ties are only one phase of broader technical assistance. The significance of developing training opportunities within each country or within the region was again emphasized, and the need to use fully the training facilities in the sending countries before using the host country's resources was brought out.

The representative from India analyzed the psychological aspects of the learning process, describing how the visiting social worker tries to adjust simultaneously to a new culture and to new surroundings, as well as to learning new concepts and methods in social welfare. His resistance is shown in his strong identification with everything represented by his own country, but this period of resistance is usually succeeded by a period of positive learning. On return home the social worker again faces a substantial period of readjustment and may again tend to overidentify with the country of training, until he feels secure both socially and professionally in his home country. This session on international social welfare was well attended and included a wide representation of former United Nations Fellows and many other social workers who had studied here or in other host countries.

In its business sessions the International Assembly of Schools adopted a revised constitution, elected new board members, and admitted new schools of social work in Greece, Iraq, and Yugoslavia, as well as the Association of Schools of Social Work in Japan.

United Nations Expert Group

Another social work meeting of great interest was held in advance of the main session of the International Conference of Social Work. This was a group of 19 training experts, selected from all parts of the world and brought together by the United Nations to work toward agreement on the basic essentials and content for social work education.

This United Nations group, chaired by Eileen Younghusband, subsequently gave a general statement of its findings to the main Conference. Miss Younghusband reported that the work was intended to be of a preliminary nature—a forerunner to the next international survey of welfare training by the United Nations. It appeared that there were no major areas of misunderstanding on the important subject of content for social work education and that there were many important areas of agreement. The group sought to identify essentials in training content that would equip a social worker to practice his profession in any country.

Influencing the discussions and the resultant findings of the group were the growth in social welfare programs under government auspices, the importance of social change and social policy, and the need for advanced training in social welfare administration and social research. Considered, too, was the need for more effective planning for auxiliary workers, particularly in countries attempting the operation of universal public services. An auxiliary worker was considered

by the group either as one who serves as assistant to a qualified social worker or as one who, though lacking the qualifications, is doing a social work job because qualified social workers are not available. The circumstances vary, of course, from country to country. The need for supervision of auxiliary workers by well-qualified personnel was stressed. The group held that training for auxiliaries should be related to function but, in any case, should be of a professional nature rather than technical. Some of the content of such training for auxiliaries would be identical with professional training but would not have the same depth.

Planning for 1958

The next session of the International Conference of Social Work will meet in Tokyo, Japan, in 1958. Discussions will center around the theme of developing resources to meet social welfare needs. George F. Davidson, Deputy Minister of the National Department of Health and Welfare of Canada, is the new President of the International Conference of Social Work. Lester B. Granger, Executive Director of the National Urban League and chairman of the U. S. Committee of the International Conference of Social Work, is a vice president. In the period between sessions, national committees will be active, organizing local groups for preparation of reports on new trends in social welfare and developing exhibits and other informational materials for use at Tokyo.

Notes and Brief Reports

Trend of Mortality in the United States Since 1900*

Mortality is an important factor in determining the cost of the old-age and survivors insurance program. This note discusses the trend of mortality in the United States since 1900. The most striking feature has been

the great reduction for children and young adults.

Beginning in 1850 death statistics were collected by the Federal Government in conjunction with each Decennial Census, but many deaths were not reported. In 1900 a Death Registration Area was established, consisting of States that had developed acceptable registration systems. Originally the area included only about one-fourth the population, all in the Northeast. The area was grad-

ually expanded until in 1933 it covered the entire country. The figures in this note are based only on the Death Registration Area. Death registration is now virtually complete, but in 1900 there may have been a significant number of deaths that were not registered.

The simplest measure of mortality is the crude death rate. This rate is defined for any calendar year as the number of deaths in the year, divided by the estimated population in the middle of the year and multiplied by 1,000. Table 1 shows the crude death rate for each year from 1900 to 1955.

Table 1.—*Crude death rates per 1,000 in the population, 1900–55* [1]

Year	Rate	Year	Rate	Year	Rate
1900	17.19	1919	12.89	1938	10.64
1901	16.42	1920	12.99	1939	10.60
1902	15.48	1921	11.50	1940	10.76
1903	15.63	1922	11.69	1941	10.50
1904	16.40	1923	12.13	1942	10.34
1905	15.89	1924	11.59	1943	10.87
1906	15.72	1925	11.68	1944	10.62
1907	15.92	1926	12.11	1945	10.58
1908	14.68	1927	11.32	1946	9.96
1909	14.25	1928	11.99	1947	10.08
1910	14.68	1929	11.88	1948	9.89
1911	13.90	1930	11.32	1949	9.71
1912	13.60	1931	11.06	1950	9.64
1913	13.81	1932	10.88	1951	9.66
1914	13.30	1933	10.69	1952	9.61
1915	13.18	1934	11.05	1953	9.59
1916	13.81	1935	10.94	1954	9.19
1917	13.97	1936	11.55	1955	[2] 9.30
1918	18.10	1937	11.26		

[1] Excludes Armed Forces overseas, 1940–55.
[2] Estimated.

There are irregular fluctuations from year to year but the long-range trend has been downward, with the rate for 1955 being about 54 percent of that for 1900. The sudden increase that produced the record peak of 1918 was the result of the influenza epidemic of that year.

The crude death rate, however, is not a good measure of the long-range trend because the average age of the population has gone up. Mortality is high at birth, drops rapidly to a minimum at about age 10, and then increases to the end of life—relatively slowly during the young adult years but rapidly thereafter. A sound analysis of the trend of mortality requires that the trend be studied by age.

An age-specific death rate for a given age-group in a given calendar year may be computed by dividing the deaths in the age group during the year by the estimated midyear population in the group. A more meaningful figure is the life table death rate. This rate for a given age x is obtained by dividing the number of persons who attain age x in a given time period into the number of such persons who die between ages x and $x + 1$. In other words, it is the probability that a person aged exactly x will die within 1 year. A rate of 3.8 per 1,000 for men at age 40 means that, out of a group of 10,000 men all exactly age 40, on the average 38 die before reaching age 41. From the life table death rates the life table may be constructed. The life table shows how many people survive to each age out of a specified number of live births (usually 100,000). National life tables have been constructed from the data of each Census since 1900, taken in conjunction with the average deaths during a 3-year period. Abridged life tables with 5-year age intervals have also been constructed for recent single calendar years.

Table 2 shows life table death rates for men and women at 10 selected ages, based on each Census and on estimates for 1954. The last column shows the 1954 rates as percentages of the rates for 1900–02. The table clearly shows that a great decrease in mortality has occurred since 1900 at the young ages. The most spectacular decline is at age 1; the 1954 rates are only about 6 percent of those for 1900–02. The rates have also decreased at the older ages, but the drop is relatively much less. The rates for women have decreased relatively more than those for men, thus increasing the relative difference in mortality between the sexes. At age 20 the male rate is now more than twice the female rate. The reason for this growing difference is only partly understood. The relative decrease from 1939–41 to 1949–51 is in most cases greater than that in any previous period between life tables. The 1954 figures suggest a trend toward less relative decrease at young ages; this trend is especially noticeable for males at age 20. In some cases at the older ages there is an increase between the two consecutive life tables; this rise may be due to underregistration of deaths and misstatement of age in the data used for the earlier life tables or to the expansion of the Death Registration Area.

Table 3 shows the number of survivors at ages 20, 40, and 65 from 1,000 live births and the average years of future life (expectation of life) at ages 0, 20, 40, and 65 for 1900–02,

Table 2.—*Life table death rates per 1,000 in the population, by sex, selected years 1900–54*

Age	1900–02	1909–11	1919–21 [1]	1929–31 [1]	1939–41	1949–51	1954 [2]	1954 as percent of 1900–02
				Male				
0	135.7	125.0	82.3	64.9	52.4	33.4	29.7	22
1	35.2	28.8	17.0	10.6	5.5	2.4	2.0	6
10	2.8	2.4	2.2	1.5	1.0	0.6	0.5	18
20	6.1	5.0	4.9	3.8	2.5	1.8	1.8	30
30	8.1	6.8	6.2	5.0	3.4	2.1	1.9	23
40	10.7	10.5	8.1	7.8	6.0	4.4	3.8	36
50	15.6	15.8	12.3	14.1	12.6	11.0	10.3	66
60	28.8	31.0	25.1	27.5	26.5	24.8	23.2	81
70	59.1	62.4	54.9	58.7	54.8	50.7	49.1	83
80	133.6	135.6	119.4	130.0	123.9	108.7	103.5	77
				Female				
0	112.7	103.8	65.9	52.1	41.5	25.9	22.6	20
1	31.8	26.4	15.3	9.4	4.9	2.2	1.7	5
10	2.6	2.1	1.9	1.2	0.8	0.4	0.3	12
20	5.7	4.4	5.1	3.5	1.9	0.9	0.7	12
30	7.8	6.2	6.7	4.6	2.8	1.4	1.1	14
40	9.4	8.2	7.5	6.4	4.5	3.0	2.5	27
50	13.6	12.8	11.5	11.1	8.8	6.6	5.9	43
60	25.3	26.1	22.5	22.0	18.4	14.6	12.5	49
70	53.8	56.8	50.7	49.4	42.7	34.8	31.3	58
80	120.9	125.7	112.9	116.3	106.9	89.6	82.4	68

[1] Estimated. Life tables were not prepared for all men and all women but only for white men, Negro men, white women, and Negro women.
[2] Estimated.

1939–41, and 1954. The figures are based solely on the years covered by the life table. Thus the expectation of 61.6 years at birth for males in the 1939–41 life table does not mean that male infants born during 1939–41 would live 61.6 years on the average. Instead it means their average lifetime would be 61.6 years if at every age they experienced the death rate that prevailed at that age in 1939–41. Actually, with the improvement that has taken place since 1939–41 and that will probably continue in the future, this group will have a greater average lifetime. Mortality of children and young adults has been reduced so much that any additional reductions at those ages cannot greatly increase the expectation of life.

Table 3.—*Number of survivors per 1,000 live births and expectation of life, selected years, 1900–54*

Age	1900–02		1939–41		1954 [1]	
	Survivors per 1,000 live births	Expectation of life	Survivors per 1,000 live births	Expectation of life	Survivors per 1,000 live births	Expectation of life
			Male			
0_____	1,000	47.9	1,000	61.6	1,000	66.8
20____	760	42.0	916	46.9	953	49.8
40____	644	27.6	852	29.6	912	31.5
65____	387	11.5	558	12.1	639	13.2
			Female			
0_____	1,000	50.7	1,000	65.9	1,000	72.9
20____	786	43.6	933	50.4	966	55.2
40____	674	29.1	881	32.7	942	36.3
65____	432	12.2	655	13.6	772	15.7

[1] Estimated.

Mortality varies not only with age and sex but with many other factors —race, occupation, marital status, and region of residence, for example. The variation caused by such factors is of less importance to the social security program, however, and is not considered here.

Crude death rates by cause of death are shown in table 4 for 1900 and 1954. While the total rate declined 47 percent, the rate for diseases of the cardiovascular-renal system has increased 43 percent and the rate for malignant neoplasms (cancer) more than doubled. The

great drop in the total has been the result of the decrease in mortality from other diseases—mainly infectious diseases. This is the reason the decrease in mortality has been much greater at the young ages. Medical advances and higher living standards have greatly reduced the hazard from infectious diseases, but much less progress has been made in attacking the degenerative diseases of middle age and old age. The increase in the rates for the latter diseases has resulted largely from the deaths of persons who, under the conditions of 1900, would have died earlier in life from an infectious disease.

Table 4.—*Crude death rates per 1,000 in the population, by cause of death, 1900 and 1954*

Cause of death	1900	1954
Total_____	17.19	9.19
Diseases of the cardiovascular-renal system_____	3.45	4.95
Malignant neoplasms_____	.64	1.46
All other diseases_____	12.26	2.07
Accidents, suicide, and homicide__	.84	.71

The great decrease in mortality at young adult ages has reduced the problem of orphanhood. It is estimated that the number of paternal orphans under age 18 decreased from 3,350,000 (8.5 percent of the population under age 18) in 1920 to 1,840,000 (3.4 percent of the population under age 18) in 1954.[1] As a result, costs are lower than they would otherwise be for mother's and child's benefits under old-age and survivors insurance.

Of much more importance to the social security program is the cost of benefits to the aged. This cost depends on the number of aged persons in relation to the working population. The problem of how changes in mortality affect the age distribution of the population is a complicated one. It takes a long time for the full effects of a change to be felt. The age distribution also depends on birth rates and on migration and it is difficult to isolate the effects of a single factor. At first thought it might seem that a decrease in mortality would imme-

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[1] "Orphanhood—A Diminishing Problem," *Social Security Bulletin,* March 1955.

diately produce a relatively older population. Actually, however, a decrease in mortality at the young ages increases the number of women who survive throughout the child-bearing period and thus, unless birth rates decline, may produce a larger total population that is relatively younger. A population probably cannot go on increasing indefinitely. In the long run a decrease in mortality will probably lead to lower birth rates and a relatively older population.

The ultimate effects on the age distribution of the indefinite continuation of a given set of death rates can be shown. If the rates at each age were to remain the same indefinitely and birth rates were adjusted to maintain a level population, the age distribution would eventually cease to change and a stationary population would result. Table 5 shows age distributions of the stationary populations based on 1900–02 and 1954 mortality in comparison with the actual age distributions of 1901 and 1954. The stationary population of 1954 is relatively much older than the actual 1954 population, and old-age and survivors insurance would be much more costly in the stationary population that may be considered the ultimate result of an indefinite continuation of current mortality rates.

Table 5.—*Percentage distributions of actual population in 1901 and 1954 and of stationary populations of 1900–02 mortality and 1954 mortality, by age*

Age	Actual population [1]		Stationary population	
	1901	1954	1900–02 [2]	1954 [3]
0–19_____	44.1	35.8	32.9	27.8
20–64_____	51.8	55.8	57.3	57.6
65 and over__	4.1	8.4	9.8	14.6

[1] Estimate based on preceding Census and subsequent births, deaths, and migration. 1954 figures include Armed Forces overseas. With adjustment for Census undercount of young children the 1954 percentages would be 36.1 for ages 0–19 and 55.5 for ages 20–64.
[2] Based on life table for total population.
[3] Based on abridged life table for total population.

Relatively fewer children would be born in the stationary population, however, and this decline might compensate for the increased cost of supporting the aged. The percentage of the population aged 20–64 is slightly

greater in the stationary population. The actual and stationary populations are relatively closer in 1954 than in 1900 because the birth rate has dropped since 1900 and immigration (most immigrants are young) was greatly reduced after World War I. The difficult question is: For how long, and how much, will the population increase? Between 1930 and 1940 it was generally believed that birth rates would stay where they had fallen or go even lower and that the population would soon cease to increase. Actually, birth rates increased from their low level in the thirties, and since 1940 the population has increased rapidly. This trend may continue for a long time. Technological advances may permit a much larger population without a reduction in living standards. Eventually, however, it would seem that the rapid growth must slow down, and then the age distribution of the population will approach that of a stationary population.

Mortality will probably continue to decline and lead ultimately to a population that is even older than the stationary population of 1954 mortality. It is difficult to predict how much mortality will decline. It is dangerous to set any limits to what science can do, but surely the decrease in mortality must stop somewhere. At the young ages mortality has been reduced to the point where accidents are the leading cause of death, and thus any further substantial reductions at young ages will require a reduction in the accidental death rate. The important question for old-age and survivors insurance is what will happen at the older ages. The answer depends on what can be done about diseases of the cardiovascular-renal system and cancer. A decrease in mortality would not necessarily increase the cost of old-age and survivors insurance, however, although it would produce ultimately a relatively older population. There would be some saving in the cost of survivor benefits, but that would not be sufficient to matter. If longer life is accompanied by longer working life, the number of aged beneficiaries might remain relatively the same.

State-Chartered Credit Unions in 1955*

Before 1920, 10 States had enacted credit union laws. During the next 20 years, an additional 33 State credit union laws were passed, and at the end of 1955 there were credit union laws in the District of Columbia, Puerto Rico, and all States except Delaware, Nevada, South Dakota, and Wyoming (table 1).

This summary report on operations of the State-chartered credit unions in 1955 was prepared from data furnished in response to questionnaires calling for composite data, which were sent to all State agencies concerned with the administration of credit union laws. Data for Indiana, Kentucky, and New Hampshire are as of June 30; those for Missouri are as of September 30; and the data for all other States are as of December 31.

State-chartered credit unions experienced substantial growth during 1955 (table 2). The number of active units increased 7.2 percent, from 7,814 to 8,373, between the end of 1954 and the end of 1955, and the number of reporting units increased from 7,713 to 8,244. Membership in the reporting credit unions totaled 4.1 million at the end of 1955, an increase of 364,760 or nearly 10 percent. At the end of 1955, loans outstanding to members exceeded $1 billion for the first time. The total of $1,073 million was 23 percent greater than that a year earlier.

Paid-in share capital of the reporting credit unions amounted to $1,245 million at the end of 1955—an increase of $199 million or 19 percent from the total at the end of 1954. The credit union laws of 30 States and Puerto Rico permit the acceptance of members' deposits in addition to the purchase of shares. At the end of 1954, members' deposits in these credit unions totaled $58.5 million; at the end of 1955, they amounted to $67.1 million. Members' savings in all State-chartered credit unions—paid-in share capital and deposits—totaled $1,312 million.

State-chartered credit unions reported reserves totaling nearly $69 million at the end of 1955. The increase for the year was $11 million, or 19 percent, compared with an increase of $9 million or 18 percent during 1954. At the end of 1955, total reserves equaled 6.4 percent of loans outstanding and 5.5 percent of paid-in share capital. The corresponding ratios at the end of 1954 were 6.6 percent and 5.5 percent, respectively.

Total assets amounting to $1,477 million at the end of 1955 were reported—an average of $179,140 per credit union. In December 1954, assets totaled $1,237 million, and the average assets per credit union were $160,401. The rate of increase in total assets was the same during both years—19 percent. Reported net earnings totaled $58 million at the end of 1955 and $48 million at the end of 1954. For both years, net earnings represented the same proportions of paid-in share capital and of total assets—4.6 percent and 3.9 percent, respectively.

The ranking of the States in terms of credit union development has changed little in recent years. At the end of 1955, Illinois had the largest

Table 1.—*Development of State-chartered credit unions, 1925-55*

| Year | Number of credit unions | | Number of members | Assets |
	Total	Number reporting		
1925	419	176	108,000	(1)
1929	974	838	264,908	(1)
1931	1,500	1,244	286,143	$33,645,343
1932	1,612	1,472	301,119	31,416,072
1933	2,016	1,772	359,646	35,496,668
1934	2,450	2,028	427,097	40,212,112
1935	2,600	2,589	597,609	47,964,068
1936	3,490	2,734	854,475	73,659,146
1937	3,792	3,128	1,055,736	97,087,995
1938	4,299	3,977	1,236,826	117,672,392
1939	4,782	4,677	1,459,377	145,803,444
1940	5,267	5,175	1,700,390	180,649,090
1941	5,663	5,506	1,907,694	216,557,977
1942	5,622	5,400	1,797,084	221,114,864
1943	5,285	5,124	1,721,240	228,314,723
1944	4,993	4,907	1,629,706	253,663,658
1945	4,923	4,858	1,626,364	281,524,015
1946	5,003	4,954	1,717,616	322,082,553
1947	5,155	5,097	1,893,944	380,751,106
1948	5,273	5,271	2,120,708	443,049,653
1949	5,427	5,402	2,271,115	510,726,465
1950	5,602	5,585	2,482,539	599,165,879
1951	5,881	5,886	2,732,495	693,613,296
1952	6,362	6,324	3,035,046	853,709,783
1953	7,096	6,986	3,380,121	1,040,874,593
1954	7,814	7,713	3,756,852	1,237,175,567
1955	8,373	8,244	4,121,612	1,476,832,006

1 Data not available.