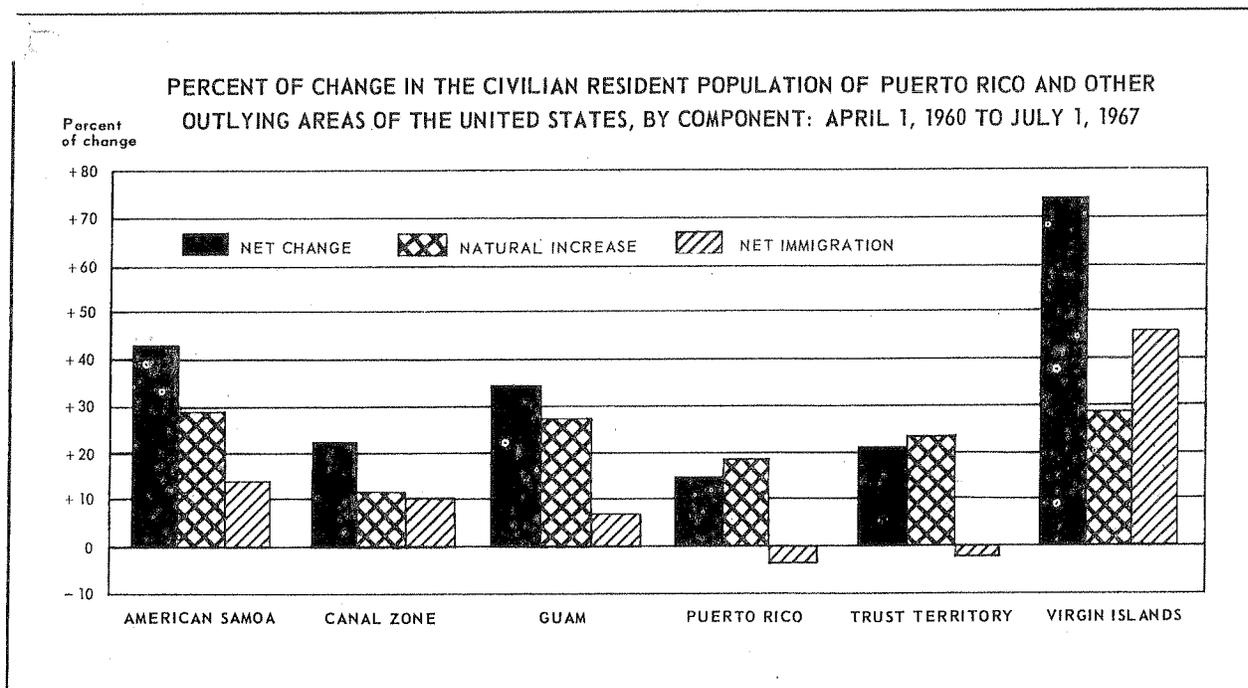
Series P-25, No. 392  
May 2, 1968

## ESTIMATES OF THE POPULATION OF PUERTO RICO AND OTHER OUTLYING AREAS OF THE UNITED STATES: 1960 TO 1967

(The figures in this report supersede those for the corresponding dates given in No. 358 of this series)

This report presents estimates of the total population of the Commonwealth of Puerto Rico and the other principal outlying areas of American sovereignty or jurisdiction for July 1 of each year, 1960 to 1967. The areas included in addition to Puerto Rico are American Samoa, the Canal Zone, Guam, the Virgin Islands of the United States, and the Trust Territory of the Pacific

Islands. This report does not include figures for certain small areas of American sovereignty or jurisdiction, such as Midway, Wake, Canton, and Johnston islands, whose total population numbered only a few thousand. The report also does not deal with other Americans residing outside the United States, such as United States citizens residing in foreign countries and the crews of



For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402, 5 cents.  
Annual subscription (Series P-20, P-23, P-25, P-27, P-28 summaries, P-60, and P-65, combined), \$5.00;  
foreign mailing, \$6.50.



U.S. DEPARTMENT OF COMMERCE, C. R. Smith, Secretary  
William H. Chartener, Assistant Secretary for Economic Affairs  
BUREAU OF THE CENSUS, A. Ross Eckler, Director



United States merchant vessels; this group totaled about 1 1/2 million according to the census count in April 1960.

The estimated total population of Puerto Rico was 2,697,000 on July 1, 1967. Each of the other areas included in this report had fewer than 100,000 inhabitants. The largest, Guam, had an estimated population of 94,000 on July 1, 1967. The smallest, American Samoa, had 29,000 inhabitants at that time.

Each of the outlying areas gained in population from 1960 to 1967, but there was considerable variation among them in percent of growth. The Virgin Islands, American Samoa, and Guam grew most rapidly, with average annual rates of growth of 7.7 percent, 5.0 percent, and 4.7 percent, respectively. The rapid growth of the Virgin Islands is partially attributable to the large numbers of alien contract laborers entering from the British West Indies who live and work in the Islands under special labor programs.

Net out-migration from Puerto Rico was a factor in holding population growth in this area to a somewhat lower rate. In spite of the net out-migration of 91,000 from Puerto Rico in the 1960-67 period, the overall growth for Puerto Rico (14.8 percent) ran higher than that of the United States (11.0 percent) because of continued higher rates of natural increase (excess of births over deaths). Increase in the number of military personnel stationed in the area contributed significantly to the population growth of Guam.

#### METHODOLOGY

The estimate of the civilian population of each area except Guam and the Trust Territory was prepared mainly by a variation of the component method of making postcensal population estimates. For the period since 1960, this variation of the component method involves (1) estimating the civilian population on April 1, 1960, from the census figures for that date, and from figures on the Armed Forces stationed in the area, (2) adding to the civilian population on April 1, 1960, an estimate of births for the period between the census and the estimate date, (3) subtracting an estimate of deaths, (4) adding or subtracting an estimate of net migration, and (5) subtracting an estimate of the net loss of civilians to the Armed Forces. The estimate of the total population of each area was obtained by adding an estimate of the number of persons in the Armed Forces stationed there on the estimate date.

The population of Guam was estimated combining, with the results of an annual compilation from "population-register" type records maintained by the Municipal Commissioners, the numbers of persons residing within military reservations operated by the Navy and the Air Force. In the Trust Territory, there is a special annual count of the indigenous population prepared for the Annual Report to the United Nations on the Administration of the Trust Territory. To this is added an estimate for Federal employees and their dependents based on data from the Civil Service Commission.

The estimates of the population of Puerto Rico and American Samoa were based upon reported statistics for each of the components of population change, with the migration component derived from monthly passenger statistics collected by the governments for these areas. The migration estimate for Puerto Rico, however, is not the sum of the reported monthly figures for this period but the sum of centered 12-month moving averages of the monthly data. Short-term fluctuations in passenger data reflect the seasonal movement of transients (tourists and other visitors) rather than the movement of migrants to a new residence; the movement of transients will tend to cancel out over longer periods. The statistics for Puerto Rico were compiled by the Puerto Rico Planning Board. The net migration of civilians carried by military transport is included on the basis of data from the Department of Defense.

Estimates of the population of the Canal Zone were based on the Census Bureau's Component Method II, in which school enrollment statistics are used to estimate net migration. This method is spelled out in detail in Current Population Reports, Series P-25, No. 339.

The estimates for the Virgin Islands are based on the average of the results of two estimating procedures--Component Method II and a composite method--supplemented with a specific allowance for alien contract laborers ("temporary" workers) living in the Islands.

As indicated above, Component Method II uses reported vital statistics to measure natural increase and school enrollment to measure net migration. In the composite method<sup>1</sup>, independent

<sup>1</sup>Donald J. Bogue and Beverly Duncan, "A Composite Method for Estimating Postcensal Population of Small Areas, by Age, Sex, and Color," National Office of Vital Statistics, Vital Statistics Special Reports, Vol. XLVII, No. 6 (August 24, 1959).

Estimates are prepared for the population in several age groups, using methods and basic data considered most appropriate for each age group. An estimate is then derived for the population as a whole by summing the independently-derived estimate for each age group. In the application here, the number of deaths of persons 45 years old and over, by age and sex, is used to estimate the population 45 years old and over; the number of births is used to estimate females in the child-bearing ages (18 to 44 years) which, in turn, is used to estimate the number of males in the same age group; school enrollment is used to estimate the population of school age (5 through 17 years old). The number of births in the previous 5-year period, in conjunction with school enrollment data, is used to estimate the population under 5 years of age. The estimates for these broad age groups are then summed to yield an estimate of the population at all ages.

In recent years, many "alien contract laborers" (nonimmigrant aliens) have been brought into the Virgin Islands, mainly from the nearby British West Indies, under a special program to work where local labor is not available. The number of such persons living in the Virgin Islands now appears to have reached a level that appreciably affects the size, distribution, and composition of the population of the Virgin Islands. There is much uncertainty as to what extent, if any, this group is included in the data series used in the basic estimating procedures. Furthermore, the unique demographic character of the group suggests that, at best, it may be inadequately reflected in conventional estimating procedures. Consequently, a separate allowance for this component was added to the estimate resulting from the average of the two estimating procedures indicated above. The addition amounted to 3,000 for July 1, 1966, and 4,000 for July 1, 1967 (these amounts are non-cumulative). The amount added was based on a "minimum" estimate of the number of such aliens in the population, derived from figures on the number of aliens reporting under the Alien Address Reports program of the Immigration and Naturalization Service.

The estimates for the Virgin Islands for July 1, 1967, are preliminary, in that data were not yet available from which to prepare 1967 estimates by the composite technique. The 1967 figures are based on the 1966 estimate, plus population

change for July 1, 1966, to July 1, 1967, as estimated by Component Method II. Estimates for 1960 to 1965 for the Virgin Islands consistent with those for 1966 and 1967 are not yet available.

Data on births and deaths were obtained from the local governments for American Samoa, Canal Zone, Guam, and the Trust Territory. Estimates of births and deaths for Puerto Rico and the Virgin Islands were derived from data obtained by the National Center for Health Statistics, U.S. Public Health Service. All the data are classified on an occurrence basis only. Only for Puerto Rico have the estimates of births been adjusted for underregistration.<sup>2</sup> No adjustment was made for underregistration of deaths in any of the areas.

Armed Forces data are based on figures provided by the Department of Defense. The component, net loss of civilians to the Armed Forces, is important only for Puerto Rico. The Puerto Rican Planning Board supplied figures on the balance of inductions, enlistments, and discharges.

#### RELATED REPORTS

Comparable estimates for Puerto Rico, the Canal Zone, and the Virgin Islands, for the years 1940 to 1949, are shown in Current Population Reports, Series P-25, No. 80, and for all the outlying areas for 1950 to 1959 in Series P-25, No. 336. Estimates of the total population of the United States for 1950 to 1967 are given in Series P-25, No. 368. Estimates of the total population of States are given for 1960 to 1967 in Series P-25, No. 380, and for 1950 to 1959 in Series P-25, No. 304.

#### ROUNDING OF ESTIMATES

Each estimate in this report has been rounded independently to the nearest thousand (Puerto Rico) or hundred (other areas) from figures computed to the last digit; hence, the sum of parts may differ from the totals shown. Percents are based on the unrounded figures.

<sup>2</sup>The adjustment factor was obtained by extending to subsequent years the results of the Birth Registration Test conducted by the National Center for Health Statistics in conjunction with the 1950 Census of Population. The factor for 1967 is .94.

Table 1.--PROVISIONAL ESTIMATES OF THE TOTAL RESIDENT AND CIVILIAN RESIDENT POPULATION OF PUERTO RICO AND OTHER OUTLYING AREAS OF THE UNITED STATES: JULY 1, 1967

(Total resident population includes persons in the Armed Forces stationed in each area. Each estimate has been rounded to the nearest thousand for Puerto Rico and to the nearest hundred for the other areas)

Area and type of population	July 1, 1967	April 1, 1960 <sup>1</sup>	Total change, 1960 to 1967		Average annual percent change <sup>2</sup>	
			Number	Percent	1960 to 1967	1950 to 1960
<b>TOTAL RESIDENT POPULATION</b>						
American Samoa.....	28,800	20,051	8,800	+43.7	+5.0	+0.6
Canal Zone.....	55,600	42,122	13,500	+32.1	+3.8	-2.3
Guam.....	94,000	67,044	26,900	+40.2	+4.7	+1.2
Puerto Rico.....	2,697,000	2,349,544	348,000	+14.8	+1.9	+0.6
Trust Territory of the Pacific Islands.....	93,000	76,256	16,700	+21.9	+2.7	+3.0
Virgin Islands of the United States.....	56,000	32,099	23,900	+74.5	+7.7	+1.9
<b>CIVILIAN RESIDENT POPULATION</b>						
American Samoa.....	28,800	20,000	8,800	+43.7	+5.0	+0.6
Canal Zone.....	42,300	34,500	7,800	+22.6	+2.8	-2.2
Guam.....	77,000	57,100	19,900	+34.9	+4.1	+3.5
Puerto Rico.....	2,684,000	2,338,000	346,000	+14.8	+1.9	+0.6
Trust Territory of the Pacific Islands.....	92,000	75,900	16,200	+21.3	+2.7	+3.3
Virgin Islands of the United States.....	55,900	32,000	23,900	+74.7	+7.7	+1.9

<sup>1</sup>Census counts for total resident population except for the Trust Territory where the population was estimated from a census taken in 1958 under the direction of the High Commissioner of the Trust Territory of the Pacific Islands and tabulated by the Bureau of the Census.

<sup>2</sup>Computed by the formula for continuous compounding,  $P_1 = P_0 e^{rt}$ .

Table 2.--ESTIMATES OF THE TOTAL RESIDENT AND CIVILIAN RESIDENT POPULATION OF PUERTO RICO AND OTHER OUTLYING AREAS OF THE UNITED STATES: JULY 1, 1960 TO 1967

(Total resident population includes persons in the Armed Forces stationed in each area. Each estimate has been rounded to the nearest thousand for Puerto Rico and to the nearest hundred for the other areas)

Area and type of population	1967	1966	1965	1964	1963	1962	1961	1960
<b>TOTAL RESIDENT POPULATION</b>								
American Samoa.....	28,800	27,300	25,000	23,000	21,900	21,100	19,900	20,000
Canal Zone.....	55,600	55,700	54,100	53,900	50,000	44,800	43,200	42,300
Guam.....	94,000	79,400	76,500	69,100	68,300	66,400	64,600	66,400
Puerto Rico.....	2,697,000	2,667,000	2,632,000	2,578,000	2,520,000	2,459,000	2,409,000	2,362,000
Trust Territory of the Pacific Islands.....	93,000	94,100	91,900	89,400	85,800	82,100	78,900	77,000
Virgin Islands of the United States.....	56,000	53,900	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
<b>CIVILIAN RESIDENT POPULATION</b>								
American Samoa.....	28,800	27,300	25,000	23,000	21,900	21,000	19,900	20,000
Canal Zone.....	42,300	43,600	42,800	42,400	39,500	36,300	35,000	34,600
Guam.....	77,000	65,800	67,700	60,800	59,500	58,600	56,700	57,000
Puerto Rico.....	2,684,000	2,656,000	2,621,000	2,567,000	2,509,000	2,449,000	2,399,000	2,349,000
Trust Territory of the Pacific Islands.....	92,000	93,700	91,700	89,300	85,600	81,800	78,600	76,500
Virgin Islands of the United States.....	55,900	50,200	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available.

Table 3.--ESTIMATES OF THE COMPONENTS OF CHANGE IN THE TOTAL RESIDENT AND CIVILIAN RESIDENT POPULATION OF PUERTO RICO AND OTHER OUTLYING AREAS OF THE UNITED STATES: 1960 TO 1967

(Total resident population includes persons in the Armed Forces stationed in each area. Each estimate has been rounded to the nearest thousand for Puerto Rico and to the nearest hundred for the other areas)

Area and type of population	July 1, 1967	April 1, 1960 <sup>1</sup>	Net change		Components of change: April 1, 1960, to July 1, 1967			
			Number	Percent	Births <sup>2</sup>	Deaths <sup>2</sup>	Net migration	
							Number	Percent
<b>TOTAL RESIDENT POPULATION</b>								
American Samoa.....	28,800	20,051	8,800	+43.7	6,800	900	+2,900	+14.3
Canal Zone.....	55,600	42,122	13,500	+32.1	5,100	1,000	+9,400	+22.3
Guam.....	94,000	67,044	26,900	+40.2	18,300	2,400	+11,000	+16.4
Puerto Rico.....	2,697,000	2,349,544	348,000	+14.8	563,000	124,000	-91,000	-3.9
Trust Territory of the Pacific Islands.....	93,000	76,256	16,700	+21.9	21,100	3,400	-1,100	-1.4
Virgin Islands of the United States.....	56,000	32,099	23,900	+74.5	11,800	2,600	+14,700	+45.8
<b>CIVILIAN RESIDENT POPULATION</b>								
American Samoa.....	28,800	20,000	8,800	+43.7	6,800	900	+2,900	+14.3
Canal Zone.....	42,300	34,500	7,800	+22.6	5,100	1,000	+3,700	+10.7
Guam.....	77,000	57,100	19,900	+34.9	18,300	2,400	+4,000	+7.0
Puerto Rico.....	2,684,000	2,338,000	346,000	+14.8	563,000	124,000	-93,000	-4.0
Trust Territory of the Pacific Islands.....	92,000	75,900	16,200	+21.3	21,100	3,400	-1,600	-2.1
Virgin Islands of the United States.....	55,900	32,000	23,900	+74.7	11,800	2,600	+14,700	+45.9

<sup>1</sup>Census counts for total resident population except for the Trust Territory where the population was estimated from a census taken in 1958 under the direction of the High Commissioner of the Trust Territory of the Pacific Islands and tabulated by the Bureau of the Census.

<sup>2</sup>Births and deaths were estimated for the 6 months ending July 1, 1967.