

FEDERAL OLD-AGE AND SURVIVORS
INSURANCE TRUST FUND

L E T T E R

FROM THE

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

TRANSMITTING

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



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BOARD OF TRUSTEES OF THE FEDERAL
OLD-AGE AND SURVIVORS INSURANCE TRUST FUND,
Washington, D. C., March 1, 1952.

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 Twelfth 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,

JOHN W. SNYDER,
*Secretary of the Treasury, and
Managing Trustee of the Trust Fund.*

MAURICE J. TOBIN,
Secretary of Labor.

OSCAR R. EWING,
Federal Security Administrator.

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

INTRODUCTORY STATEMENT

The Federal old-age and survivors insurance trust fund was established on January 1, 1940, under the provisions of section 201 of the Social Security Act, as amended. The fund is held by the Board of Trustees comprised of three ex officio members: the Secretary of the Treasury, who is also the managing trustee; the Secretary of Labor; and the Federal Security Administrator. The Commissioner for Social Security is secretary of the Board. This report is submitted jointly by the three trustees.

As required by law, the report describes the operations of the trust fund during the fiscal year ended June 30, 1951, the expected receipts and disbursements during the five fiscal years following that date, and the long-range actuarial status of the fund. It also discusses the far-reaching effects of the 1950 amendments on the operations of the trust fund.

The Social Security Act Amendments of 1950 (Public Law 734, 81st Cong.), which lowered the eligibility requirements, increased the benefits, and extended the coverage of the insurance program, were enacted early in the fiscal year reviewed in this report. The new eligibility and benefit provisions became effective on September 1, 1950, and the new coverage provisions on January 1, 1951. Although they do not represent a full year's operations under the amended act, the revenues and disbursements of the trust fund were substantially increased in fiscal year 1951 by the larger benefit rolls, the higher level of benefits, and the broader coverage that resulted from these 1950 amendments. In addition, 1951 was the first full fiscal year under the increased contribution rates that became effective on January 1, 1950. The rise in the fund's revenues in fiscal year 1951 as compared with fiscal year 1950, therefore, was affected by both the larger number of workers covered and the higher rate of contributions.

The operations of the trust fund during the year were also influenced by economic developments. Employment and earnings rose above the already high levels reached in 1950. Total civilian employment in fiscal year 1951 averaged 60.8 million, or 3 percent higher than in 1950. Average nonagricultural employment for the 12 months of fiscal year 1951 was about 4 percent higher than in 1950. Unemployment, which averaged 3.7 million in 1950, fell to an average of 2.2 million in fiscal year 1951. Payrolls in civilian employment totaled about \$153 billion in fiscal year 1951, about \$21.5 billion above 1950 payrolls.

This rise in employment and earnings combined with the extended coverage under the 1950 amendments to increase the number of wage earners receiving wage credits under old-age and survivors insurance to about 46.0 million in the last quarter of fiscal year 1951, a gain of about 16 percent over the corresponding quarter in 1950, and to increase the total wages taxable under old-age and survivors insurance to \$31.0 billion in the last quarter of fiscal year 1951, a rise of about 28 percent over the same quarter of the preceding year. These figures include practically none of the self-employed whose annual income from self-employment was first taxable under the program for calendar year 1951 or for the taxpayer's fiscal year beginning in 1951.

These changes, partly legislative and partly economic, resulted in even greater relative increases in the receipts and disbursements of the trust fund. The contribution income of the trust fund rose to an all-time high of \$3,120 million, an increase of \$1,014 million over fiscal year 1950. Benefit payments rose by \$771 million and totaled \$1,498 million. The total number of beneficiaries in June 1951 was 4,034,000 or 38 percent more than in June 1950. Retirement beneficiaries (including entitled wives, dependent husbands, and children of old-age beneficiaries) numbered 2,748,000 in June 1951 or 49 percent more than 1 year earlier. There were 1,285,000 survivor beneficiaries in June 1951 or 18 percent more than in June 1950. During the fiscal year the trust fund received interest of \$287 million and increased its assets to a total of \$14,736 million.

A substantial factor in increasing the amount of contributions received by the fund during the past few years has been the upward trend in average earnings. This rise has implications for benefits as well as for contributions. The income of the old-age and survivors insurance trust fund is derived from contributions which are a percentage of earnings in employments covered by the program. Thus, a rise in average earnings increases the income of the fund, even though the contribution rates remain unchanged. At the same time, because of the weighted nature of the benefit formula, benefit liabilities do not increase to the same extent as contribution revenues. Consequently, as the wage level rises, there is a drop in the percentage-of-payroll cost of benefits payable under the present act.

The economic consequences of hostilities in Korea, the defense preparations, and the programs for economic and military aid to Western European nations will have far-reaching effects on the operations of the trust fund, both short-range and long-range. These consequences, 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 constantly shifting economic conditions.

SOCIAL SECURITY ACT AMENDMENTS OF 1950

The 1950 amendments to the Social Security Act (Public Law 734, 81st Cong.), which represented the first major legislative changes in the old-age and survivors insurance program since enactment of the 1939 amendments, became law during the early part of the fiscal year ending June 30, 1951. These changes in the law will have far-reaching effects on the level and incidence of income and disbursements of the trust fund both in the immediate and long-term future. Coverage was extended to a number of classes of employees as well as to most nonagricultural self-employed persons hitherto excluded. The requirements necessary to qualify for receipt of benefits were relaxed greatly. Benefit amounts payable to present and future beneficiaries were increased substantially. A schedule of contribution rates was adopted which Congress believed will make the system self-supporting.

The more important changes significant from an actuarial standpoint will now be presented in greater detail.

1. Coverage was extended compulsorily to 7-8 million additional persons, including regularly employed domestic and farm workers; most Federal employees not covered under the civil-service retirement program; the nonfarm self-employed other than doctors, lawyers, engineers, and members of certain other professional groups; workers and the self-employed in Puerto Rico and the Virgin Islands; and a few other small occupational classes. In addition, two categories of wage earners were given the opportunity to be covered on a voluntary basis—employees of nonprofit institutions and employees of State and local governments who are not under retirement systems. In June 1951, about 75 percent of all persons in paid employment in this country were covered by the old-age and survivors insurance program.

2. Benefits are paid in certain circumstances in which no benefits would formerly have been paid.

(a) The requirements for fully insured status were liberalized by introducing a new starting date for determining such status. This "new start" enables many persons at least 65 years of age who did not meet the former requirements to become immediately eligible to receive retirement benefits. It also removes the disadvantage the newly covered groups would otherwise have faced in acquiring eligibility.

(b) Provisions defining dependency were modified to permit the payment of survivor benefits to all unmarried children under 18 years of age whose mothers were currently insured at time of death.

(c) Several new benefits for dependents and survivors of insured persons were added. Benefits equal to 50 percent of the primary insurance amount are payable to a wife, under 65 years of age, of an old-age (primary) beneficiary as long as she has in her care a child entitled to benefits on her husband's earnings. In certain instances benefits are payable to the dependent husband, aged 65 or over, of a retired female beneficiary, and also to the aged surviving dependent widower of a deceased woman worker. Husband's and widower's benefits are equal to 50 and 75 percent, respectively, of the primary insurance amount.

(d) The provisions governing the withholding of benefits because of work in covered employment were liberalized. Eligible persons at least 75 years of age can receive benefits regardless of the amount of

their earnings in covered employment. Those under 75 years of age may earn as much as \$50 a month in covered employment and still receive benefits.

(e) Lump-sum death benefits are paid even though monthly benefits are payable to survivors for the month in which the wage earner died.

(f) Monthly benefits are paid retroactively for a period up to 6 months prior to the month in which an application was filed provided the beneficiary was eligible therefor.

3. Larger benefits will be paid to future beneficiaries as well as to persons on the rolls.

(a) The maximum amount of annual taxable earnings was raised to \$3,600.

(b) For persons having at least 6 quarters of coverage after 1950, the average monthly wage may be calculated over all years after 1936 or after 1950, whichever yields the larger primary insurance amount, except that in the case of individuals born after 1928, the 1950 starting date must be used.

(c) 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 50 percent of the first \$100 of average monthly wage, plus 15 percent of the next \$200. The minimum primary insurance amount ranges from \$25 for persons with average monthly wages between \$35 and \$50, down to \$20 for persons with average monthly wages below \$31.

(d) For persons already on the beneficiary rolls, benefits were increased by means of a conversion table contained in the new amendments. This table increased primary insurance benefits by 77½ percent, on the average, with a range of from 100 percent for the smallest benefit to 50 percent for the largest benefit. Where the wage earner lacks 6 quarters of coverage after 1950, benefits to future beneficiaries will be based on an average monthly wage computed over all years after 1936. In all cases where the average monthly wage is computed over all years after 1936, including cases referred to in subparagraph (b) above, the old benefit formula will be used, except that no 1-percent increment will be included for years after 1950. The amounts so computed are then increased by means of the conversion table.

(e) Parent's benefits were increased to 75 percent of the primary insurance amount. Child-survivor benefits were increased to the sum of (1) 50 percent of the primary insurance amount, and (2) 25 percent of the primary insurance amount, divided equally among all child beneficiaries in the family. The amount of the lump-sum death payment was changed from six times the primary insurance benefit to three times the primary insurance amount.

(f) The maximum monthly amount of family benefits payable with respect to one wage record is the smaller of \$150 or 80 percent of the average monthly wage, provided that the latter limit may not reduce benefits below \$40.

4. Wage credits of \$160 a month are given to persons for each month of service in World War II, unless benefits (other than ordinary veteran's benefits) based on such service are payable by another Federal retirement system. No provision is made to reimburse the trust fund from the general funds of the Treasury for the additional costs

arising from such wage credits. Accordingly these additional costs are borne by the trust fund.

The survivorship protection provided to certain World War II veterans by the Social Security Act Amendments of 1946 has been continued by the present amendments. However, the additional costs of these benefits which formerly were met from general funds will, effective September 1, 1950, be borne by the trust fund.

5. Contribution rates for employees and employers are 1½ percent each on taxable wages for calendar years 1951-53; 2 percent each for calendar years 1954-59; 2½ percent each for calendar years 1960-64; 3 percent each for calendar years 1965-69; and 3¼ percent each thereafter. The contribution rates on self-employment income are equal to one and one-half times the corresponding employee rates.

The provision which was added to the Social Security Act in 1943 authorizing appropriations to the trust fund from general revenues when needed to meet costs was eliminated.

Actuarial estimates, prepared at the time the 1950 amendments were being considered by Congress, indicate that on an intermediate basis the level premium cost of the system is 6.05 percent of payroll.¹

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 Bureau of Internal Revenue 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

¹ Source: Actuarial Cost Estimates for the Old-Age and Survivors Insurance System as Modified by the Social Security Act Amendments of 1950, prepared for the use of the Committee on Ways and Means by Robert J. Myers, actuary to the committee, dated July 27, 1950.

periodically to the extent that the estimates are subsequently found to differ from the actual amounts of contributions payable.

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 3¾ 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 one and one-half 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. Under the Social Security Act Amendments of 1950 this survivors insurance protection was continued, but the resulting additional cost was to be met from the trust fund beginning September 1, 1950.

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. The new legislation provides that the railroad wage credits of workers who die or retire with less than 10 years of railroad employment will 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 two systems, Public Law 234 requires the Railroad Retirement Board and the Federal Security Administrator 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 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.

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. 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 Federal Security Administrator may offset the amount of such reimbursement against the amount determined for the period through June 30, 1952.

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 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. Beginning with fiscal year 1949, 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, are charged directly to the trust fund. Under the President's Reorganization Plan No. 2, effective July 16, 1946, the Federal Security Administrator certifies benefit payments to the managing trustee, who makes the payments from the trust fund in accordance therewith. Prior to July 16, 1946, certifications for payments were made by the Social Security Board. Payments are made from an uninvested balance held in the fund to the account of the disbursing officer of the Treasury.

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 December 31, 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 December 31, 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 the 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, 1951, there were about 12,700,000 persons aged 65 and over, a number equivalent to about 8 percent of the total population. It is estimated that by the end of 50 years the number of persons aged 65 and over may be $1\frac{1}{2}$ to $2\frac{1}{4}$ times as large as on June 30, 1951, and represent from 10 to 16 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, furthermore, serves in part as a reserve against short-run fluctuations in total contribution 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. These reserves will provide additional resources against a sudden increase in total benefit amounts or a sharp decline in contributions, both of which could occur simultaneously during any reversal in business activity.

SUMMARY OF OPERATIONS OF TRUST FUND, FISCAL YEAR 1951

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, 1950, and ended on June 30, 1951, and of the assets of the fund at the beginning and end of the fiscal year, is presented in table 1.

The total receipts of the trust fund during the fiscal year 1951 amounted to \$3,411.5 million. Of this total, \$3,119.5 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. An additional \$0.9 million represented 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. The combined amount of \$3,120.4 million, appropriated or deposited, represented a 48-percent increase over appropriations in the preceding fiscal year. This large increase resulted from the combined influence of three factors: (1) Increase in total taxable earnings because of (a) higher wage rates and (b) a larger number of persons in covered employment due chiefly to extension of coverage effective January 1, 1951; (2) increase from \$3,000 to \$3,600 in the maximum amount of annual taxable earnings, effective January 1, 1951; and (3) increase in the contribution rate for employees and employers from 1 percent each to 1½ percent on January 1, 1950, with the result that the higher rate, which was in effect during only half of fiscal year 1950, was in effect during the entire fiscal year 1951. The other \$291.1 million of receipts consisted of \$287.4 million of interest on investments of the fund and \$3.7 million transferred from general funds of the Treasury in accordance with section 210 (d) of the Social Security Act, as amended in 1946 and in effect prior to the enactment of the Social Security Act Amendments of 1950.

TABLE 1.—Statement of operations of the Federal old-age and survivors insurance trust fund during the fiscal year 1951¹

Total assets of the trust fund, June 30, 1950.....		\$12,892,611,815.65
Receipts, fiscal year 1951:		
Insurance contributions:		
Appropriations.....	\$3,119,536,743.54	
Deposits, arising from State agreements.....	867,204.41	
Total insurance contributions.....	\$3,120,403,947.95	
Transfers from general fund.....	3,694,000.00	
Interest on investments.....	287,391,831.37	
Total receipts.....	3,411,489,779.32	
Disbursements, fiscal year 1951:		
Benefit payments.....	1,498,087,989.24	
Administrative expenses.....	70,446,898.72	
Total disbursements.....	1,568,534,887.96	
Net addition to trust fund.....		1,842,954,891.36
Total assets of the trust fund, June 30, 1951.....		14,735,566,707.01

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

Disbursements from the trust fund during the fiscal year 1951 totaled \$1,568.5 million, of which \$1,498.1 million consisted of benefit payments, and \$70.4 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 1950 by 106 percent, the increase being due chiefly to certain provisions of the Social Security Act Amendments of 1950 which became effective beginning in September 1950 and which resulted in (1) a larger number of persons drawing benefits primarily because of the liberalized qualifying requirements, and (2) higher benefit amounts payable to all beneficiaries.

Administrative expenditures of the fund were 2.3 percent of contribution income and 4.7 percent of benefit payments in fiscal year 1951. These were lower than the corresponding percentages—2.7 and 7.8—in the preceding fiscal year. Figures for each of the years 1941–51 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	1947.....	2.8	9.6
1942.....	3.0	24.3	1948.....	2.9	9.3
1943.....	2.4	18.4	1949.....	3.2	8.8
1944.....	2.5	17.7	1950.....	2.7	7.8
1945.....	2.1	11.2	1951.....	2.3	4.7
1946.....	3.0	11.7			

The distribution of benefit payments in fiscal years 1950 and 1951 by type of benefit is shown in table 3. Approximately 78 percent of the total benefit payments from the fund in the fiscal year 1951 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 19 percent of the 1951 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 1951 consisted of lump-sum payments in cases where the insured individual died before September 1950 leaving no survivor immediately eligible for monthly benefits, and in all cases where the insured individual died after August 1950.

TABLE 3.—Estimated distribution of Treasury disbursements for benefit payments under the old-age and survivors insurance program, by type of benefit, fiscal years 1950 and 1951

[Amounts in millions]

Type of benefit	1950		1951	
	Amount	Percent of total	Amount	Percent of total
Total	\$727.3	100	\$1,498.1	100
Monthly benefits ¹	693.3	95	1,453.8	97
Old-age (retired workers 65 or over)	412.6	57	891.8	60
Wife's or husband's (wives or dependent husbands, 65 or over, of old-age beneficiaries, or their wives regardless of age if caring for child beneficiary)	66.1	9	138.7	9
Widow's or widower's (widows or dependent widowers 65 or over of workers)	67.0	9	128.2	9
Parent's (dependent parents 65 or over of deceased workers)	2.3	(²)	6.2	(²)
Child's (children under 18 of old-age beneficiaries)	5.1	1	9.4	1
Child's (children under 18 of deceased workers)	99.8	14	210.8	14
Mother's (widows or dependent divorced wives of deceased workers caring for child beneficiary)	40.4	6	68.7	5
Lump-sum benefits (wage earner died after August 1950, or before September 1950 with no survivor immediately eligible for monthly benefits)	34.0	5	44.3	3

¹ Effective September 1950, under the Social Security Act Amendments of 1950, (1) benefits became payable to wives under age 65 with child beneficiaries in their care, to aged dependent husbands or widowers and to dependent divorced wives with child beneficiaries in their care; and (2) the terms "primary insurance benefit" and "widow's current insurance benefit" were changed to "old-age insurance benefit" and "mother's insurance benefit," respectively.

² Totals do not represent the sum of rounded components.

³ Less than 0.5 percent.

At the end of the fiscal year 1951, approximately 4.0 million persons in 2.9 million families were receiving monthly benefits at an annual rate of \$1,725 million. At the end of the preceding fiscal year, the monthly benefit rolls included 2.9 million persons in about 2.1 million families to whom monthly benefits were being paid at an annual rate of \$728 million. Average monthly family benefits at the end of June 1951 showed substantial increases over the corresponding averages a year earlier (table 4) because of the higher benefit rates provided by the Social Security Act Amendments of 1950. Payments to retired workers with no dependents receiving benefits averaged \$40.90, an increase of 60 percent. The average for a retired worker and his aged wife was \$70.40, 68 percent more than a year earlier. For survivor families, the average benefits ranged from \$30.60 for aged dependent widowers and \$35.10 for families in which only one child was receiving benefits to \$91.50 for families consisting of a widowed mother and two children. Percentage increases in benefit amounts for parent and for child families were exceptionally large, reflecting not only the higher benefit rates under the 1950 amendments but also the provisions that increased the amount of parent's benefits from one-half of the primary insurance amount to three-fourths and that increased the benefit amount for one or more surviving children by one-fourth of the primary insurance amount, divided equally among the children.

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TABLE 4.—Estimated number of families and beneficiaries receiving benefits and their average monthly family benefit, by family group, end of fiscal years 1950 and 1951

Family classification of beneficiaries receiving benefits	June 30, 1950			June 30, 1951			Percent-age increase in average monthly family benefit, 1951 from 1950
	Number of families (in thousands)	Number of beneficiaries (in thousands)	Average monthly family benefit	Number of families (in thousands)	Number of beneficiaries (in thousands)	Average monthly family benefit	
Total.....	2,051.7	2,930.4		2,866.5	4,033.6		
Retired worker families.....	1,384.8	1,839.2		2,090.7	2,748.2		
Worker only.....	940.0	940.0	\$25.50	1,478.8	1,478.8	\$40.90	60
Male.....	739.7	739.7	26.80	1,091.1	1,091.1	43.50	62
Female.....	200.3	200.3	20.80	387.7	387.7	33.60	62
Worker and wife aged 65 or over.....	418.8	837.6	41.90	568.5	1,137.0	70.40	68
Worker and wife under age 65 ^{1,2}8	1.6	63.20	
Worker and aged dependent husband ¹				2.4	4.8	59.50	
Worker and 1 child.....	17.0	34.0	41.40	10.2	20.4	65.80	59
Worker and 2 or more children.....	8.7	26.7	51.40	5.6	17.8	74.80	46
Worker, wife aged 65 or over, and 1 or more children.....	.3	.9	57.30	.4	1.3	93.40	63
Worker, wife under age 65, and 1 or more children ¹				24.0	86.5	73.10	
Survivor families.....	666.9	1,091.2		775.8	1,285.4		
Aged widow.....	290.2	290.2	20.90	350.1	350.1	36.20	73
Aged dependent widower ¹2	.2	30.60	
Widowed mother only ²	3.3	3.3	21.40	2.0	2.0	36.10	69
Widowed mother and 1 child.....	81.0	162.0	36.70	88.0	176.0	75.00	104
Widowed mother and 2 children.....	45.4	136.2	50.70	61.4	184.2	91.50	80
Widowed mother and 3 or more children.....	27.1	110.6	54.50	41.0	171.0	90.00	65
Dependent divorced wife and 1 or more children ¹1	.2	84.40	
1 child only.....	110.8	110.8	13.50	122.3	122.3	35.10	160
2 children.....	51.2	102.4	26.80	49.9	99.8	59.80	123
3 children.....	19.5	58.6	37.70	19.5	58.5	75.60	101
4 or more children.....	25.3	103.0	50.10	25.5	104.4	83.60	67
1 aged dependent parent.....	12.0	12.0	13.80	14.7	14.7	36.70	166
2 aged dependent parents.....	1.1	2.1	26.70	1.1	2.1	72.30	171

¹ Effective September 1950, under the Social Security Act Amendments of 1950, benefits became payable to wives under age 65 with child beneficiaries in their care, to aged dependent husbands or widowers, and to surviving dependent divorced wives caring for child beneficiaries who are survivors of the divorced husband.

² Benefits of child or children were being withheld.

³ Total does not represent the sum of rounded components.

NOTE.—Estimates were prepared October 1951.

The total assets of the old-age and survivors insurance trust fund amounted to \$12,893 million on June 30, 1950. These assets increased to \$14,736 million by the end of the fiscal year 1951, as the result of an excess of receipts over disbursements amounting to \$1,843 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 1950 and 1951. The assets of the fund at the end of the fiscal year 1951 consisted of \$14,323 million in the form of obligations of the United States Government, \$212 million to the credit of the fund account, and \$200 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. The asset value of the bonds, as carried on the books of the Treasury De-

partment, is the book value—par value plus unamortized premium outstanding.

In accordance with the provisions of section 201 (c) of the Social Security Act, as amended, the managing trustee invested during fiscal year 1951 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 again in fiscal year 1951, investments made for the fund consisted only of direct obligations of the United States purchased on original issue. During each of the fiscal years 1948-50, however, 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 1950 and 1951¹

	June 30, 1950		June 30, 1951	
	Par value	Book value ²	Par value	Book value ²
Investments:				
Public issues (Treasury bonds):				
2¼-percent bonds of 1959-62	\$4,205,000	\$4,219,194.57	\$4,205,000	\$4,217,682.45
2½-percent bonds of 1962-67	58,650,000	58,864,403.03	58,650,000	58,846,536.11
2½-percent bonds of 1963-68	116,480,000	116,732,963.71	116,480,000	116,714,225.67
2½-percent bonds of 1964-69	83,654,000	84,050,487.57	83,654,000	84,022,638.33
2½-percent bonds of 1965-70	455,447,500	455,978,142.53	455,447,500	455,942,766.37
2½-percent bonds of 1966-71	305,677,500	305,829,771.62	305,677,500	305,820,254.64
2½-percent bonds of 1967-72	1,197,023,250	1,201,147,658.48	1,151,121,250	1,17,099,166.15
2¾-percent bonds, investment series B-1975-80			1,081,902,000	1,083,835,694.26
Total public issues	2,221,137,250	2,226,822,621.51	2,221,137,250	2,226,498,963.98
Special issues (certificates of indebtedness):				
2½-percent certificates:				
Maturing June 30, 1951	10,418,000,000	10,418,000,000.00	12,096,300,000	12,096,300,000.00
Maturing June 30, 1952				
Total special issues	10,418,000,000	10,418,000,000.00	12,096,300,000	12,096,300,000.00
Total investments	12,639,137,250	12,644,822,621.51	14,317,437,250	14,322,798,963.98
Uninvested balances:				
To credit of fund account		167,861,442.30		212,311,394.10
To credit of disbursing officer		79,927,751.84		200,456,348.93
Total assets		12,892,611,815.65		14,735,566,707.01

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

² Par value plus unamortized premium outstanding.

The par value of the net increase in the investments owned by the fund during the fiscal year 1951 amounted to \$1,678 million. New securities whose gross purchase price totaled \$14,734 million were acquired through the investment of receipts of the fund, the reinvestment of funds made available from the sale or maturity of securities during the year, and the exchange of bonds of equal par value. Securities, consisting entirely of 2½ percent special certificates of indebtedness, were redeemed during the fiscal year at their par value of \$11,974 million. In addition, 2½ percent Treasury bonds of 1967-72 with a par value of \$1,082 million were exchanged for 2¾ percent Treasury bonds, investment series B-1975-80, of equal par value.

Of the new securities acquired, \$13,652 million were in the form of special certificates of indebtedness, \$1,556 million of which were redeemed during the year and \$12,096 million of which mature on June 30, 1952. These certificates were acquired at par and bear an interest rate of $2\frac{1}{8}$ percent. This rate was 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 \$1,082 million of securities acquired during the fiscal year were $2\frac{3}{4}$ percent Treasury bonds, investment series B-1975-80, received in exchange for $2\frac{1}{2}$ percent Treasury bonds of 1967-72. These new bonds, although nonmarketable, may be exchanged at any time for marketable $1\frac{1}{2}$ percent 5-year Treasury notes of equal par value.

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 1951 the average rate of interest on the public debt rose slightly. The rate was 2.247 percent on May 31, 1951, as compared with 2.200 percent on June 30, 1950. Because the rate exceeded $2\frac{1}{2}$ percent but remained less than $2\frac{3}{4}$ percent at the end of each month in the period from June 30, 1950, to May 31, 1951, the interest rate on all special issues acquired during the fiscal year continued to be $2\frac{1}{8}$ percent.

STATEMENT OF THE EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND DURING FISCAL YEARS 1952-56

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 the Congress on the expected operations and status of the trust fund during the next ensuing five 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, which were amended in 1950 so as to increase substantially the number of beneficiaries and the level of benefits paid beginning in September 1950, but they are also affected by the general economic conditions.

In this as in previous reports the Board presents estimates of income and disbursements based on alternative 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.

For both alternative I and alternative II, it is assumed that present statutory coverage of old-age and survivors insurance will remain unchanged throughout the period under consideration. The computa-

tions of tax income are based on present statutory rates of contribution which are 1½ percent each on employer and employee on wages paid during the calendar years 1951 through 1953 and 2 percent each during the calendar years 1954 through 1956; and 2¼ percent on the taxable income from self-employment in calendar years 1951-53 and 3 percent in calendar years 1954-56. The taxable earnings limit is assumed to remain at \$3,600 during the period 1951-56.

Estimates of the income and disbursements of the trust fund for each of the five fiscal years 1952 to 1956, together with the resulting assets of the trust fund at the beginning and the end of each year, are presented in table 6. Single estimates are given for fiscal years 1952 and 1953, but for fiscal years 1954 to 1956 two sets of estimates are presented based on the alternative economic assumptions. In addition, the figures on actual experience in fiscal years 1940 to 1951 are shown.

TABLE 6.—Operations of the Federal old-age and survivors insurance trust fund, fiscal years 1940-56, subject to the assumptions and limitations stated in the text¹

[In millions]

Fiscal year	Fund at beginning of year ²	Transactions during year						Net increase in fund	Fund at end of year
		Income			Disbursements				
		Total	Appropriations ³	Interest on investments ⁴	Total	Benefit payments	Administrative expenses		
Past experience:									
1940 ⁵	\$1,724	\$42	(⁶)	\$42	\$22	\$10	\$12	\$20	\$1,745
1941.....	1,745	744	\$688	56	91	64	27	653	2,398
1942.....	2,398	967	896	71	137	110	27	830	3,227
1943.....	3,227	1,218	1,130	87	177	149	27	1,041	4,298
1944.....	4,268	1,395	1,292	103	217	185	\$ 33	1,178	5,446
1945.....	5,446	1,434	1,310	124	267	240	\$ 27	1,167	6,613
1946.....	6,613	1,386	1,238	148	358	321	37	1,028	7,641
1947.....	7,641	1,623	1,460	163	466	426	41	1,157	8,798
1948.....	8,798	1,807	1,617	191	559	512	47	1,248	10,047
1949.....	10,047	1,924	1,694	230	661	607	53	1,263	11,310
1950.....	11,310	2,367	2,110	257	784	727	57	1,583	12,893
1951.....	12,893	3,411	3,124	287	1,569	1,498	70	1,843	14,736
Estimated future experience:									
1952.....	14,736	4,192	3,854	338	2,059	1,975	84	2,133	16,868
1953.....	16,868	4,437	4,030	407	2,337	2,250	87	2,100	18,969
1954:									
Alternative I.....	18,969	5,680	5,233	447	2,606	2,518	88	3,074	22,043
Alternative II.....	18,969	5,105	4,665	440	2,751	2,659	92	2,354	21,323
1955:									
Alternative I.....	22,043	7,149	6,620	529	2,848	2,757	91	4,301	26,344
Alternative II.....	21,323	6,063	5,563	500	3,100	3,006	94	2,903	24,286
1956:									
Alternative I.....	26,344	7,717	7,089	628	3,072	2,978	94	4,645	30,989
Alternative II.....	24,286	6,213	5,648	565	3,376	3,281	95	2,837	27,123

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 1952.

² Totals shown in this and other columns do not necessarily equal the sum of rounded components.

³ 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 1952-56 are based on statutory rates.

⁴ Includes profits on marketable investments amounting to \$138,668 in 1949 and \$8,934 in 1950.

⁵ January-June 1940, fund having been established in place of old-age reserve account on Jan. 1, 1940.

⁶ Represents assets transferred from old-age reserve account on Jan. 1, 1940.

⁷ Appropriations equivalent to contributions collected became effective July 1, 1940; appropriations authorized under sec. 201 (a) of the Social Security Act of 1935 were made prior to Jan. 1, 1940.

⁸ Represent charges against trust fund in respective fiscal years; administrative expenses, after adjustment for bookkeeping transfers, were about \$30,000,000 in fiscal year 1944 and about \$29,000,000 in fiscal year 1945.

In alternative I, it is assumed that employment and earnings will be maintained at a high level through calendar year 1956. Hourly wage rates, and therefore weekly earnings and average annual taxable wages, are assumed to increase not only in accordance with long-time trends but also because of the impetus of the defense program. The earnings of the self-employed are assumed to follow a similar pattern. Unemployment is assumed to remain at a low level. 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 alternative method of computing benefit amounts which becomes effective in calendar year 1952.

Under alternative I, aggregate income during the period of five fiscal years ending in 1956 would amount to \$29.2 billion, including \$26.8 billion in contributions and transfers and \$2.3 billion in interest. Aggregate disbursements for the period would be about \$12.9 billion, with the highest expected annual disbursement about \$3.1 billion. The trust fund at the beginning of the fiscal year 1952 would amount to about 4.8 times the highest expected annual disbursement during the succeeding five fiscal years.

The other set of estimates, alternative II, is based on the assumption that beginning in the second half of 1952 employment and wages will increase less rapidly than under alternative I. It is assumed that unemployment will be slightly higher than under alternative I. As a result, estimated taxable payrolls and earnings of the self-employed in the periods affecting tax collections during fiscal years 1954-56 and therefore estimated contributions, are lower under alternative II than under alternative I. Estimated benefit disbursements, on the other hand, increase more rapidly 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 five fiscal years 1952-56 under alternative II would amount to \$26.0 billion, including \$23.8 billion in contributions and transfers and \$2.2 billion in interest. Aggregate disbursements would be \$13.6 billion, with the highest expected annual disbursement about \$3.4 billion. The trust fund at the beginning of the fiscal year 1952 would amount to about 4.4 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 will 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 two systems, Public Law 234 requires the Railroad Retirement Board and the Federal Security Administrator 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 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.

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. 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 Federal Security Administrator may offset the amount of the reimbursement against the amount determined for the period through June 30, 1952.

Both agencies are presently engaged in the development of joint plans for conducting the necessary financial studies and analyses required by these financing provisions. Pending their completion, the estimates shown in table 6 have not been adjusted to reflect the effect of future transfers between the railroad retirement account and the trust fund.

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 remained credited to the individual's account. The law authorized an appropriation to the trust fund from general revenues equal to the total amount of benefits paid and to be paid, as estimated by the Federal Security Administrator, that would not have been paid had the amended definition been in effect beginning in 1937. An estimate was accordingly prepared and submitted to Congress based on the provisions of the Social Security Act in effect prior to enactment of the 1950 amendments. A revised estimate based on the new amendments has not yet been prepared and, accordingly, income from this source is excluded from the appropriations shown in table 6.

Included in the 1950 amendments to the Social Security Act are provisions which have had a substantial effect on benefit payments. The 1950 legislation provided for (1) an increase in benefits averaging about 77½ percent to beneficiaries on the rolls on August 31, 1950, and also increased benefits to all future beneficiaries; (2) more liberal insured status requirements which made about 675,000 persons, aged 65 or more, immediately eligible for benefits; and (3) the removal of the work clause entirely for persons at least 75 years of age, which made it possible for about 75,000 persons to receive benefits who otherwise would not have received them. As a consequence of these and other provisions in the new amendments, benefit disbursements during the five fiscal years 1952-56 will be on a much higher level than the benefit disbursements made under the old law.

During the next 5 years, benefit disbursements, 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 program, 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 1941-56, subject to the assumptions and limitations stated in the text ¹

[In millions]

Fiscal year	Total benefit disbursements ²	Disbursed to old-age beneficiaries ³	Disbursed to dependents of old-age beneficiaries ³	Disbursed to survivors of deceased insured workers			
				Monthly benefits ³			Lump-sum payments
				Total ³	Aged widows, dependent widowers, and dependent parents	Widowed mothers, dependent divorced wives, and children	
Past disbursements: ⁴							
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	891.8	148.1	413.9	134.4	279.5	44.3
Estimated future disbursements:							
1952	1,975	1,178	194	543	181	362	60
1953	2,250	1,321	216	641	221	420	72
1954:							
Alternative I...	2,518	1,462	238	736	266	470	83
Alternative II...	2,659	1,586	255				
1955:							
Alternative I...	2,757	1,593	257	822	313	509	85
Alternative II...	3,006	1,813	287				
1956:							
Alternative I...	2,978	1,710	275	907	362	545	87
Alternative II...	3,281	1,976	311				

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 1952.

² Totals do not necessarily equal the sum of rounded components.

³ Effective Sept. 1, 1950, under the Social Security Act Amendments of 1950 (1) benefits became payable to wives under age 65 with child beneficiaries in their care, to aged dependent husbands or widowers, and to surviving dependent divorced wives caring for child beneficiaries who are survivors of the divorced husband; and (2) the terms "primary insurance benefit" and "widow's current insurance benefit" were changed to "old-age insurance benefit" and "mother's insurance benefit," respectively.

⁴ 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 probably 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.

Should the high employment conditions assumed in alternative I materialize, this trend is expected to be halted. Many persons in newly covered occupations with no quarters of coverage before 1951 will become fully insured for the first time in 1952. Since they will have been fairly regularly engaged in covered employment, relatively few who thus become insured and are also eligible for old-age (primary) benefits on January 1, 1953, are expected to be receiving them, thus depressing the proportion of all eligible persons in receipt of old-age benefits.

TABLE 8.—*Workers eligible for and receiving old-age (primary) benefits by attained age, fiscal years 1941-56, 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
Past experience:	<i>Thous.</i>	<i>Thous.</i>	<i>Pct.</i>	<i>Thous.</i>	<i>Thous.</i>	<i>Pct.</i>	<i>Thous.</i>	<i>Thous.</i>	<i>Pct.</i>
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.....	2,990	1,771	59	1,661	721	43	1,329	1,050	79
Estimated future experience:									
1952.....	3,350	2,280	68	1,810	955	53	1,540	1,325	86
1953.....	3,855	2,495	65	2,080	1,005	48	1,775	1,490	84
1954:									
Alternative I.....	4,210	2,705	64	2,230	1,050	47	1,980	1,655	84
Alternative II.....	4,190	2,900	69	2,220	1,200	54	1,970	1,700	86
1955:									
Alternative I.....	4,515	2,900	64	2,350	1,090	46	2,165	1,810	84
Alternative II.....	4,460	3,270	73	2,325	1,375	59	2,135	1,895	89
1956:									
Alternative I.....	4,795	3,085	64	2,455	1,125	46	2,340	1,960	84
Alternative II.....	4,720	3,540	75	2,415	1,470	61	2,305	2,070	90

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 1952. 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) military service in World War II.

² Figures for 1941-51 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 1956. The growth in the number of eligible workers aged 65-69 was gradual but uninterrupted during the calendar years 1941-49, 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. Prior to the passage of these amendments the number of quarters of coverage needed by persons aged 65 and over to be eligible for benefits decreased with advancing age. As a result of the 1950 amendments all persons now age 65 or over, or who will attain age 65 prior to July 1954, will be fully insured if they have the minimum number of six 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 two new factors will have an even greater effect, namely, the liberalized insured-status provisions and the extension of coverage to new areas of employment.

The estimates presented above result in a net increase in the trust fund during the 5-year period of about \$16.3 billion under alternative I and about \$12.4 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 this report the long-range cost estimates presented are the same as those finally developed for the congressional committee concerned with the Social Security Act amendments of 1950. (See Actuarial Cost Estimates for the Old-Age and Survivors Insurance System as Modified by the Social Security Act Amendments of 1950, July 27, 1950, prepared for the use of the Committee on Ways and Means by Robert J. Myers, actuary to the committee.) These estimates are on essentially the same basis as those which had been developed for the previous law based on employment and wage data of 1947. Since then there has been a considerable change in economic conditions and since much additional actuarial and statistical data are available, such as from operating experience and from the 1950 census, completely new long-range cost estimates are now being developed for the new program, and it is anticipated that they will be completed in time for the next report of the Board. In this report, while use is made of the cost estimates prepared in 1950 for the Committee on Ways and Means, there will be considered the general effect of assumptions based on recent experience.

There are a number of basic cost factors which must be continuously recognized in analysis of the costs of this program, and 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 is available a great quantity 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 two censuses. The 1950 census shows about 700,000 more persons age 65 and over than are indicated by a projection of the 1940 census.

Crude birth rates declined for many years until the middle thirties, due in part to the increasing percentages of the female population past the child-bearing ages and in the middle ages where child-bearing is less frequent, and in part to a decline in the age-specific birth rates. However, since 1937 the long decline of the birth rate has been reversed. During the war years quite high rates were reported, the wartime peak having been reached in 1943. Although the birth rate 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 birth rate again 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, 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 as well as the number of such dependents. As a result, the cost of survivor benefits is increased despite the counteracting effect of fewer large families; in regard to the latter factor there is 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.

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 immigration rates may be expected.

As a basis for the cost estimates, two population projections were developed in 1946. 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. The 12 estimates prepared by the National Resources Planning Board in its report of August 1943, entitled "Estimates of Future Population of the United States, 1940-2000," are useful in indicating the possible range of future population, but it was considered desirable not to use any specific one of these estimates, although following closely their methodology. A revision of this 1943 report starting with a different population base and short-range demographic factors but using in general the same long-range assumptions with respect to future trends in mortality and fertility was released in 1948 by the Bureau of the Census (Forecasts of the Population of the United States, 1945-75). However, the results were not available at the time the cost bases for estimates presented here were developed, and in addition data showing a range in population were needed for a longer period than 30 years.

One reason that the National Resources Planning Board estimates were not used is that these estimates do not reflect war deaths, civilian mortality in 1940-45, and births in 1940-45. The official estimates of the Bureau of the Census for 1945 indicate that births in 1940-45 were about 10 percent higher than the National Resources Planning Board high estimate. Another reason for developing new estimates was to use a somewhat wider range in mortality assumptions (as will be discussed later), and in fertility assumptions (allowing for somewhat higher fertility, as evidenced by the 1940-45 experience).

The population used for the low-cost assumptions is based on high mortality (level into the future at 1939-41 rates) and high fertility (approximately 10 percent above the National Resources Planning Board high rates). On the other hand, the population projection used for the high-cost assumptions is based on low mortality (same as National Resources Planning Board low rates up to age 65, but with greater improvement for the older ages) and medium fertility (same as National Resources Planning Board medium rates). Neither estimate provides for migration, either in or out.

Table 9 indicates the alternative trends of population growth resulting for the total population, for the group aged 20 to 64, and for the group 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 declining fertility which more than offsets the improved mortality. Actual data for 1950 indicate a somewhat

larger population age 65 and over than had been estimated in either projection and also a materially larger population under age 10 (as a result of the high birth rates in the past few years). The new cost estimates, now in preparation, will be based on new population projections using as a starting point the 1950 census data.

TABLE 9.—*Estimated population of the United States in selected years, 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 from 1950 census									
1950.....	151	75	76	87	43	44	12.3	5.8	6.5
Projection for low-cost assumptions									
1960.....	159	79	80	89	44	45	14.0	6.5	7.5
1980.....	179	89	90	100	50	50	17.9	7.8	10.1
2000.....	199	99	100	113	57	56	19.0	8.3	10.7
Projection for high-cost assumptions									
1960.....	155	77	78	91	45	46	14.9	7.0	7.9
1980.....	170	85	85	100	50	50	22.8	10.4	12.4
2000.....	173	87	86	102	52	50	28.5	13.3	15.2

(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, with relatively little change above that age, except for the past decade when there has been significant improvement. The National Resources Committee study of 1938, the National Resources Planning Board study of 1943, and the Bureau of the Census report of 1948, all make assumptions of a future improvement in mortality, as plausibly indicated by past history.

In the low-cost assumptions, as mentioned previously, no improvement in mortality rates at any age is assumed. However, in the high-cost assumptions, considerable improvement is assumed, with even more at the older ages than the most optimistic assumption of the National Resources Planning Board for the ultimate condition, the year 2000. 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; the possibilities of increasing the survival of impaired lives for only temporary periods and the effects of future uses of atomic energy.

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 widowed mother's and child's survivor benefits and ultimately to aged widow's benefits. Continuous study must be given to this important element, and the new cost estimates now in preparation will be based on revised assumptions.

(c) *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, since 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 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-illustrations differential mortality by marital status has been considered in determining costs for the various types of survivor benefits.

TABLE 10.—*Estimated monthly beneficiaries¹ age 65 and over and children of such beneficiaries, in current payment status in selected years, 1960-2000*

[In thousands]					
Calendar year	Old-age beneficiaries ¹	Wives of old-age beneficiaries ²	Children of old-age beneficiaries	Aged widows ⁴	Aged dependent parents
Actual data for December					
1950.....	1,771	508	46	314	15
1951.....	2,278	647	71	384	19
Low-cost estimate					
1960.....	2,727	836	65	1,101	37
1980.....	5,685	1,320	115	2,709	42
2000.....	8,910	1,270	129	3,008	34
High-cost estimate					
1960.....	4,404	1,257	101	1,133	69
1980.....	10,332	2,240	130	2,788	97
2000.....	17,456	2,652	86	3,083	90

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.

Insurance beneficiaries age 65 and over are composed of a number of different categories. Table 10 shows the various illustrative trends in the number of beneficiaries, distinguishing between old-age beneficiaries (retired workers), wives of old-age beneficiaries, children of beneficiaries, aged widows of deceased insured individuals, and dependent parents of deceased insured workers who left no widow or child under 18.

Although beneficiaries age 65 and over make up the bulk of the prospective recipients under the program, the young survivors, composed of orphaned children and widowed mothers, will receive a considerable amount of benefits. Table 11 lists these two groups separately.

The high-cost assumptions show, as expected, a larger number of aged beneficiaries than the low-cost assumptions (table 12); 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 assumed 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 despite the somewhat higher birth rate, tends to have the opposite effect in regard to young survivors (table 13); a smaller number of child and widowed-mother beneficiaries under the high-cost assumptions than under the low-cost assumptions is indicated.

TABLE 11.—*Estimated younger survivor insurance monthly beneficiaries, in current payment status in selected years, 1960-2000*

[In thousands]

Calendar year	Low-cost estimate		High-cost estimate	
	Orphaned children	Widowed mothers	Orphaned children	Widowed mothers
1960.....	1,135	304	901	320
1980.....	1,446	385	718	280
2000.....	1,714	454	602	255

NOTE.—Actual data for December 1950: 653,000 orphaned children and 169,000 widowed mothers. Actual data for December 1951: 776,000 orphaned children and 204,000 widowed mothers.

(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 (g).

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. Table 13 relates the old-age beneficiaries actually drawing benefits to the total aged population. It has been assumed in these cost illustrations that all 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, widow’s, or par-

ents' benefits, which instead they would receive as reduced supplementary amounts. This assumption has been made because it is always to the individual's 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.

In tables 10 to 13 only potential long-range trends have been set down, without recognition of the cyclical or periodic irregularities. Bearing this in mind, certain trends may be observed in these illustrative tables of number of beneficiaries.

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

[In percent]

Calendar year	Low-cost estimate		High-cost estimate	
	Ages 20-64	Ages 65 and over ¹	Ages 20-64	Ages 65 and over ¹
	Men			
1960.....	72	56	82	64
1980.....	77	73	87	83
2000.....	78	81	89	90
	Women ²			
1960.....	31	10	39	14
1980.....	44	20	52	27
2000.....	50	39	59	47

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.

TABLE 13.—*Estimated proportion of population aged 65 and over receiving old-age benefits,¹ 1960-2000*

[In percent]

Calendar year	Low-cost estimate		High-cost estimate	
	Men	Women	Men	Women
1960.....	34	7	50	12
1980.....	52	16	69	25
2000.....	61	36	79	46

¹ Old-age beneficiaries are retired insured workers. Women qualified both for old-age and for wife's, widow's, or parent's benefits are considered as old-age beneficiaries.

(1) An over-all uptrend in beneficiaries under all types of old-age benefits—except in the relatively minor category of dependent parents;

(2) After 1960, a relatively small increase under some assumptions and a decline in others 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 to 64; and

(5) A rapid rise in the percent of aged men drawing old-age benefits up to 1980, and a slowing down of the increase in the following 20 years.

(e) *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 the age of the widow and the 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 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 1951 the program provided about \$200 billion of “life insurance” protection for survivors.

(f) *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 \$50 in covered employment, assumptions as to the employment of beneficiaries rank high in importance among the various cost elements. As of December 1951, about 68 percent of those age 65 and over who were fully insured were actually receiving benefits. This proportion is influenced to some extent by the apparently abnormal 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.

(g) *Income 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 the war, but also there has tended to be relatively little unemployment, including partial unemployment, so that most workers have had a full workweek.

The resulting changes in earnings give workers relatively more chance of obtaining credit for quarters of coverage (at \$50 per quarter) than had been the case in the prewar years, and as a result produces 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 they are currently. The increase which has occurred is indicated in table 14.

The cost assumptions used for the estimates made at the time of congressional consideration of the 1950 amendments involve average annual creditable earnings throughout the period up to the year 2000 of \$2,550 for men working in four quarters of a year and, correspondingly, \$1,625 for women. For both men and women the average earnings used for three-quarter workers is about 50 percent of that for four-quarter workers (i. e., at a lower rate per quarter), while the corresponding proportions for two and one-quarter workers are about 20 and 10 percent, respectively. As used here, the reference to four-quarter workers, three-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 four quarters of some years, three 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 wage to the four-quarter average parallel very closely the actual ratios observed in the old-age and survivors insurance wage data.

The four-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 14 but allowance must be made for the change in maximum wage base. The earnings assumptions are on about the level prevailing in 1947 and are, on the whole, about 10-15 percent below the experience in 1950 (and probably about 20-25 percent below what the experience will show for 1951). This seems to indicate a need for revision of the basic earnings assumptions which were made when the postwar trend was not at all clear.

In determining the number of covered persons, percentages by age were developed through analysis of wage data for the previous coverage modified by census and other data in regard to the newly covered groups. The level of employment assumed was roughly that of 1947, which is somewhat below that currently prevailing. It was 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 (all long-service railroad 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 employments 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.

TABLE 14.—Average earnings credits of workers under old-age and survivors insurance by year, 1937-50

Calendar year	Workers with any earnings in year			Workers with earnings in all 4 calendar quarters		
	Total	Male	Female	Total	Male	Female
Actual, for \$3,000 maximum earnings base						
1937.....	\$809	\$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	1,697	1,953	1,169	2,287	2,493	1,750
1950 ²	1,769	2,024	1,231	2,350	2,558	1,811
Estimate, for \$3,600 maximum earnings base						
1950 ²	\$1,894	\$2,197	\$1,257	\$2,540	\$2,800	\$1,860
1951 ²	2,025	(1)	(1)	(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. As payments got under way, 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 the war and immediate postwar conditions. The long-range cost estimates look beyond these various limitations and 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, which 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, and there are financial interchange provisions 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. In the long-range costs developed here it is assumed that there will be such a small net effect that this coordination provision does not have to be taken into account for cost purposes here. Even if it were desirable to consider this element, there are not sufficient available data for making any reasonable long-run estimates at this time.

Table 15 summarizes the previous discussion by showing illustrative numbers of beneficiaries. 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.

TABLE 15.—*Estimated old-age and survivors insurance beneficiaries in current payment status as of middle of selected years, 1960-2000*

[In thousands]

Calendar year	Low-cost estimate			High-cost estimate		
	Aged beneficiaries ¹	Younger survivors	Lump sum ²	Aged beneficiaries ¹	Younger survivors	Lump sum ²
1960.....	4,800	1,450	690	7,000	1,200	630
1980.....	9,900	1,850	1,090	15,600	1,000	1,000
2000.....	13,400	2,150	1,470	23,400	850	1,470

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.—Actual data for December 1951: 3,399,000 aged beneficiaries and 980,000 younger survivors. Actual data for 1951: about 415,000 deaths resulting in lump-sum payments.

The long-range cost estimates of income and outgo are presented in table 16. 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 Congress adopted the principle of establishing in the law a contribution schedule designed to make the system self-supporting, it was necessary to select a single set of estimates as the basis for this 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 when it developed the tax schedule in the law.

TABLE 16.—Illustrations of benefit payments, contribution income, and size of the old-age and survivors insurance trust fund in selected years, 1960–2000

Calendar year	Benefit payments (in billions)	Contribution income (in billions)	Trust fund at end of year (in billions)	Benefits as percent of payroll
Actual data ¹				
1950	\$0.96	\$2.67	\$13.7	1.1
1951	1.89	3.36	15.5	1.5
Low-cost estimate				
1960	\$3.2	\$5.4	\$32	2.8
1970	5.0	7.8	64	4.0
1980	6.6	8.5	103	4.9
1990	8.1	9.0	138	5.7
2000	8.8	9.6	175	5.8
Level premium in perpetuity ²				4.8
High-cost estimate				
1960	\$4.3	\$5.4	\$25	3.7
1970	6.7	7.9	40	5.3
1980	9.3	8.3	48	7.1
1990	12.1	8.4	29	9.0
2000	13.7	8.5	(³)	10.2
Level premium in perpetuity ²				7.5
Intermediate cost estimate ⁴				
1960	\$3.8	\$5.4	\$29	3.3
1970	5.9	7.9	52	4.7
1980	8.0	8.4	75	6.0
1990	10.1	8.7	83	7.3
2000	11.3	9.1	78	7.9
Level premium in perpetuity ²				6.1

¹ Based on Daily Statement of the U. S. Treasury. For 1950 benefit payments were those of previous law for 9 months, and contribution income was that of previous law for entire year.

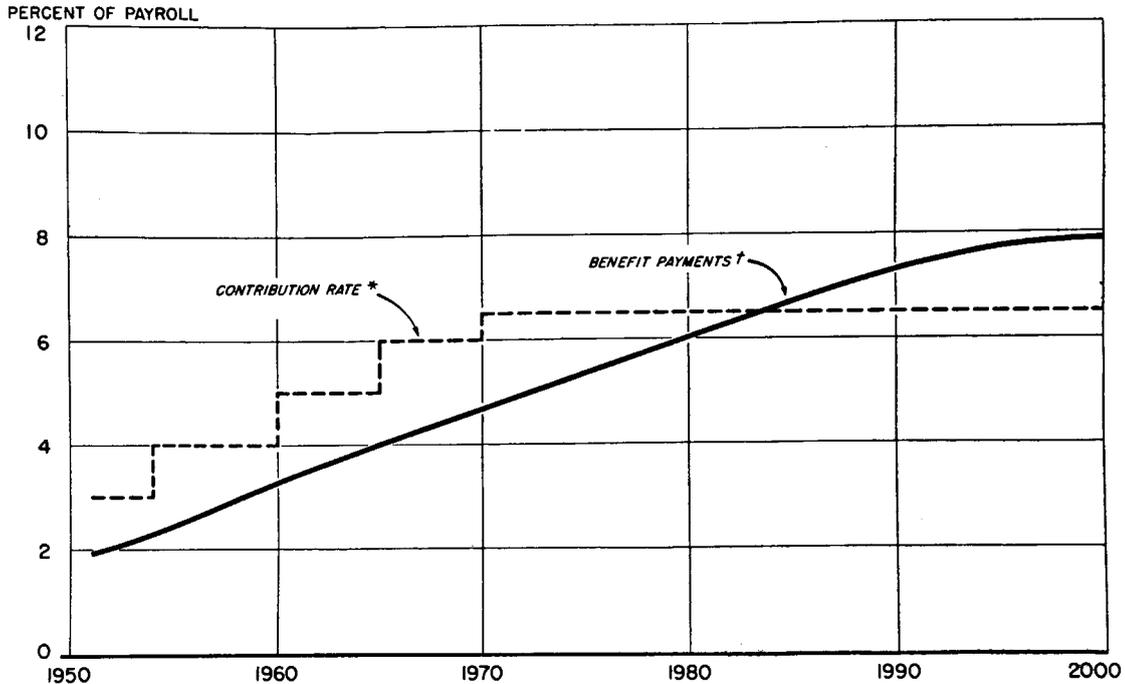
² Level premium contribution rate (based on 2 percent interest) for benefit payments after 1950 and into perpetuity, not taking into account the accumulated funds at the end of 1950 or administrative expenses.

³ Fund exhausted in 1997.

⁴ Based on an average of the dollar costs under the low-cost and high-cost estimates.

Chart 1 shows the year-by-year cost of the benefit payments relative to payroll (i. e., total taxable earnings under the system) according to the intermediate cost estimate, along with the applicable contribution rates. Table 16 shows the steady rise in benefit payments under the widely different sets of conditions discussed earlier in this section, and demonstrates the larger increases, relatively and in absolute quantities, which would occur even after 1980, particularly under the high-cost assumptions.

CHART I
COST OF 1950 AMENDMENTS



*COMBINED RATE FOR EMPLOYEE AND EMPLOYER. SELF-EMPLOYED PAY THREE-FOURTHS OF THIS RATE.
 †AVERAGE OF LOW AND HIGH COST ESTIMATES. THIS IS NOT NECESSARILY THE "MOST PROBABLE" ESTIMATE.

Because of the nature of the assumptions, the chart shows only smooth curves and hence does not show the irregularities and periodic cyclical variations which may develop. These irregularities are expected to be far more pronounced in the curves pertaining to contributions than in those representing 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. Thus, the chart indicates more smoothness of income and disbursements, especially the former, and more stability in the percentage relationship of the two than actually is likely to occur. In fact, 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.

In the low-cost estimate, contribution income exceeds benefit disbursements in all years over the next half century; accordingly, the trust fund builds up quite rapidly and even some 50 years hence is growing at a rate of \$4 billion per year (and at that time is about \$175 billion in magnitude). On the other hand, under the high-cost estimate, the benefit disbursements exceed contribution income after 1975, and the trust fund after building up a maximum of nearly \$50 billion shortly before 1980 decreases thereafter until being exhausted shortly before the year 2000.

These results are consistent and reasonable since the system on an intermediate cost estimate is intended to be 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. In actual practice under the financing basis established by the Congress, the tax schedule undoubtedly would be adjusted in future years so that neither of the developments of the trust fund under the low-cost and the high-cost estimates shown in table 16 would ever eventuate. Thus, if actual experience followed the low-cost estimate, the contribution rates would probably be adjusted downward, or perhaps would not be increased as scheduled. On the other hand, if the experience followed the high-cost estimate, the contribution rates would have to be raised above those scheduled. At any rate, considering the high-cost estimate, it appears likely that under any reasonable circumstances, there will be ample funds for several decades even under relatively unfavorable experience.

According to the intermediate cost estimate, contribution income exceeds benefit disbursements until some time after 1980. Accordingly, the trust fund grows steadily, reaching a maximum of \$83 billion in 1990, 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, but it is sufficiently close for all practical purposes considering the uncertainties and variations inherent in the cost estimates.

Previously, it was mentioned that current earnings levels are about 20-25 percent in excess of those used in the cost estimates. While this factor will be taken into account in the new cost estimates now

being prepared, its general effect may be briefly considered here. Because of the weighted nature of the benefit formula, as explained hereafter, an increase in the earnings assumption raises the estimates of absolute dollar amounts of contribution income more than benefit disbursements. Accordingly, under these circumstances, the cost of the program relative to payroll is decreased. If the assumed earnings level were 20–25 percent higher, this would result in a reduction in cost of between one-half and three-fourths of 1 percent of payroll on a level premium basis according to the intermediate-cost estimate. On the basis of such a lower cost, the system would be shown to be well more than self-supporting under the intermediate cost estimate, rather than being not quite self-supporting, as indicated in table 16.

The interest assumption used in determining level premium costs has generally been taken to be 2 percent since that was a reasonable rate 5 years ago when the basic cost assumptions were developed. Since then the trend of interest rates has been upward, and the average rate on investments of the trust fund is currently about $2\frac{1}{4}$ percent. Using this interest rate would decrease the level premium cost in the intermediate estimate by about 0.15 percent of payroll. Accordingly, if this factor alone were changed, the system would be shown to be just about self-supporting on the intermediate-cost estimate.

Another 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 change 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; 50 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 50-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, 70, or more years previously.

Under the assumptions of a 1-percent compound annual rate of increase in earnings over the 1947 level, and of a static benefit formula unchanging from the present provisions, benefit disbursements in the year 2000 would be only about 10 percent higher than under a level-earnings assumption (as in table 14 and chart 1). At the same time, contributions would be increased by about 30 percent under the high-employment assumptions. On this basis, the relationship between benefits and taxable earnings for the year 2000 would be as follows:

	Rising earnings	Level earnings
Low-cost assumptions	Percent 4.7	Percent 5.8
High-cost assumptions	8.3	10.2

Thus, the cost of benefits relative to contributions in a year half a century hence would be about 20 percent lower under an increasing earnings, static benefit formula assumption than under a level-earnings assumption. Under such an assumption, the cost expressed as a level premium into perpetuity, taking into account discounting at 2-percent interest, would show a range of from 4½ to 6½ percent of taxable earnings, as contrasted with the range of from 5 to 7½ percent as shown in table 14. Quite obviously, if the increase assumed had been 2 percent rather than 1 percent—which some economists feel would be a rather conservative assumption over the long-range future—the differences indicated above would be almost doubled. If the current interest rate of 2¼ percent were used instead of 2 percent the above figures would be slightly lower, as indicated previously.

The assumption of steadily rising earnings in conjunction with an unamended benefit formula has an important bearing in the consideration of 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; rather revisions would probably be adopted by Congress (perhaps with some delay) which would make average benefits as adequate relative to the then-existing earnings level as average benefits under the present formula are in relation to the level prevailing about the time that the 1950 amendments were enacted.

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 reserve at that time would have developed from contributions on the lower earnings prevailing during the past and 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. Accordingly, because of the diminution of the value of the existing reserve toward financing the program, the level premium cost of the program would be increased if the benefit level were adjusted in exact proportion with the increase in the earnings level. For small rates of increase in the earnings level the increase in cost may be counterbalanced by the time lag which would undoubtedly occur between the rise in earnings level and the amendment of the benefit provisions.

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 with 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.

SUMMARY AND CONCLUSIONS

The Social Security Act Amendments of 1950 were adopted by Congress and went into operation during the fiscal year reviewed by this report. As stated in its eleventh annual report, the Board of Trustees believes that these amendments are an important advance in social security protection.

Although the new amendments were in effect only part of the year, they materially affected the fund's income and disbursements in fiscal year 1951. During fiscal year 1952, the first full year of operation of the expanded program, benefit disbursements are expected to be about \$2.0 billion, or about 2.7 times the amount in fiscal year 1950. In the last of the five fiscal years ahead, annual payments are expected to total between \$3.0 and \$3.3 billion. The trend in benefit payments will be upward throughout the remainder of the century; by 1970 benefit disbursements are expected to increase to 2½ to 3½ times their level in fiscal year 1952.

Despite the large increase in benefit disbursements, contributions paid by employers, employees, and self-employed persons in each of the five 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.

The income of the fund from contributions was much larger in fiscal year 1951 than in fiscal year 1950 for a number of reasons: the increased contribution rate that went into effect on January 1, 1950; the broader coverage of the program beginning January 1, 1951; the increase in the maximum taxable earnings from \$3,000 to \$3,600; and the rise in economic activity and wage levels.

During the past several years, average earnings in covered employment have increased substantially, largely because of increased wage rates. The Board can see no prospect of a permanent drop in wage rates from existing levels. Certainly, the long-time trend of both real wages and money wages has been upward. On the other hand, in terms of goods and services, the real level of benefits established by the 1950 amendments has already been lowered by the recent price trends.

The military as well as the economic aspects of the defense program to which the Nation is committed have far-reaching implications for the old-age and survivors insurance program; some of them are immediately apparent while others relate to the long-run financing of the program and are more difficult to assess. For example, the transfer of large numbers of persons from civilian employment to the armed services again raises the question as to the extent and type of old-age and survivors insurance protection to be provided to veterans and how such protection should be financed. The benefits provided to

survivors of World War II veterans under the 1946 amendments were financed by special appropriations and not charged to the trust fund. The 1950 amendments, which provided additional benefits for World War II veterans, charged to the trust fund not only these additional benefits but also those payable under the 1946 amendments. In any consideration of legislative proposals to provide similar benefits for members of the Armed Forces called into service on account of the present emergency, Congress will need to consider again whether the costs of these benefits are a proper charge against the trust fund or whether they should be met by funds specially appropriated for this purpose.

The preparedness program has had, and for many years to come will continue to have, economic repercussions that will be reflected in the income and disbursements of the old-age and survivors insurance trust fund. Further study is needed to appraise the significance of these developments in relation to the financial aspects of the program. In such a study, emphasis should be placed on the relationships over the years between the income and disbursements of the fund.

