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FEDERAL OLD-AGE AND SURVIVORS INSURANCE TRUST FUND

LETTER

FROM THE

BOARD OF TRUSTEES OF THE FEDERAL OLD-AGE AND SURVIVORS INSURANCE TRUST FUND

TRANSMITTING

PURSUANT TO LAW THE FOURTEENTH ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL OLD-AGE AND SURVIVORS INSURANCE TRUST FUND

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LETTER OF TRANSMITTAL

BOARD OF TRUSTEES OF THE FEDERAL
OLD-AGE AND SURVIVORS INSURANCE TRUST FUND,
Washington, D. C., March 1, 1954.

The PRESIDENT OF THE SENATE,
The SPEAKER OF THE HOUSE OF REPRESENTATIVES,
Washington, D. C.

SIRS: We have the honor to transmit to you the 14th Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance Trust Fund, in compliance with the provisions of section 201 (b) of the Social Security Act, as amended.

Respectfully,

GEORGE M. HUMPHREY,
Secretary of the Treasury, and Managing Trustee of the Trust Fund.

JAMES P. MITCHELL,
Secretary of Labor.

OVETA CULP HOBBY,
Secretary of Health, Education, and Welfare.

JOHN W. TRAMBURG,
Commissioner of Social Security and Secretary, Board of Trustees.

FOURTEENTH ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL OLD-AGE AND SURVIVORS INSURANCE TRUST FUND

INTRODUCTORY STATEMENT

This report is submitted to Congress by the Board of Trustees of the Federal old-age and survivors insurance trust fund in accordance with the requirements of section 201 of the Social Security Act, as amended. It describes the operations of the trust fund during the fiscal year ended June 30, 1953, the expected receipts and disbursements during the 5 fiscal years 1954–58, and the long-range actuarial status of the fund.

The Federal old-age and survivors insurance trust fund, which was established on January 1, 1940, is held by the Board of Trustees under the authority of the Social Security Act. The Board is comprised of three members who serve in an ex officio capacity. From January 1, 1940, through July 15, 1946, the three members of the Board were the Secretary of the Treasury, the Secretary of Labor, and the Chairman of the Social Security Board. On July 16, 1946, under the Reorganization Plan No. 2 of 1946, the Federal Security Administrator became ex officio member of the Board of Trustees in place of the Chairman of the Social Security Board, which was abolished. On April 11, 1953, the Reorganization Plan No. 1 of 1953 creating the Department of Health, Education, and Welfare went into effect, and the Office of Federal Security Administrator was abolished. The functions of the Administrator as ex officio member of the Board of Trustees were taken over by the Secretary of Health, Education, and Welfare. The remaining membership of the Board has not changed since it was first established. The Secretary of the Treasury is designated by law as the managing trustee. The Commissioner of Social Security is secretary of the Board. The present document is a joint report of the three trustees.

During fiscal year 1953, the Social Security Act amendments of 1952 (Public Law 590, 82d Cong.) became law. These amendments increased benefits and the amount of earnings a beneficiary may have and still receive benefits, and extended the period of active military and naval service for which old-age and survivors insurance wage credits will be granted. Benefit disbursements during the year were also substantially increased over previous levels as a result of the coverage extensions and the liberalized eligibility and benefit provisions included in the 1950 amendments.

The receipts and disbursements of the trust fund are influenced by economic as well as legislative changes. In fiscal year 1953 employment and earnings continued to rise. Total civilian employment averaged 61.8 million, or 1 percent higher than in fiscal year 1952, and unemployment averaged 1.6 million as compared with 1.8 million in 1952. Payrolls in civilian employment totaled about $181.6 billion, about $15.1 billion above payrolls in fiscal year 1952. The estimated number of persons in covered employment during calendar year 1953 was about 62 million as compared with about 60 million in calendar year 1952. Total taxable earnings reported for calendar year 1953 are estimated at $138.4 billion as compared with an estimated $128.0 billion in calendar year 1952.

Receipts and disbursements of the trust fund again rose to new high levels in fiscal year 1953. Net contribution income was $4,097 million, an increase of $502 million over fiscal year 1952. Benefit payments rose by $645 million and totaled $2,627 million. The total number of beneficiaries in June 1953 was 5,574,000, or 21 percent more than in June 1952. Retirement beneficiaries (including entitled wives, dependent husbands, and children of old-age beneficiaries) numbered 3,888,000 in June 1953, or 25 percent more than 1 year earlier. There were 1,686,000 survivor beneficiaries in June 1953, or 14 percent more than in June 1952. During the fiscal year the trust fund received interest of $387 million and increased its assets to a total of $18,366 million.

The economic consequences of the recent hostilities in Korea, the defense preparations, and the programs for economic and military aid to other nations will have far-reaching effects on the operations of the trust fund, both short range and long range. These effects, resulting for example from higher money earnings in covered employment, increased employment of women, and deferred retirement of older workers, cannot be fully appraised at this time but as far as possible they are taken into account in this report.

Because it is difficult to foresee economic developments during the next 5 years, the assumptions on which the Board has based its estimates of the expected operations of the trust fund during this period are subject to many uncertainties. In many respects developments over the much longer period covered by the discussion of the actuarial status of the trust fund are even more uncertain. The detailed report that follows, therefore, should be read with full recognition of the difficulties of estimating future trust fund income and disbursements under changing economic conditions.

SOCIAL SECURITY ACT AMENDMENTS OF 1952

The 1952 amendments to the Social Security Act, which became law during the early part of the fiscal year ending June 30, 1953, will, as in the case of the 1950 amendments which were described in preceding reports, affect the level and incidence of disbursements of the trust fund both in the immediate and long-term future. The important changes significant from an actuarial standpoint are as follows:

1. Larger benefits will be paid to beneficiary families on the rolls as well as to virtually all future beneficiary families.

(*a*) For persons whose average monthly wage is calculated on the basis of wages and self-employment income after 1950, the monthly primary insurance amount will be 55 percent of the first $100 of average monthly wages, plus 15 percent of the next $200. The minimum primary insurance amount is $25 for persons whose average monthly wage is under $35, and $26 for persons with average monthly wages from $35 to $47.

(*b*) For persons already on the beneficiary rolls whose benefits were determined by the conversion table, benefits were increased by the use of a new conversion table in which all primary insurance amounts in the table of the 1950 law were increased by $5, or 12½ percent, whichever was larger. This new conversion table will be applicable in determining benefits for all future beneficiaries whose average monthly wage will be computed over all years since 1936.

(*c*) The maximum monthly amount of family benefits payable with respect to one wage record is the smaller of $168.75, or 80 percent of the average monthly wage, provided that the latter limit may not reduce benefits below $45.

2. The provision governing the withholding of benefits because of work in covered employment was liberalized. The amount which eligible persons under age 75 may earn in covered employment and still receive benefits was increased to $75 a month.

3. The provisions granting wage credits of $160 for each month of active military service during World War II were extended to cover military service during the period after July 24, 1947, and before January 1, 1954.

4. Provisions were included which indicate a way of preserving the insured status and accrued benefit amounts of persons who become permanently and totally disabled. These provisions have no actual effect on benefit rights, since the provisions expired on June 30, 1953, a date prior to the earliest time permitted for filing application. No subsequent action was taken by Congress to prevent the expiration of these provisions.

Actuarial estimates, on an intermediate basis, prepared at the time the 1952 amendments were considered by Congress, indicated that these amendments did not affect the actuarial balance of the program. Therefore, the schedule of contribution rates in the 1950 amendments which was intended to place the system on a self-supporting basis was continued by the Congress.

LEGISLATIVE CHANGES IN 1953

Two laws affecting old-age and survivors insurance were enacted in the early part of the fiscal year ending June 30, 1954. Public Law 269, enacted August 14, 1953, extended the provisions granting wage credits of $160 for each month of active military service to cover the period after December 31, 1953, and before July 1, 1955.

Under section 218 (d) of the Social Security Act as amended, employees covered by the Wisconsin retirement fund could not be included under the Wisconsin agreement covering State and local employees. Public Law 279, enacted August 15, 1953, made it possible for employment on or after January 1, 1951, of such employees to be included in the Wisconsin agreement.

NATURE OF THE TRUST FUND

Amounts accumulated under the old-age and survivors insurance program are held in the Federal old-age and survivors insurance trust fund, and financial operations under the program are handled through this fund. The primary source of the fund's receipts is amounts deposited in or appropriated to it under permanent appropriation on the basis of contributions paid by workers and their employers, and by individuals with self-employment income, in employments covered by the old-age and survivors insurance program. All employees and their employers in employments covered by subchapter A of chapter 9 of the Internal Revenue Code (Federal Insurance Contributions Act) or under State agreements made pursuant to section 218 of the Social Security Act, as amended, are required to pay contributions with respect to the wages of individual workers. All individuals with self-employment income covered by subchapter E of chapter 1 of the Internal Revenue Code are required to pay contributions with respect to their self-employment income. In general, an individual's contributions are computed on annual wages or self-employment income, or both wages and self-employment income combined, up to a maximum of $3,600, with the contributions being determined first on the wages and then on any self-employment income necessary to make up the $3,600.

Except for amounts received by the Secretary of the Treasury under State agreements and deposited in the trust fund, all contributions are collected by the Internal Revenue Service and are paid into the Treasury as internal-revenue collections. Sums equivalent to 100 percent of the taxes imposed under subchapter E of chapter 1 and subchapter A of chapter 9 of the Internal Revenue Code are transferred to the trust fund from time to time on the basis of estimates made by the Secretary of the Treasury. Proper adjustments are made periodically to the extent that the estimates are subsequently found to differ from the amounts of contributions actually payable on the basis of reported earnings.

Although the Social Security Act of 1935 fixed the contribution rates for employees and their employers at 1 percent each on taxable wages for the calendar years 1937–39 and provided for higher rates thereafter, subsequent acts of Congress extended the 1-percent rates through calendar year 1949. On January 1, 1950, the rates rose to 1½ percent each for employees and employers, in accordance with the provisions of the Social Security Act Amendments of 1947. The Social Security Act Amendments of 1950 provide that these 1½-percent rates shall remain in effect through calendar year 1953, and that the rates shall rise to 2 percent each on January 1, 1954, to 2½ percent each on January 1, 1960, to 3 percent each on January 1, 1965, and to 3¼ percent each on January 1, 1970. Beginning January 1, 1951—the effective date of extension of coverage to self-employed persons—the rates of tax on self-employment income are equal to 1½ times the corresponding employee rates.

The second source from which receipts of the trust fund are derived is interest received on investments held by the fund. The investment procedures of the fund are described later in this section.

The Social Security Act Amendments of 1946 added section 210 to the Social Security Act. This section provided survivors insurance protection to certain World War II veterans for a period of 3 years following their discharge from the Armed Forces. Section 210 (d) authorized Federal appropriations to reimburse the Federal old-age and survivors insurance trust fund for such sums as were withdrawn to meet the additional cost (including administrative expenses) of the payments under this section. The 1950 amendments, which provided additional benefits for World War II veterans, and the 1952 and 1953 amendments, which provided additional benefits on account of active military or naval service from July 25, 1947, through June 30, 1955, charged to the trust fund not only these additional benefits but also those payable under the 1946 amendments (beginning September 1950). In any future legislative consideration of the extent and type of old-age and survivors insurance protection to be provided for servicemen, Congress will need to consider again whether the costs of benefits already provided on the basis of service in the Armed Forces are a proper charge against the trust fund or whether they should be met by funds specially appropriated for this purpose.

Public Law 642, enacted June 14, 1948, which amended the definition of the term "employee" as used in the Social Security Act, resulted in the exclusion from coverage of certain services previously held covered. While the amended definition was made retroactive to 1937, certain wage credits established under the former definition will remain credited to the individual's account. The law authorizes an appropriation to the trust fund from general revenues equal to the estimated total amount of benefits paid and to be paid that would not have been paid had the amended definition been in effect beginning in 1937.

Public Law 234, enacted October 30, 1951, amended the Railroad Retirement Act to provide a new basis of coordinating the railroad retirement program with old-age and survivors insurance. A description of the legislative provisions governing the allocation of costs between the two systems is contained in a later section of this report entitled "Statement of the Expected Operations and Status of the Trust Fund During Fiscal Years 1954–58."

The Comptroller General of the United States, in a decision (B-4906) dated October 11, 1951, held that receipts derived from the sale of miscellaneous supplies and services may be credited to and form a part of the trust fund, where the initial outlays therefor were paid from the trust fund. Formerly, these moneys were credited to the general fund of the Treasury as miscellaneous receipts.

Expenditures for benefit payments and administrative expenses under the old-age and survivors insurance program are paid out of the trust fund. These expenditures for the fiscal year 1946 and previous years included such reimbursements to the Treasury for administrative expenses incurred by the Federal Security Agency and the Treasury Department under the program as were authorized by section 201 (f) of the act. Successive acts of Congress have modified the procedures in accounting for these expenses. Thus, during fiscal years 1947 and 1948 progressively increasing portions of the program's administrative expenses incurred by the Federal Security Agency were charged directly to the trust fund and not reimbursed from the fund as they had been in the preceding fiscal years. From July 1, 1948, through April 10, 1953, all expenses incurred by all offices of the Federal Security Agency in carrying out the provisions of title II of the Social Security Act, as amended, were charged directly to the trust fund. In like manner, beginning April 11, 1953, all expenses so incurred by the Department of Health, Education, and Welfare are charged directly to the fund. Before July 16, 1946, the Social Security Board certified benefit payments to the managing trustee who made the payments from the trust fund in accordance therewith. During the period July 16, 1946, through April 10, 1953, the Federal Security Administrator made such certifications. Beginning April 11, 1953, certifications for payments are made by the Secretary of Health, Education, and Welfare. Payments are made from an uninvested balance held in the fund to the account of the disbursing officer of the Treasury

Public Law 170, enacted July 31, 1953, authorized expenditures from the trust fund of $1,500,000 in preparation for construction of an office building and related facilities for the Bureau of Old-Age and Survivors Insurance.

With respect to wages paid prior to 1951, refunds to employees who worked for more than one employer during the course of a year and paid contributions on such wages in excess of the statutory maximum, were made from general revenues. With respect to wages paid after 1950, these refunds will be paid from the Treasury account for refunding internal-revenue collections. The Social Security Act Amendments of 1950 direct the managing trustee to pay from time to time from the trust fund into the Treasury as repayments to the account for refunding internal-revenue collections the amount estimated by him to be contributions which are subject to refund with respect to wages paid after 1950.

The managing trustee invests that portion of the trust fund which, in his judgment, is not required to meet current expenditures for benefits or administration. The Social Security Act restricts permissible investments of the trust fund to interest-bearing obligations of the United States Government or to obligations guaranteed as to both principal and interest by the United States. Obligations of these types may be acquired on original issue at par or by purchase of outstanding obligations at their market price. In addition, the Social Security Act authorizes the issuance of special obligations exclusively to the trust fund. Such special obligations are required to bear interest at a rate equal to the average rate of interest, computed as of the end of the calendar month next preceding the date of their issue, borne by all interest-bearing obligations of the United States forming a part of the public debt (where such average rate is not a multiple of one-eighth of 1 percent, the rate of interest on such special obligations is required to be the multiple of one-eighth of 1 percent next lower than such average rate).

Interest on public issues held by the trust fund is received by the fund at the time the interest becomes payable on the particular series held. Interest on special issues is received semiannually—generally on June 30 and December 31. Public issues acquired by the fund may be sold at any time by the managing trustee at their market price. Special issues may be redeemed at par plus accrued interest. Interest receipts and proceeds from the sale or redemption of obligations held in the trust fund are available for investment in the same manner as other receipts of the fund.

Interest earned by the invested assets of the trust fund will provide income to meet a portion of future benefit disbursements. Benefit disbursements are expected to increase markedly over a long period because the number of persons aged 65 and over will be increasing for many decades, and because an increasing proportion of such aged persons will be qualifying for benefits under the old-age and survivors insurance system.

On June 30, 1953, there were about 13,600,000 persons aged 65 and over in the United States, a number equivalent to 8.4 percent of the total population. It is estimated that by the end of the century the number of persons aged 65 and over may be double that on June 30, 1953, and represent from 10 to 13 percent of the population. The effect on the finances of the old-age and survivors insurance system of this expected change in the number of aged persons will be even greater than may at first appear, because, compared with the present situation, a much larger proportion of aged persons 50 years hence is expected to be eligible to receive benefits under the program. The future financial soundness of this system, with its rising rate of disbursements, is of the utmost importance to the millions of persons who are already within its scope and to the Nation as a whole.

The trust fund also serves in part as a reserve against short-run fluctuations in total contributions and benefit amounts, providing a margin of safety against relatively short-term contingencies to insure the payment of benefits without sharp changes in rates paid by contributors.

SUMMARY OF OPERATIONS OF TRUST FUND, FISCAL YEAR 1953

A statement of the income and disbursements of the Federal old-age and survivors insurance trust fund in the fiscal year which began on July 1, 1952, and ended on June 30, 1953, and of the assets of the fund at the beginning and end of the fiscal year, is presented in table 1.

TABLE 1.—*Statement of operations of the Federal old-age and survivors insurance trust fund during the fiscal year 1953* [1]

Total assets of the trust fund, June 30, 1952			$16,600,036,134.59
Receipts, fiscal year 1953:			
Insurance contributions:			
Appropriations	$4,086,293,392.07		
Deposits arising from State agreements	43,308,311.35		
Gross insurance contributions	4,129,601,703.42		
Less payment to general fund for taxes subject to refund	33,000,000.00		
Net insurance contributions		$4,096,601,703.42	
Interest on investments		386,639,733.96	
Total receipts		4,483,241,437.38	
Disbursements, fiscal year 1953:			
Benefit payments		2,627,492,133.01	
Administrative expenses:			
Gross	$89,469,599.90		
Less receipts for sale of surplus material, services, etc	40,594.63		
Net administrative expenses		89,429,005.27	
Total disbursements		2,716,921,138.28	
Net addition to trust fund			1,766,320,299.10
Total assets of the trust fund, June 30, 1953			18,366,356,433.69

[1] On basis of Daily Statement of the U. S. Treasury.

The total receipts of the trust fund during the fiscal year 1953 amounted to $4,483.2 million. Of this total, $4,086.3 million represented amounts appropriated to the fund in accordance with the continuing appropriation in section 201 (a) of the Social Security Act as amended, on the basis of contributions paid under subchapter E of chapter 1 and subchapter A of chapter 9 of the Internal Revenue Code. The amount appropriated to the trust fund during the fiscal year 1953 includes approximately $300 million which is allocable to wages and self-employment income of fiscal year 1952. This adjustment was made because tabulations of tax returns made subsequent to fiscal year 1952 indicated that the estimates of social security tax collections, on the basis of which the appropriations were made for that year, understated actual collections by that amount. The total receipts also included $43.3 million representing amounts received by the Secretary of the Treasury in accordance with State agreements made pursuant to section 218 of the Social Security Act, as amended, and deposited in the trust fund. In accordance with section 201 (f) (2) of the Social Security Act, as amended, the Secretary of the Treasury estimated that the amount of contribution subject to refund to employees who worked for more than one employer during 1951 and paid contributions on 1951 wages in excess of $3,600 totaled $33.0 million. This amount was transferred from the trust fund as repayment to the Treasury. The net amount of $4,096.6 million—appropriated or deposited, less repayment—represented a 14-percent increase over the amount for the preceding fiscal year. The other $386.6 million of receipts consisted of interest on investments of the fund.

Disbursements from the trust fund during the fiscal year 1953 total $2,716.9 million, of which $2,627.5 million were for benefit payments, and $89.4 million for administrative expenses of the insurance program. The total amount of benefits paid during the fiscal year exceeded benefits paid in the fiscal year 1952 by 33 percent. This increase resulted chiefly from the (1) higher benefit amounts payable under the 1952 amendments; (2) larger than normal increase in the number of persons drawing benefits resulting from the fact that persons who became newly covered in 1951 could qualify for full-rate benefits for the first time; and (3) higher benefit amounts awarded resulting from the fact that by the end of fiscal year 1952 many persons had acquired 6 quarters of coverage after 1950 and thus qualified in fiscal year 1953 for benefits figured on the basis of their average earnings after 1950 and the new benefit formula.

Administrative expenditures of the fund were 2.2 percent of contribution income and 3.4 percent of benefit payments during fiscal year 1953. Figures for each of the years 1941–53 are shown in table 2.

TABLE 2.—*Relationship of administrative charges against old-age and survivors insurance trust fund to old-age and survivors insurance contribution income and benefit payments*

Fiscal year	Administrative charges against the OASI trust fund as a percentage of—		Fiscal year	Administrative charges against the OASI trust fund as a percentage of—	
	Contribution income	Benefit payments		Contribution income	Benefit payments
1941	3.9	41.7	1948	2.9	9.3
1942	3.0	24.3	1949	3.2	8.8
1943	2.4	18.4	1950	2.7	7.8
1944	2.5	17.7	1951	2.3	4.7
1945	2.1	11.2	1952	2.4	4.3
1946	3.0	11.7	1953	2.2	3.4
1947	2.8	9.6			

TABLE 3.—*Estimated distribution of Treasury disbursements for benefit payments under the old-age and survivors insurance program, by type of benefit, fiscal years 1952 and 1953*

[Amounts in millions]

Type of benefit	1952		1953	
	Amount	Percent of total	Amount	Percent of total
Total	$1,982.4	100	$2,627.5	100
Monthly benefits	1,924.1	97	2,551.2	97
Old-age (retired workers 65 or over)	1,191.4	60	1,624.6	62
Wife's or husband's (wives or dependent husbands, 65 or over, of old-age beneficiaries, or their wives regardless of age if cari ig for child beneficiary)	182.0	9	239.2	9
Widow's or widower's (widows or dependent widowers 65 or over of workers)	169.8	9	221.4	8
Parent's (dependent parents 65 or over of deceased workers)	9.4	(1)	11.2	(1)
Child's (children under 18 of old-age beneficiaries)	11.5	1	13.8	1
Child's (children under 18 of deceased workers)	274.3	14	336.2	13
Mother's (widows or dependent divorced wives of deceased workers caring for child beneficiaries)	85.7	4	104.8	4
Lump-sum benefits (wage earner died after August 1950 or before September 1950 with no survivor immediately eligible for monthly benefits)	58.3	3	76.3	3

[1] Less than 0.5 percent.

The distribution of benefit payments in fiscal years 1952 and 1953, by type of benefit, is shown in table 3. Approximately 80 percent of the total benefit payments from the fund in the fiscal year 1953 were accounted for by monthly benefits to aged persons—retired wage earners and their wives (including a relatively small number of wives under age 65) or dependent husbands, and aged widows, dependent widowers, and dependent parents of deceased wage earners. Approximately 17 percent of the 1953 benefit payments represented monthly benefits on behalf of children of deceased or retired workers and payments to mothers—practically all of them under age 65—who had children of deceased wage earners in their care. The balance of the benefits paid in the fiscal year 1953 consisted of lump-sum payments in cases where the insured individual died after August 1950 or where he died before September 1950 leaving no survivor immediately eligible for monthly benefits.

At the end of the fiscal year 1953, approximately 5.6 million persons in about 4.0 million families were receiving monthly benefits at an annual rate of $2,796 million. At the end of the preceding fiscal year, the monthly benefit rolls included 4.6 million persons in about 3.3 million families to whom monthly benefits were being paid at an annual rate of $1,941 million. Average monthly family benefits at the end of June 1953 showed sizable increases over the corresponding averages a year earlier (table 4) primarily because of the higher benefit rates provided by the Social Security Act amendments of 1952. Payments to retired workers with no dependents receiving benefits averaged $48.20, an increase of 20 percent. The average for a retired worker and his aged wife, both of whom were drawing benefits, was $83.60, 19 percent more than a year earlier. For survivor families, payments to aged widows averaged $40.80; families made up of a widowed mother and 1 child averaged $88.30; widowed mothers and 2 children averaged $108.80.

TABLE 4.—*Estimated number of families and beneficiaries receiving benefits and average monthly family amount, by family group, end of fiscal years 1952 and 1953*

Family classification of beneficiaries receiving benefits	June 30, 1952			June 30, 1953			Percentage increase in average monthly amount per family, 1953 from 1952
	Number of families (in thousands)	Number of beneficiaries (in thousands)	Average monthly amount per family	Number of families (in thousands)	Number of beneficiaries (in thousands)	Average monthly amount per family	
Total	3,278.4	4,593.8		4,009.1	5,573.6		
Retired worker families	2,372.3	3,109.8	--	2,977.5	3,887.6		
Worker only	1,691.4	1,691.4	$40.10	2,137.7	2,137.7	$48.20	20
Male	1,194.1	1,194.1	43.20	1,443.1	1,443.1	52.10	21
Female	497.3	497.3	32.80	694.6	694.6	40.10	22
Worker and wife aged 65 or over	633.5	1,267.0	70.10	781.6	1,563.2	83.60	19
Worker and wife under age 65 [1]	.5	1.0	61.00	.6	1.2	93.50	53
Worker and aged dependent husband	3.4	6.8	62.10	5.6	11.2	74.00	19
Worker and 1 child	7.5	15.0	62.00	7.8	15.6	75.30	21
Worker and 2 or more children	5.1	17.5	69.50	5.4	18.9	82.40	19
Worker, wife aged 65 or over and 1 or more children	.8	2.5	79.50	.9	2.9	98.10	23
Worker, wife under age 65 and 1 child	19.5	58.5	77.40	24.4	73.2	92.80	20
Worker, wife under age 65 and 2 or more children	10.6	50.1	70.30	13.5	63.7	87.60	25
Survivor families	906.1	1,484.0		1,031.6	1,686.0		
Aged widow	421.1	421.1	36.00	498.1	498.1	40.80	13
Aged dependent widower	.4	.4	30.00	.6	.6	33.90	13
Widowed mother only [1]	3.5	3.5	35.80	2.9	2.9	43.40	21
Widowed mother and 1 child	95.3	190.6	77.60	109.2	218.4	88.30	14
Widowed mother and 2 children	63.3	189.9	93.80	71.9	215.7	108.80	16
Widowed mother and 3 or more children	52.0	242.8	91.90	60.9	286.1	104.80	14
Dependent divorced wife and 1 or more children	.2	.5	92.90	.2	.5	101.50	9
1 child only	152.9	152.9	36.10	160.3	160.3	41.80	16
2 children	57.8	115.6	61.20	64.4	128.8	71.30	17
3 children	20.3	60.9	78.10	22.7	68.1	86.90	11
4 or more children	20.2	85.2	80.70	19.5	84.0	90.90	13
1 aged dependent parent	17.6	17.6	36.80	19.3	19.3	42.00	14
2 aged dependent parents	1.5	3.0	71.50	1.6	3.2	81.40	14

[1] Benefits of children were being withheld.

NOTE.—Estimates were prepared November 1953.

The total assets of the old-age and survivors insurance trust fund amounted to $16,600 million on June 30, 1952. These assets increased to $18,366 million by the end of the fiscal year 1953, as the result of an excess of receipts over disbursements amounting to $1,766 million during the fiscal year. Table 5 shows a comparison of the total assets of the trust fund and their distribution at the end of the fiscal years 1952 and 1953. The assets of the fund at the end of the fiscal year 1953 consisted of $17,818 million in the form of obligations of the United States Government, $262 million to the credit of the fund account, and $287 million to the credit of the disbursing officer.

The Government obligations held in the trust fund consist of special certificates issued directly to the fund and bonds issued to the public. The asset value of the special certificates is their par value. As carried on the books of the Treasury Department the asset value of the bonds exclusive of accrued interest purchased is the book value—par value plus unamortized premium less discount outstanding.

In accordance with the provisions of section 201 (c) of the Social Security Act, as amended, the managing trustee invested during fiscal year 1953 that portion of the assets of the trust fund which, in his judgment, was not required to meet current withdrawals. This section provides that direct obligations of the United States Government as well as obligations guaranteed as to both principal and interest by the United States may be acquired through purchase of outstanding obligations in the open market or on original issue at par. Prior to fiscal year 1948, and during fiscal years 1951 and 1952, investments made for the fund consisted only of direct obligations of the United States purchased on original issue. However, during each of the fiscal years 1948–50, and again in fiscal year 1953, investments included purchases of outstanding obligations of the United States in the open market.

TABLE 5.—*Assets of Federal old-age and survivors insurance trust fund, by type, at end of fiscal years 1952 and 1953* [1]

	June 30, 1952		June 30, 1953	
	Par value	Book value [2]	Par value	Book value [2]
Investments:				
Public issues (Treasury bonds):				
2¼-percent bonds of 1959–62	$4,205,000	$4,216,170.33	$4,205,000	$4,214,658.21
2½-percent bonds of 1962–67	58,650,000	58,828,669.19	58,650,000	58,810,802.27
2½-percent bonds of 1963–68	116,480,000	116,695,487.63	116,480,000	116,676,749.59
2½-percent bonds of 1964–69	83,654,000	83,994,789.09	93,704,000	93,203,674.23
2½-percent bonds of 1965–70	455,447,500	455,907,390.21	456,547,500	456,880,545.30
2½-percent bonds of 1966–71	305,677,500	305,810,737.66	308,077,500	308,003,033.18
2½-percent bonds of 1967–72	115,121,250	116,979,292.45	118,021,250	119,504,793.75
2¾-percent bonds, investment series B–1975–80	1,081,902,000	1,083,718,654.56	1,081,902,000	1,083,601 614.86
3¼-percent bonds of 1978–83			45,100,000	44,910,656.26
Total public issues	2,221,137,250	2,226,151,191.12	2,282,687,250	2,285,806,527.65
Special issues (certificates of indebtedness):				
2¼-percent certificates: Maturing June 30, 1953	14,046,900,000	14,046,900,000.00		
2⅜-percent certificates: Maturing June 30, 1954			15,531,700,000	15,531,700,000.00
Total special issues	14,046,900,000	14,046,900,000.00	15,531,700,000	15,531,700,000.00
Accrued interest purchased				86,826.06
Total investments	16,268,037,250	16,273,051,191.12	17,814,387,250	17,817,593,353.71
Uninvested balances:				
To credit of fund account		112,101,803.47		261,885,142.37
To credit of disbursing officer		214,883,140.00		286,877,937.61
Total assets		16,600,036,134.59		18,366,356,433.69

[1] On basis of Daily Statement of the United States Treasury.
[2] Par value plus unamortized premium less discount outstanding.

☛ The par value of the net increase in the investments owned by the fund during the fiscal year 1953 amounted to $1,546 million. New securities whose gross purchase price totaled $16,895 million were acquired through the investment of receipts of the fund and the reinvestment of funds made available from the maturity of securities during the year. The par value of securities redeemed during the fiscal year was $15,350 million consisting of $14,777 million of 2¼-

percent special certificates of indebtedness and $573 million of 2⅜-percent special certificates of indebtedness.

Of the new securities acquired during the year, $16,835 million were in the form of special certificates of indebtedness, $1,303 million of which were redeemed during the year and $15,532 million of which mature on June 30, 1954. These certificates were acquired at par, $730 million bearing an interest rate of 2¼ percent and the balance an interest rate of 2⅜ percent, this rate being determined by the average rate of interest on the interest-bearing public debt which prevailed at the end of the month preceding the date of issue of these securities. The remaining $60 million of securities acquired during the year were Treasury bonds—$45 million at 3¼ percent and $15 million at 2½ percent. Except for $25 million of the 3¼-percent bonds acquired on original issue at par, the public issues were purchased at a discount in the open market.

The average rate of interest on the interest-bearing public debt at the end of a month, which determines the interest rate at which special obligations are issued to the trust fund during the following month, varies with changes in the composition of the public debt and with changes in the particular rates of interest on different classes of securities. During the fiscal year 1953 the average rate of interest on the public debt rose from 2.329 percent on June 30, 1952, to 2.401 percent on May 31, 1953. Because the end-of-month rate first exceeded 2⅜ percent on February 28, 1953, but remained less than 2½ percent during the following 3 months, the interest rate on all special issues acquired after that date increased to 2⅜ percent, compared to 2¼ percent at which special issues were acquired during the period July 1, 1952–February 28, 1953.

STATEMENT OF THE EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND DURING FISCAL YEARS 1954–58

The Board of Trustees is required under the provisions of section 201 (b) of the Social Security Act, as amended, to report each year to Congress on the expected operations and status of the trust fund during the next ensuing 5 fiscal years. The Board is required to include in the report estimates of both the income and the disbursements of the trust fund in each of the 5 years.

The income of the fund depends on the amount of taxable payrolls and self-employment income in covered industries, rates of contributions, and interest earnings of the fund. The disbursements from the fund depend on the number of persons eligible for benefits, the proportion who apply for and receive benefits, and the amounts of benefit to which they are entitled on the basis of past earnings. Consequently, both the income and the disbursements of the fund not only depend on the legislative provisions but they are also affected by general economic conditions.

Estimates of the income and disbursements of the trust fund for each of the 5 fiscal years 1954–58, together with the resulting assets of the trust fund at the end of each year, are presented in table 6. In addition, the figures on actual experience in earlier fiscal years are shown.

TABLE 6.—*Operations of the Federal old-age and survivors insurance trust fund, fiscal years 1937–58, subject to the assumptions and limitations stated in the text* [1]

[In millions]

Fiscal year	Transactions during period					Fund at end of period [5]
	Income		Disbursements		Net increase in fund [5]	
	Appropriations [2]	Interest on investments [3]	Benefit payments	Administrative expenses [4]		
Past experience:						
1937–53	$25,958	$2,525	$9,484	$633	$18,366	$18,366
1941	688	56	64	27	653	2,398
1942	896	71	110	27	830	3,227
1943	1,130	87	149	27	1,041	4,268
1944	1,292	103	185	33	1,178	5,446
1945	1,310	124	240	27	1,167	6,613
1946	1,238	148	321	37	1,028	7,641
1947	1,460	163	426	41	1,157	8,798
1948	1,617	191	512	47	1,248	10,047
1949	1,694	230	607	53	1,263	11,310
1950	2,110	257	727	57	1,583	12,893
1951	3,124	287	1,498	70	1,843	14,736
1952	3,598	334	1,982	85	1,864	16,600
1953	4,097	387	2,627	89	1,766	18,366
Estimated future experience:						
1954	4,650	442	3,240	90	1,772	20,138
1955	5,462	477	3,677	92	2,170	22,308
1956:						
Alternative I	5,986	541	4,017	93	2,417	24,725
Alternative II	5,422	532	4,149	96	1,709	24,017
1957:						
Alternative I	6,153	595	4,349	95	2,304	27,029
Alternative II	5,377	566	4,615	94	1,234	25,251
1958:						
Alternative I	6,444	649	4,636	97	2,360	29,389
Alternative II	5,256	589	4,897	94	854	26,105

[1] In interpreting the estimates in this table, reference should be made to the accompanying text which describes the underlying assumptions. Past experience on basis of Daily Statement of the U. S. Treasury. Estimates were prepared February 1954.

[2] Include insurance contributions, adjusted for refunds, and transfers from general funds equivalent to additional payments arising from the extension of survivors insurance protection to certain veterans of World War II (Social Security Act Amendments of 1946). Estimated contributions for fiscal years 1954-58 are based on statutory rates.

[3] Includes profits on marketable investments amounting to $183,668 in 1949 and $8,934 in 1950.

[4] Include administrative expenses, less receipts for sale of surplus material, services, etc. For fiscal years 1944 and 1945, represent charges against trust fund; administrative expenses, after adjustment for bookkeeping transfers, were about $30 million in fiscal year 1944 and $29 million in fiscal year 1945. For fiscal years 1954 and 1955, include $1.1 million and $0.4 million respectively for preparations for construction of office building for the Bureau of Old-Age and Survivors Insurance.

[5] Totals do not necessarily equal the sum of rounded components.

For this report, it is assumed that the present statutory provisions relating to old-age and survivors insurance will remain unchanged throughout the period under consideration. The computations of tax income are based on present statutory rates of contribution which are 1½ percent each on employer and employee on wages paid during calendar year 1953 and 2 percent each during the calendar years 1954 through 1958; and 2¼ percent on the taxable income from self-employment in calendar year 1953 and 3 percent in calendar years 1954–58.

In table 6, single estimates are given for fiscal years 1954 and 1955, but for fiscal years 1956–58 two sets of estimates are presented based on alternative economic assumptions. Alternative I shows the effect of assumptions postulating a relatively high level of economic activity; alternative II shows the effect of the assumption of a somewhat lower level of economic activity.

Alternative I, which shows a relatively large increase in trust fund assets, is based on the assumption of a small contraction in industrial activity in 1954–55 followed by a return to a high level of economic activity throughout 1956–58. Employment and earnings are assumed to remain at a relatively high level throughout the period of the estimates, with substantial increases after the middle of 1955. The earnings of the self-employed are assumed to follow a similar pattern. Benefit disbursements are assumed to increase substantially, primarily because of the long-range upward trend in the number of beneficiaries, and partly because of the combined effect of the alternative method of computing benefit amounts, which became effective in calendar year 1952, and the higher benefit amounts payable under the 1952 amendments.

Under alternative I, aggregate income during the period of 5 fiscal years ending in 1958 would amount to $31.4 billion, including $28.7 billion in contributions and $2.7 billion in interest. Aggregate disbursements for the period would be about $20.4 billion with the highest expected annual disbursement about $4.7 billion. The trust fund at the beginning of fiscal year 1954 would amount to about 3.9 times the highest expected annual disbursements during the succeeding 5 fiscal years.

The other set of estimates for fiscal years 1956–58, alternative II, is based on the assumption of a small contraction in industrial activity in 1954–55 followed by a sharp decline in economic activity soon after June 1955 with a slow recovery beginning in the second half of calendar year 1957. As a result, estimated taxable payrolls and earnings of the self-employed in the periods affecting tax collections during fiscal years 1956–58, and therefore estimated contributions, are lower under alternative II, than under alternative I. Estimated benefit disbursements, on the other hand, are higher under alternative II than under alternative I because a larger number of older workers withdraw from or are unable to find jobs in covered employment.

The aggregate income of the fund for the 5 fiscal years 1954–58 under alternative II would amount to $28.8 billion, including $26.2 billion in contributions and $2.6 billion in interest. Aggregate disbursements would be $21.0 billion, with the highest expected annual disbursement about $5.0 billion. The trust fund at the beginning of the fiscal year 1954 would amount to about 3.7 times the highest expected annual disbursement during the period.

Public Law 234, enacted October 30, 1951, amended the Railroad Retirement Act to provide a new basis of coordinating the railroad retirement program with old-age and survivors insurance. The new legislation provides that the railroad wage credits of workers who die or retire with less than 10 years of railroad employment shall be transferred to the old-age and survivors insurance system. The situation will be unchanged for workers who acquire 10 years or more of railroad service. That is, the survivors of over-10-year railroad workers will, as under the 1946 amendments to the Railroad Retirement Act, receive benefits under one program or the other based on combined wage records, while retirement benefits will in most cases be payable under both systems to individuals with 10 or more years of railroad service who also qualify under old-age and survivors insurance.

With respect to the allocation of costs between the 2 systems, Public Law 234 requires the Railroad Retirement Board and the Secretary of Health, Education, and Welfare to—

determine, no later than January 1, 1954, the amount which would place the Federal Old-Age and Survivors Insurance Trust Fund in the same position in which it would have been at the close of the fiscal year ending June 30, 1952, if service as an employee [railroad] after December 31, 1936, had been included in the term "employment" as defined in the Social Security Act and in the Federal Insurance Contributions Act.

Both agencies recently completed a series of joint actuarial studies and analyses required by this provision. The results showed that the addition of $488 million to the old-age and survivors insurance trust fund would place it in the same position as of June 30, 1952, as it would have been if railroad employment had always been covered under the Social Security Act.

Although there is no authority in the law to transfer the $488 million from the railroad retirement account to the trust fund, the legislation provides that beginning with fiscal year 1953, and for each fiscal year thereafter, annual interest payments on this amount (less any offsets described below) are to be transferred from the railroad retirement account to the trust fund. For the fiscal year ending June 30, 1953, interest amounting to $11.6 million was transferred to the trust fund in February 1954.

The legislation further provides that at the close of fiscal year 1953 and each fiscal year thereafter annual reimbursements are to be effected between the railroad retirement account and the trust fund in such amounts as would, taking into consideration the amount determined for the period through June 30, 1952, place the trust fund at the end of the year in the same position in which it would have been if railroad employment were covered under the Social Security Act. If the reimbursement is from the trust fund to the retirement account the Secretary of Health, Education, and Welfare may offset the amount of such reimbursement against the amount determined for the period through June 30, 1952. In accordance with these financial interchange provisions, the two agencies are conducting the studies necessary to complete before June 15, 1954, the joint determination of the amount of the reimbursement applicable to the fiscal year ending June 30, 1953. Because of the relatively small amounts involved, the estimates shown in table 6 have not been adjusted to reflect the effect of future reimbursements between the railroad retirement account and the trust fund.

As indicated in earlier sections of this report, the 1950 and 1952 amendments contain provisions which will result in benefit disbursements during the 5 fiscal years 1954–58 which will be on a much higher level than the disbursements made under the old law. Moreover, benefit disbursements during the next 5 years, like contributions, will be dependent to a considerable extent upon economic developments and so will have a considerable range of possible variation. The number of workers in covered employment, their distribution among different classes of workers (e. g., older workers, very young workers, women workers not previously engaged in covered employment, etc.), and the level of wages will all have a decided effect upon the amount of benefit payments to be anticipated.

In general, the larger the volume of employment the larger will be the number of workers who are insured under the programs, and therefore the larger will be the number of deaths which will give rise to valid claims for survivors' benefits. However, over the short range the amount paid out for survivors' benefits will not be affected significantly by variations in economic conditions. While favorable opportunities for employment will operate to increase the number of insured persons, and hence increase the number of new death claims, such a high employment situation will tend to have counterbalancing effects such as that of inducing many of the widows and older children eligible for survivors' benefits to forego them by working in covered employment. On balance, the amount paid out for survivors' benefits over the next few years will differ so little whether the economic conditions of alternative I or alternative II are assumed that a single set of estimates is deemed appropriate for both alternatives (table 7).

TABLE 7.—*Treasury disbursements for benefit payments, distributed by classification of beneficiaries, fiscal years 1941–58, subject to the assumptions and limitations stated in the text* [1]

[In millions]

Fiscal year	Total benefit disbursements [2]	Disbursed to old-age beneficiaries	Disbursed to dependents of old-age beneficiaries	Disbursed to survivors of deceased insured workers			
				Monthly benefits			Lump-sum payments
				Total [2]	Aged widows, dependent widowers, and dependent parents	Widowed mothers, dependent divorced wives, and children	
Past disbursements: [3]							
1941	$64.3	$31.4	$5.3	$15.3	$1.5	$13.8	$12.3
1942	110.3	54.9	9.6	31.6	4.1	27.5	14.1
1943	149.3	72.4	12.7	47.5	7.9	39.6	16.7
1944	184.6	86.8	15.2	63.6	12.1	51.5	19.0
1945	239.8	109.1	19.2	85.8	17.7	68.1	25.7
1946	320.5	153.9	27.2	113.4	24.7	88.7	26.0
1947	425.6	219.2	38.4	139.4	33.8	105.6	28.5
1948	511.7	272.4	47.5	160.5	43.7	116.8	31.3
1949	607.0	333.0	57.7	184.0	55.6	128.4	32.2
1950	727.3	412.6	71.2	209.4	69.3	140.2	34.0
1951	1,498.1	891.1	148.0	413.5	134.3	279.2	45.5
1952	1,982.4	1,191.4	193.5	539.2	179.2	360.0	58.3
1953	2,627.5	1,624.6	253.0	673.6	232.7	441.0	76.3
Estimated future disbursements:							
1954	3,240	2,046	316	788	282	506	90
1955	3,677	2,335	356	892	332	560	94
1956:							
Alternative I	4,017	2,542	386	991	383	608	98
Alternative II	4,149	2,657	403				
1957:							
Alternative I	4,349	2,740	415	1,092	438	654	102
Alternative II	4,615	2,973	448				
1958:							
Alternative I	4,636	2,923	442	1,166	495	671	105
Alternative II	4,897	3,152	474				

[1] In interpreting the estimates in this table, reference should be made to the accompanying text which describes the underlying assumptions. Estimates were prepared February 1954.
[2] Totals do not necessarily equal the sum of rounded components.
[3] Partly estimated.

On the other hand, the lower the level of employment during the next 5 years the larger will be the volume of benefit payments to retired workers who have attained age 65, and to their eligible dependents. As is indicated in table 8, a considerable proportion of the workers aged 65 and over who were eligible for old-age (primary) benefits in the past remained in covered employment (or, if they left covered employment, later returned to it) and did not receive benefits. Since fiscal year 1945, however, this proportion has decreased as the number of retired workers receiving benefits increased relatively more rapidly than the number eligible for old-age benefits. The proportion of eligible workers receiving benefits on January 1, 1951 (table 8), would have been higher if it had not been for the fact that, for a large number of workers newly eligible as a result of the liberalized insured status provisions of the 1950 amendments, claims for benefits had been received but had not yet been completely processed.

Although the proportion of eligible workers receiving benefits on January 1, 1953, is lower than it was a year earlier, the upward trend in this proportion is expected to continue even under the favorable employment conditions assumed in alternative I. Many persons in newly covered occupations, with little or no covered employment before 1951, became fully insured for the first time in 1952. Since these newly insured persons were fairly regularly employed, relatively few filed application for old-age (primary) benefits, thus depressing the proportion of all eligible persons in receipt of such benefits on January 1, 1953.

TABLE 8.—*Workers eligible for and receiving old-age (primary) benefits by attained age, fiscal years 1941–58, subject to the assumptions and limitations stated in the text.*[1]

Middle of fiscal year (Jan. 1)	All workers aged 65 and over			Workers aged 65–69			Workers aged 70 and over		
	Number eligible for benefits [2]	Persons receiving benefits		Number eligible for benefits [2]	Persons receiving benefits		Number eligible for benefits [2]	Persons receiving benefits	
		Number	Percent of number eligible		Number	Percent of number eligible		Number	Percent of number eligible
	Thousands	*Thousands*	*Percent*	*Thousands*	*Thousands*	*Percent*	*Thousands*	*Thousands*	*Percent*
Past experience:									
1941	548	112	20	376	85	23	172	28	16
1942	680	200	29	445	134	30	235	66	28
1943	831	260	31	522	153	29	309	107	35
1944	1,016	306	30	608	156	26	408	151	37
1945	1,244	378	30	708	167	24	536	211	39
1946	1,469	518	35	805	212	26	664	306	46
1947	1,637	702	43	868	271	31	769	430	56
1948	1,813	875	48	930	325	35	883	550	62
1949	1,990	1,048	53	1,000	380	38	990	668	67
1950	2,164	1,286	59	1,069	474	44	1,095	812	74
1951	3,139	1,771	56	1,663	720	43	1,476	1,051	71
1952	3,504	2,278	65	1,825	942	52	1,679	1,337	80
1953	4,230	2,644	63	2,154	1,054	49	2,076	1,589	77
Estimated future experience:									
1954	4,610	3,220	70	2,320	1,300	56	2,290	1,920	84
1955	4,985	3,610	72	2,475	1,460	59	2,510	2,150	86
1956:									
Alternative I	5,330	3,915	73	2,590	1,555	60	2,740	2,360	86
Alternative II	5,315	4,040	76	2,580	1,660	64	2,735	2,380	87
1957:									
Alternative I	5,645	4,190	74	2,670	1,620	61	2,975	2,570	86
Alternative II	5,595	4,465	80	2,640	1,845	70	2,955	2,620	89
1958:									
Alternative I	5,940	4,440	75	2,730	1,665	61	3,210	2,775	86
Alternative II	5,865	4,720	80	2,690	1,900	71	3,175	2,820	89

[1] In interpreting the estimates in this table reference should be made to the accompanying text which describes the underlying assumptions. Estimates were prepared February 1954. No adjustments have been made to reflect changes arising from (1) provisions that coordinate the old-age and survivors insurance and railroad retirement programs, and (2) wage credits for military service.

[2] Figures for 1941–53 are partly estimated.

If the lower employment conditions assumed in alternative II should materialize, it is expected that larger proportions of eligible workers will be obliged to leave covered employment especially at ages 65–69. Hence, despite a slightly smaller number of eligible workers, the number receiving old-age (primary) benefits under alternative II would considerably exceed that under alternative I. Moreover, it is expected that the average old-age (primary) benefit amount payable under alternative II would exceed the average under alternative I, inasmuch as many of the more steadily employed, and therefore higher paid, older workers who would not withdraw from covered employment under the conditions of alternative I would not be employed under the conditions of alternative II. In consequence, alternative II would result in a substantially higher volume of benefit payments to old-age (primary) beneficiaries and their dependents.

Table 8 contains an analysis of workers eligible for old-age (primary) benefits by age attained as of the middle (January 1) of each of the fiscal years 1941 through 1958. The growth in the number of eligible workers aged 65–69 was gradual but uninterrupted during the calendar years 1941 to 1949, inclusive. This growth resulted partly from the increase in the population at these attained ages, but primarily from the fact that each passing year a larger proportion of the persons attaining age 65 had fully insured status. In the calendar year 1940, a worker attaining age 65 would not have been fully insured if he had left covered employment more than 1½ or 2 years previous to his attainment of age 65—for example, due to a permanent disability—but in the calendar year 1949 numerous persons attaining age 65 were fully insured even though they left covered employment after reaching age 59.

The marked increase in the number of workers eligible for benefits in 1951 is due to the liberalized insured-status provisions of the 1950 amendments to the Social Security Act. The number of quarters of coverage needed to be eligible for old-age benefits just prior to the passage of these amendments ranged from 27 for persons then attaining age 65 down to 6 for persons then aged 76 and over. As a result of the 1950 amendments all persons who will have attained age 65 prior to July 1954, will be fully insured if they have the minimum number of 6 quarters of coverage. Consequently, the increase in the number of eligible persons on January 1, 1951, was greatest for the persons in the 65–69 age group. Although the same factors which contributed to the growth in the number of eligible persons before 1951 will continue to be operative after 1950, the liberalized insured-status provisions and the extension of coverage to new areas of employment will have an even greater effect.

The estimates presented above result in a net increase in the trust fund during the 5-year period of about $11.0 billion under alternative I and about $7.7 billion under alternative II. It is entirely possible under alternative I that the amount of contribution income may be greater and benefit payments lower than has been estimated. The total result would be an even greater growth in the trust fund than is indicated under this alternative. On the other hand, lower contribution and interest income together with higher benefit payments than shown under alternative II would lead to smaller net increases in the trust fund.

ACTUARIAL STATUS OF THE TRUST FUND

Section 201 (b) of the Social Security Act requires the Board of Trustees to present each year a statement of the actuarial status of the trust fund. In accordance with this requirement there are submitted two summary tables. Table 9 shows the cost of benefits as a percentage of payroll through the year 2050 and gives the level-premium cost of the program. The level-premium cost ranges from 5.59 to 8.50 percent of payroll, depending upon the combination of assumptions selected. Table 10 shows the estimated contributions, benefit payments, administrative expenses, interest accumulations, and assets of the trust fund at intervals of 10 years through the year 2000, under various alternative combinations of assumptions with respect to benefit costs and levels of employment. A discussion of the assumptions upon which these tables have been calculated is presented in the actuarial appendix.

TABLE 9.—*Estimated cost of benefit payments as percent of payroll, 1960–2050*

[In percent]

Calendar year	High-employment assumption			Low-employment assumption		
	Low-cost estimate	High-cost estimate	Intermediate-cost estimate [1]	Low-cost estimate	High-cost estimate	Intermediate-cost estimate [1]
	Cost in year					
1960	3.76	4.44	4.10	4.41	4.97	4.69
1970	4.85	5.66	5.26	5.57	6.27	5.92
1980	5.86	6.95	6.40	6.57	7.58	7.07
1990	6.54	8.18	7.33	7.20	8.92	8.03
2000	6.29	8.42	7.30	6.99	9.33	8.09
2025	7.01	11.24	8.84	7.76	12.40	9.77
2050	6.88	10.93	8.48	7.63	12.07	9.38
	Level-premium cost [2]					
2¼ percent interest	5.80	7.73	6.69	6.49	8.50	7.42
2¾ percent interest	5.59	7.29	6.39	6.27	8.02	7.09

[1] Based on average of the dollar costs under the low-cost and high-cost estimates.

[2] Level-premium contribution rate for benefit payments after 1952, taking into account the accumulated funds at the beginning of the period and future administrative expenses.

TABLE 10.—*Estimated progress of old-age and survivors insurance trust fund, 1960–2000*

[In millions]

Calendar year	Contributions [1]	Benefit payments	Administrative expenses	Interest on fund [2]	Fund at end of year
	Actual data [3]				
1950	$2,671	$961	$61	$257	$13,721
1951	3,367	1,885	81	417	15,540
1952	3,819	2,194	88	365	17,442
	Low-cost estimate, low-employment assumptions				
1960	$5,627	$5,241	$98	$517	$23,651
1970	8,397	7,452	116	727	33,432
1980	9,361	9,686	139	979	44,260
1990	10,164	11,517	160	968	43,228
2000	11,238	12,369	172	839	37,468
	High-cost estimate, low-employment assumptions				
1960	$5,563	$5,835	$125	$431	$19,397
1970	8,324	8,310	158	416	18,847
1980	9,138	10,903	193	298	12,557
1990	9,519	13,373	227	(4)	(4)
2000	10,082	14,811	246	(4)	(4)
	Intermediate-cost estimate, low-employment assumptions [5]				
1960	$5,595	$5,537	$112	$474	$21,524
1970	8,361	7,881	137	572	26,140
1980	9,250	10,294	166	638	28,408
1990	9,842	12,443	194	298	12,124
2000	10,660	13,588	209	(6)	(6)
	Low-cost estimates, high-employment assumptions				
1960	$6,646	$5,267	$101	$657	$30,482
1970	9,985	7,723	125	1,186	54,982
1980	11,176	10,321	151	1,868	85,263
1990	12,224	12,584	175	2,345	106,282
2000	13,591	13,455	191	2,830	128,585
	High-cost estimate, high-employment assumptions				
1960	$6,578	$6,166	$134	$540	$24,673
1970	9,878	8,913	170	741	34,084
1980	10,874	11,909	208	915	40,941
1990	11,435	14,725	246	557	23,547
2000	12,191	16,769	268	(7)	(7)
	Intermediate-cost estimate, high-employment assumptions [5]				
1960	$6,612	$5,716	$118	$598	$27,578
1970	9,932	8,318	148	964	44,533
1980	11,025	11,116	180	1,392	63,102
1990	11,830	13,656	210	1,451	64,914
2000	12,891	14,812	230	1,265	56,412

[1] Combined employer, employee, and self-employed contributions. The combined employer-employee rate is 3 percent for 1950–53, 4 percent for 1954–59, 5 percent for 1960–64, 6 percent for 1965–69, and 6½ percent for 1970 and after. The self-employed pay ¾ of these rates.

[2] Interest is figured at 2¼ percent on average balance in fund during year. Actual 1951 figure is inflated because it includes a considerable amount of the interest which accrued in the second half of 1950 and also virtually all of the 1951 interest.

[3] Based on Daily Statement of the U. S. Treasury. For 1950, benefit payments were those of 1939 act for first 9 months and those of 1950 act for last 3 months, and contribution income was that of previous law for entire year. For 1952, benefit payments were those of 1950 law for first 9 months and those of 1952 law for last 3 months.

[4] Fund exhausted in 1986.

[5] Based on average of the dollar costs under the low-cost and high-cost estimate.

[6] Fund exhausted in 1995.

[7] Fund exhausted in 1997.

NOTE.—See Actuarial Appendix for explanation of meaning of these figures in regard to financial interchange provisions with railroad retirement system.

SUMMARY AND CONCLUSIONS

The Social Security Act Amendments of 1950 and 1952 have materially affected the fund's income and disbursements. During fiscal year 1953, benefit payments were $2.6 billion, or about 3½ times the amount in fiscal year 1950, which was the first full fiscal year before the 1950 amendments went into effect. In the last of the 5 fiscal years ahead, annual payments are expected to total between 4.6 and 4.9 billion dollars. The trend in benefit payments will be upward throughout the remainder of the century; by 1970 benefit disbursements are expected to increase almost 3 to 3½ times their level in fiscal year 1953.

Despite the large increase in benefit disbursements, contributions paid by employers, employees, and self-employed persons in each of the 5 fiscal years immediately ahead are expected to continue to be wholly sufficient to meet the disbursements of the old-age and survivors insurance program in each of these years.

As experience with the actual operation of the program accumulates, it provides the means for improving the estimates of the future income and disbursements of the trust fund. This experience also should serve as a basis for further study of the financial aspects of the program. In such study, there should continue to be emphasis on the relationship over the years between the income and disbursements of the fund.

ACTUARIAL APPENDIX

DETAILED LONG-RANGE COST ESTIMATES

Two sets of estimates were presented in the previous report of the Board of Trustees, both based on high-employment assumptions (somewhat below conditions prevailing at the end of 1952). The low-cost and high-cost assumptions relate to the cost as a percent of payroll (i. e., total taxable earnings including those from self-employment) in the aggregate and not to the dollar costs. The two sets of cost assumptions are based on possible variations in fertility rates, mortality rates, retirement rates, remarriage rates, etc. Two additional estimates have been developed and are presented here—both based on low-employment assumptions (roughly, midway between the high-employment assumptions and the level prevailing just before the start of World War II).

In the following pages, summary figures are presented for all 4 estimates although detailed figures are given only for the 2 based on the high-employment assumptions (which appear somewhat more reasonable than the low-employment assumptions in the light of current conditions). In addition, further details for all cost estimates are given in Actuarial Study No. 36 of the Social Security Administration, Department of Health, Education, and Welfare (*Long-Range Cost Estimates for the Old-Age and Survivors Insurance System, 1953*).

The estimates are based on level earnings assumptions (slightly below the present level). If in the future the earnings level should be considerably above that which now prevails, and if the benefits for those on the roll are at the same time adjusted upward so that the annual costs relating to payroll will remain the same, then the increased dollar outgo resulting will offset the increased dollar income. This is an important reason for considering costs relative to payroll rather than in dollars.

The cost estimates have not taken into account the possibilities of a rise in earnings levels, although such a rise has characterized the past history of this country. If such an assumption were used in the cost estimates, along with the unlikely assumption that the benefits nevertheless would not be changed, the cost relative to payroll would, of course, be lower. If benefits are adjusted to keep pace with rising earnings trends, the year-by-year costs as a percentage of payroll would be unaffected. However, in such case this would not be true for the level-premium cost which would be higher, since under such circumstances the relative value of the interest earnings of the trust fund would gradually diminish with the passage of time.

For the estimates based on low-employment and high-employment assumptions, all cost factors (including earnings rates) are the same, other than employment assumptions. In the low-employment estimates it is assumed that about 85 percent of all males aged 25–34 in the country have covered earnings in the course of a year, decreasing to about 60 percent for ages 60–64, as against about 90 percent and 70 percent respectively for the high-employment assumptions. For women the corresponding proportions are 35 percent for ages 25–34 and 15 percent for ages 60–64 for the low-employment assumptions, and 40 and 20 percent respectively for the high-employment assumptions. Further, the proportion of those covered who work in all 4 quarters varied for men from about 75 percent for the low-employment assumptions to about 80 percent for the high-employment assumptions, with somewhat lower proportions at the youngest and oldest ages. For women, the same proportions were used for both employment assumptions, namely about 55 percent for ages 20–35 and about 65 percent for ages 40 and over. As a result of these assumptions, the annual covered payroll currently amounts to about $110 billion under the low-employment assumptions and $130 billion under the high-employment assumptions, the latter figure being quite close to actual experience.

There are a number of other basic factors which must be continuously recognized in estimating the costs of this program. These will be discussed hereafter.

(a) *Population.*—The future trend of the population depends on the size and age distribution of the existing population, on future births and immigration, and on future deaths and emigration. As a basis for making such estimates, there are available great quantities of census and vital statistics data. There are various types of error and bias in such data, as has been recognized by the Bureau of the Census in its many comprehensive reports on this subject. For instance, the 1940 census showed about 600,000 more persons aged 65 and over than had been indicated as likely by data in the 1930 census and the deaths and migration between the 2 censuses. The 1950 census shows about 700,000 more persons age 65 and over than are indicated by a similar projection of the 1940 census. In the cost estimates the 1950 census is used as the base, despite any errors or bias it may have, since there is at this time no adequate basis for adjustment.

Crude birthrates declined for many years until the middle thirties, due in part to the increasing proportion of the female population past the childbearing ages, and in part to a decline in age-specific birthrates. However, since 1937 the long decline of the birthrate has been reversed. During the war years quite high rates were reported, the wartime peak having been reached in 1943. Although the birthrate declined somewhat in 1944–45, it remained higher than at any time during the thirties despite the effect of the war in removing from this country many young potential fathers. Beginning in the middle of 1946, the birthrate rose very rapidly, and for the 12-month period ending June 1947 was higher than at any time since before the beginning of World War I. Thereafter there was some decline and a subsequent rise in 1951–53, although not quite to the 1947 level.

The increase in birth rates in recent years seems to be largely concentrated in the rates for first, second, and third births. The increase in first births tends to increase the proportion of the insured population with dependents eligible for immediate monthly benefits, as well as the number of such dependents. As a result, the cost of survivor benefits is increased even though there is a decline in the number of large families; the latter factor has only a limited effect upon benefits because aggregate benefits for a family are not increased for children in excess of three where the mother is also receiving benefits.

Net immigration had been very heavy prior to 1915 and moderate in the early twenties, but was quite negligible thereafter. Most population forecasts have assumed that no return to high net immigration rates may be expected.

As a basis for the cost estimates, two population projections have been developed. These do not reflect the maximum possible range in population which might develop in the future, but rather embody factors which produce either low cost or high cost in regard to old-age and survivors insurance; for example, unfavorable mortality assumptions versus favorable ones. These population projections are presented in detail in Actuarial Study No. 33 of the Social Security Administration (*Illustrative United States Population Projections, 1952*).

Table 11 indicates the alternative trends of population growth resulting for the total population, for those aged 20–64, and for those aged 65 and over. The high-cost projection shows a larger aged population than the low-cost projection because of the assumed lower mortality, but a somewhat lower population in age groups under 65 because of the assumed lower fertility which more than offsets the improved mortality.

TABLE 11.—*Estimated population of the United States, 1960–2000*

[In millions]

Calendar year	All ages			Ages 20–64			Ages 65 and over		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
	Actual data								
1950 (April)	151	75	76	87	43	44	12.3	5.8	6.5
1952 (July)	157	78	79	89	44	45	13.1	6.1	7.0
	Projection for low-cost assumptions								
1960	174	86	88	95	46	49	15.4	7.0	8.4
1980	209	103	106	117	58	59	22.0	9.4	12.6
2000	248	123	125	139	70	69	25.8	11.0	14.8
	Projection for high-cost assumptions								
1960	173	86	87	95	47	48	15.5	7.1	8.4
1980	197	97	100	116	58	58	22.8	9.9	12.9
2000	216	108	108	128	64	64	28.0	12.2	15.8

(*b*) *Mortality.*—Mortality rates by age have been improving steadily since the turn of the century for both sexes and for virtually all ages up to age 60. Although there was relatively little change above that age during the first four decades, during the past decade there has been significant improvement.

In the low-cost assumptions, some improvement in mortality rates at all ages is assumed. However, in the high-cost assumptions, considerably more improvement is assumed. Although both sets of assumptions are arbitrary, they may reasonably bound, for the purposes of this report, the range within which mortality rates will fall. If the range between them seems wide, it should be recalled that no allowance has been made for the effects of such diverse factors as the application of new discoveries to the prevention of disease and to the impairments caused by disease and the possibilities of increasing the survival of impaired lives for only temporary periods.

Mortality rates are of major importance for estimates of future benefits for the aged and of importance also in determining potential deaths among the younger parents which will give rise to mother's and child's survivor benefits and ultimately to aged widow's benefits.

(c) *Amount of covered employment.*—In determining the number of covered persons, percentages of men and women in the population who are in covered employment are developed by age through analysis of wage data for the previous coverage and preliminary data for 1951 for the present coverage, along with census and other data in regard to the newly covered groups. The level of employment in the high employment assumptions is roughly that currently prevailing. It is assumed that in the future the proportion of women who would be in covered employment would gradually rise for each age group, since in recent years they have been participating more and more in the covered labor force.

Because the coverage of the system excludes several large categories of employment (considerable portions of agricultural, domestic, nonprofit, and public employment, and agricultural and most professional self-employment), there is a flow of workers between covered and noncovered employment in addition to that between covered employment and unemployment. The restricted coverage necessarily will result in large numbers of workers who have not had sufficient contact with the program to establish or maintain the insured status necessary for benefit qualification. The extent of contact is a function both of stability of covered jobs and of age; older persons are somewhat more settled in their work than younger persons.

(d) *Proportion of time in covered employment prior to qualification for benefits.*—The number of persons who gain protection through becoming either "fully insured" or "currently insured" under old-age and survivors insurance depends upon the volume and pattern of their work in covered employment and upon the amount of taxable earnings from such work. A discussion of the latter factor is presented subsequently under item (h).

Estimates are presented in table 12, showing for the future the percentages of the population insured by reason of current or previous work experience, subdivided by sex and by age groups above and below 65. The percentages for age 65 and over include old-age beneficiaries (i. e., retired workers). Table 13 relates the old-age beneficiaries and the total beneficiaries age 65 and over actually drawing benefits to the total aged population.

TABLE 12.—*Estimated proportion of the population insured under old-age and survivors insurance, 1960–2000*

[In percent]

Calendar year	Low-cost estimate: Ages 20–64	Low-cost estimate: Ages 65 and over [1]	High-cost estimate: Ages 20–64	High-cost estimate: Ages 65 and over [1]
	Men			
1960	80	67	83	71
1980	81	78	87	82
2000	80	85	88	94
	Women [2]			
1960	44	20	47	22
1980	46	34	53	42
2000	46	43	54	58

[1] Including old-age beneficiaries.
[2] Excludes wives and widows of fully insured men except such wives and widows who are insured on the basis of their own employment.

NOTE.—The figures in this table are based on the cost estimate involving high-employment assumptions

TABLE 13.—*Estimated proportion of population aged 65 and over receiving benefits, 1960–2000*

[In percent]

Calendar year	Men receiving benefits [1]	Women receiving benefits: Old-age benefits [2]	Women receiving benefits: Other benefits [3]	Women receiving benefits: Total
	Low-cost estimate			
1960	49	15	30	45
1980	59	30	37	67
2000	68	39	37	76
	High-cost estimate			
1960	57	19	32	51
1980	69	38	38	76
2000	82	54	34	88

[1] Consists almost entirely of old-age beneficiaries (retired insured workers).
[2] Old-age beneficiaries are retired insured workers. Women qualified both for old-age and wife's, widow's, or parent's benefits are considered as old-age beneficiaries.
[3] Wives of old-age beneficiaries, and widow's and dependent mothers of deceased insured workers.

NOTE.—The figures in this table are based on the cost estimate involving high-employment assumptions.

(*e*) *Marital and family composition.*—Marital relationships by age have great significance for old-age and survivors insurance costs because the system provides benefits for aged wives and widows (and also for aged dependent husbands and widowers). A woman over 65 cannot draw both the old-age benefit based on her own earnings and a full wife's or widow's benefit based on her husband's earnings. Hence, it is necessary to consider both the marital status of the female covered workers and also the exits from this group because of marriage. There will be a relatively large cost offset on account of this provision which prohibits duplication of benefits. The experience to date is extremely limited in this respect; this factor will not be of major importance until some 30 or 40 years hence when the vast bulk of the current female workers, those in their twenties and thirties, have attained the minimum retirement age.

Family composition data indicating the proportion of individuals with children and the average number of children in such cases also have great significance because the system provides benefits for orphaned children and their widowed mothers. The future birth rate has an important role in this connection since it determines not only the total number of children, but also how they are divided up into families. The actual claims experience is valuable as a guide.

There must also be considered the various factors affecting termination of married status, chiefly divorce and mortality. The distribution of ages of husbands and wives also affects the cost of illustrations. Various studies have indicated that at almost all ages women have lower mortality rates than men and that the mortality rates of married persons are lower than those for all persons combined. In the cost estimates differential mortality by marital status has been considered in determining costs for the various types of benefits.

Beneficiaries age 65 and over and their dependents are composed of a number of different categories. Table 14 shows the trends in the number of beneficiaries, distinguishing between old-age beneficiaries (retired workers), wives and dependent husbands of old-age beneficiaries, children of old-age beneficiaries, aged widows and dependent widowers of deceased insured individuals, and dependent parents of deceased insured workers who left no widow or child under 18. It has been assumed that all retired persons eligible to receive old-age benefits based on their own earnings would apply for and receive such benefits even though they might be entitled to larger wife's, husband's, widow's, widower's, or parent's benefits (which instead would be paid as reduced supplementary amounts). This assumption has been made because it is never to the individual's disadvantage and may be to his advantage to receive old-age benefits and reduced supplementary benefits of another category, rather than to receive solely the full benefits of the other category.

Although persons age 65 and over make up the bulk of the prospective beneficiaries under the program, the young survivors, composed of orphaned children and widowed mothers, will receive a considerable amount of benefits. Table 15 lists these two groups separately.

The high-cost assumptions show, as expected, a larger number of old-age beneficiaries, and dependents thereof, than the low-cost assumptions (table 14); this is in part because of the lower mortality rates assumed which result in a greater number and proportion of aged persons, and in part because of the higher retirement rates and the greater proportion of the population assumed to be insured as a result of the in-and-out movement between covered and noncovered employment. On the other hand, the lower mortality tends to have the opposite effect in regard to widows (table 14) and, despite the somewhat higher birth rates, in regard to young survivors (table 15); a smaller number of survivor beneficiaries under the high-cost assumptions than under the low-cost assumptions is indicated.

TABLE 14.—*Estimated monthly beneficiaries [1] age 65 and over and children of old-age beneficiaries, in current payment status, 1960–2000*

[In thousands]

Calendar year	Old-age beneficiaries [2]	Wives of old-age beneficiaries [3]	Children of old-age beneficiaries	Aged widows [4]	Dependent parents
	Actual data for December				
1950	1,771	508	46	314	15
1951	2,278	647	71	381	19
1952	2,644	739	74	455	21
1953	3,222	888	90	541	24
	Low-cost estimate				
1960	4,715	1,180	99	1,328	27
1980	9,338	1,592	156	3,082	35
2000	13,211	1,899	181	3,644	43
	High-cost estimate				
1960	5,625	1,348	120	1,353	31
1980	11,751	1,764	172	3,076	47
2000	18,570	2,021	190	3,266	63

[1] Persons qualifying both for old-age benefits and for wife's, widow's, husband's, widower's, or parent's benefits are shown as old-age beneficiaries.
[2] I. e., retired insured workers.
[3] Including dependent husbands and also a small number of wives under age 65 with child beneficiaries in their care.
[4] Including dependent widowers.

NOTE.—The estimated figures in this table are based on the cost estimate involving high-employment assumptions.

TABLE 15.—*Estimated younger survivor insurance monthly beneficiaries in current payment status, 1960–2000*

[In thousands]

Calendar year	Orphaned children	Widowed mothers
	Actual data for December	
1950	653	169
1951	776	204
1952	865	228
1953	964	254
	Low-cost estimate	
1960	1,282	359
1980	1,413	421
2000	1,614	473
	High-cost estimate	
1960	1,341	442
1980	1,366	496
2000	1,289	478

NOTE.—The estimated figures in this table are based on the cost estimate involving high-employment assumptions.

TABLE 16.—*Estimated old-age and survivors insurance beneficiaries in current payment status, 1960–2000*

[In thousands]

Calendar year	Aged beneficiaries [1]	Younger survivors	Lump-sum death payments [2]
	Actual data for December		
1950	2,654	822	200
1951	3,399	980	414
1952	3,933	1,093	437
1953	4,764	1,217	512
	Low-cost estimate		
1960	7,349	1,641	758
1980	14,203	1,834	1,184
2000	18,978	2,087	1,557
	High-cost estimate		
1960	8,477	1,783	784
1980	16,810	1,862	1,245
2000	24,110	1,767	1,701

[1] Including children of old-age beneficiaries and wives under age 65 having such children in their care.
[2] Number of deaths resulting in lump-sum payments during the year.

NOTE.—The estimated figures in this table are based on the cost estimate involving high-employment assumptions.

Table 16 summarizes the previous discussion by showing illustrative numbers of beneficiaries and lump-sum death payments. The category "younger survivors" comprises orphaned children and their widowed mothers. Widows, widowers, and parents aged 65 and over are included under the old-age category, as are also spouses and dependent children of old-age beneficiaries.

In tables 12 to 16 only potential long-range trends have been set down, without recognition of cyclical or periodic fluctuations. Bearing this in mind, certain trends may be observed in these illustrative tables of number of beneficiaries.

(1) An overall uptrend in beneficiaries under all types of benefits payable to persons aged 65 and over;

(2) After 1960, a relatively small increase under the low-cost assumptions and a leveling off under the high-cost assumptions in the number of orphan-child and widowed-mother beneficiaries;

(3) The relatively small, and increasingly smaller, proportion that younger survivor benefits are of all benefits;

(4) A relatively rapid advance in the percent of insured persons aged 65 and over (including those drawing benefits) as compared with the rise in the percent insured at ages 20–64; and

(5) A rapid rise in the percent of aged persons who are receiving old-age benefits.

(*f*) *Remarriage rates.*—Remarriage of "young widows" is an important cost factor because mother's insurance benefits terminate thereupon, as do also rights to deferred widow's benefits at age 65. The greatest possible duration of benefits occurs among the younger widows, who can receive benefits for many years as mothers of young children and later as aged widows. These, however, are also the women with the greatest chance of remarriage. Among the older mothers with fewer prospective years of benefit receipt (their youngest child being nearer age 18), the probability of remarriage is lower.

Remarriage rates vary both by age of the widow and by duration of widowhood. This factor produces a tangible reduction in the volume of "life insurance" afforded by the program when such "life insurance" is interpreted as meaning the present value, in case of the worker's death, of prospective benefit payments to his surviving dependents. It is estimated that at the end of 1953 the program provided over $300 billion of such "life insurance" protection for survivors.

(*g*) *Employment of beneficiaries.*—Since monthly benefits for all categories of beneficiaries are, in effect, suspended in any month in which the beneficiary is under age 75 and earns more than $75 in covered employment, assumptions as to the employment of beneficiaries rank high in importance among the various cost elements. As of December 1952, 63 percent of those age 65 and over who were fully insured were actually receiving benefits. The proportion is influenced to some extent by the favorable work opportunities for the aged now prevailing. In the future this proportion will probably increase somewhat, if for no other reason than the aging of the insured population.

Then, too, a large demand for labor draws into employment and away from benefit receipt many widowed mothers and older children. There is assumed to be more employment of beneficiaries, and thus savings in cost, in the low-cost assumptions than in the high-cost ones.

(*h*) *Earnings in covered employment.*—One of the most striking changes in earned income on record has taken place since 1940. Not only have there been further rises in the hourly rate of earnings since the end of World War II, but also there has tended to be relatively little unemployment, including partial unemployment, so that most workers have had a full workweek. Since the outbreak of the Korean conflict, another sharp rise in earnings rates has occurred.

The resulting changes in earnings give workers relatively more chance of obtaining credit for quarters of coverage (at $50 of wages per quarter) than had been the case in the prewar years, and as a result produce an increase in number of persons with insured status and in the average wage used for benefit computations. This increase is assumed to be more or less permanent.

Assumptions as to future covered earnings are essential in developing illustrative actuarial projections. The trend of earnings in the past has been unquestionably of an upward character. Average reported earnings derived from old-age and survivors insurance records were much lower in the early years of the system than currently (table 17).

The cost assumptions involve average annual creditable earnings throughout the future of $2,980 for men working in 4 quarters of a year and, correspondingly, $2,030 for women. For both men and women the average earnings used for 3-quarter workers is about 40 percent of that for 4-quarter workers (i. e., at a lower rate per quarter), while the corresponding proportions for the 2-quarter and 1-quarter workers are about 20 and 10 percent, respectively. As used here, the reference to 4-quarter workers, 3-quarter workers, etc., relates only to the status in a particular year; the estimates allow for the fact that over the course of a working lifetime an individual would be in covered employment all 4 quarters of some years, 3 quarters of other years, etc. (and, in fact, not in covered employment at all in some years). These ratios of the part-time average covered earnings to the 4-quarter average parallel very closely the actual ratios observed in the old-age and survivors insurance earnings data.

The 4-quarter earnings assumptions may be compared with the actual experience for such workers in the past years as shown by the last two columns of table 17 but allowance must be made for the change in maximum wage base. The earnings assumptions are on about the level prevailing in 1951–52 (somewhat lower than 1952 but higher than 1951) and are about 20 to 25 percent above the experience in 1947 when adjustment is made for the change in the wage base.

TABLE 17.—*Average earnings credits of workers under old-age and survivors insurance by years, 1937–52*

Calendar year	Workers with any earnings in year			Workers with earnings in all 4 calendar quarters		
	Total	Male	Female	Total	Male	Female
	$3,000 maximum earnings base					
1937	$899	$1,037	$539	(1)	(1)	(1)
1938	832	958	507	$1,211	$1,359	$783
1939	881	1,014	536	1,247	1,400	800
1940	926	1,070	553	1,305	1,465	831
1941	1,014	1,188	574	1,466	1,646	910
1942	1,127	1,364	609	1,703	1,939	1,047
1943	1,289	1,580	788	1,913	2,205	1,271
1944	1,369	1,681	887	1,996	2,301	1,402
1945	1,328	1,591	895	1,982	2,293	1,384
1946	1,394	1,635	929	2,031	2,269	1,480
1947	1,571	1,831	1,044	2,173	2,393	1,611
1948	1,677	1,939	1,138	2,281	2,493	1,733
1949	1,711	1,964	1,185	2,298	2,508	1,763
1950	1,769	2,026	1,232	2,375	2,578	1,851
	$3,600 maximum earnings base					
1951 total [2]	$2,031	$2,389	$1,328	(1)	(1)	(1)
1951 wage employment [2]	1,989	2,352	1,314	$2,658	$2,965	$1,936
1951 self-employment [2]	2,300	2,400	1,710	(1)	(1)	(1)
1952 total [2]	2,100	2,480	1,390	(1)	(1)	(1)
1952 wage employment [2]	2,070	2,450	1,380	2,740	3,040	2,060
1952 self-employment [2]	2,320	2,420	1,730	(1)	(1)	(1)

[1] Data not available.
[2] Preliminary.

The development of the prospective cost of the program using the various elements discussed furnishes reasonable illustrations of future beneficiaries and costs. Though neither the lowest nor the highest conceivable, the values derived are well within the outside boundaries of possibility. Experience to date is limited, the payment of monthly benefits having begun only in 1940, and these benefits were revised drastically in 1950 and again to a moderate extent in 1952. As payments got underway, the limitations of coverage and the insured-status requirement excluded large numbers of potential beneficiaries. Payments were further delayed by the lag with which any new program commences. In recent years, as the lag has lessened, payments among those eligible to receive them have been limited by postponements in the claiming of benefits occasioned by favorable employment conditions during the war and immediate postwar years. The long-range cost estimates look beyond these various limitations and attempt to furnish some indication of the trend in the costs of the old-age and survivors insurance program.

It is to be noted that in addition to the assumptions already discussed, the long-range cost illustrations include assumptions relating to retirement rates, interest rate, and various miscellaneous administrative factors. Since the earlier cost estimates were developed, sufficient actual experience under the operation of the program is available to permit the introduction of various modifications to allow for such factors as the minimum and maximum provisions as to benefits, and the provision that the lump-sum death payment in certain instances may not exceed the actual burial expenses. Also taken into account are such miscellaneous factors as differential retirement rates by marital status and the effect on the size of survivor benefits of lowered earning capacity during last illness.

An important element affecting old-age and survivors insurance costs arose through amendments made to the Railroad Retirement Act in 1951. These extend the 1946 amendments and provide for a coordination of railroad retirement compensation and old-age and survivors insurance covered earnings in determining not only survivor benefits but also retirement benefits for those with less than 10 years of railroad service. In fact, all future survivor and retirement cases involving less than 10 years of railroad service are to be paid by the old-age and survivors insurance system.

Financial interchange provisions are established such that the old-age and survivors insurance trust fund is to be placed in the same financial position as if there never had been a separate railroad retirement program. It is estimated that the net effect of these provisions will be a relatively small net gain to the old-age and survivors insurance system since the reimbursements from the railroad retirement system will be somewhat larger than the net additional benefits paid on the basis of railroad earnings. The long-range costs developed here are for the operation of the trust fund on the basis, as provided in current law, that all railroad employment will be (and beginning with 1937 has been) covered employment. The balance in the fund thus corresponds exactly to the actual situation arising. But the contribution income and benefit disbursement figures shown (as well as the numbers of beneficiaries) are slightly higher (by less than 5 percent) than the payments which will actually be made directly to the trust fund from contributors and the payments which will actually be made from the trust fund to the individual beneficiaries. This is the case because the figures here include both the additional contributions which would have been collected if railroad employment had always been covered and the additional benefits that would have been paid under such circumstances. The balance for these two elements is to be accounted for in actual practice bv the operation of the financial interchange provisions.

The long-range cost estimates of income and outgo were presented previously in the body of the report in tables 9 and 10, the former showing the benefit costs relative to payroll and the latter the progress of the trust fund. In addition to the figures for the low-cost and high-cost estimates, there have been developed intermediate cost estimates which are merely an average of the low-cost and high-cost estimates and are not intended to represent "most probable" figures. Rather, they have been set down as a convenient and readily available single set of figures to be used for comparative purposes.

Furthermore, since the Congress has adopted the principle of establishing in the law a contribution schedule designed to make the system self-supporting, it was necessary at the time the legislation was enacted to select a single set of estimates as the basis for the contribution schedule. The intermediate estimate was used for this purpose. Quite obviously any specific schedule may require modification in the light of experience, but the establishment of the schedule in the law does make clear the congressional intent that the system be self-supporting. Further, exact self-support cannot be obtained from a specific set of integral or rounded fractional rates, but rather this principle of self-support was aimed at as closely as possible by the Congress in 1950 when it developed the tax schedule in the law, and again in 1952 when further amendments were made.

The low-cost and high-cost estimates result from two carefully considered series of assumptions. The intermediate-cost estimate represents an average of the low-cost and high-cost estimates of beneficiaries, benefit disbursements, and total taxable payroll. The corresponding estimates of benefits relative to payroll are developed from these dollar figures.

The tax schedule in the 1950 amendments was derived such that when the rates therein were applied to the payroll resulting for the intermediate-cost estimate, the system would be on a more or less completely self-supporting basis. From this tax schedule, the progress of the fund was developed at the time this legislation was enacted, and this naturally showed that in the ultimate condition the fund virtually leveled off—neither increasing nor decreasing substantially thereafter. This same tax schedule was also applied to the low-cost and high-cost benefit projections to develop the trust fund balances in the future on these respective bases. Quite obviously, under the circumstances previously outlined, the trust fund would eventually be depleted for the high-cost estimate and would increase indefinitely for the low-cost estimate. Such results are to be expected for these two estimates since for purposes of developing contribution income there was used a tax schedule considered more or less adequate according to the intermediate cost estimate.

Similarly, when the 1952 amendments were considered, low-cost and high-cost estimates were developed and from these also an intermediate-cost estimate. As it turned out according to such intermediate-cost estimate, the tax schedule in existence as a result of the 1950 amendments was sufficient under the modified cost assumptions to support the system to just as great an extent (and, in fact, a little greater) as was the case for the 1950 amendments when they were being considered. Accordingly, the trust fund developing for the 1952 amendments under the intermediate-cost estimate made at the time the legislation was enacted virtually levels off for the ultimate condition; as would be expected, it is exhausted at some future date for the high-cost estimate and increases indefinitely for the low-cost estimate.

Tables 9 and 10 show the steady rise in benefit payments under the widely different sets of conditions discussed earlier in this section, and demonstrate the large increases, relatively and in absolute quantities, which would occur even after 1980, particularly under the high-cost assumptions.

Because of the nature of the assumptions, the tables show only smooth trends and hence do not show the irregularities and periodic cyclical variations which may develop. These irregularities are expected to be far more pronounced in regard to contributions than benefits, because the dollar amount of the benefit roll, after the system is well established, will contain a large proportion of fixed payments to permanently retired persons. However, the payroll of covered workers from which the contribution income is derived is quite sensitive to current fluctuations, through increases or decreases in job opportunities, changes in the length of the workweek, and changes in unit rates of pay. For demographic reasons alone, as discussed earlier in this section, it is unlikely that the system would even eventually level out to a completely fixed relationship between contributions and benefits.

Before proceeding with a discussion of the results of the estimates, there might be mentioned several important factors affecting the relationship between the new cost estimates and the previous ones. In the low-cost estimate, the new estimate assumes some improvement in mortality, whereas previously constant mortality had been the basis (this would, of course, produce higher costs). For both cost estimates, the range in regard to a number of the cost factors has been narrowed somewhat since, on the basis of the 14 years operating experience under monthly benefit payments, we have some better ideas as to future trends.

In the previous cost estimates (prepared from 1939 on) it had always been assumed that the system would mature in the year 2000 or, in other words, that benefit payments and contributions would be level thereafter (the 1935 cost estimates assumed maturity by 1980). In the new cost estimates, an alternative assumption is made by maturing any trends such as mortality in the year 2000 but going on with the estimate for another 50 years. In one sense, this seems necessary because the aged population itself cannot mature by the year 2000 (see Actuarial Study No. 33, Social Security Administration, particularly p. 28). The reason for this is that the number of births in the 1930's was very low as compared with those since then, and, as a result, there is a dip in the relative proportion of the aged from 1995 to about 2010, which, in itself, would be reflected in the benefit costs for that period. Accordingly, the year 2000 is by no means a typical "ultimate year."

The interest assumption used in determining level-premium costs is alternatively 2¼ and 2¾ percent. The average rate on investments of the trust fund is currently about 2.4 percent.

Table 9 compares benefit costs related to payroll for the present estimate. Considering the year-by-year figures, those for the low-employment assumptions are higher than those for the high-employment assumptions—by somewhat more than one-half percent of payroll in the early years and by about three-fourths percent of payroll some 50 years hence. The cost rises steadily over the future years under all estimates—leveling out somewhat between 1990 and 2000 for the reasons indicated previously.

The "ultimate" cost is reached some 20 or 25 years after the year 2000. For the high-employment assumptions, the ultimate cost is roughly 7 percent of payroll for the low-cost estimate, 11 percent for the high-cost estimate, and 8½ percent for the intermediate-cost estimate. On the other hand, for the low-employment assumptions, the corresponding figures are 7⅔, 12, and 9⅓ percent, respectively.

Next, considering level-premium costs, the intermediate-cost estimate based on high-employment assumptions shows a cost of 6.7 percent of payroll at 2¼-percent interest, and 6.4 percent at 2¾-percent interest. The corresponding figures for the low-employment assumptions are 7.4 and 7.1 percent, respectively. These figures may be contrasted with the level rate equivalent to the graded contribution schedule in the law (taking into account the lower contributions payable by the self-employed as compared with the combined employer-employee rate), which is somewhat under 6 percent of payroll. Thus, this comparison indicates that according to these intermediate-cost figures, the tax schedule in the law is not quite self-supporting based on the high-employment assumptions and, further, that such situation also prevails for the low-cost estimate based on low-employment assumptions.

Table 10 shows the progress of the trust fund under the present estimates. In the high-employment, low-cost estimate, contribution income exceeds benefit disbursements in all years over the next three decades and is only slightly lower thereafter (this excess is more than counterbalanced by interest earnings on the trust fund). Accordingly, the trust fund builds up quite rapidly and even some 50 years hence is growing at a rate of over $2½ billion per year (and at that time is about $130 billion in magnitude). On the other hand, under the corresponding high-cost estimate, the benefit disbursements exceed contribution income after 1975, and the trust fund after building up to a maximum of about $40 billion in 1975–80, decreases thereafter until exhausted shortly before the year 2000.

These results for the high-employment, low-cost and high-cost estimates are to be expected since the system on an intermediate-cost estimate is approximately self-supporting. Accordingly, a low-cost estimate should show that the system is more than self-supporting and a high-cost estimate should show that a deficiency will arise in later years. At any rate, it appears likely that under any reasonable circumstances, there will be ample funds for several decades even under relatively unfavorable experience.

According to the high-employment, intermediate-cost estimate, contribution income exceeds benefit disbursements until about 1980. Accordingly, the trust fund grows steadily, reaching a maximum of about $65 billion in 1985, and then declines slowly. This decrease indicates that the tax schedule in the law is not quite self-supporting according to this intermediate-cost estimate.

For the low-employment assumptions, under the low-cost estimate contribution income exceeds benefit disbursements only until shortly after 1975. Accordingly, the trust fund builds up for the next quarter century, reaching a peak of about $45 billion in 1980 and then declines slowly. On the other hand, under the corresponding high-cost estimate, benefit disbursements in general slightly exceed contributions in most of the early years; as a result the trust fund tends to stay somewhat under $20 billion until 1970 and then declines steadily until being exhausted shortly after 1985. For the intermediate-cost estimate, the trust fund builds up to a maximum of about $30 billion in 1975 and decreases steadily thereafter until being exhausted in about 1995.

A factor mentioned earlier, but not used in the actuarial projections, is the trend, exhibited in the past, of an irregular but upward movement in earnings, both on a dollar basis and in the form of real wages. If this secular trend continues, then—other things being equal—the curves of benefits and contributions would both be more steeply ascending than shown. The upward changes in the contribution curves, however, would be far more accentuated than would be such changes in the benefit curves. There are several reasons for this, the important one being that the benefit increase would be dampened because—

(1) The benefits are determined by the average monthly wage up to the maximum of $300; 55 percent is applied to the first $100 thereof and 15 percent to that part above $100. As average earnings increase and as more persons approach or reach the $300 maximum, a larger portion of such earnings falls in that bracket of the benefit formula to which the 15-percent rather than the 55-percent rate applies. Thus benefits are smaller in relation to earnings, and consequently in relation to contributions.

(2) Any year's contributions are substantially based on the covered earnings of that year, while any year's benefits in force are based on weighted composite earnings of all previous years in which the insured persons on whose account the benefits are paid worked in covered employment, thus including, in far distant future years, earnings of as much as 60 years previously.

The assumption of steadily rising earnings in conjunction with an unamended benefit formula would have an important bearing in considering the long-range cost of the program. With such an assumption, the future rise in earnings would seem to offer significant financial help in the financing of benefits because contributions at a fixed percentage rate would increase steadily relative to benefit disbursements; but the benefits paid to beneficiaries would steadily diminish in relation to current earnings levels. In such a case, offsetting this apparent savings in cost, it is likely that from the long-range point of view the present benefit formula would not be maintained.

In revising the benefit schedule to conform with the altered earnings level, the changed cost and contribution picture would have to be considered. This is especially so as to changes resulting from the fact that benefits would be based on earnings prevailing at the time of such change and thereafter, while the accumulated trust fund at that time would have developed from contributions on the lower earnings prevailing during the past. The fund thus would not play as important a role in financing the program as would have been the case if the earnings level had not changed. If it is assumed that the benefit level in the future will be adjusted in proportion to the increase in the average earnings, the level-premium cost of the program, expressed as a percentage of taxable earnings into perpetuity, is increased because of the diminishing part played by the accumulated trust fund in financing the program. For small annual rates of increase in average earnings (i. e., for rates less than the assumed valuation interest rate) this increase in cost may be partially counterbalanced by the timelag which would undoubtedly occur between the rise in earnings level and the amendment of the benefit provisions. However, for larger rates of increase in average earnings the level-premium cost into perpetuity would be the ultimate cost, because the fund would ultimately play virtually no role in the financing of the benefits. Nevertheless, during the course of this century, at least, the interest income from the fund would continue to be a significant amount when related to total disbursements.

In addition to excluding the assumption of increasing wages in the future, the detailed cost estimates given have avoided dealing with various other important secular trends. These have diverse effects on costs which cannot now be adequately extrapolated into the future. One illustration is the lengthening of the period of childhood or preparation for work. Another possibility is a drastic change in the average age of retirement, either to a considerably lower effective age so that practically all persons would retire at the minimum age of 65, or conversely to a higher effective age under circumstances of greatly improved health conditions combined with good employment opportunities, such that few would retire before age 70 or even 75.

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