

NEW POPULATION ESTIMATES FOR THE PHILIPPINES 1948-1962

*By Edith Adams **

In the face of considerable evidence that the population of the Philippines is currently growing at a much faster rate than has been implied in the official population estimates published by the Government, the Inter-agency Committee on Demography agreed in April, 1958 on certain procedures for revising the official figures.¹ For current estimates and short-term projections, it was agreed to adopt an average annual rate of growth of 2.95 per cent and to use as the starting point estimates of private household population derived from the March 1957 Philippine Statistical Survey of Households, plus an estimated 200,000 population living outside private households (institutional, armed forces and "floating" population). The Committee thus adopted the following series of total population estimates for 1957 to 1962:

July 1, 1957	23,322,000
July 1, 1958	24,010,000
July 1, 1959	24,718,000
July 1, 1960	25,448,000
July 1, 1961	26,198,000
July 1, 1962	26,971,000

The next step was to distribute these totals by sex and age, and to estimate the total population, as well as its distribution by sex and age, annually for the period between the 1948 census and the 1957 survey. It was the feeling of the Committee that the methods recommended by the United Nations should be

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¹ The Inter-agency Committee on Demography, established by the Office of Statistical Coordination and Standards of the National Economic Council, included representatives of the Bureau of the Census and Statistics, the Statistical Center of the University of the Philippines, the Bureau of Health, the Institute of Hygiene, the Government Service Insurance System, Office of National Planning of the NEC, the Philippine Statistical Association, the International Cooperation Administration (USA), and the United Nations.

NEW POPULATION ESTIMATES

followed in calculating the estimates by sex and age.¹ In making population projections for many countries of the world the United Nations has adopted the "component method" whereby sex-age specific survival ratios, computed from an appropriate life table, are applied to the population in each 5-year sex-age group to determine the probable numbers who will survive to the next higher age group five years hence.² Births during the next five-year period are estimated by applying fertility rates to the projected numbers of women in the child-bearing ages. The results of these projections for the various sex-age groups are summed to give an estimate of the size of the total population at the future date. This method is believed to be preferable to one in which the total population is projected according to a mathematical formula and the results then distributed by sex and age, perhaps by assuming that the sex-age distribution will remain constant as given at the start of the projection. Particularly when the age structure exhibits irregularities arising from actual causes (for example war casualties) rather than from misstatements of age, it is desirable to use the component method of projection so that any such deficits in a given age group can be carried through to the next higher group five years later.

Since the Committee on Demography had already approved the projection of the total population of the Philippines by mathematical formula, some modification of the United Nations' method was necessary. The best procedure in this instance seemed to be to apply the "component method", using a life table giving the closest approximation to the rate of population increase agreed upon by the Committee, and then prorate the difference between the total derived by this method and that officially adopted by the Committee.

Before undertaking a projection of the population by sex and age in cases where age reporting is subject to considerable

¹ The United Nations has made population estimates and projections for the Philippines which show a considerably higher total population than the new population estimates adopted by the Government. While the author believes that the UN estimates are to be preferred, she has cooperated with the National Economic Council in preparing the alternative estimates presented in this paper. These estimates are in line with the somewhat different assumptions agreed upon by the Committee on Demography of which she was a member.

² A detailed description of the "component" and other methods of population projections is given in the United Nations manual, *Methods for Population Projections by Sex and Age* (ST/SOA/Series A, Population Studies No. 25).

NEW POPULATION ESTIMATES

inaccuracies, it is desirable to first smooth the age distribution. It is also desirable in many cases to correct the data for under-enumeration of children. Actual irregularities in the age structure arising from war losses, birth deficits during war-time, etc., should, of course, not be eliminated. Where the age data to be used in the projection are derived from a source which does not cover the entire population—as in the case of the Philippine Statistical Survey of Households—it is also desirable to estimate the sex-age distribution of the groups omitted from coverage.

To obtain the estimated numbers in each sex-age group as of July 1, 1957, at the start of the projection, we have distributed the total population—23,322,000—according to the distribution shown in the United Nations projection for the same date. This distribution was based on the May and October 1956 PSSH survey data, smoothed and adjusted to take account of some of the factors mentioned above. The distribution in the UN projection was used mainly as a matter of convenience, since the considerable work of smoothing and adjusting the survey data had already been done there. It might have been preferable to utilize the sex-age distributions of the 1957 survey rounds (which were not available at the time the UN projection was prepared), add in estimates of the various groups of non-private household population by sex and age, and then smooth and adjust the data for misstatements of age and under-reporting of young children. Such a procedure is illustrated in Appendix I. It will be seen that the July 1957 estimates derived in this manner do not differ markedly from those of the UN projection so far as age structure is concerned, but they result in a lower ratio of males to females.

On the whole there seems to be no clear choice as to which sex-age distribution more closely represents the population of the Philippines in mid-1957. With more research it might be possible to obtain better estimates of the size and composition of the various groups not covered by the survey, as well as a better indication of the types of errors which occur in age reporting. The estimates and projections which are presented here must necessarily be considered as only an approximate guide to current trends in the Philippine population, as they are based on data which are less than adequate. We, nevertheless, believe that they represent a considerable improvement over the official estimates previously in use and that they may satisfy the needs of the Government for planning purposes until the 1960 census results become available.

NEW POPULATION ESTIMATES

1. Estimates for the period 1957-1962

Table 1 shows the calculation of population estimates by sex and age for the period 1957-1962. The first step was to estimate the numbers in each 5-year age group who will survive to be five years older in 1962. Since statistics on registered deaths in the Philippines are unsatisfactory, it was necessary to utilize the model life tables which have been constructed by the United Nations and which are believed to cover the entire range of mortality conditions existing in the world today.¹ We select the model life table believed to most closely approximate mortality conditions in the Philippines—that with life expectancy at birth of 45 years—and which coupled with a crude birth rate near 50, yields a rate of population growth of about 2.9 per cent per year. The P_x functions of this life table, i.e., the survival ratios from one 5-year group to the next, were then applied to the numbers in each age group.² This gives the population which will be 5 years of age and over in 1962. It remains to estimate the number of births occurring between mid-year 1957 and mid-year 1962 and the number of these children who will survive to be 0-4 years of age at the latter date.

Calculation of births during 1957-1962. The calculation of the number of births which may be expected during this period is shown in Table I-A. The United Nations has carried out detailed studies in an effort to estimate the probable level of fertility in the Philippines, and arrived at a figure of 48.7 as the best current estimate of the crude birth rate. Applying this rate to the total population estimate for mid-year 1957, we obtain an estimate of 1,135,781 births during 1957.

The number of births is affected by the proportion of women in the childbearing ages and this proportion may change owing to shifts in age structure. For estimating future births it is therefore desirable to calculate what is referred to as a "sex-age adjusted birth rate". This is a device for eliminating the effects of changes in sex-age structure in estimating future births. The "sex-age adjusted birth rate" is defined as

¹ For a further explanation of the model life tables see United Nations, *Age and Sex Patterns of Mortality (ST/SOA/Series A, Population Studies No. 22)*.

² The survival ratios are given in Appendix Table V of the United Nations, *Methods for Population Projections by Sex and Age (op. cit.)*.

NEW POPULATION ESTIMATES

a "sex-age adjusted birth rate". . . This is a device for eliminating the effects of changes in sex-age structure in estimating future births. The "sex-age adjusted birth rate" is defined as the number of births per 1000 of a weighted aggregate of the number of women in the various five-year age groups from 15 to 44. A standard set of weights is used in computing this aggregate as follows:

15-19 years.....	1
20-24 years.....	7
25-29 years.....	7
30-34 years.....	6
35-39 years.....	4
40-44 years.....	1

These weights are roughly proportional to the fertility rates of the various age groups, as determined by examination of statistics of birth by age of mother for various countries. It has been found that even though absolute levels of fertility may be very different for two countries, the pattern of fertility by age is often similar.¹

The "sex-age adjusted birth rate" for the Philippines in 1957 is computed to be 53.07. It was assumed that this rate would remain constant throughout the short period under consideration. We next weighted the female survivors aged 15-44 years in 1962 and obtained the mean of the weighted female population in these ages for 1957 and 1962. Sex-age adjusted quinquennial birth rates for each sex were estimated by multiplying the 1957 rate by 5 and assuming the standard ratio of 105 male births for every 100 female births. These rates were applied to the mean weighted female population of child-bearing age to obtain an estimate of birth occurring from 1957 to 1962. Survival ratios *P* given in the model life tables were then applied to determine the numbers likely to survive to reach ages 0-4 in 1962.

Final adjustment of 1962 data and estimates for intervening years. The total population for 1962 obtained by adding the numbers 0-4 years to the population 5 years and over is 26,945,601—a figure only slightly lower than the 26,971,000 adopted by the Committee. The small difference was prorated among the various age groups.

To obtain annual estimates for each sex-age group, we interpolated between 1957 and 1962, allowing a geometric rate of growth. When the interpolated data for the various age

¹ For a fuller explanation of the derivation of these weights see United Nations, *Methods for Population Projections by Sex and Age*, pp. 42-45

NEW POPULATION ESTIMATES

groups were summed, the totals did not agree exactly with those adopted by the Committee, and the small differences were again pro-rated.

II. Estimates for the period 1948-1957

While the Committee recommended that an annual rate of growth of 2.95 per cent be used in making population estimates for the period from 1957 onward, the annual rate of growth in the preceding decade was much lower, if one accepts both the 1948 census total and the 1957 estimate adopted by the Committee. At the 1948 census, taken in October, the population stood at 19,234,000; a rise to 23,322,000 by mid-year 1957 implies an average annual rate of growth of 2.2 per cent. Instead of assuming this rate of increase to have been constant throughout the period, it appeared preferable to assume an annual rate of growth lower than the average during the first half of the period, and a rate higher than the average during the second half in order to avoid a sudden sharp increase in the amount of population growth between 1956-57 and 1957-58. It thus seemed not unreasonable to adopt a rate of growth of 2.0 per cent for the period 1947-52 and 2.4 per cent for the period 1952-57.

On the basis of the stated assumptions, the total population figures for the years from 1948 to 1957 are as follows:

Oct. 1948 (census)	19,234,000
July 1949	19,520,000
July 1950	19,910,000
July 1951	20,308,000
July 1952	20,714,000
July 1953	21,211,000
July 1954	21,720,000
July 1955	22,241,000
July 1956	22,775,000
July 1957	23,322,000

Estimates by sex and age for the period 1952-1957. In order to obtain estimates of the population by sex and age for the period before 1957, the process of "reverse survival" was applied. Table II shows the calculations for the period 1952-1957. The starting point is the July 1957 population as previously estimated. The most closely corresponding model life table for this period, i.e., the one which will give a rate of increase nearest to 2.4 per cent per annum, is one with life

NEW POPULATION ESTIMATES

expectancy at birth of 40 years. Each survival ratio (P^x value) from this life table is divided into the number in the next higher five-year age group in 1957. This gives an estimate of the number in the age group in question in 1952 from which the present numbers in the next higher age group have survived. The results were summed for all ages and both sexes and gave a total of 20,528,199, as compared with the total of 20,714,000 previously recommended for adoption for 1952. The difference is then pro-rated among the various age groups. The average annual rate of growth of each sex-age group is then computed and an interpolation is made to obtain annual estimates for each group. The results are summed and adjusted to the totals for each year given above.

Estimates by sex and age for the period 1947-1952. The calculations for this period are shown in Table III. The procedure was the same as that adopted for 1952-1957, except that the starting point was the 1952 population calculated in Table II, and the model life table used was that with life expectancy at birth of 35 years.

It will be noted that the procedures described above result in estimates which ignore the age distribution of the 1948 census. Various tests applied to the census age data have indicated that these statistics are subject to considerable inaccuracies, and it therefore appeared preferable to utilize the age distribution from the PSSH data and reverse-survive the cohorts to obtain statistics for the earlier years.

Appendix I. Adjustment of Survey Data by Sex and Age

In the attached tables one method for obtaining a sex-age distribution of the population of the Philippines at mid-year 1957 is illustrated. Table A shows the estimates of private household population by sex and age derived from the three 1957 PSSH survey rounds. The estimate for the three surveys have been averaged and to them has been added the estimated non-private household population distributed by sex and age. At present there is no good basis for estimating the sex-age distribution of any of the groups constituting the non-private household population—with the exception of the armed forces—and the procedures used are arbitrary. [The 1948 census results provide a basis for estimating the totals of the armed forces, correctional and other institutional populations, but the census data were not tabulated by age.] Because of their ready availability, United States age distributions of the

NEW POPULATION ESTIMATES

armed forces, of correctional and other institutional populations, as shown in the 1950 census results of that country, were applied to the estimated totals in these groups for the Philippines. In the case of the sacadas and their dependents, the age distribution of migrants enumerated in the May 1957 PSSH was used. [By this procedure we have no doubt underestimated the numbers in the young adult ages, since persons who move about so freely as to be easily missed in the survey are likely to be concentrated in these ages. Moreover, young migrant workers without dependents are frequently found in dwelling units other than private households and are thus excluded from survey coverage. The sex distribution of the migratory group not covered by the survey is equally difficult to estimate; it is here assumed that males outnumber females by a 2 to 1 ratio.]

Once an estimate of the total population by age is obtained, the next step is to adjust the numbers in the various sex-age groups by means of a smoothing formula. The formula often used by demographers is the following:

$$= 1/16 (-S_{-2} + 4S_{-1} + 10S + 4S_1 - S_2)$$

where \bar{X} is the adjusted number of persons in the five-year age group to be computed; S is the reported number of persons in the same age group; S_{-2} and S_{-1} are the reported numbers in the two preceding five-year age groups; and S_1 and S_2 are the reported numbers in the two subsequent five-year age groups. In Table B we have applied this formula to derive adjusted figures for the age groups 10 through 74. The numbers in the youngest and oldest age groups have to be dealt with separately.

For the ages 0-4 and 5-9, which in the PSSH statistics appear to be subject to under- and over-enumeration respectively, the estimates from the survey are replaced by figures derived by estimating births during the periods 1947-52 and 1952-57, and survivors in 1957 from those births. [To obtain these estimates the numbers of women in the childbearing ages obtained in Table B are reverse-survived to 1952 and 1947 (See Table C); they are then weighted and the sex-age adjusted fertility rate of 53.07 is applied to yield estimates of births during 1947-52 and 1952-57. The survivors from these births are estimated by applying survival ratios from a model life table with expectation of life at birth of 40 years. (Table D).]

NEW POPULATION ESTIMATES

The survey does not provide a breakdown of the population aged 65 years and over by detailed age groups. Therefore, the five-year groups from 65-84 and the group 85 and over have been estimated from the age distribution of the model stable population believed to correspond most closely to the population of the Philippines.

The smoothed estimates by age are shown in Table E. After smoothing, the figures no longer add to the original totals, and a final pro-rating is necessary to bring them into agreement with the totals for each sex obtained in Table A. Table F shows a comparison of the sex-age distribution of the UN projection and of the smoothed and adjusted 1957 PSSH data as derived in Appendix Tables A-E. While the age distributions of the two sets of figures do not differ very greatly, there are rather substantial differences in the sex ratios for some of the age groups. The method we have illustrated here seems to yield more realistic sex ratios for the youngest age groups, whereas it yields sex ratios which appear to be too low for the young adult ages and too high for the upper ages. For these age groups the sex ratios shown in the UN projection are more reasonable.

The number of males of all ages per 100 females is 100.4 in our smoothed and adjusted 1957 figures as compared with 101.4 in the UN projection. The former figure is closer to the ratio of males to females found at the 1948 census (100.7), but it might be supposed that the sex ratio at that date was abnormally low owing to male war casualties.

TABLE I. POPULATION ESTIMATES FOR THE PHILIPPINES: 1957-1962
(Sheet 1)

	Total Population July 1957 ^a	Survival ratios (Px of Model Life Table) c = 45	Estimated Population July 1962	1962 Adjusted to Control	Average Annual Rate of Increase	1958	1959	1960	1961
Total both Sexes	23,322,000		26,945,601	26,971,000		24,007,703	12,445,901	12,813,909	13,193,406
Total Males	11,742,925		13,571,787	13,584,580		12,089,022	2,314,387	2,386,133	2,460,103
0-4	2,177,302	.9287	2,534,191 ^b	2,536,580	3.10	2,244,798	1,882,141	1,928,442	1,975,882
5-9	1,792,848	.9785	2,022,060	2,023,966	2.46	1,836,952	1,601,177	1,651,294	1,702,980
10-14	1,505,460	.9783	1,754,302	1,755,956	3.13	1,552,581	1,317,012	1,367,322	1,419,554
15-19	1,221,877	.9681	1,472,792	1,474,180	3.82	1,268,553	864,660	897,258	931,085
20-24	1,003,957	.9615	1,182,899	1,184,014	3.35	1,037,590	699,517	722,531	746,302
25-29	802,975	.9592	965,305	966,215	3.77	833,247	593,557	604,478	615,600
30-34	655,665	.9551	770,214	770,940	3.29	677,236	520,154	527,540	535,031
35-39	572,303	.9473	626,226	626,816	1.84	582,833	442,231	452,225	462,445
40-44	505,690	.9342	542,143	542,654	1.42	512,871	351,754	363,256	375,134
45-49	422,899	.9150	472,416	472,861	2.26	432,457	263,922	273,318	283,048
50-54	329,831	.8877	386,953	387,318	3.27	340,616	194,532	199,279	204,141
55-59	246,083	.8488	292,791	293,067	3.56	254,849	144,865	145,580	146,279
60-64	185,575	.7924	208,879	209,076	2.44	189,898	99,690	100,527	101,371
65-69	143,504	.7116	146,891	147,029	0.48	144,193	54,880	56,340	57,839
70-74	98,036	.6054	102,117	102,213	0.84	98,860	29,053	30,113	31,212
75-79	52,073	.4757	59,351	59,407	2.66	53,458	21,714,791	25,443,952	26,195,899
80-84	20,802	.2768	24,771	24,794	3.65	28,030			
85 and over	6,241		7,486	7,493					

143

^a Published total 23,322,000 distributed by sex and age on the basis of sex-age distribution of U.N. projection for mid-1957.

^b Estimated in Table I-A.

^c Adjustment factor = $\frac{26,971,000}{26,945,601} = 1.0009426$

TABLE I. POPULATION ESTIMATES FOR THE PHILIPPINES: 1957-1962 (Continuation)
(Sheet 1)

	Total Population July 1957 ^a	Survival ratios (Px of Model Life Table) $\frac{c}{d} = .45$	Estimated Population July 1962	1962 Adjusted to Control ^c	Average Annual Rate of Increase	1958	1959	1960	1961
Total Females	11,579,075	13,373,814	13,386,420	11,918,681	12,268,890	12,630,043	13,002,493
0-4	2,120,205	.9300	2,468,627 ^b	2,470,954	3.11	2,186,143	2,254,132	2,324,236	2,396,520
5-9	1,686,267	.9773	1,971,791	1,973,650	3.20	1,740,228	1,795,915	1,853,384	1,912,692
10-14	1,398,878	.9764	1,647,989	1,649,542	3.35	1,445,740	1,494,172	1,544,227	1,595,959
15-19	1,206,651	.9671	1,365,864	1,367,151	2.53	1,237,179	1,268,480	1,300,573	1,333,477
20-24	1,042,973	.9606	1,166,952	1,168,052	2.29	1,066,857	1,091,288	1,116,278	1,141,841
25-29	848,843	.9577	1,001,880	1,002,824	3.39	877,619	907,370	938,130	969,933
30-34	685,355	.9550	812,937	813,703	3.49	709,274	734,028	759,646	786,158
35-39	583,342	.9513	654,514	655,131	2.55	597,051	611,082	625,442	640,140
40-44	506,832	.9439	554,933	555,456	1.85	516,208	525,758	535,485	545,391
45-49	421,186	.9304	478,399	478,850	2.60	432,187	443,373	454,901	466,728
50-54	317,079	.9098	391,871	392,240	4.34	330,840	345,198	360,180	375,812
55-59	226,485	.8761	288,478	288,750	4.98	237,764	249,605	262,035	275,934
60-64	179,856	.8230	198,424	198,611	2.00	183,453	187,122	190,864	194,681
65-69	153,020	.7443	145,021	148,161	-0.64	152,041	151,068	150,101	149,140
70-74	108,675	.6358	113,893	114,000	0.96	109,718	110,771	111,834	112,906
75-79	59,743	.5040	69,096	69,161	3.00	61,535	63,381	65,282	67,240
80-84	25,275)	.2979	30,110	30,138)	3.59	34,894	36,147	37,445	38,789
85 and over.....	8,410)		10,035	10,044)					

^a Published total 23,322,000 distributed by sex and age on the basis of sex-age distribution of U.N. projection for mid-1957.

^b Estimated in Table I-A.

^c Adjustment factor = $\frac{26,971,000}{26,945,601} = 1.0009426$

TABLE I. POPULATION ESTIMATES FOR THE PHILIPPINES: 1957-1962

(Sheet 2)

	1957	Adjusted from Sheet I				1962
		1958	1959	1960	1961	
Both Sexes—Control Total.....	23,322,000	24,010,000	24,718,000	25,448,000	26,198,000	26,971,000
Total by adding interpolated data		24,007,703	24,714,791	25,443,952	26,195,899	
Adjustment factor		1.0000957	1.0001298	1.0001591	1.0000802	
Total Males.....	11,742,925	12,090,179	12,447,516	12,815,949	13,194,465	13,584,580
0-4	2,177,302	2,245,013	2,314,687	2,386,513	2,460,300	2,536,580
5-9	1,792,848	1,837,128	1,882,385	1,928,749	1,976,040	2,023,966
10-14	1,505,460	1,552,730	1,601,385	1,651,557	1,703,117	1,755,956
15-19	1,221,877	1,268,674	1,317,183	1,367,540	1,419,668	1,474,180
20-24	1,003,957	1,037,689	1,072,488	1,108,449	1,145,492	1,184,014
25-29	802,975	833,327	864,772	897,401	931,160	966,215
30-34	655,665	677,301	699,608	722,646	746,362	770,940
35-39	572,303	582,889	593,634	604,574	615,649	626,816
40-44	505,690	512,920	520,222	527,624	535,074	542,654
45-49	422,899	432,498	442,288	452,297	462,482	472,861
50-54	329,831	340,649	351,800	363,314	375,164	387,318
55-59	246,088	254,873	263,956	273,361	283,071	293,067
60-64	185,375	189,916	194,557	199,311	204,157	209,076
65-69	143,504	144,207	144,904	145,603	146,291	147,029
70-74	98,036	98,869	99,703	100,543	101,379	102,213
75-79	52,073	53,463	54,887	56,349	57,844	59,407
80 and over	27,043	28,033	29,057	30,118	31,215	32,287

TABLE I. POPULATION ESTIMATES FOR THE PHILIPPINES: 1957-1962 (Continuation)
(Sheet 2)

	1957	Adjusted from Sheet I				1962
		1958	1959	1960	1961	
Total Females.....	11,579,075	11,919,822	12,270,483	12,632,053	13,003,535	13,386,420
0-4	2,120,205	2,186,352	2,254,425	2,324,606	2,396,712	2,470,954
5-9	1,686,267	1,740,395	1,796,148	1,853,679	1,912,845	1,973,650
10-14	1,398,878	1,445,878	1,494,366	1,544,473	1,596,087	1,649,542
15-19	1,206,651	1,237,297	1,268,615	1,300,780	1,333,584	1,367,151
20-24	1,042,973	1,066,959	1,091,430	1,116,456	1,141,933	1,168,052
25-29	848,843	877,703	907,488	938,279	970,011	1,002,824
30-34	685,355	709,342	734,123	759,767	786,221	813,703
35-39	583,342	597,108	611,161	625,542	640,191	655,131
40-44	506,832	516,257	525,826	535,570	545,435	555,456
45-49	421,186	432,178	443,431	454,973	466,765	478,850
50-54	317,079	330,872	345,243	360,237	375,842	392,240
55-59	226,485	237,787	249,637	262,077	275,106	288,750
60-64	179,856	183,471	187,146	190,894	194,697	198,611
65-69	153,020	152,056	151,088	150,125	149,152	148,161
70-74	108,675	109,729	110,785	111,852	112,917	114,000
75-79	59,743	61,541	63,389	65,292	67,245	69,161
80 and over	33,685	34,897	36,152	37,451	38,792	40,182

TABLE I-A. ESTIMATE OF BIRTHS 1957-1962 AND SURVIVORS AGED 0-4 IN 1962

Age Group	Females July 1957	Weights	Product	Estimated Births 1957	"Sex-age Adjusted Birth Rate"	Females July 1962	Weights	Product	Mean Weighted	Quinquennial Birth Rates (Age-Sex adjusted)	
										Male	Female
15-19	1,206,651	1	1,206,651			1,365,861	1	1,365,864			
20-24	1,042,973	7	7,300,811			1,166,952	7	8,168,664			
25-29	843,843	7	5,941,901			1,001,880	7	7,013,160			
30-34	685,355	6	4,112,130			812,937	6	4,877,622			
35-39	583,342	4	2,333,368			654,514	4	2,618,056			
40-44	506,832	1	506,832			554,933	1	554,933			
			<u>21,401,693</u>	1,135,781	53.07			<u>24,598,290</u>	22,999,996	135.91	129.44

147

Estimated Births 1957-62

Estimated Survivors

Male

Female

Male

Female

3,125,929

2,977,119

2,534,191

2,468,627

TABLE II. POPULATION ESTIMATES FOR THE PHILIPPINES: 1952-57

(Sheet 1)

	Total Population July 1957	Survival ratios (Px of Model Life Table $e_0=40$)	Estimated Population July 1952	Population Adjusted to Control ^a 1952	Average Annual Rate of Increase	1953	1954	1955	1956
Total Both sexes	23,322,000		20,528,199	20,714,000		21,207,894	21,715,233	22,236,404	22,771,801
Total Males.....	11,742,925		10,331,531	10,425,542		10,674,632	10,931,060	11,194,524	11,465,231
0-4	2,177,302	.9098	1,970,596	1,988,132	1.83	2,024,820	2,061,874	2,099,606	2,138,029
5-9	1,792,848	.9725	1,548,031	1,562,042	2.80	1,605,779	1,650,741	1,696,962	1,744,477
10-14	1,505,460	.9729	1,255,912	1,267,379	3.50	1,311,634	1,357,541	1,405,055	1,454,232
15-19	1,221,877	.9612	1,044,483	1,053,973	3.00	1,085,555	1,118,121	1,151,665	1,186,215
20-24	1,003,957	.9530	842,576	850,202	3.39	879,024	908,823	939,632	971,486
25-29	802,975	.9494	690,610	696,861	2.87	716,861	737,435	758,599	780,371
30-34	655,665	.9437	606,446	611,935	1.40	620,502	629,189	637,998	646,930
35-39	572,303	.9336	541,656	546,559	0.92	551,587	556,662	561,783	566,951
40-44	505,690	.9180	460,674	464,244	1.70	472,746	480,783	488,956	497,268
45-49	422,599	.8964	367,951	371,281	2.64	381,083	391,144	401,470	412,069
50-54	323,831	.8664	284,035	286,506	2.85	294,774	303,176	311,815	320,702
55-59	246,088	.8243	224,724	226,758	1.65	230,500	234,303	238,169	242,099
60-64	185,375	.7660	187,342	189,038	-0.38	188,320	187,604	186,891	186,181
65-69	143,504	.6820	143,748	145,049	-0.21	144,744	144,440	144,137	143,834
70-74	98,036	.5732	90,846	91,668	1.34	92,896	94,141	95,402	96,680
75-79	52,073	.4430	46,957	47,382	1.91	48,287	49,209	50,149	51,107
80-84	20,802)	.2502	24,944	25,170	1.39	25,520	25,875	26,235	26,600
85 and over.....	6,241)								

TABLE II: POPULATION ESTIMATES FOR THE PHILIPPINES: 1952-57 (Continued)

(Sheet 2)

	Total Population July 1957	Survival ratios (Px of Model Life Table ${}_{e_0}=40$)	Estimated Population July 1952	Population Adjusted to Control ^a 1952	Average Annual Rate of Increase	1953	1954	1955	1956
Total Females	11,579,075		10,196,668	10,288,958		10,533,262	10,784,173	11,041,880	11,306,570
0-4	2,120,205	.9105	1,852,023	1,868,786	2.55	1,916,440	1,965,309	2,015,424	2,066,817
5-9	1,686,267	.9707	1,441,102	1,454,145	3.01	1,497,915	1,543,002	1,589,446	1,637,288
10-14	1,398,378	.9701	1,243,842	1,255,100	2.20	1,282,712	1,310,932	1,339,773	1,369,248
15-19	1,206,651	.9587	1,087,903	1,097,750	1.91	1,118,717	1,140,084	1,161,860	1,184,052
20-24	1,042,975	.9500	893,519	901,606	2.95	928,203	955,585	983,775	1,012,796
25-29	848,843	.9456	724,783	731,343	3.02	753,430	776,184	799,625	823,774
30-34	686,355	.9419	619,325	624,931	1.86	636,555	648,395	660,455	672,759
35-39	583,342	.9372	540,794	545,689	1.34	553,001	560,411	567,921	575,531
40-44	506,882	.9290	453,376	457,480	2.07	466,950	476,616	486,482	496,552
45-49	421,186	.9140	346,914	350,054	3.76	363,216	376,873	391,043	405,746
50-54	317,079	.8910	254,192	256,493	4.33	267,599	279,186	291,275	303,887
55-59	226,435	.8538	210,654	212,561	1.28	215,282	218,038	220,829	223,656
60-64	179,856	.7967	192,067	193,805	-1.48	190,937	188,111	185,327	182,584
65-69	153,020	.7145	152,099	153,476	-0.66	153,384	153,292	153,200	143,108
70-74	108,675	.6029	99,093	99,990	1.60	101,680	103,393	105,145	106,922
75-79	59,743	.4687	53,926	54,414	1.88	55,437	56,479	57,541	58,623
80-84	25,275)	.2708	31,056	31,337	1.49	31,804	32,278	32,753	33,247
85 and over	8,410)								

TABLE II. POPULATION ESTIMATES FOR THE PHILIPPINES: 1952-57

(Sheet 2)

	1952	Adjusted from Sheet 1				1957
		1953	1954	1955	1956	
Both Sexes—Control Total.....	<u>20,714,000</u>	<u>21,211,000</u>	<u>21,720,000</u>	<u>22,241,000</u>	<u>22,775,000</u>	<u>23,322,000</u>
Total by Adding Interpolated data		21,215,730	21,750,921	22,259,962	22,803,245	
Adjustment factor9997771	.9994974	.9991482	.9987614	
Total Males.....	10,425,012	10,675,932	10,933,037	11,196,245	1,466,069	11,742,925
0-4	1,988,432	2,025,130	2,062,339	2,100,049	2,138,335	2,177,302
5-9	1,562,012	1,606,025	1,651,113	1,697,320	1,744,727	1,792,848
10-14	1,267,279	1,311,835	1,357,847	1,405,352	1,454,440	1,505,460
15-19	1,053,957	1,085,721	1,118,373	1,151,908	1,186,385	1,221,877
20-24	850,202	879,158	909,028	939,830	971,625	1,003,957
25-29	696,861	716,971	737,601	758,759	780,483	802,975
30-34	611,935	620,597	629,331	638,133	647,023	655,665
35-39	546,559	551,562	556,566	561,568	566,583	572,303
40-44	464,844	472,316	480,891	489,059	497,339	505,690
45-49	371,281	381,215	391,384	401,789	412,448	422,899
50-54	286,606	294,762	303,125	311,700	320,499	329,831
55-59	226,758	230,466	234,217	238,007	241,847	246,088
60-64	189,038	188,613	187,819	187,012	186,199	185,375
65-69	145,049	144,331	144,139	143,936	143,726	143,504
70-74	91,668	92,910	94,162	95,422	96,694	98,036
75-79	47,382	48,294	49,220	50,160	51,114	52,073
80 and over	25,176	25,524	25,881	26,241	26,604	27,043

*b175Wp8es

1952-57 (Continued)

Sheet 1	1956	1957	
	,755	11,308,932	11,579,075
	,849	2,067,113	2,120,205
	,782	1,637,522	1,686,267
	,056	1,369,444	1,398,878
	,105	1,184,221	1,206,651
	,983	1,012,941	1,042,973
	,259	824,531	848,843
	,399	672,571	685,355
	,706	575,159	583,342
	,014	497,207	506,832
	,126	405,804	421,186
	,673	304,398	317,079
	,286	222,893	226,485
	,368	182,598	179,856
	,508	153,498	153,020
	,323	107,148	108,675
	,553	58,631	59,743
	,766	33,252	33,685

TABLE. II. POPULATION ESTIMATES FOR THE PHILIPPIN

(Sheet 4)

	1952	Adjusted from Sh		
		1953	1954	1955
Total Females	10,288,958	10,535,068	10,786,964	11,044,000
0-4	1,868,958	1,916,733	1,965,572	2,015,000
5-9	1,454,145	1,498,144	1,543,350	1,588,000
10-14	1,255,100	1,282,908	1,311,227	1,340,000
15-19	1,097,750	1,118,888	1,140,341	1,162,000
20-24	901,606	928,345	955,800	983,000
25-29	731,343	753,691	776,660	800,000
30-34	624,931	636,589	648,413	660,000
35-39	545,689	552,977	560,316	567,000
40-44	457,480	467,158	477,003	487,000
45-49	350,054	363,272	376,958	391,000
50-54	256,492	267,743	279,464	291,000
55-59	212,561	215,123	217,699	220,000
60-64	193,805	190,997	188,169	185,000
65-69	153,476	153,499	153,511	153,000
70-74	99,990	101,746	103,523	105,000
75-79	54,414	55,445	56,492	57,000
80 and over	31,337	31,809	32,285	32,000

TABLE III. POPULATION ESTIMATES FOR THE PHILIPPINES: 1947-52
(Sheet 1)

	Total Population July 1952	Survival Ratios (Px of Model Life Table %—35)	Estimated Population July 1947	Population Adjusted to Control 1947	Average Annual Rate of Increase	1948	1949	1950	1951
Total both sexes..	20,714,003		18,530,906	18,762,000		19,132,826	19,513,401	19,903,975	20,304,804
Total Males	10,425,043		9,288,495	9,404,329		9,597,951	9,796,802	10,001,026	10,210,765
0-4	1,988,432	.8868	1,761,437	1,783,403	2.20	1,822,638	1,862,736	1,903,716	1,945,598
5-9	1,562,042	.9651	1,313,106	1,329,481	3.28	1,373,088	1,418,125	1,464,640	1,512,630
10-14	1,267,279	.9666	1,090,355	1,103,932	2.80	1,134,863	1,166,639	1,199,305	1,232,886
15-19	1,053,937	.9532	891,945	903,065	3.14	931,424	960,671	990,836	1,021,948
20-24	850,202	.9454	738,670	747,882	2.61	767,402	787,431	807,983	829,071
25-29	696,861	.9381	652,313	660,448	1.08	667,581	674,791	682,079	689,445
30-34	611,935	.9301	587,635	594,963	0.56	598,295	601,645	605,014	608,402
35-39	546,559	.9170	506,918	513,240	1.27	519,758	526,359	533,044	539,814
40-44	464,844	.8980	413,453	418,609	2.12	427,484	436,547	445,802	455,253
45-49	371,281	.8734	328,150	332,242	2.25	339,717	347,361	355,177	363,163
50-54	286,606	.8406	269,757	273,121	0.97	275,770	278,445	281,146	283,877
55-59	226,758	.7964	237,366	240,326	-1.15	237,562	234,830	232,129	229,460
60-64	189,038	.7355	197,211	199,670	-1.09	197,494	195,341	193,212	191,106
65-69	145,049	.6492	141,201	142,962	0.28	143,562	143,763	144,166	144,570
70-74	91,668	.5386	87,973	89,070	0.58	89,587	90,107	90,630	91,156
75-79	47,382	.4083	50,764	51,397	-1.61	50,570	49,756	48,955	48,167
80-84	20,727 ^b	.2195	20,241	20,493	-4.21	21,356	22,255	23,192	24,168
85 and over									

^a Derived from Table II

^b Estimated from Table 7, page 14 of UN Manual III
18,762,000

^c Adjustment Factor: $\frac{18,762,000}{18,530,906} = 1.0124707$

TABLE III. POPULATION ESTIMATES FOR THE PHILIPPINES: 1947-52 (Continued)
(Sheet 2)

	Total Population July 1952	Survival Ratios (Px of Model Life Table ${}_{e_n-35}$)	Estimated Population July 1947	Population Adjusted to Control ^c 1947	Average Rate of Annual Increase	1948	1949	1950	1951
Total Females	10,288,960		9,242,411	9,357,670		9,534,875	9,716,599	9,902,949	10,094,039
0-4	1,868,786	.8870	1,633,597	1,659,841	2.40	1,699,677	1,740,469	1,782,240	1,825,014
5-9	1,454,145	.9627	1,303,729	1,319,987	1.95	1,345,727	1,371,969	1,398,722	1,425,997
10-14	1,255,100	.9628	1,140,164	1,154,383	1.69	1,173,892	1,193,731	1,213,905	1,234,420
15-19	1,097,750	.9495	949,559	961,401	2.70	987,559	1,014,018	1,041,396	1,069,514
20-24	901,606	.9387	779,102	788,818	2.71	810,195	832,151	854,702	877,864
25-29	731,343	.9322	670,383	678,743	1.50	688,924	699,258	709,747	720,392
30-34	624,931	.9265	588,979	596,324	0.94	601,929	607,587	613,298	619,063
35-39	545,689	.9204	497,045	503,243	1.65	511,547	519,988	528,568	537,289
40-44	457,480	.9110	384,252	389,044	3.30	401,882	415,144	428,844	442,996
45-49	350,054	.8942	286,841	290,418	3.81	301,483	312,970	324,894	337,272
50-54	256,493	.8656	244,660	247,711	0.70	249,445	251,191	252,949	254,720
55-59	212,561	.8285	233,923	236,846	-2.13	231,748	226,765	221,890	217,119
60-64	193,805	.7682	199,787	202,278	-0.85	200,559	198,854	197,164	195,488
65-69	153,476	.6830	146,398	148,224	0.70	149,262	150,307	151,359	152,419
70-74	99,990	.5639	95,648	96,841	0.65	97,470	98,104	98,742	99,384
75-79	54,414	.4331	59,584	60,327	-2.04	59,096	57,890	56,709	55,552
80-84	25,806	.2409	22,960	23,246	6.17	24,680	26,203	27,820	29,536
85 and over	5,531								

153

^c Adjustment Factor: $\frac{18,762,000}{18,530,906} = 1.0124707$

TABLE III. POPULATION ESTIMATES FOR THE PHILIPPINES: 1947-52

(Sheet 2)

	1947	Adjusted from Sheet I			
		1948	1949	1950	1951
Both Sexes—Control Total	18,762,000	19,137,000	19,520,000	19,910,000	20,308,000
Total by adding interpolated data	————	19,132,826	19,513,401	19,903,975	20,304,804
Adjustment factor	————	1.0002182	1.0003332	1.0003027	1.0001574
Total Males	9,404,329	9,600,046	9,800,115	10,004,052	10,212,373
0- 4	1,783,403	1,823,036	1,863,366	1,904,292	1,945,904
5- 9	1,329,481	1,373,388	1,418,605	1,465,083	1,512,918
10-14	1,103,952	1,135,111	1,167,034	1,199,668	1,233,080
15-19	903,068	931,627	960,996	991,136	1,022,109
20-24	747,882	767,569	787,697	808,228	829,201
25-29	660,418	677,727	675,013	682,285	689,554
30-34	594,963	598,426	601,848	605,197	608,493
35-39	513,240	519,871	526,527	533,205	539,899
40-44	418,609	427,577	436,693	445,937	455,325
45-49	332,242	339,791	347,478	355,285	363,225
50-54	273,121	275,830	278,539	281,231	283,918
55-59	240,326	237,614	234,909	232,199	229,496
60-64	199,670	197,537	195,407	193,270	191,136
65-69	142,962	143,393	143,812	144,210	144,593
70-74	89,070	89,607	90,137	90,657	91,170
75-79	51,397	50,581	49,773	48,970	48,175
80 and over	20,493	21,361	22,263	23,199	24,172

TABLE III. POPULATION ESTIMATES FOR THE PHILIPPINES: 1947-52 (Continued)
(Sheet 4)

	Adjusted from Sheet I				
	1947	1948	1949	1950	1951
Total Females	9,357,670	9,536,956	9,719,865	9,905,946	10,095,626
0-4	1,659,841	1,700,048	1,741,058	1,782,779	1,825,301
5-9	1,319,987	1,346,021	1,372,433	1,399,145	1,426,221
10-14	1,154,383	1,174,148	1,194,135	1,214,272	1,234,614
15-19	961,401	987,574	1,014,361	1,041,711	1,069,682
20-24	788,818	810,372	832,432	854,961	878,002
25-29	678,743	689,074	699,494	709,962	720,505
30-34	596,324	602,060	607,792	613,484	619,160
35-39	503,243	511,659	520,164	528,728	537,374
40-44	389,044	401,970	415,284	428,974	443,066
45-49	290,418	301,549	313,076	324,992	337,325
50-54	247,718	249,499	251,276	253,026	254,760
55-59	236,840	231,709	226,842	221,957	217,153
60-64	202,278	200,603	198,921	197,224	195,519
65-69	148,224	149,295	150,358	151,405	152,442
70-74	96,841	97,491	98,137	98,772	99,400
75-79	60,327	59,109	57,910	56,726	55,560
80 and over	23,246	24,685	26,212	27,828	29,541

Table A. Estimates of Mid-Year 1957 Population of the Philippines by Sex and Age

(Figures in thousands)

Sex and Age	PSSH survey results			Mean of 1957 PSSH results	Mid-year 1957 private household population ^a	Armed Forces ^c	Popula- tion in correc- tional Institu- tions ^e	Other institu- tional popula- tion ^f	Sacadas and dependents ^d	Mid-year 1957 total population
	March 1957	May 1957	October 1957							
BOTH SEXES	22,893	22,876	22,962	22,910	23,122	50	20	40	90	23,322
MALES	11,413	11,431	11,450	11,431	11,537	50	20	20	60	11,687
0-4 years	2,030	1,996	2,022	2,016	2,035	—	—	—	6	2,041
5-9 years	1,902	1,917	1,929	1,916	1,934	—	—	1	6	1,941
10-14 years	1,427	1,444	1,435	1,435	1,448	—	—	1	5	1,454
15-19 years	1,183	1,173	1,190	1,182	1,193	12	1	1	11	1,218
20-24 years	925	931	920	925	934	17	4	1	11	967
25-29 years	739	739	719	732	739	10	4	1	6	760
30-34 years	604	574	590	589	594	7	3	1	4	609
35-39 years	576	609	587	591	596	4	2	1	4	607
40-44 years	509	507	498	505	510	—	2	1	2	515
45-49 years	412	470	478	453	457	—	1	1	1	460
50-54 years	321	312	323	319	322	—	1	2	1	326
55-59 years	240	248	258	249	251	—	1	2	1	255
60-64 years	181	161	151	164	166	—	1	2	1	170
65-69 years	—	—	—	—	173b	—	—	1	1	175
70-74 years	363	351	353	355	105b	—	—	1	—	106
75-79 years	—	—	—	—	53b	—	—	1	—	54
80-84 years	—	—	—	—	21b	—	—	1	—	22
85 years over	—	—	—	—	6b	—	—	1	—	7

TABLE A (Continued) Estimates of Mid-Year 1957 Population of the Philippines by Sex and Age

(Figures in thousands)

Sex and Age	PSSH survey results			Mean of 1957 PSSH results	Mid-1957 private household population ^a	Armed Forces ^c	Population in correctional Institutions ^e	Other institutional population ^e	Sacadas and dependents ^d	Mid-year 1957 total population
	March 1957	May 1957	October 1957							
FEMALES	11,480	11,445	11,512	11,479	11,585	—	—	20	30	11,635
0-4 years	1,931	1,933	1,907	1,923	1,941	—	—	—	4	1,945
5-9 years	1,779	1,748	1,764	1,764	1,780	—	—	1	4	1,785
10-14 years	1,364	1,380	1,418	1,387	1,400	—	—	1	3	1,404
15-19 years	1,283	1,225	1,244	1,250	1,262	—	—	1	5	1,268
20-24 years	999	1,022	1,024	1,015	1,024	—	—	1	5	1,030
25-29 years	329	835	828	831	838	—	—	1	3	842
30-34 years	669	638	614	650	656	—	—	1	1	658
35-39 years	610	649	649	636	642	—	—	1	1	644
40-44 years	530	508	517	518	523	—	—	1	1	525
45-49 years	424	452	464	447	451	—	—	1	1	453
50-54 years	319	310	318	316	319	—	—	1	1	321
55-59 years	219	213	207	213	215	—	—	1	1	217
60-64 years	174	180	170	175	177	—	—	1	—	178
65-69 years					164b	—	—	1	—	165
70-74 years					105b	—	—	2	—	107
75-79 years	349	352	360	354	57b	—	—	2	—	59
80-84 years					23b	—	—	2	—	25
85 years and over					8b	—	—	1	—	9

NEW POPULATION ESTIMATES

Footnotes for Table A

- ^a The total population estimate for mid-year 1957 as agreed upon by the Committee on Demography is here distributed by the mean sex-age distribution of the three 1957 PSSH survey rounds.
- ^b PSSH data are tabulated for the group 65 years of age and over without subdivision. The breakdown given here has been estimated from a model stable population with $GRR = 3$ and ${}^0c_0 = 40$.
- ^c The totals by sex have been estimated on the basis of 1948 census returns. The age distribution of similar groups in the United States census of 1950 has been applied to obtain the estimates by age.
- ^d The totals by sex have been estimated independently and distributed by age on the basis of data on age of migrants collected in the May 1957 PSSH.

Table B

Smoothing of Mid-Year 1957 Population by Sex and Age for Age Groups 10-64

(Figures in thousands)

Sex and age	S_{-2}	$4 S_{-1}$	$10 s$	$4 S_1$	S_2	$M^{1/16} (-S_{-2} + 4 S_{-1} + 10 s + 4 S_1 - S_2)$
MALES						
10-14 years	2,041	7,764	14,540	4,872	967	1,510
15-19 years	1,941	5,816	12,180	3,868	760	1,198
20-24 years	1,454	4,872	9,670	3,040	609	970
25-29 years	1,218	3,868	7,600	2,436	607	755
30-34 years	967	3,040	6,090	2,428	515	630
35-39 years	760	2,436	6,070	2,060	460	584
40-44 years	609	2,428	5,150	1,840	326	530
45-49 years	607	2,060	4,600	1,304	255	444
50-54 years	515	1,840	3,260	1,020	170	340
55-59 years	460	1,304	2,550	680	175	244
60-64 years	326	1,020	1,700	700	106	187
FEMALES						
10-14 years	1,945	7,140	14,040	5,072	1,030	1,455
15-19 years	1,785	5,616	12,680	4,120	842	1,237
20-24 years	1,404	5,072	10,300	3,368	658	1,042
25-29 years	1,268	4,120	8,420	2,632	644	829
30-34 years	1,030	3,368	6,580	2,576	525	686
35-39 years	842	2,632	6,440	2,100	453	617
40-44 years	658	2,576	5,250	1,812	321	541
45-49 years	644	2,100	4,530	1,284	217	441
50-54 years	525	1,812	3,210	868	178	324
55-59 years	453	1,284	2,170	712	165	222
60-64 years	321	868	1,780	660	107	180

NEW POPULATION ESTIMATES

Table C. Reverse Survival of Smoothed Mid-Year 1957
Female Population in Selected Age Groups
(Figures in thousands)

Age	Mid-year 1957	Survival ratios $o_e = 40$	Mid-year 1952	Survival ratios $o_e = 35$	Mid-year 1947
15-19 years	1,237	.9587	1,087	.9495	919
20-24 years	1,042	.9500	873	.9387	772
25-29 years	829	.9456	725	.9322	703
30-34 years	686	.9419	655	.9265	623
35-39 years	617	.9372	577	.9204	516
40-44 years	541	.9290	475	.9110	389
45-49 years	441	.9140	354		
50-54 years	324				

TABLE D

Derivation of Estimates of Age Groups 0-4 and 5-9 Years for Mid-Year 1957
(Figures in thousands)

Age	Weights	1957		1952		1947	
		Actual females	Weighted females	Actual females	Weighted females	Actual females	Weighted females
15-19 years	1	1,237	1,237	1,087	1,087	919	919
20-24 years	7	1,042	7,294	873	6,111	772	5,404
25-29 years	7	829	5,803	725	5,075	703	4,921
30-34 years	6	686	4,116	655	3,930	623	3,738
35-39 years	4	617	2,468	577	2,308	516	2,064
40-44 years	1	541	541	475	475	389	389
Total			21,459	20,222	18,986	18,210	17,435

Mean

135.91 x 20,222 = 2,748 male births 1952-57
 129.44 x 20,222 = 2,618 female births 1952-57

135.91 x 18,210 = 2,475 male births 1947-52
 129.44 x 18,210 = 2,357 female births 1947-52

Survivors 0-4 in 1957 (mortality: $e = 40$)

$P_b .7789 \times 2,748 = 2,140$ males

$P_b .7969 \times 2,618 = 2,086$ females

Survivors 0-4 in 1952 (mortality: $e = 40$)

$P_b .7789 \times 2,475 = 1,928$ males

$P_b .7968 \times 2,357 = 1,878$ females

Survivors 5-9 in 1957 of cohort born 1947-52

$P_{x-y} .9098 \times 1,928 = 1,754$

$P_{x-y} .9105 \times 1,878 = 1,710$

NEW POPULATION ESTIMATES

Table E

Smoothed and Adjusted Estimates of Mid-Year 1957 Population of the Philippines by Sex and Age.

Age	Total	Males		Females	
		Smoothed	Adjusted to Control Total	Smoothed	Adjusted to Control Total
		11,650	11,687	11,735	11,635
0-4 years		2,140	2,147	2,086	2,068
5-9 years		1,754	1,760	1,710	1,695
10-14 years		1,510	1,515	1,455	1,443
15-19 years		1,198	1,202	1,237	1,226
20-24 years		970	973	1,042	1,033
25-29 years		755	757	829	822
30-34 years		630	632	686	680
35-39 years		584	586	617	612
40-44 years		530	532	541	536
45-49 years		444	445	441	437
50-54 years		340	341	324	321
55-59 years		244	245	222	220
60-64 years		187	188	180	179
65-69 years		175	175	165	164
70-74 years		106	106	107	106
75-79 years		54	54	59	59
80-84 years		22	22	25	25
85 years and over		7	7	9	9

Table F

Comparison of Sex-Age Distribution of United Nations Population Projection for the Philippines and Smoothed and Adjusted (PSSH data: Mid-Year 1957).

Age	Smoothed and adjusted PSSH			United Nations Projection		
	Percentage	Distribution	Males per	Percentage	Distribution	Males per
	Males	Females	100 females	Males	Females	100 females
Total	100	100	100.4	100	100	101.4
0-4 years	18.4	17.8	103.8	18.5	18.3	102.7
5-9 years	15.1	14.6	103.8	15.3	14.6	106.3
10-14 years	13.0	12.4	105.0	12.8	12.1	107.6
15-19 years	10.3	10.5	98.0	10.4	10.4	101.3
20-24 years	8.3	8.9	94.2	8.5	9.0	96.1
25-29 years	6.5	7.1	92.1	6.8	7.3	94.6
30-34 years	5.4	5.8	92.9	5.6	5.9	95.7
35-39 years	5.0	5.3	95.8	4.9	5.0	98.1
40-44 years	4.6	4.6	99.3	4.3	4.4	99.8
45-49 years	3.8	3.8	101.8	3.6	3.6	100.4
50-54 years	2.9	2.8	106.2	2.8	2.7	104.0
55-59 years	2.1	1.9	111.4	2.1	2.0	108.7
60-64 years	1.6	1.5	105.0	1.6	1.6	103.1
65 years and over	3.1	3.1	100.3	2.7	3.0	90.3

*p1448X

S U M M A R Y

POPULATION ESTIMATES FOR THE PHILIPPINES, BY AGE AND SEX: JULY 1, 1948-1962*
(Thousands)

BOTH SEXES		1948 ^b	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Total BOTH SEXES		19,137	19,526	19,910	20,308	20,714	21,211	21,720	22,241	22,775	23,322	24,010	24,718	25,448	26,198	26,971
0-4		3,523	3,604	3,688	3,771	3,857	3,942	4,023	4,116	4,205	4,297	4,431	4,569	4,711	4,857	5,008
5-9		2,719	2,792	2,861	2,939	3,016	3,104	3,194	3,287	3,382	3,479	3,577	3,678	3,782	3,889	3,998
10-14		2,309	2,361	2,414	2,468	2,522	2,593	2,669	2,745	2,825	2,904	2,999	3,095	3,196	3,299	3,405
15-19		1,920	1,975	2,033	2,092	2,152	2,205	2,258	2,314	2,370	2,429	2,506	2,586	2,669	2,754	2,841
20-24		1,577	1,621	1,663	1,707	1,752	1,807	1,865	1,924	1,985	2,047	2,105	2,163	2,224	2,288	2,352
25-29		1,357	1,375	1,398	1,411	1,428	1,471	1,514	1,559	1,605	1,652	1,711	1,773	1,835	1,901	1,969
30-34		1,200	1,210	1,218	1,228	1,237	1,258	1,278	1,298	1,320	1,341	1,386	1,434	1,483	1,532	1,585
35-39		1,032	1,046	1,062	1,077	1,093	1,105	1,118	1,130	1,143	1,155	1,180	1,205	1,231	1,256	1,282
40-44		830	852	875	898	922	940	958	976	991	1,013	1,029	1,046	1,064	1,080	1,098
45-49		642	660	680	700	721	744	768	795	818	844	864	886	907	930	952
50-54		525	530	534	539	544	563	582	603	625	647	672	697	723	751	779
55-59		470	462	454	446	440	445	452	459	466	472	493	514	535	558	582
60-64		398	394	390	387	383	379	376	372	368	365	374	382	390	399	408
65-69		292	294	295	297	298	298	298	297	297	297	296	296	296	295	295

SUMMARY
POPULATION ESTIMATES FOR THE PHILIPPINES, BY AGE AND SEX: JULY 1, 1948-1962,
(Continuation)
(Thousands)

Age	1948 ^b	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
70-74	187	188	190	190	192	195	198	201	204	207	209	211	213	214	216
75-79	110	108	106	104	101	103	106	108	110	112	115	118	121	125	129
80 & over	46	48	51	54	56	57	58	59	60	61	63	65	67	70	72
M A L E S															
Total Males	9,600	9,800	10,004	10,212	10,425	10,676	10,933	11,197	11,467	11,743	12,090	12,448	12,816	13,194	13,585
0-4	1,823	1,863	1,905	1,946	1,988	2,025	2,062	2,100	2,138	2,177	2,245	2,315	2,386	2,460	2,537
5-9	1,373	1,419	1,465	1,513	1,562	1,606	1,651	1,697	1,745	1,793	1,837	1,882	1,929	1,976	2,024
10-14	1,135	1,167	1,200	1,233	1,267	1,312	1,358	1,405	1,454	1,505	1,553	1,601	1,652	1,703	1,756
15-19	932	961	991	1,022	1,054	1,086	1,118	1,152	1,186	1,222	1,269	1,317	1,368	1,420	1,474
20-24	767	788	808	829	850	879	909	940	972	1,004	1,038	1,072	1,108	1,146	1,184
25-29	668	675	683	690	697	717	738	759	781	803	833	865	897	931	966
30-34	598	602	605	609	612	621	629	638	647	656	677	700	723	746	771
35-39	520	526	533	540	547	552	557	562	567	572	583	594	605	616	627
40-44	428	437	446	455	465	473	481	489	497	506	513	520	528	535	543
45-49	310	317	325	333	341	348	355	362	369	376	382	389	395	402	409
50-54	276	279	281	284	287	295	303	312	321	330	341	352	363	375	387
55-59	238	235	232	229	227	230	234	238	242	246	255	264	273	283	293

SUMMARY
POPULATION ESTIMATES FOR THE PHILIPPINES, BY AGE AND SEX: JULY 1, 1948-1952,
(Thousands) **(Continuation)**

Age	1948 ^a	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
60-64	197	195	193	191	189	188	188	187	186	185	190	195	199	204	209
65-69	143	144	144	145	145	145	145	144	144	144	144	145	146	146	147
70-74	90	90	91	91	92	92	94	96	97	98	99	100	101	101	102
75-79	51	50	49	48	47	48	49	50	51	52	53	55	56	58	60
80 & over	21	22	23	24	25	25	26	26	27	27	28	29	30	31	32
F E M A L E S															
Total															
Females	9,537	9,720	9,906	10,096	10,289	10,535	10,787	11,044	11,308	11,579	11,920	12,270	12,632	13,004	13,386
0-4	1,700	1,741	1,783	1,825	1,869	1,917	1,966	2,016	2,067	2,120	2,186	2,254	2,325	2,397	2,471
5-9	1,346	1,373	1,399	1,426	1,451	1,498	1,543	1,590	1,637	1,686	1,740	1,796	1,854	1,913	1,974
10-14	1,174	1,194	1,214	1,235	1,255	1,283	1,311	1,340	1,369	1,399	1,446	1,494	1,544	1,596	1,649
15-19	988	1,014	1,042	1,070	1,098	1,119	1,140	1,162	1,184	1,207	1,237	1,269	1,301	1,334	1,367
20-24	810	833	855	878	902	928	956	984	1,013	1,043	1,067	1,091	1,116	1,142	1,168
25-29	689	700	710	721	731	754	776	800	824	849	878	908	938	970	1,003
30-34	602	603	613	619	625	637	649	660	673	685	709	734	760	786	814
35-39	512	520	529	537	546	553	561	568	576	583	597	611	626	640	655
40-44	402	415	429	443	457	467	477	487	497	507	516	526	536	545	555

SUMMARY

POPULATION ESTIMATES FOR THE PHILIPPINES, BY AGE AND SEX: JULY 1, 1948-1952

(Thousands)

Age	1948 ^b	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
FEMALES (Cont'd.)															
45-49	302	313	325	337	350	363	377	391	406	421	432	444	455	467	479
50-54	249	251	253	255	257	268	279	291	304	317	331	345	360	376	392
55-59	232	227	222	217	213	215	218	221	224	226	228	250	262	275	289
60-64	201	199	197	196	194	191	188	185	182	180	184	187	191	195	199
65-69	149	150	151	152	153	153	153	153	153	153	152	151	150	149	148
70-74	97	98	99	99	100	102	104	105	107	109	110	111	112	113	114
75-79	59	58	57	56	54	55	57	58	59	60	62	63	65	67	69
80 & over	25	26	28	30	31	32	32	33	33	34	35	36	37	39	40

166

^a From Tables I, II, and III with figures rounded to nearest thousand persons.

^b This is a smoothed-out distribution for July 1, 1948, adjusted for misstatements of age, errors in enumeration, etc.