vivors insurance beneficiaries who received assistance to supplement benefits that were considered inadequate to meet their needs.

Although most paternal orphans live with their mother, a considerable number of the mothers have remarried. On the basis of the latest available data from the Bureau of the Census,3 it is estimated that in December 1955 the number of children under age 18 living with a widowed mother who had not remarried was about 1.3 million, compared with the estimate of 1.8 million children with father dead, mother living. The 500,-000 paternal orphans without income from a public income-maintenance program included some supported by the mother's earnings or by private insurance or investment income, a few who were self-supporting, and a considerable number supported by a stepfather or adoptive father.

## Widows

Employment is the most important single source of income for widows under age 65, even for those with children. About half the 690,000 widows with children, and somewhat more than half the others, had some income from employment in December 1955. More than 1 in 6 of the 340,000 widows with earnings were entitled to old-age and survivors insurance benefits, but their benefits were withheld because of employment. Some would probably have qualified for a pension on account of the non-service-connected death of a veteran if their income had been smaller.

For widows with children, as for paternal orphans, old-age and survivors insurance is the most frequent source of nonearned income, with more than two-fifths of them receiving benefits (and more than half of them entitled to benefits). The compensation and pension programs for survivors of veterans ranked next in importance, but the number of widowed mothers receiving such payments was less than one-third as large as the number receiving old-age and survivors insurance benefits. For

widows without children, however, this program was of major importance, providing income for roughly 300,000, or more than 10 percent.

Although current information is lacking on the extent to which insurance beneficiaries supplement their benefits by part-time work, it appears that at the end of 1955 substantially all widows with children had some income from employment and/or one or more of the public income-maintenance programs. Of the childless widows, except those receiving general assistance, one-third were without income from such sources. Even if childless widows aged 62-64 had been eligible for oldage and survivors insurance benefits. as they will be under the 1956 amendments to the Social Security Act, well over one-fourth of all childless widows under age 65 would have been without income from employment or from social insurance or related programs at the end of 1955.

# Deaths Represented in Social Insurance Survivor Benefit Awards\*

Although the payment of retirement benefits may be considered the major role of old-age and survivors insurance, the program's function in providing survivor benefit protection is also significant. These benefits are payable to widows, dependent widowers, children, and dependent parents. In addition, a lump sum is paid on the death of any insured individual, whether death occurs before or after retirement.

When an insured individual dies—whether or not retired and receiving old-age benefits—his widow, if she is aged 65 <sup>1</sup> or over or when she reaches age 65, receives monthly survivor benefits. His widow may also receive survivor benefits regardless of her age if she has an eligible child under age

Table 1.—Deaths of workers represented in survivor benefit awards under social insurance programs and deaths in total population aged 20 and over, by year of death

[In thousands]

	Deaths in total								
Year	popu- lation aged 20 and over	Total	Old- age and survi- vors insur- ance	Rail- road retire- ment					
Total, 1940-									
54	19, 564	5, 037	4, 581	<sup>2</sup> 456					
1940	1, 239 1, 223 1, 235 1, 315 1, 344	<sup>2</sup> 155 <sup>2</sup> 172 <sup>2</sup> 197 <sup>2</sup> 230 <sup>2</sup> 303	125 142 167 200 273	(3) (3) (4) (5)					
1945	1, 342 1, 237 1, 283 1, 287 1, 289	<sup>2</sup> 309 <sup>2</sup> 285 304 319 329	279 255 273 287 297	(3) (3) 31 32 32					
1950 1951 1952 1953 1954	1,315 1,357 1,361 1,385 1,352	369 452 493 545 575	337 421 464 515 546	32 31 29 30 29					

 $<sup>^{1}</sup>$  Includes a small number under age 20 (about 2,600 in 1954).  $^{2}$  Includes an estimated 30,000 deaths annually

18° in her care. Benefits are likewise payable to such children.

One indication of the significant effect of the survivor benefits can be obtained by considering the equivalent amount of life insurance in force under old-age and survivors insurance as a result of such provisions. As of the middle of 1956 the estimated net amount of such insurance, after allowing for offsetting factors—such as any substantial employment of the beneficiary that prevents benefit payment—is about \$350 billion.<sup>3</sup>

Still another way of measuring the importance of the survivor benefits under old-age and survivors insurance is to consider the proportion of the total population that has such protection. It may be said that,

<sup>3</sup> Current Population Reports, Population Characteristics, Series P-20, Numbers 62 and 67.

<sup>\*</sup> Prepared by Robert J. Myers, Chief Actuary, Social Security Administration.

<sup>&</sup>lt;sup>1</sup> Age 65 has been the minimum eligibility age since these benefits were first available in 1940, but effective November 1956, under the 1956 amendments to the Social Security Act (Public Law 880, 84th Congress), the minimum age is 62.

under railroad retirement in 1940-46.

<sup>3</sup> Monthly survivor benefits were not in effect before 1947.

<sup>&</sup>lt;sup>2</sup> Beginning January 1957 as a result of the 1956 amendments, monthly survivor benefits are also available for children who are permanently and totally disabled even though aged 18 or over.

<sup>3</sup> See the Bulletin, February 1956, pages 13-15.

Table 2.—Deaths of workers represented in survivor benefit awards under oldage and survivors insurance and under the railroad retirement program in 1953, by age and sex

		Deaths of men		Deaths of women					
Age last birthday	Railroad retirement 1 Old-age an survivors insurance		Railroad retirement as percent of OASI	Railroad retirement <sup>1</sup>	Old-age and survivors insurance <sup>2</sup>	Railroad retirement as percent of OASI			
Total	29, 469	437, 367	6. 7	423	77, 208	0. 5			
Under 20	0 0 13 100 228	1, 999 8, 136 10, 164 11, 480 15, 329	.0 .0 .1 .9 1.5	0 0 0 0 5 6	396 1, 680 2, 940 3, 662 4, 749	.0 .0 .0 .1 .1			
40-44 45-49 50-54 55-59 60-64	385 893 1,812 2,886 4,268	22, 333 31, 651 40, 683 51, 201 57, 918	1. 7 2. 8 4. 5 5. 6 7. 4	6 18 44 60 54	6, 131 7, 398 8, 423 8, 972 9, 070	.1 .2 .5 .7 .6			
65–69 70–74 75–79 80–84 85 and over	5, 040 5, 050 4, 077 2, 957 1, 760	64, 542 56, 566 40, 176 18, 107 7, 082	7. 8 8. 9 10. 1 16. 3 <b>24.</b> 9	60 49 59 37 25	9, 441 7, 422 4, 390 1, 870 664	. 6 . 7 1. 3 2. 0 3. 8			

<sup>&</sup>lt;sup>1</sup> Based on awards through June 1955.

roughly, about 9 out of 10 gainfully employed persons in the country are covered by the program at any one time. A clearer picture, however, is obtained by focusing attention on the proportion of deaths represented in the old-age and survivors insurance benefit awards to all deaths in the United States. For such purposes, it is meaningful to consider only the deaths occurring at ages 20 and over, since most of the population below this age is not insured.

To complete the picture of deaths represented in social insurance awards, survivor benefits paid under the railroad retirement system are included in the analysis. It is not possible to obtain unduplicated data on deaths represented in awards under such related programs as the civil-service retirement and State and local government retirement systems.

The National Office of Vital Statistics collects calendar-year data on deaths among the total population. These data show deaths in the continental United States; data were also obtained or estimated for the Armed Forces overseas and for Alaska, Hawaii, Puerto Rico, and the Virgin Islands.<sup>4</sup> A slight understatement—

perhaps 1 percent or 2 percent—of the deaths in the population results from underregistration, but it may well be offset by understatement of the insured deaths because of the failure of some eligible survivors to file for benefits or because in a few cases there may be no eligible survivors.

Data on deaths represented in survivor benefit awards through 1954 under old-age and survivors insurance are available for each year beginning with 1940, when monthly benefits first became payable. Except for 1940 and 1941, the data have been obtained on a sample basis (20 percent for 1942-52 and 10 percent thereafter). These deaths, initially tabulated by year of award, are also tabulated according to year of death. Because of the delay in filing claims and because of the natural administrative lag, many deaths that occurred in 1954 were the basis for awards made in 1955, and a few will be represented in awards of subsequent years. Likewise, some 1953 deaths will first be represented in the 1955 and later awards.

For the following analysis, estimates were made of the deaths occurring in 1953 and 1954 that are represented in awards after 1954, and the results were included with the actual tabulated data. Adjustment was also necessary to reallocate these

deaths from an "age in year of death" basis to "age last birthday." to be comparable with the data for deaths in the total population. To these data can be added the corresponding data from the operations of the railroad retirement system, which since 1946 has provided parallel survivor benefits, coordinated with those of old-age and survivors insurance: before that year only lump-sum payments of a residual nature were generally available. Except under unusual circumstances, there can be no duplication in the reporting under the two programs for deaths occurring after 1946. The resulting data can then be used to yield the ratios of deaths represented in social insurance awards 5 to deaths in the total population.

Table 1 contrasts the deaths in the social insurance population each year with deaths in the total population at ages 20 and over. The annual number of deaths among the entire population aged 20 and over has remained relatively constant throughout the entire 15-year period. The total for the 15 years was 19.6 million. The range was from a low of 1.22 million in 1941 to a high of 1.39 million in 1953. The virtually level trend (at most, a 10-percent increase for the 15 years) is noteworthy. The total population aged 20 and over increased by 21 percent between 1940 and 1955. At the same time, the median age of this population group rose from 29.1 years to 30.1 years. If age-specific mortality rates had remained unchanged, both of these factors would have resulted in an increasing trend in the annual number of deaths. That such a trend obviously did not take place was the result of the observed improvement in mortality. In other words, over the past 15 years decreases in death rates among those aged 20 and over almost exactly counterbalanced the increasing number of persons in this group and their rising average age.

The number of deaths represented in social insurance survivor benefit awards increased more or less stead-

<sup>&</sup>lt;sup>2</sup> Based on awards through December 1954, adjusted upward slightly to allow for later awards.

<sup>4</sup> Puerto Rico and the Virgin Islands are not included in the analysis before 1951 since coverage under old-age and survivors insurance was not extended to those jurisdictions until that year.

<sup>&</sup>lt;sup>5</sup> Only the deaths under the old-age and survivors insurance and railroad retirement programs are included.

ily, from about 155,000 in 1940 to an estimated 575,000 in 1954. The total for the 15 years was 5.0 million (including an allowance for deaths represented in railroad retirement benefit awards during 1940-46 that would have been reported if survivor benefits had been available then on the same basis as later). The ratio of insured deaths under the two programs to all deaths at age 20 and over was 26 percent.

The number of deaths represented in survivor benefit awards under the railroad retirement system has remained relatively constant at about 30,000 each year from 1947 on. In large part, this trend has been the result of the relative maturity of the railroad retirement program. In the program's early years the number of retirement beneficiaries on the rolls was relatively large because of the provisions for taking over pensioners from previously existing private plans and for granting full benefit rights to those retiring shortly after the program started. The slight decrease in the number of deaths represented in awards under the railroad program beginning in 1952 is the result of the 1951 amendments to the Railroad Retirement Act, which provided that benefits to survivors of workers dying with less than 10 years of service would not be payable under the railroad retirement system but rather under old-age and survivors insurance.

Table 2 compares the distribution of the deaths in 1953 of insured workers represented in the survivor benefit awards under the two programs. Because 1953 is the latest year for which reporting is virtually complete, with little estimating involved, this year was selected for the analysis.

The nature of the railroad retirement system and its coverage means that there are relatively few deaths among insured women. For that system, also, virtually no deaths are shown for persons under age 30 because of the requirement that, for workers with less than 10 years of service, benefits are paid under the old-age and survivors insurance program, on the basis of combined earnings under the two programs.

The ratio of deaths of men insured under the railroad retirement system to deaths of men under the old-age and survivors insurance program increases from about 2 percent for those aged 35-49 to 8 percent at about age 65 and to 25 percent for those aged 85 and over. The increasing ratio up to age 65 is the result of the older age distribution in the railroad industry; for those aged 65 and over the important factor is that the railroad retirement program is so much closer to maturity than old-age and survivors insurance. For men of all ages combined the ratio was almost 7 percent, and for women it was only about 0.5 percent. The trend by age for women was to some extent similar to that for men; the ratio rose to about 1.5 percent for those aged 75 and over.

This measure of the deaths represented in social insurance survivor benefit awards to deaths in the total population for the 15 years does not, of course, give the entire picture. Not only are there differences related to time, as the coverage of the old-age and survivors insurance program has expanded, but there are also significant variations by age and sex that reflect employment patterns and the growing maturity of the system.

The ratios increase from 20 percent for men and 3 percent for women in 1940-43 to an estimated 63 percent and 15 percent in 1954 (tables 3 and 4). The rate of increase has been greatest since 1950 because of the increased coverage and the liberalized insured-status requirements provided by the 1950 amendments to the old-age and survivors insurance program.

Deaths of persons covered by social insurance tend to have the highest relation to all deaths at the youngest ages, with a gradual decrease as age advances. A large relative increase has occurred in the ratios for the oldest ages, however, because in the early years of old-age and survivors insurance relatively few older persons were working, whereas now many older persons have had coverage ever since the program's beginning.

During the first few years of the social insurance programs' operations, survivor benefit awards were made in somewhat more than 40 percent of all male deaths between the ages of 25 and 40. This ratio dropped off rapidly until, for those aged 85 and over, it was only about 1 percent. By 1954 the situation was considerably different. The ratio then was about 80-90 percent for men aged 30-54. It was somewhat lower for younger men because they had had insufficient time to acquire insured status-in large part because of continuation of education. For persons aged 55 and over the ratio dropped slowly, to about 60 percent for those slightly under age 80 and to very much lower for those aged 80 and over. Nevertheless, the ratio of 12

Table 3.—Deaths of men represented in survivor benefit awards under social insurance programs 1 as a percent of deaths in total male population, by age and year of death

Age last birthday	Year of death												
	1940–54	1940-43	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
Total, 20 and over	38	20	31	31	32	37	39	40	43	50	54	59	63
20-24	43	32	49	33	51	57	59	56	45	45	57	53	57
25-29	57	42	64	52	60	67	66	63	65	72	67	75	73
30-34	62	44	65	55	62	66	68	65	70	81	80	83	8
35-39	60	41	54	55	59	61	63	64	67	80	81	86	8:
40–44	58	37	50	52	56	60	63	60	67	75	79	82	89
15–49	54	33	44	48	50	56	56	57	60	73	77	83	86
50-54	50	31	38	43	45	49	50	52	56	65	69	77	82
55-59	47	28	37	40	41	49	47	49	53	63	66	73	78
60-64	44	23	32	35	38	43	45	45	49	58	63	67	71
65-69	39	17	24	29	32	39	41	42	46	55	59	64	68
70–74	33	9	17	22	26	33	36	38	42	48	54	58	66
75–79	24	4	9	11	13	20	24	28	32	36	41	46	63
80-84	13	2	4	5	7	11	14	16	19	21	25	28	26
85 and over	7	l ī	i	2	3	5	6	8	9	11	12	15	i i

<sup>&</sup>lt;sup>1</sup> Old-age and survivors insurance and, beginning 1947, the railroad retirement program.

Table 4.—Deaths of women represented in survivor benefit awards under social insurance programs 1 as a percent of deaths in total female population, by age and year of death

Age last birthday	Year of death												
	1940-54	1940-43	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
Total, 20 and over	7	3	4	5	5	5	5	6	7	10	12	13	1.
20-24 25-29 30-34 35-39	19 21 19 18 17	11 11 10 8 7	16 15 13 12 10	19 17 14 14 13	22 20 17 15 14	24 20 16 17 15	24 22 17 17 15	24 22 18 17 16	27 31 25 21 20	25 33 34 31 28	32 36 36 34 32	36 45 41 38 35	33 43 43 39 34
45-49 50-54 55-59 60-64 55-69	15 12 10 7 6	6 4 3 2 1	9 7 4 3 2	11 8 6 4 3	12 10 7 5 3	13 10 8 6 4	13 9 8 6 5	14 12 9 6 5	17 15 11 8 6	25 20 16 12 10	28 23 19 14 11	32 26 22 17 13	3. 29 2. 19
70-74 75-79 90-84 35 and over	4 2 1 0	1 0 0 0	1 1 0 0	2 1 0 0	2 1 0 0	3 1 0 0	3 2 0 0	4 2 1 0	5 3 1 0	6 3 1 0	8 4 2 1	9 5 2 1	1

<sup>&</sup>lt;sup>1</sup> Old-age and survivors insurance and, beginning 1947, the railroad retirement program.

percent at ages 85 and over represents a large relative growth from the corresponding level of only 1 percent in the early years of operation. In the next decade, this ratio will no doubt continue to grow rapidly for the oldest age groups as the present younger workers move into these groups.

The same general trends prevail for women except that the ratios are, of course, considerably lower. Nonetheless, the highest ratio, which in the early years was about 10 percent for women who died at ages 20-34, increased until in 1954 it was greater than 40 percent. Correspondingly, for those aged 65 and over, in the early years the ratio was virtually zero, whereas by 1954 it was 16 percent for those aged 65-69, with gradually decreasing amounts for women aged 70 and over.

The ratios will continue to increase as the percentage of insured persons in the population rises. In the long run, the ratio for men-especially when the effect of the 1955 extension of coverage that results from the 1954 amendments to the old-age and survivors insurance program is considered-will undoubtedly exceed 90 percent at all ages above 30 and may rise to 95 percent or even higher for some age groups. The corresponding figure for women aged 30 and over may well be in the neighborhood of 40 percent. Thus, in the not-too-distant future, survivor protection under social insurance — especially against the risk of orphanhood — will be available for virtually all men and all employed women in this country.

## Recent Publications\*

## Social Security Administration

BREWSTER, AGNES W., and McCAMMAN, DOROTHY. Health Costs of the Aged. (Division of Research and Statistics Report No. 20.) Washington: U. S. Govt. Print. Off., 1956. 126 pp. Processed. 65 cents. "A source book on the use of hospital and medical services and on health insurance and other methods of financing medical care among the aged."

CHILDREN'S BUREAU. Personnel in Public Child Welfare Programs, 1954. (Statistical Series No. 30.) Washington: The Bureau, 1956. 14 pp. Processed. Limited free distribution; apply to the Children's Bureau, Social Security Administration, Washington 25, D. C. CHILDREN'S BUREAU. Your Children's Bureau. (Publication No. 357.)

Washington: U. S. Govt. Print. Off., 1956. 48 pp. 20 cents. Describes the current programs.

#### General

COUNCIL OF STATE GOVERNMENTS.

Planning Services for State Government: A Summary of the Need and Suggestions for Organization.

Chicago: The Council, 1956. 63 pp. \$2.

FLEISHER, WILFRID. Sweden: The Welfare State. New York: John Day Co., 1956. 255 pp. \$4.

Discussion of Sweden's welfare, health insurance, and housing programs.

GERMANY (WEST). STATISTISCHES BUNDESAMT. Wirtschaftskunde der Bundesrepublik Deutschland. Stuttgart: W. Kohlhammer, 1955. 561 pp.

A source book on the economics of the German Federal Republic, with data on social insurance, health, public aid, housing, and public administration.

HAUSER, PHILIP M., and LEONARD, WILLIAM R., editors. Government Statistics for Business Use. (2d ed.) New York: John Wiley & Sons, Inc., 1956. 440 pp. \$8.50.

Describes the main series of Federal statistics—on national income, population, labor, industry, agriculture, housing, and prices—and outlines purposes to which these statistics may be put.

HEALTH AND WELFARE FEDERATION OF ALLEGHENY COUNTY. FAMILY AND CHILD WELFARE DIVISION. Survey of Handicapped Workers: Report of a Citizens Committee. Pittsburgh, Pa.: The Federation, 1955. 97 pp. Processed.

INTERNATIONAL LABOR OFFICE. Report of the Director-General. (Internanational Labor Conference, 39th Session, Geneva, 1956, Report I.) Geneva: The Office, 1956, 130 pp. \$1.

Reports on the main social trends during the past year, problems of rural and urban employment, and the activities of the International Labor Organization.

MacNeil, Neil, and Metz, Harold W.

The Hoover Report, 1953-1955:

What It Means to You as Citizen
and Taxpayer. New York: The
Macmillan Co., 1956. 344 pp. \$6.

McConnell, John W. "Private Unemployment Pay Plans—Economic Effects." Monthly Labor Review, Washington, Vol. 79, Mar. 1956, pp. 300-303. 55 cents.

<sup>\*</sup> Prepared in the Library, Department of Health, Education, and Welfare. Orders for items listed should be directed to publishers and booksellers; Federal publications for which prices are listed should be ordered from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.