Long-Range Cost Estimates for Old-Age, Survivors, and Disability Insurance System, 1966

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF TABLES -- Continued

LIST OF TABLES -- Continued

LONG-RANGE COST ESTIMATES FOR OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE SYSTEM, 1966

A. Introduction

This report is the ninth in a series of Actuarial Studies dealing with the actuarial costs of the Old-Age and Survivors Insurance program, and the third to give detailed actuarial cost estimates for the Disability Insurance program established by the 1956 Amendments. The estimates given here relate to the OASDI cash-benefits program as it was after the significant amendments of 1965, valued as of January 1, 1967. No estimates are presented here for the two health insurance programs (Hospital Insurance and Supplementary Medical Insurance) established by the 1965 Amendments.

The first cost estimates for the Old-Age and Survivors Insurance program were developed at the time the legislation introducing survivor benefits was enacted (1939) and were subsequently presented in Actuarial Study No. 14. In the second of this series (developed in 1942 and presented in Actuarial Study No. 17), estimates were made on the basis of a certain amount of actual operating data, as well as more complete demographic data from the 1940 census and the 1935 Family Composition Study.

The third in this series of cost estimates was developed in 1943-44, and was published as Actuarial Study No. 19. This differed from the previous study in that, not only were there available more experience data, but also a differential average wage between the low-cost and high-cost illustrations was introduced. Because Actuarial Study No. 19 considered the terms "low-cost" and "high-cost" as indicating absolute dollar costs, rather than percentage costs relative to payroll, certain difficulties of interpretation and analysis arose. Thus, by coincidence, the average cost of the benefits from 1945 to 2000 without interest was 5.6% of payroll for both estimates, which led some to believe erroneously that, although the dollar costs might have a range, the relative costs were fairly closely predictable, a matter of importance in estimating the necessary contribution rates.

Actuarial Study No. 23 was the fourth in this series of estimates. It was published in 1947 and used more current data on population, wage levels, etc. Two further studies were prepared for and printed by the House Committee on Ways and Means, dated July 27, 1950 and July 21, 1952, relating to the 1950 Amendments and 1952 Amendments, respectively.

The cost estimates presented in Actuarial Study No. 36 (published in 1953), the fifth in the series, related to the 1952 Amendments and correspond to those in the House Committee on Ways and Means print of July 21, 1952,

but differ considerably because of the use of the new population projections (Actuarial Study No. 33) and revised cost factors. In order to have appropriate ranges in benefit costs, both as to dollar amounts and relative to payroll, there were developed, in effect, four separate cost illustrations. On the one hand, the low-employment assumptions basis which was used was somewhat lower than full employment and corresponded roughly, on the average, to the 1940-41 conditions as to proportion of population in covered employment, combined with wage rates prevailing in the same period. On the other hand, the high-employment assumptions basis was near-full employment, corresponding closely to conditions just before the recession that was then occurring.

When cost estimates were made for the 1954 legislation as it was being considered by the Congress, only the high-employment assumptions were used, because the low-employment assumptions were too much below actual experience to appear to be realistic. The subsequent cost estimates have used only one employment assumption.

Following the Conference Committee agreement on the 1954 Amendments, cost estimates were developed in the short time available before the President signed the bill and were published as a committee print of the House Committee on Ways and Means, dated August 20, 1954. Subsequently, these cost estimates were carried out on a more complete basis, rather than using certain approximations and short cuts that were necessary in the rapid development of the original cost estimates. The figures in this more complete cost estimate differed only slightly from the original estimates and were presented in Actuarial Study No. 39, the sixth in the series.

The development of the actuarial cost estimates relating to the 1956 Amendments followed a similar pattern. Cost estimates were prepared on an approximate preliminary basis immediately after agreement was reached by the Conference Committee and were published as a committee print of the House Committee on Ways and Means, dated July 23, 1956. The more refined cost estimates presented in Actuarial Study No. 48, the seventh in the series, differed from the preliminary ones to a greater extent than was the case in 1954 because of the use of revised population projections (Actuarial Study No. 46), the use of somewhat higher earnings assumptions (reflecting approximately 1956 earnings levels, whereas the figures in the committee print assumed earnings at about the level prevailing in 1955), and a considerable number of other changes in basic assumptions and methodology.

Within the single employment assumption of Actuarial Study No. 48, there were two separate estimates: (1) using "low-cost" factors (i.e., low cost relative to payroll) as to fertility, mortality, retirement rates, etc.; and (2) using "high-cost" factors. As in the previous studies, the terms "low-cost" and "high-cost" apply in the aggregate, since in some of the component parts (e.g., child's and mother's benefits) the costs were shown to be higher for the "low-cost" factors than for the "high-cost" factors.

The actuarial cost estimates for the 1958, 1960, and 1961 Amendments were contained in various committee prints of the House Committee on Ways and Means. In addition, the annual reports of the Board of Trustees of the Old-Age and Survivors Insurance and the Disability Insurance Trust Funds present actuarial cost estimates for the program; these incorporate changes as a result of using different assumptions based on the developing experience. Also, it should be pointed out that Actuarial Study No. 49 (issued in May 1959) gave an extensive description of the methodology involved in the long-range cost estimates then current.

New OASDI cost estimates were prepared in 1963 for the use of the 1963 Advisory Council on Social Security Financing. These were published in Actuarial Study No. 58 and were based on the population projections of Actuarial Study No. 46. Some minor changes were made in the methodology. Basically, the estimates reflected a revision of the earnings-level assumption and the retirement-rates assumption, as well as all the other factors involved in the cost analysis. Specifically, actual experience data was used for the first time for disability benefits at ages below 50 and for male retirement benefits claimed before age 65.

Detailed cost estimates were prepared at the time that the 1965 Amendments were being considered. The estimates for the final bill were prepared for the House Ways and Means Committee and were published as a committee print, dated July 30, 1965. These estimates were based on the calculations that had previously been published in Actuarial Study No. 58.

The cost estimates presented in this study are based on a complete updating of all the assumptions involved, including the new set of population projections, published in Actuarial Study No. 62. A detailed description of the methodology followed (which does not differ greatly from that in Actuarial Study No. 49) will be published shortly as an actuarial study.

An important element affecting Old-Age, Survivors, Disability, and Hospital Insurance (OASDHI) costs arose through amendments made to the Railroad Retirement Act beginning in 1951. These provide for a coordination of Railroad Retirement compensation and OASDHI covered earnings in determining all survivor benefits, and also retirement benefits for those with less than 10 years of railroad service and, in addition, hospital benefits to persons aged 65 and over. In fact, all future survivor and retirement cases involving less than 10 years of railroad service are to be paid by the OASDHI system.

Financial interchange provisions are established such that the Old-Age and Survivors Insurance Trust Fund, the Disability Insurance Trust Fund and the Hospital Insurance Trust Fund are to be placed in the same financial position as if there never had been a separate Railroad Retirement program and as if railroad employment had been covered under OASDHI. It is estimated that the net effect of these provisions will be a relatively small loss to

the OASDHI system since the contributions from railroad work will be somewhat smaller than the net additional benefits paid on the basis of railroad earnings. The long-range costs developed here for the operation of the OASI and DI Trust Funds are on the basis, as provided in the law, that all railroad employment be considered (beginning with 1937) covered employment, with the effect of the financial interchange provision being shown as a separate item within the transactions of the funds. All the figures in this study are for direct OASDI coverage and benefit payments and do not include the railroad experience. The values for the railroad financial interchange provisions are treated as separate items.

B. Basic Assumptions

The various assumptions have been selected so as to be consistent with the actual operating data and with other assumptions, and at the same time so as to represent a reasonable range for the element under consideration. As in previous studies, the figures developed do not represent the widest possible range that could reasonably be anticipated, but rather our studied opinions as to a plausible range. For a more detailed analysis of items (1), (2), (3), and (4) below, see Actuarial Study No. 62. The various basic assumptions are:

(1) Mortality

The low-cost and high-cost estimates are both based on decreasing rates of mortality to the year 2000 and level thereafter, with the decrease in the low-cost estimate being equal to 50% of the decrease in the high-cost estimate. Assumptions as to mortality declines are based on analysis of recent mortality data by age, sex, and major groups of causes of death.

(2) Birth Rates

The low-cost estimate assumes age-specific birth rates that decline gradually from the 1965 values to a level equivalent to a total fertility rate of 2,800 per 1,000 women in 1985. For the high-cost estimate, the decline is assumed to reach a level of 2,300 per 1,000 women in 2010. By "total fertility rate" is meant the number of babies that a woman will have had by the end of her child-bearing period if she were subject to the age-specific fertility rates specified.

(3) Migration

For both the low-cost and high-cost estimates, it was assumed there would be about 400,000 net immigrants per year for all years in the future.

(4) Population

The above assumptions as to fertility, mortality, and migration--when applied to the existing population--yield the basic population projections. At the time this study was begun, estimates of the U.S. population as of July 1, 1965, subdivided by age and sex, were available. These were used as the starting point for the projections, after an adjustment for net census underenumeration and for the difference in area coverage between the census and the OASDHI coverage.

Table 1 summarizes the two population projections. It will be observed that the population for all ages combined does not show a very wide range as between the low-cost and high-cost assumptions in the early years, but ultimately (in the year 2050) the low-cost population is about

40% greater than the high-cost one. The high-cost projection has nearly the same number of aged persons as the low-cost projection. Both projections have about the same population in the productive years during the early period, but due to lower fertility assumptions, the high-cost projection eventually has fewer people in this age group. For the year 2050, those aged 65 and over represent 10.4% of the total population for the low-cost projection as contrasted with 14.6% for the high-cost projection. Thus, in contrast with 1950, when the corresponding figure was 8.0%, there is a relative increase in the proportion of the aged of about 30% for the low-cost projection and 82% for the high-cost one. In the 100-year period preceding 1950, the actual relative increase was about 225%.

(5) Employment

In developing bases for estimating both payrolls and insured populations, it is necessary to have the proportion of the total population in covered employment in a given year, by age and sex. Valuable guides toward developing assumed ratios exist in the form of (a) the actual coverage data for recent years and (b) labor force data and projections published by the Department of Labor. Roughly speaking, it has been assumed that, over the long range, the average unemployment rate will be about 3½%.

Table 2 shows the assumed ratios of persons with earnings credits in the year to total population for quinquennial age groups for three illustrative years (there are no changes assumed after the year 2000). For the aged groups, under the high-employment assumptions, the favorable employment opportunities, combined with good health and a philosophy of desiring to continue at work, might result in a retirement postponement; conversely, the increasing availability of supplementary old-age benefits from private pension plans might hasten retirement (even under high-employment conditions).

(6) Taxable Earnings for Male and Female Workers

Male workers are assumed to have average annual taxable earnings of $4,355. For women, the corresponding figure is $2,435. As in previous studies, no age differential in earnings is used, because the relatively small variations existing for the vast majority of employees (those between ages 25 and 65) do not warrant the additional computation. It will be observed that, due to a projected higher participation of females in the labor force, the average taxable earnings for both sexes combined shows a tendency to decrease.

These earnings correspond to the estimated averages for 1966 and are assumed to be level into the future. In a subsequent section, the use of an increasing-earnings assumption will be discussed.

(7) Taxable Payroll

By applying the previous assumptions as to covered employment and average earnings to the population projections, there are obtained the

total numbers of persons with credited earnings in various years and the aggregate amounts of such earnings. The resulting data for selected years are shown in Table 3, along with the developed averages for persons with any taxable earnings in the year. The numbers of persons with earnings in the year are somewhat lower for the high-cost assumptions than for the low-cost ones. This results from the fact mentioned previously--namely, that under the low-cost assumptions there is assumed higher fertility, which produces eventually greater numbers of persons in the productive ages.

(8) Insured Population

From the most recent actual data on insured workers and the assumptions as to the proportions of the population in covered employment, there may be developed, by diagonal projection and general reasoning, the assumed proportions of the total population who are insured. As generally used here, the term "insured" includes both "fully insured" and "currently insured only", but the latter category is relatively unimportant costwise and has been disregarded in this study.

Although only a single set of assumptions was used as to covered employment at most ages, a range is necessary in the proportions having insured status (resulting from the cumulative effect of employment), because of the uncertainty involved in the extent of year-by-year progression of covered employment as between individuals. Table 4 shows, for selected years, the resulting percentages of the total population that are insured. The lower figure of the range in each case applies to the low-cost estimate, while the higher figure is used in the high-cost estimate. A constant figure at all ages is reached by 2005 for males and by 2045 for females.

By applying the assumed proportions insured to the population projections, there are obtained the estimated insured populations shown in Table 5 (note that the term "insured population" includes only persons who are "insured" as a result of their own earnings credits, and not wives and widows of "insured" workers who do not have insured status based on their own earnings record). Although the insured population for all ages combined increases by about 145-160% in the next 60 years, the insured population aged 65 and over increases by 240-290%. It should be observed that the increment is higher for females than for males.

(9) Marital Status

Assumptions as to marital status are necessary in estimating the costs of the various supplementary and survivor benefits. The various assumptions both for men and women are based on census data and on actual claims data. The assumed proportion married in the future is adjusted upward at the older ages to allow for the effect of assumed improved mortality (resulting in fewer early broken marriages); the adjustment in the high-cost estimate is greater. Assumptions as to relative ages of husband and wife are based on census data and on actual claims data.

(10) Child's and Mother's Benefits

Projected numbers of child survivor beneficiaries are obtained from projections of the population under age 22 by estimating the proportion of such children in each future quinquennial year who will be orphans of insured workers. For those aged 18-21, an adjustment is made to take into consideration the requirement that they be full-time students. The method used for estimating benefit payments to child survivors and their mothers involves the implicit assumption that both the distribution of family patterns reflected in recent claims statistics and the current remarriage rates of mothers will continue to prevail in the future. Mother beneficiaries are obtained by multiplying the child beneficiaries under age 18 by a factor which is based on current experience.

(11) Parent's Benefits

This relatively minor category is difficult to estimate. As more and more of the aged become eligible for old-age, wife's, or widow's benefits, the number eligible for parent's benefits will be relatively lower. Because of the relative unimportance of this category, its size has been roughly estimated by assuming that the number of parent beneficiaries will bear a constant ratio to the number of persons aged 62 and over who are not eligible for any other OASDI benefit.

(12) Proportion of Eligible Persons Who are Beneficiaries

For the various beneficiary categories, a considerable reduction in disbursements occurs because individuals who are otherwise eligible for monthly benefits are engaged in substantial employment and do not receive benefits (or do not receive full benefits) because of the earnings test. In some instances benefits are withheld from beneficiaries who are "entitled", while in other cases the potential beneficiary never files (notably in the case of mother's benefits in families where there are sufficient children to obtain a maximum or near-maximum benefit anyhow).

The effect of employment in reducing benefit costs is most important in connection with old-age benefits and wife's benefits. Table 6 shows the percentages of aged insured workers receiving old-age benefits in selected years, and Table 7 shows similar percentages by separate age groups (including ages 62-64). The increase in these percentages with time is due primarily to the fact that there is a growing proportion of persons who are not currently in covered employment, but who are insured on the basis of earnings in the past. It is assumed that, in the future, all eligible aged widows who are not insured on their own account will receive benefits, and that no children and no wives will lose dependent's benefits because of their own work (wives who have larger benefits based on their own earnings record than their wife's benefits are not shown as receiving wife's benefits, and it is this category that is most likely to be working beyond the minimum retirement age). Implicitly, it is assumed that the percentage of eligible mothers who receive benefits remains at the present level.

(13) Alternative Receipt of Benefits

A very important cost element several decades hence, although not as important currently, is the provision that women may not receive full old-age benefits in their own right and full wife's, widow's or parent's benefits (also applicable to men with respect to their corresponding benefits). In effect, in such cases the larger of the two benefits is payable. For the cost estimates, it was assumed that these women will file for the widow's benefits only after filing for the old-age benefit. For wives, it is a legal requirement that they file for old-age benefits upon filing for their wife's benefit. In all cases, it is assumed that they receive the excess of such benefits over their old-age benefits as a supplement.

The number of women qualified for both old-age benefits and wife's or widow's benefits has been estimated by assuming that in the ultimate year 90% of all the females who are neither married nor widowed are eligible for old-age benefits and that, with the increasing participation of married women in the labor force, their proportion insured at any particular age will eventually reach the same levels as for widows of the same age. For the early years, it was assumed that widows are between two and three times as likely as married females to be insured. Then, based on claims data, with certain modifications to allow for changes in future distributions, estimates have been made as to the proportions of the cases in which the female old-age benefit will be smaller than the widow's benefit or the wife's benefit, as the case may be, and then for such cases what will be the average excess of the dependents benefit over the primary benefit.

(14) Average Benefits

An estimate, by sex, was made of the average monthly wage of insured workers who retire far enough in the future so that the 1966 earnings level and the ultimate percentages of the population in covered employment will have been in effect throughout their working life. The effects of the 5-year dropout and the disability freeze were taken into account. The ultimate average PIA for each sex was then calculated from the benefit formula, using the estimated AMW.

The resulting PIA's were then subdivided into two groups--one for those who retire with a full benefit after age 65, and the second for those who retire with a reduced benefit before age 65. It was assumed, based on current statistics, that 43% of the males and 60% of the females retire before age 65 with actuarially-reduced benefits. The average PIA for the early retirees was assumed, according to recent data, to be lower than that for the retirees at age 65 and over by 10% for females and 15% for males. The larger difference for males is principally due to the fact that their AMW is computed to age 65 (assuming no earnings for years not yet lived), while for females the computation point is age 62. Their average benefits were determined by estimating the average reduction factor, taking into account the age distribution at time of retirement.

The ultimate average PIA's and benefits are as follows:

Item	Low-Cost		High Cost	
	Male	Female	Male	Female
Age 65 and over, annual PIA	$1,655	$1,110	$1,645	$1,075
Age 62-64, annual PIA	1,405	1,000	1,400	965
Age 62-64, annual benefit	1,152	820	1,148	791

The high-cost figures are slightly lower than the low-cost ones because, since there is a relatively larger number of insured workers in the high-cost estimate, they must have a smaller average amount of coverage.

In obtaining the ultimate average benefits for survivors and dependents, the reductions in benefits because of the family maximum and because of early retirement were taken into account.

Average benefits were graded from presently prevailing figures into the ultimate ones for all beneficiary categories.

(15) Benefit Payments

The benefit payments for each category of benefit was calculated as the product of the number of beneficiaries and their average benefit. An adjustment was made for the retroactive payment of benefits. In accordance with the law, benefits can be claimed with up to 12 months of retroactivity. Also, in many cases a new beneficiary receives a first check for two or more months of benefits due to a delayed award or to the normal time that it takes to process a claim.

(16) Administrative Expenses

After study of the various elements involved, it is believed desirable to base the assumed administrative cost on two factors--the number of persons having any covered employment in a given year and the number of monthly beneficiaries. The estimated annual administrative expenses for future years were obtained from the following relationships:

Low-cost estimate--$11.30 per monthly beneficiary,
plus $1.35 per covered person;

High-cost estimate--$11.80 per monthly beneficiary,
plus $1.75 per covered person.

(17) Contributions

The previous discussion as to earnings and payroll dealt solely with taxable earnings. However, the effective payroll on which contributions are based is slightly lower for several reasons. Although taxes are collected

up to the annual earnings base ($6,600 from 1966 on) from each employer and employee, there are cases in which an employee has more than one employer during the course of a year, and excess taxes are withheld from his pay. In such cases, the employee contributions for wages in excess of $6,600 are refundable but the matching amounts collected from the employers are not. Also, in the coverage of tips, the taxes are collected only from the employees, there being no tax on the employer for the tips. According to an analysis of past experience of multiple-employer employment and according to estimates of covered tips, it was assumed that 1.8% of the taxable wages will be taxable at half the combined employer-employee rate. In addition, it was assumed, after an analysis of recent trends, that 7.5% of the taxable earnings will be due to self-employed workers, who contribute at a rate roughly equal to 1½ times the employee rate up to 1972 and somewhat less than this in 1973 and after. Allowance was also made for the fact that a portion of the contributions collected in a given year are based on the earnings of the preceding year.

(18) Disability Rates

Estimates of the future cost of the Disability Insurance program have been based on the same general assumptions as were used in the estimates prepared at the time of the 1956 Amendments, but with some modifications to reflect the available experience.

The numbers of persons receiving monthly disability benefits are estimated by applying prevalence rates (by age and sex) to the population insured for disability. These prevalence rates (number of beneficiaries per 1,000 workers insured) were initially developed from disability incidence rates based on the so-called 165% modification of the Class 3 incidence rates and from 1924-27 German social insurance experience and Class 3 termination rates.

The prevalence rates resulting from the assumed incidence and termination rates were then adjusted to reflect the latest available experience of the program. In accordance with current experience, the prevalence rates for females were assumed to be 80% of those used for males.

(19) Interest Rate

Under the present law, which was amended in this respect in 1960, the interest rate for the special issues to the OASDI Trust Funds is based on the average yield of all marketable obligations of the United States Government not due or callable for at least 4 years.

As a result of the provision as to interest rates prevailing prior to the 1960 Amendments, the average yield of the total investments currently held by the trust funds is about 3.6%, but for new investments the trust funds are currently obtaining about 5% to 5¼%.

An interest rate of 3.75% has, therefore, been assumed for the intermediate-cost estimate, while the rates for the low-cost and high-cost estimates are assumed at 4.25% and 3.25%, respectively.

C. Results of Cost Estimates under Level Earnings Assumption

Table 8 shows the actual and estimated numbers of aged monthly beneficiaries (including females aged 62-64 in 1957 and after, males aged 62-64 in 1962 and after, and widows aged 60-61 in 1966 and after) in current payment status. During the next 60 years, such beneficiaries are shown to increase from the present level of 16 million to a range of from 46 to 51 million ultimately. At that time, male old-age beneficiaries (retired workers) make up somewhat over 40% of the total, female old-age beneficiaries somewhat over 42%, wife beneficiaries not eligible for old-age benefits about 7%, widow beneficiaries not eligible for old-age benefits about 11%, and parent beneficiaries only .1%. The proportion of old-age beneficiaries who are women increases from 38% in 1966 to about 51% in the year 2025.

In Tables 8-11, the projected numbers of beneficiaries in current payment status are based on the assumption that there will be a reduction in the retroactivity of the first payments. Currently, the benefit payments in each month include substantial amounts of retroactive payments to beneficiaries to whom awards were made subsequent to the month of entitlement to benefits. Thus, current data as to the number of beneficiaries in current payment status in a given month significantly understate the number of persons who will eventually receive benefits for that month.

Table 9 relates the estimated total number of monthly beneficiaries aged 65 and over to the total population aged 65 and over, by sex. Whereas at the beginning of 1966, about 77% of all aged men and 74% of all aged women were actually drawing benefits, eventually this proportion is shown to range from 86% to 91%, depending on the age structure of the population. The difference between these figures and 100% is accounted for by (a) persons not eligible for benefits and (b) persons eligible for benefits, but not receiving them because of the earnings test.

Table 10 shows for various future years the estimated OASI monthly beneficiaries under retirement age who are in current payment status, as well as the actual data for 1956-66, while Table 11 gives corresponding figures for the DI program. All categories show a decided increase in future years, except for mother and child survivor beneficiaries; these latter categories remain relatively level after 1966 due to the lower fertility and mortality assumptions, both of which mean fewer survivor children created. Table 10 also gives the estimated number of lump-sum death payments, which for both estimates increases steadily as the insured population grows and becomes older on the average.

Table 12 shows the estimated amount of overlapping for female beneficiaries as between old-age benefits and wife's or widow's benefits. In the early years there are not many cases of such overlapping, since relatively few of the current older married women worked sufficiently in covered employment to become insured for old-age benefits. However, in later years

many aged married women will possess insured status for old-age benefits on account of employment at the younger ages, either before or shortly after marriage. Likewise, eventually many widows will qualify for old-age benefits by reason of employment, generally while single or after the death of their husbands.

Ultimately, about 32 to 37% of the female old-age beneficiaries are estimated to be also qualified for wife's benefits. However, since the unreduced wife's benefit is only 50% of the husband's old-age benefit, in only about 20% of such cases is the wife's benefit estimated to be larger than her old-age benefit. Likewise, ultimately, about 43 to 46% of the female old-age beneficiaries are estimated as also being qualified for widow's benefits. Since the widow's benefit is 82½% of the husband's old-age benefit, a relatively large proportion of such women (about 40%) have a widow's benefit that is larger than their old-age benefit. It should be emphasized again that these figures are particularly subject to fluctuations and uncertainty.

Table 13 gives the estimated average annual benefits in current payment status for old-age beneficiaries and their dependents. Also shown are the average additional wife's benefits payable for those women who receive an old-age benefit which is smaller than the wife's benefit otherwise payable. The averages for all types of beneficiaries tend to be slightly higher under the low-cost assumptions than under the high-cost assumptions because the latter assume a greater proportion to be insured; thus, the total covered wages are spread among more persons and result in lower average benefits. The average old-age benefit for males gradually rises as the effect of lower earnings levels prior to 1966 diminishes. The average old-age benefit for females rises less rapidly because of an increasing proportion of females who, although fully insured, have been out of the labor force for long periods, and because of the increasing proportion of women who retire before age 65 with reduced benefits.

Table 14 shows estimated average survivor annual benefits and lump-sum death payments, while Table 15 shows average disability benefits. As in the case of the average old-age and supplementary benefits in Table 13, the average benefits shown in Tables 14 and 15 increase gradually in future years and are somewhat higher under the low-cost assumptions than under the high-cost assumptions.

Table 16 summarizes the estimated benefit payments for the OASI portion of the system, along with the actual data for the years 1956-65. The total benefit payments increase from the level of about $16.7 billion in 1965 to $38 to $40 billion in the year 2000. Old-age benefits constitute from 69% to 72% of the total benefit payments in the year 2000; the total benefits for those who have reached retirement age make up about 90% of the total. In the actual 1965 data, old-age benefits were 66%, other benefits for the aged were 20%, and younger survivor benefits and lump-sum death payments were 14%.

Table 17 similarly summarizes the estimated benefit payments for the DI portion of the system. The total benefit payments increase from $1.6 billion in 1965 to $3.8 to $4.5 billion in the year 2000. Payments to disabled workers represented 79% of the total outgo in 1965, with wife's benefits being 6% and child's benefits being 15%. In the future, the proportion of the outgo for disabled workers is estimated to rise slightly as the proportion for dependents declines (due to the assumed lower fertility).

Since the Congress has adopted the principle of establishing in the law a contribution schedule designed to make the system self-supporting, it is necessary to select a single set of estimates as the basis for determining and evaluating the contribution schedule. The intermediate-cost estimate, which is derived as the average of the low-cost and high-cost estimates, is 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 has been aimed at as closely as possible by the Congress in 1950 and on subsequent occasions when developing the tax schedule in the law.

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

Table 18 relates the estimated benefit payments to taxable payroll by type of benefit for the OASI and DI portions of the programs. The level-cost of the total benefits is 7.91% and .83% of taxable payroll, respectively. The net total level-cost for OASI is also 7.91%, since the additional costs for administrative expenses and the railroad financial interchange are offset by the interest income produced by the present trust fund. For DI, the net total level-cost is higher by .02% of taxable payroll.

Table 19 shows the yearly cost as percent of taxable payroll for the most recent 10 years of actual experience and also for the projected intermediate-cost estimate. It should be observed that the OASI cost increases up to the year 1990. Then the system is projected to have a 20-year period of relatively low cost, due to a low number of aged persons in the population. This effect is directly related to the low birth rates in the 1930's. In the DI cost estimate, this effect is felt earlier; the cost becomes almost level for the 15-year period starting in 1980.

Table 20 deals with level-costs of the system under the three cost assumptions (low, high, and intermediate), taking into account administrative expenses and the accumulated fund on hand at the end of 1966. The resulting

net level-cost would, if actual experience is the same as the particular estimate, be the level contribution rate payable by the employer and employee combined (with the self-employed paying the appropriate reduced rate) which, if in effect hereafter, would result in an exactly self-supporting system; then, funds accumulating at interest would supply income sufficient to offset any annual excesses of outgo for benefit payments and administrative expenses over contribution income for the next 75 years. In addition, an amount equal to one year's outgo would be available in the fund at the end of the 75-year period.

The net level-cost for the OASI system ranges from 7.4% to 8.5% of taxable payroll. In other words, for this system, a level employer-employee contribution rate of as little as 7½% might be sufficient. On the other hand, a rate of 8½% might be necessary under adverse circumstances. Using a higher interest rate naturally results in somewhat lower costs, and vice versa. A differential of ½% in the interest rate has a net effect on the level-cost of about .08% of taxable payroll.

Table 20 also shows the level-equivalents of the present contributions to the OASDI system based on the following graded schedule in the Act.

Period	Combined employer-employee rate	Self-employed rate
1967-68	7.8%	5.9%
1969-72	8.8	6.6
1973 and after	9.7	7.0

For the DI portion of the system, the employer-employee rate is .70% and the self-employed rate is .525% in all years. The remainder of the above rates is applicable to the OASI portion.

The OASI program is over-financed under all three cost assumptions, while the DI program is under-financed under all three assumptions. It will be noted that the OASDI system as a whole is over-financed under all three cost assumptions. The excess financing is relatively small (.04% of taxable payroll) under the high-cost estimate, but is of a considerable magnitude (.74% of taxable payroll) under the intermediate-cost estimate and is very high (1.31% of taxable payroll) under the low-cost estimate.

It is important to note that these estimates are made on the assumption that earnings will remain at about the level prevailing in 1966. If earnings levels rise, as they have in the past, the benefits and the taxable earnings base under the program will undoubtedly be modified. If such changes are made concurrently and proportionately with changes in general earnings levels, and if the experience follows all the other assumptions, the future year-by-year costs of the system as a percentage of taxable payroll would be the same as those shown. However, the existing trust fund accumulated in the past, and its interest earnings, will represent a smaller proportion of the future taxable payrolls than if earnings were not to increase in future years. As

a result, since interest earnings of the trust fund will play a relatively smaller role in the financing of the system, the "net" level-cost--taking into account benefit payments, administrative expenses, and interest on the existing trust fund--would be somewhat higher. However, the level-cost would not rise this much, or might even decline, depending on the degree to which benefits are adjusted to reflect rising earnings. The effect of such events can be observed in ample time to make any needed changes in the contribution schedule or any other appropriate changes in the system.

Table 21 presents the estimated cost of benefit payments as percentages of taxable payroll for selected future years under the low-cost and high-cost assumptions. It should be observed that, for the next 35 years, the OASI cost stays below 8.0% of taxable payroll under the low-cost estimate and below 8.6% of taxable payroll under the high-cost estimate; however, it is possible for such cost to go above 11% of taxable payroll after this period.

Table 22 presents the estimated progress of the OASI Trust Fund under the contribution schedule in the 1965 Act. The contribution income includes reimbursements to the trust fund by the General Treasury for the cost of the "gratuitous" wage credits allowed for military service between September 15, 1940 and December 31, 1956, as provided by Public Law No. 84-881. The effect (positive or negative) of the Railroad Retirement financial interchange provisions is shown separately.

Under all three estimates, the trust fund is projected to increase continuously, reaching a level of about $250 billion in the year 2000 under the high-cost estimate, and higher levels under the intermediate-cost and low-cost estimates. These high levels result from the fact that the OASI portion of the system has a significant positive actuarial balance under all three cost estimates (i.e. it is over-financed).

Table 23 shows the corresponding progress of the DI Trust Fund. As would be anticipated from the data on the actuarial balance of this system, as shown in Table 20, the DI Trust Fund declines rapidly and becomes exhausted somewhere between 1975 and 1983, unless additional financing is provided.

D. The Effect of an Increasing Earnings Assumption

A factor mentioned earlier, but not assumed in the actuarial projections, is the past observed trend 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 trend in the contribution curves, however, would be far more accentuated than would be such trend in the benefit curves. The main reasons are:

(1) The benefits are determined by the average monthly earnings up to the maximum of $550; in essence, 62.97% is applied to the first $110 thereof, 22.9% to that part between $110 and $400, and 21.4% to the excess over $400. As average earnings increase, and as more persons approach or reach the $550 maximum, a larger portion of such earnings falls in the brackets of the benefit formula to which the lower rates apply. Thus, benefits become 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 80 years previous.

The assumption of steadily-rising earnings in conjunction with an unamended benefit formula would have an important bearing in considering the long-range cost of the program. With such an assumption, the future rises 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. Under such circumstances, 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 made by the Congress (perhaps with some delay) that would make average benefits as adequate relative to the then-existing covered earnings level as average benefits under the present formula are in relation to the level prevailing when the 1965 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 true as to changes resulting from the fact that benefits would be based on earnings prevailing at the time of such change and thereafter, while the accumulated trust funds at that time would have developed from contributions on the lower earnings prevailing during the past. The trust funds 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 trust funds in the financing of the program, the level-cost of the program would be increased if the benefit level were adjusted in exact proportion with the increase in the covered earnings level. For small rates of increase in the earnings level, the increase in cost may be partially counterbalanced by the time lag that would undoubtedly occur between the rise in the earnings level and the amendment of the benefit provisions. However, for large annual rates of increase in earnings levels (i.e., for rates equal to or in excess of the assumed valuation interest rate), the system would be financed practically on a pay-as-you-go basis, since the funds would be continually losing their real value and would become more of a contingency reserve than a source of interest income.

In addition to excluding the assumption of increasing earnings in the future, the detailed cost estimates given have avoided dealing with various other important secular trends. These have diverse effects on the cost of the program that cannot now be adequately extrapolated into the future. One illustration is the lengthening of the period of 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 62, or conversely to a relatively high effective age (under circumstances of greatly improved health conditions, combined with good employment opportunities), such that few would retire before age 72.

E. Comparison with Previous Estimates

Prior to the cost estimates prepared for the 1965 Act, the actuarial procedures assumed that the financing of the system would be into perpetuity. Projections were prepared for the necessary factors for many years--up to a far-distant point in the future, when all factors were assumed to level off. The 1963-64 Advisory Council on Social Security Financing recommended that the financing period be changed to 75 years (roughly, the life span of current new entrants). This recommendation was adopted and, starting with the 1965 Act, the cost estimates for OASDI have covered only a period of 75 years into the future.

The cost estimates prepared from 1939 until 1953 had always contained the assumption that the system would mature in the year 2000--or, in other words, had assumed that benefit payments and contributions would be level thereafter. In the cost estimates of 1953 and thereafter, a different assumption was made by maturing all trends, such as mortality, in the year 2000, but going on with the estimates for another 50 years. In one sense, this seems necessary because the aged population itself cannot mature by the year 2000. The reason for this is that the number of births in the 1930's was very low as compared with subsequent and previous periods. As a result, a dip in the relative proportion of the aged occurs from 1995 to about 2010, which would be reflected in relatively low OASI benefit costs for that period. Accordingly, the year 2000 is by no means a typical "ultimate year".

Table 24 compares, for low-cost estimates, the OASDI benefit costs relative to taxable payroll for various years for all the major long-range cost estimates that have been made for the program, beginning with the 1935 Act and for each of the major amendments. Table 25 gives corresponding figures for the high-cost estimates.

It is not appropriate to compare level-costs because of several factors, such as different interest rates, different periods covered, different assumptions as to when "maturity" would occur, and the different time elements involved. In regard to the last point, the level-cost in a given estimate for a particular plan will shift over the course of time if a graded contribution schedule is involved. Thus, for instance, consider a plan beginning in 1937 and remaining unchanged thereafter, with the experience exactly following the cost assumptions originally used. Under such circumstances, if the level-cost were 5% of taxable payroll at the inception of the plan, and if a graded combined employer-employee contribution schedule beginning at 2% and running up to 6% over a period of years were established such as to be equivalent to the level rate of 5%, then the level-cost determined in later years would be higher than 5% of taxable payroll because this amount had not been collected in the early years of operation. In fact, ultimately the level-cost would be 6% of taxable payroll (by the time the contribution schedule reached 6%).

In 1960, the actual cost of the OASI benefit payments made in that year was 5.33% of taxable payroll. By coincidence this is only slightly above the original high-cost estimate for the 1935 Act for that year, and well below the $5\frac{1}{2}$ to $6\frac{1}{2}$% range in cost for that year shown for the 1939 Amendments in the estimates made at the time of their enactment. Subsequent estimates for 1960 made for the 1939 Act show lower costs than this; the primary reason for this is the rapid increase of wages that occurred in the 1940's. Corresponding 1960 estimates for the 1950 and later amendments made at the time of their enactment indicate an increase in cost due to increases in the benefit level and to changes in the law that shifted the cost to the early years (for example, the early-retirement, actuarial-reduction provisions).

Table 1

ACTUAL AND PROJECTED U. S. POPULATION[a], 1950-2050
(in millions)

Calendar Year	Aged 20-64			Aged 65 and Over			All Ages		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Actual Data[a]									
1950	44.2	44.9	89.1	5.9	6.5	12.4	76.8	77.4	154.2
1960	47.0	48.7	95.7	7.6	9.1	16.7	90.5	92.7	183.2
Projection for Low-Cost Assumptions[b]									
1965	50.8	52.4	103.2	8.2	10.5	18.7	99.9	102.1	202.1
1970	55	57	112	9	12	20	106	109	214
1980	65	67	132	10	14	24	121	125	246
1990	74	75	149	12	17	28	140	144	284
2000	87	88	175	12	18	30	160	164	323
2025	120	120	240	20	27	47	222	225	447
2050	162	161	322	26	36	62	297	301	598
Projection for High-Cost Assumptions[b]									
1965	50.8	52.4	103.2	8.2	10.5	18.7	99.9	102.1	202.1
1970	55	57	112	9	12	20	105	108	214
1980	65	67	132	10	14	25	119	123	242
1990	74	75	149	12	17	29	134	138	272
2000	85	86	171	13	19	32	149	153	301
2025	105	105	210	22	29	51	185	189	374
2050	121	121	241	27	36	63	213	219	432

a/ From Census (as of April 1). These data relate to the total United States and not merely to the continental United States. Figures for 1965 and after incorporate a correction for under enumeration (see Actuarial Study No. 62).

b/ As of July 1, estimated.

Note: Figures are individually rounded and, in some instances, do not add exactly to totals shown.

Table 2

ASSUMED RATIOS OF PERSONS WITH EARNINGS CREDITS IN YEAR TO TOTAL POPULATION IN AGE GROUP[a/]

Age Group	Male			Female		
	1965	1980	2000	1965	1980	2000
15-19	51.9%	52-56%	52-58%	34.6%	40-42%	40-44%
20-24	95.2	97-98	97-99	62.8	68-70	68-72
25-29	94.2	95-97	95-97	45.3	48-51	51-53
30-34	90.3	90-92	90-92	40.1	45	48
35-39	88.3	89	89	44.5	51	54
40-44	88.0	89	89	47.2	55	59
45-49	87.4	89	89	48.7	59	63
50-54	86.1	87	87	47.1	57	62
55-59	80.8	83	83	43.6	54	57
60-64	70.9	69-71	68-71	33.3	33-35	32-35
65-69	45.7	31-37	25-35	18.6	16-19	14-19
70+	17.8	13-16	12-16	5.8	4-6	4-6

a/ When two figures are shown, the lower figure was used in the high-cost estimates, and the higher figure was used in the low-cost estimates.

Table 3

ESTIMATED PERSONS WITH TAXABLE EARNINGS, TOTAL TAXABLE EARNINGS, AND AVERAGE TAXABLE EARNINGS[a/]

Calendar Year	Persons with Taxable Earnings in Year (in millions)			Total Taxable Earnings in Year (in billions)	Average Taxable Earnings
	Male	Female	Total		
			Actual Data		
1955	43.1	22.1	65.2	$158	$2,416
1956	44.6	23.0	67.6	171	2,525
1957	47.1	23.4	70.5	181	2,573
1958	47.0	23.2	70.2	181	2,576
1959	47.6	24.1	71.7	202	2,822
1960	47.9	24.6	72.5	207	2,854
1961	48.0	24.8	72.8	210	2,879
1962	48.7	25.6	74.3	219	2,948
1963	49.3	26.3	75.5	225	2,985
1964[b/]	50.5	27.2	77.7	236	3,041
			Low-Cost Assumptions		
1965	51.6	28.6	80.2	$294[c/]	$3,671[c/]
1970	56.7	33.5	90.2	329	3,643
1980	67.3	41.6	109.0	395	3,621
2000	89.7	58.1	147.8	532	3,600
2025	123.8	78.8	202.5	731	3,608
			High-Cost Assumptions		
1965	51.6	28.6	80.2	$294[c/]	$3,671[c/]
1970	56.3	33.0	89.3	325	3,645
1980	66.0	40.7	106.7	387	3,623
2000	84.7	54.3	138.9	501	3,605
2025	103.6	65.6	169.2	611	3,611

a/ The total taxable earnings and the average taxable earnings are both affected by the maximum taxable earnings base. This base was $4,200 in 1955, and was increased to $4,800 in 1959, and to $6,600 in 1966.

b/ Preliminary Data.

c/ These figures are computed on the basis of a $6,600 earnings base.

Note: Figures are individually rounded and, in some instances, do not add exactly to totals shown.

Table 4

ASSUMED INSURED POPULATION AS PERCENT OF TOTAL POPULATION

Age Group	Male				Female				
	1965	1975	1990	2005 and After	1965	1975	1990	2005	2045 and After
20-24	87%	87-89%	87-90%	87-90%	59%	60-63%	60-65%	60-65%	60-65%
25-29	98	96-98	96-98	96-98	72	74-76	75-79	75-80	75-80
30-34	96	96-98	96-98	96-98	65	67-69	70-73	70-75	70-75
35-39	94	96-97	96-98	96-98	64	66-68	69-72	70-74	70-74
40-44	95	96-97	96-98	96-98	66	68-70	71-74	72-76	72-76
45-49	95	96-97	96-98	96-98	65	69-70	72-75	74-78	74-78
50-54	95	96-97	96-98	96-98	60	67-68	73-75	75-78	75-79
55-59	94	96-97	96-98	96-98	57	63-63	70-71	72-75	72-77
60-64	89	95-96	96-98	96-98	50	58-59	67-68	70-72	70-75
65-69	87	93-95	96-98	96-98	48	56-56	65-65	69-71	70-75
70-74	89	91-92	96-98	96-98	41	50-51	62-62	68-70	70-75
75-79	87	88-89	95-97	96-98	34	48-48	58-59	67-68	70-75
80-84	78	89-89	93-96	96-98	27	41-41	56-56	65-65	70-75
85+	54	82-84	92-94	96-98	14	29-30	48-48	59-60	70-75

Note: In each case the smaller figure was used in the low-cost estimate and the larger figure in the high-cost estimate.

Table 5

ESTIMATED INSURED POPULATION
(in millions)

Calendar Year	All Ages[a/]			Aged 65 and Over		
	Male	Female	Total	Male	Female	Total
	Actual Data (as of January 1)					
1956	43.9	26.6	70.5	4.4	1.5	5.9
1957	46.5	27.6	70.1	5.0	1.9	6.9
1958	48.1	28.0	76.1	5.4	2.1	7.5
1959	48.9	27.6	76.5	5.7	2.4	8.1
1960	49.2	27.5	76.7	5.9	2.6	8.5
1961	52.1	32.3	84.4	6.2	2.9	9.0
1962	53.6	35.0	88.5	6.4	3.1	9.5
1963	54.2	35.6	89.8	6.6	3.4	10.0
1964	54.9	36.3	91.3	6.8	3.7	10.4
1965	55.7	37.1	92.8	6.9	3.9	10.8
	Low-Cost Assumptions (as of July 1)					
1965	54.6	36.8	91.4	7.0	4.1	11.1
1970	59.4	41.5	100.9	7.7	5.0	12.7
1980	70.8	52.4	123.2	9.3	7.4	16.7
2000	93.9	73.3	167.2	11.5	11.4	22.9
2025	132.7	103.5	236.2	19.0	18.9	37.9
	High-Cost Assumptions (as of July 1)					
1965	54.6	36.8	91.4	7.0	4.1	11.1
1970	59.9	42.1	102.0	7.8	5.1	12.9
1980	72.8	54.2	127.0	9.8	7.6	17.4
2000	95.4	76.2	171.6	12.8	12.3	25.1
2025	123.4	100.7	224.0	21.7	21.5	43.3

a/ The actual data is for all ages combined, but the projected data is for ages 20 and over.

Table 6

ESTIMATED OLD-AGE BENEFICIARIES AGED 65 AND OVER IN CURRENT PAYMENT STATUS AS PERCENT OF INSURED POPULATION AGED 65 AND OVER

Calendar Year	Male	Female	Total
	Actual Data (as of January 1)		
1955	70%	75%	71%
1956	75	80	76
1957	71	77	73
1958	78	81	79
1959[a/]	81	85	82
1960	84	87	85
1961	85	87	85
1962	86	88	87
1963	89	89	89
1964	90	89	89
1965	89	89	89
	Low-Cost Assumptions (as of July 1)		
1965	90%	90%	90%
1970	89	90	90
1980	89	91	90
2000	91	92	92
2025	89	91	90
	High-Cost Assumptions (as of July 1)		
1965	90%	90%	90%
1970	90	91	91
1980	91	92	91
2000	93	94	93
2025	91	93	92

a/ As of December 1, 1958.

Table 7

ESTIMATED OLD-AGE BENEFICIARIES IN CURRENT PAYMENT STATUS
AS PERCENT OF INSURED POPULATION, BY AGE AND SEX

Calendar Year	Aged 62-64		Aged 65-69		Aged 70-74		Aged 75 and Over	
	Male	Female	Male	Female	Male	Female	Male	Female
			Actual Data (as of January 1)					
1955	-	-	54%	67%	76%	80%	96%	92%
1956	-	-	58	72	84	85	97	95
1957	-	16%	55	67	80	85	92	91
1958	-	35	62	73	85	88	96	93
1959[a/]	-	41	65	76	90	92	98	96
1960	-	42	69	79	90	94	98	97
1961	-	38	70	77	91	94	98	97
1962	13%	39	73	78	92	95	99	97
1963	22	42	76	78	95	97	99	98
1964	24	43	77	78	95	97	100	99
1965	25	43	76	77	96	97	100	100
			Low-Cost Assumptions (as of July 1)					
1965	25%	43%	76%	78%	96%	97%	100%	100%
1970	26	43	76	78	96	97	99	99
1980	26	43	76	78	96	97	99	99
			High-Cost Assumptions (as of July 1)					
1965	25%	43%	76%	78%	96%	97%	100%	100%
1970	26	44	77	79	97	98	100	100
1980	28	46	78	80	98	98	100	100

a/ As of December 1, 1958.

Table 8

ESTIMATED AGED[a] MONTHLY BENEFICIARIES IN CURRENT PAYMENT STATUS
(in thousands)

Calendar Year	Old-Age			Survivors		Total
	Male	Female	Wife's[b]	Widow's[c]	Parent's	
			Actual Data (as of January 1)			
1956	3,252	1,222	1,135	701	25	6,335
1957	3,572	1,540	1,371	913	27	7,423
1958[d]	4,198	1,999	1,746	1,095	29	9,067
1959[d]	4,617	2,303	1,929	1,233	30	10,112
1960	4,937	2,589	2,057	1,394	35	11,012
1961	5,217	2,845	2,158	1,544	36	11,800
1962	5,765	3,160	2,252	1,697	37	12,911
1963	6,244	3,494	2,365	1,857	37	13,997
1964	6,497	3,766	2,409	2,011	37	14,720
1965	6,657	4,011	2,434	2,159	36	15,297
1966	6,872	4,276	2,442	2,371	35	15,996
			Low-Cost Assumptions (as of July 1)			
1970	7,453	5,218	2,505	2,951	34	18,161
1980	9,013	7,567	2,642	3,473	32	22,727
1990	10,578	10,075	2,740	3,557	30	26,980
2000	11,125	11,514	2,544	3,501	28	28,712
2025	18,204	18,989	3,129	5,356	28	45,706
			High-Cost Assumptions (as of July 1)			
1970	7,638	5,336	2,554	3,000	35	18,563
1980	9,619	7,931	2,814	3,441	33	23,838
1990	11,639	10,697	2,964	3,547	31	28,878
2000	12,616	12,607	2,740	3,623	29	31,615
2025	21,280	22,039	3,249	4,838	23	51,429

a/ Before 1957, this implies persons aged 65 and over; in 1957-61, men aged 65 and over and women aged 62 and over; in 1962 and after, persons aged 62 and over, except that for 1966 and after widows aged 60-61 are also included.

b/ Including husband's beneficiaries, but excluding wife's beneficiaries who are caring for an entitled child.

c/ Including widower's benefits.

d/ As of December 1, 1958.

Table 9

ESTIMATED BENEFICIARIES AGED 65 AND OVER IN CURRENT PAYMENT STATUS AS PERCENT OF TOTAL POPULATION AGED 65 AND OVER

Calendar Year	Male	Female	Total
	Actual Data (as of January 1)		
1956	47%	38%	42%
1957	50	41	45
1958	58	48	53
1959[a/]	63	53	58
1960	66	57	61
1961	69	61	64
1962	71	64	67
1963	74	68	71
1964	75	70	73
1965	76	72	74
1966	77	74	76
	Low-Cost Assumptions (as of July 1)		
1970	79%	79%	79%
1980	83	84	84
1990	87	86	87
2000	87	88	88
2025	86	88	87
	High-Cost Assumptions (as of July 1)		
1970	80%	80%	80%
1980	86	85	85
1990	89	87	88
2000	91	90	90
2025	89	89	89

a/ As of December 1, 1958.

Table 10

ESTIMATED MONTHLY SUPPLEMENTARY AND SURVIVOR BENEFICIARIES UNDER RETIREMENT AGE IN CURRENT PAYMENT STATUS AND LUMP-SUM DEATH PAYMENTS IN YEAR
(in thousands)

Calendar Year	Supplementary Benefits[a]		Survivor Benefits		Lump-Sum Payments[c]
	Wife's[b]	Child's	Mother's	Child's	
			Actual Data (as of January 1)		
1956	57	122	292	1,154	547
1957	62	131	301	1,201	689
1958[d]	81	180	328	1,322	656
1959[d]	93	208	354	1,398	822
1960	103	246	376	1,508	779
1961	111	268	401	1,577	813
1962	140	338	428	1,650	865
1963	167	405	452	1,755	969
1964	170	418	461	1,811	1,011
1965	170	424	470	1,873	990
1966	171	463	472	2,072	[e]
			Low-Cost Assumptions (as of July 1)		
1970	228	569	511	2,509	1,159
1980	270	676	508	2,541	1,446
1990	301	752	567	2,786	1,698
2000	294	735	611	3,082	1,944
2025	517	1,293	801	4,040	2,895
			High-Cost Assumptions (as of July 1)		
1970	233	583	501	2,046	1,172
1980	289	722	475	1,939	1,491
1990	316	790	481	1,964	1,747
2000	310	774	482	1,968	1,980
2025	533	1,333	529	2,668	3,009

a/ Payable to dependents of old-age beneficiaries (retired workers).
b/ Wives under 65 with entitled children in her care.
c/ Number of decedents on whose account payments are made in the year.
d/ As of December 1, 1958.
e/ Not available.

Table 11

ESTIMATED MONTHLY DISABILITY BENEFICIARIES[a/]
IN CURRENT PAYMENT STATUS
(in thousands)

Calendar Year	Disabled Worker	Supplementary Benefits[b/]	
		Wife's	Child's
Actual Data (as of January 1)			
1958	150	--	--
1959[c/]	238	12	18
1960	334	48	78
1961	455	77	155
1962	618	118	291
1963	741	147	387
1964	827	168	457
1965	894	179	490
1966	988	193	558
Low-Cost Assumptions (as of July 1)			
1970	1,173	233	751
1980	1,438	252	813
1990	1,576	263	823
2000	1,898	318	935
2025	2,799	491	1,328
High-Cost Assumptions (as of July 1)			
1970	1,259	250	805
1980	1,652	290	936
1990	1,839	306	987
2000	2,242	370	1,192
2025	3,198	524	1,691

a/ Includes only persons who receive benefits from the DI Trust Fund.
b/ Payable to dependents of disabled workers.
c/ As of December 1, 1958.

Table 12

ESTIMATED FEMALE BENEFICIARIES QUALIFIED FOR BOTH OLD-AGE BENEFITS[a] AND WIFE'S OR WIDOW'S BENEFITS[b], IN CURRENT PAYMENT STATUS[c]
(in thousands)

Calendar Year	Qualified for Old-Age and Wife's: Total Eligible	Qualified for Old-Age and Wife's: With Smaller Old-Age Benefit	Qualified for Old-Age and Widow's: Total Eligible	Qualified for Old-Age and Widow's: With Smaller Old-Age Benefit
		Low-Cost Assumptions		
1970	1,157	347	2,634	579
1980	1,802	469	4,032	1,189
1990	2,603	573	5,357	1,875
2000	3,109	637	6,078	2,340
2025	6,154	1,231	8,671	3,468
		High-Cost Assumptions		
1970	1,234	370	2,704	595
1980	2,032	528	4,163	1,228
1990	2,964	652	5,559	1,946
2000	3,767	772	6,416	2,470
2025	8,014	1,603	9,511	3,804

a/ I.e., benefits for retired workers.
b/ Does not include cases in which the woman has not become a beneficiary (has not retired). There are relatively few wives in this group, since generally they retire at the same time as their husbands, but the number of widows should be substantially higher. The number eligible for both old-age and parent's benefits is negligible.
c/ As of July 1.

Table 13

ESTIMATED AVERAGE ANNUAL BENEFITS IN CURRENT PAYMENT STATUS FOR OLD-AGE BENEFICIARIES AND THEIR DEPENDENTS

Calendar Year	Old-Age[a]			Supplementary		
				Wife's[b]		
	Male	Female	Total	With No Old-Age Benefit	With Smaller Old-Age Benefit[c]	Child's
	Actual Data (as of January 1)					
1956	$797	$599	$743	$397	$117	$240
1957	819	604	757	405	125	248
1958[d]	846	627	775	412	132	263
1959[d]	873	643	796	421	141	276
1960	961	706	873	458	146	328
1961	982	716	888	465	149	339
1962	998	744	908	473	121	330
1963	1,005	751	914	475	130	329
1964	1,016	761	922	479	127	334
1965	1,027	771	930	483	131	337
1966	1,111	841	1,007	524	[e]	385
	Low-Cost Assumptions (as of July 1)					
1970	$1,151	$865	$1,033	$540	$149	$417
1980	1,243	895	1,084	581	160	461
1990	1,332	917	1,130	619	171	496
2000	1,389	931	1,156	645	178	517
2025	1,415	936	1,171	652	182	528
	High-Cost Assumptions (as of July 1)					
1970	$1,150	$864	$1,031	$540	$149	$417
1980	1,241	885	1,080	580	160	460
1990	1,327	896	1,121	617	170	494
2000	1,383	904	1,143	642	177	515
2025	1,408	905	1,152	650	181	525

a/ I.e., benefits for retired workers.
b/ Including husband's benefits.
c/ Figures represent the average residual wife's benefit paid in addition to their own old-age benefit.
d/ As of December 1, 1958.
e/ Not available.

Table 14

ESTIMATED AVERAGE ANNUAL SURVIVOR BENEFITS IN CURRENT PAYMENT STATUS AND LUMP-SUM DEATH PAYMENTS

Calendar Year	Widow's[a] With No Old-Age Benefit	Widow's[a] With Smaller Old-Age Benefit[b]	Mother's	Child's	Parent's	Lump-Sum[c] Death Payments
			Actual Data (as of January 1)			
1956	$584	$119	$551	$457	$599	$200
1957	602	206	568	472	609	201
1958[d]	613	216	589	490	622	202
1959[d]	623	228	606	505	634	208
1960	681	246	688	570	706	211
1961	692	253	711	616	724	211
1962	779	291	712	633	806	212
1963	791	293	713	643	818	213
1964	802	301	713	652	829	214
1965	814	310	713	660	841	219
1966	885	[e]	785	735	912	[e]
			Low-Cost Assumptions (as of July 1)			
1970	$948	$365	$830	$775	$966	$230
1980	1,059	408	906	846	1,042	232
1990	1,140	439	973	904	1,093	236
2000	1,189	458	1,014	939	1,124	239
2025	1,213	467	1,035	958	1,148	239
			High-Cost Assumptions (as of July 1)			
1970	$948	$365	$830	$775	$966	$229
1980	1,057	407	904	844	1,040	231
1990	1,136	437	969	900	1,088	234
2000	1,182	455	1,009	934	1,118	234
2025	1,207	465	1,028	953	1,142	233

a/ Including widower's benefits.
b/ Figures represent the average residual widow's benefit paid in addition to their own old-age benefit.
c/ Average amount paid per deceased worker.
d/ As of December 1, 1958.
e/ Not available.

Table 15

ESTIMATED AVERAGE ANNUAL DISABILITY BENEFITS[a] IN CURRENT PAYMENT STATUS

Calendar Year	Disabled Worker	Supplementary Benefits[b]	
		Wife's	Child's
Actual Data (as of January 1)			
1958[c]	$873	-	-
1959[c]	958	$407	$327
1960	1,068	433	371
1961	1,072	413	363
1962	1,075	397	350
1963	1,080	389	343
1964	1,087	387	341
1965	1,093	387	342
1966	1,173	420	379
Low-Cost Assumptions (as of July 1)			
1970	$1,283	$466	$425
1980	1,416	530	484
1990	1,467	557	508
2000	1,478	563	513
2025	1,479	563	513
High-Cost Assumptions (as of July 1)			
1970	$1,277	$465	$424
1980	1,400	528	481
1990	1,450	554	505
2000	1,458	559	510
2025	1,457	559	510

a/ With respect only to persons who receive benefits from the DI Trust Fund.
b/ Payable to dependents of disabled workers.
c/ As of December 1, 1958.

Table 16

ESTIMATED OASI BENEFIT PAYMENTS
(in millions)

Calendar Year	Monthly Benefits to the Aged				Monthly Benefits to Younger Persons		Lump-Sum Death Payments	Total Benefits
	Old-Age[a]	Wife's[b]	Widow's[c]	Parent's	Child's	Mother's		
				Actual Data				
1956	$3,793	$536	$469	$17	$614	$177	$109	$5,715
1957	4,888	756	653	19	694	198	139	7,347
1958	5,567	851	757	20	776	223	133	8,327
1959	6,548	982	921	25	931	263	171	9,842
1960	7,053	1,051	1,057	28	1,037	286	164	10,677
1961	7,802	1,124	1,232	31	1,186	316	171	11,862
1962	8,813	1,216	1,470	34	1,304	336	183	13,356
1963	9,391	1,258	1,612	34	1,368	348	206	14,217
1964	9,854	1,277	1,754	33	1,425	354	216	14,914
1965	10,984	1,383	2,041	35	1,691	388	217	16,737
				Low-Cost Assumptions				
1970	$13,185	$1,558	$3,099	$33	$2,268	$445	$266	$20,854
1980	18,066	1,801	4,288	33	2,560	483	336	27,567
1990	23,448	2,021	5,024	33	3,008	580	400	34,514
2000	26,311	1,983	5,392	31	3,405	651	464	38,237
2025	43,753	2,655	8,361	32	4,735	870	691	61,097
				High-Cost Assumptions				
1970	$13,472	$1,590	$3,153	$34	$2,232	$437	$268	$21,186
1980	19,046	1,921	4,261	34	2,437	453	345	28,497
1990	25,161	2,177	5,025	34	2,632	489	409	35,927
2000	28,985	2,136	5,568	32	2,777	510	463	40,471
2025	50,169	2,802	7,836	26	3,373	572	701	65,479

a/ I.e., for retired workers.
b/ Including husband's and young wife's benefits.
c/ Including widower's benefits.

Table 17

ESTIMATED DI BENEFIT PAYMENTS
(in millions)

Calendar Year	Disabled Worker	Wife's	Child's	Total Benefits
		Actual Data		
1957	$57	-	-	$57
1958	246	$1	$2	249
1959	391	29	38	457
1960	489	32	48	568
1961	724	54	109	887
1962	888	68	149	1,105
1963	965	73	172	1,210
1964	1,044	79	186	1,309
1965	1,246	95	232	1,573
		Low-Cost Assumptions		
1970	$1,670	$128	$367	$2,165
1980	2,239	154	444	2,837
1990	2,543	168	472	3,183
2000	3,086	206	542	3,834
2025	4,555	317	770	5,642
		High-Cost Assumptions		
1970	$1,784	$136	$392	$2,312
1980	2,544	176	508	3,228
1990	2,932	196	563	3,691
2000	3,596	238	687	4,521
2025	5,124	337	974	6,435

Table 18

ANALYSIS OF THE INTERMEDIATE-COST ESTIMATE FOR OASDI BY TYPE OF BENEFIT PAYMENT AS PERCENT OF TAXABLE PAYROLL[a/]

Type of Payment	OASI	DI
Primary benefits	5.45%	.66%
Wife's benefits	.46	.04
Widow's benefits	1.13	b/
Parent's benefits	.01	b/
Child's benefits	.65	.13
Mother's benefits	.12	b/
Lump-sum death payments	.09	b/
Total benefits	7.91	.83
Administrative expenses	.13	.03
Railroad retirement financial interchange	.03	.00
Interest on existing trust fund[c/]	-.16	-.01
Net total level-cost	7.91	.85

a/ Including adjustment to reflect the lower contribution rate on self-employment, on tips, and on multiple employer excess wages.

b/ This type of benefit is not payable under this program.

c/ This item includes reimbursement for additional cost of non-contributory credits for military service.

Table 19

INTERMEDIATE-COST ESTIMATE OF BENEFIT PAYMENTS AS PERCENT OF TAXABLE PAYROLL[a/] FOR SELECTED YEARS

Calendar Year	OASI	DI	OASDI
	Actual Data		
1956	3.48%	b/	3.48%
1957	4.20	.03%	4.23
1958	4.77	.14	4.91
1959	5.03	.23	5.26
1960	5.33	.28	5.61
1961	5.85	.44	6.29
1962	6.31	.52	6.83
1963	6.52	.55	7.07
1964	6.53	.57	7.10
1965	6.85	.64	7.49
	Projection		
1970	6.65%	.71%	7.36%
1975	7.05	.77	7.82
1980	7.43	.80	8.23
1985	7.89	.81	8.70
1990	8.24	.80	9.04
1995	8.21	.80	9.01
2000	7.89	.84	8.73
2005	7.65	.90	8.55
2010	7.80	.96	8.76
2015	8.38	.97	9.35
2020	9.12	.96	10.08
2025	9.76	.93	10.69
2030	10.00	.91	10.91
2035	9.91	.94	10.85
2040	9.86	.95	10.81
2045	9.96	.95	10.91

a/ Including adjustment to reflect lower contribution rate on self-employed on tips, and on multiple-employer excess wages.

b/ Under this program, benefit payments started in 1957.

Table 20

ANALYSIS OF ESTIMATED LEVEL-COST (AS OF JANUARY 1, 1967) OF OASDI SYSTEM AS PERCENT OF TAXABLE PAYROLL[a/]

Level Equivalent of	Estimate: Low-Cost	High-Cost	Intermediate-Cost
OASI System			
Benefit Payments	7.45%	8.49%	7.91%
Administrative Expenses	.12	.14	.13
Railroad Interchange	.03	.04	.03
Interest on 1966 Trust Fund[b/]	-.18	-.15	-.16
Net Cost[c/]	7.42	8.52	7.91
Contributions[d/]	8.79	8.82	8.80
Actuarial Balance[e/]	1.37	.30	.89
DI System			
Benefit Payments	.75%	.93%	.83%
Administrative Expenses	.03	.04	.03
Railroad Interchange	.00	.00	.00
Interest on 1966 Trust Fund[b/]	-.02	-.01	-.01
Net Cost[c/]	.76	.96	.85
Contributions[d/]	.70	.70	.70
Actuarial Balance[e/]	-.06	-.26	-.15

a/ Including adjustment to reflect the lower contribution rate on the self-employed, on tips, and on multiple employer excess wages.

b/ Interest on Trust Fund existing at end of 1966 as earned in future years. Includes reimbursement for additional cost of noncontributory credits for military service.

c/ Level-equivalent of benefit payments, plus administrative expenses, less interest on existing Fund at end of 1963 and including effect of the Railroad Retirement interchange and reimbursement from the general treasury of the additional cost for noncontributory wage credits for military service.

d/ Level contribution rate for employer and employee combined equivalent to the graded rates in the 1965 Act.

e/ A negative figure indicates the extent of lack of actuarial sufficiency.

Table 21

ESTIMATED OASDI BENEFIT PAYMENTS AS PERCENT OF TAXABLE PAYROLL[a], LOW-COST AND HIGH-COST ASSUMPTIONS

Calendar Year	Low-Cost	High-Cost
	OASI System	
1970	6.56%	6.73%
1980	7.24	7.63
1990	7.94	8.55
2000	7.44	8.37
2025	8.66	11.09
	DI System	
1970	.68%	.73%
1980	.74	.86
1990	.73	.88
2000	.74	.93
2025	.80	1.09

a/ Including adjustment to reflect the lower contribution rate on self-employment, on tips, and on multiple-employer excess wages.

Table 22

ESTIMATED PROGRESS OF OASI TRUST FUND
(in millions)

Calendar Year	Contributions[a]	Benefit Payments	Administrative Expenses	Railroad Retirement Financial Interchange[b]	Interest on Fund	Fund at End of Year
			Actual Data			
1956	$6,172	$5,715	$132	$5	$526	$20,519
1957	6,825	7,347	162	2	556	20,393
1958	7,566	8,327	194	-124	552	21,864
1959	8,052	9,842	184	-282	532	20,141
1960	10,866	10,677	203	-318	516	20,324
1961	11,285	11,862	239	-332	548	19,725
1962	12,059	13,356	256	-361	526	18,337
1963	14,541	14,217	281	-423	521	18,480
1964	15,689	14,914	296	-403	569	19,125
1965	16,017	16,737	328	-436	593	18,235
			Low-Cost Assumptions			
1970	$25,825	$20,854	$370	$-498	$1,224	$34,640
1980	34,373	27,567	449	-105	4,849	124,853
1990	39,232	34,514	523	52	10,016	251,272
2000	46,318	38,237	577	112	17,946	447,853
2025	63,533	61,097	865	147	65,411	1,611,481
			High-Cost Assumptions			
1970	$25,579	$21,186	$420	$-528	$1,088	$32,526
1980	33,682	28,497	514	-155	3,009	100,561
1990	37,888	35,927	612	-7	5,239	170,718
2000	43,619	40,471	663	42	7,792	252,861
2025	53,140	65,479	963	67	16,425	521,752
			Intermediate-Cost Assumptions			
1970	$25,702	$21,020	$395	$-513	$1,154	$33,580
1980	34,028	28,031	482	-130	3,867	112,430
1990	38,560	35,220	566	23	7,385	209,245
2000	44,969	39,355	620	77	12,205	344,138
2025	58,336	63,288	914	107	36,172	1,004,202

a/ Includes reimbursement for additional cost of noncontributory credits for military service.

b/ A positive figure indicates payment to the Trust Fund from the Railroad Retirement Account, and a negative figure indicates the reverse.

Table 23

ESTIMATED PROGRESS OF DI TRUST FUND
(in millions)

Calendar Year	Contributions[a]	Benefit Payments	Administrative Expenses	Railroad Retirement Financial Interchange[b]	Interest on Fund	Fund at End of Year
			Actual Data			
1957	$702	$57	$3	--	$7	$649
1958	966	249	12	--	25	1,379
1959	891	457	50	$22	40	1,825
1960	1,010	568	36	5	53	2,289
1961	1,038	887	64	-5	66	2,437
1962	1,046	1,105	66	-11	68	2,368
1963	1,099	1,210	68	-20	66	2,235
1964	1,154	1,309	79	-19	64	2,047
1965	1,188	1,573	90	-24	59	1,606
			Low-Cost Assumptions			
1970	$2,242	$2,165	$108	$-5	$74	$2,045
1980	2,691	2,837	115	15	22	701
1990	3,070	3,183	112	18	[c]	[c]
2000	3,622	3,834	126	18	[c]	[c]
2025	4,953	5,642	185	18	[c]	[c]
			High-Cost Assumptions			
1970	$2,221	$2,312	$118	$-9	$51	$1,488
1980	2,637	3,228	144	7	[d]	[d]
1990	2,965	3,691	157	8	[d]	[d]
2000	3,412	4,521	190	8	[d]	[d]
2025	4,143	6,435	271	8	[d]	[d]
			Intermediate-Cost Assumptions			
1970	$2,232	$2,240	$113	$-7	$62	$1,763
1980	2,664	3,032	130	11	[e]	[e]
1990	3,017	3,438	134	13	[e]	[e]
2000	3,517	4,176	158	13	[e]	[e]
2025	4,548	6,039	228	13	[e]	[e]

[a] Includes reimbursement for additional cost of noncontributory credits for military service.
[b] A positive figure indicates payment to the Trust Fund from the Railroad Retirement Account, and a negative figure indicates the reverse.
[c] Fund exhausted in 1983.
[d] Fund exhausted in 1975.
[e] Fund exhausted in 1977.

Table 24

COMPARISON OF ESTIMATED OASDI BENEFIT PAYMENTS AS PERCENT OF TAXABLE PAYROLL FOR VARIOUS ACTS, LOW-COST ASSUMPTIONS

Act	Actuarial Study No.	Employment Assumption	Benefit Payments Cost in Year 1955	1960	1970	1980	2000
			OASI				
1935	12	a/	2.81%	4.18%	6.38%	9.35%	-
1939	14	a/	4.46	5.36 c/	6.33 c/	7.22 c/	-
1939	17	a/	2.58 c/	3.35	4.71	6.13	7.55%
1939	19	a/	2.51	3.45	5.19	7.29	8.98
1939	23	Low	2.48	3.12	4.04	5.02	5.75
1939	23	High	1.32	1.75	2.57	3.33	4.19
1950	b/	a/	2.21	2.83	4.00	4.93	5.80
1952	b/	a/	2.14	2.87	4.03	4.93	5.77
1952	36	Low	3.31	4.41	5.57	6.57	6.99
1952	36	High	2.80	3.76	4.85	5.86	6.29
1954	39	a/	2.78	4.04	5.57	6.79	7.24
1956	48	a/	3.26 d/	4.72 c/	6.27	7.16	6.74
1958	b/	a/	3.26 d/	5.04 c/	6.47	7.46	7.06
1960	b/	a/	3.26 d/	5.33 d/	6.69	7.75	6.94
1961	b/	a/	3.26 d/	5.33 d/	7.03	7.78	7.15
1961	58	a/	3.26 d/	5.33 d/	6.98	7.70	7.19
1965	b/	a/	3.26 d/	5.33 d/	7.00	7.47	7.64
1965	63	a/	3.26 d/	5.33 d/	6.56	7.24	7.44
			DI				
1956	48	a/		.14%	.22%	.22%	.22%
1958	b/	a/		.20 c/	.32	.36	.30
1960	b/	a/		.28 d/	.40	.41	.39
1961	b/	a/		.28 d/	.40	.41	.39
1961	58	a/		.28 d/	.57	.56	.52
1965	b/	a/		.28 d/	.56	.57	.54
1965	63	a/		.28 d/	.68	.74	.74

a/ Only one employment assumption was made.
b/ Prepared at time of enactment.
c/ Not shown in Actuarial Study; taken from worksheets.
d/ Actual experience.

Table 25

COMPARISON OF ESTIMATED OASDI BENEFIT PAYMENTS AS PERCENT OF TAXABLE PAYROLL FOR VARIOUS ACTS, HIGH-COST ASSUMPTIONS

Act	Actuarial Study No.	Employment Assumption	Benefit Payments Cost in Year 1955	1960	1970	1980	2000
			OASI				
1935	12	a/	3.46%	5.13%	8.41%	13.36%	-
1939	14	a/	5.45	6.72	8.54 c/	10.60 c/	-
1939	17	a/	3.70 c/	4.75	6.77	9.55	12.66%
1939	19	a/	2.14	3.00	4.68	6.94	10.64
1939	23	Low	3.03	3.73	5.20	7.19	10.52
1939	23	High	1.89	2.46	3.65	5.18	8.12
1950	b/	a/	2.69	3.74	5.34	7.14	10.20
1952	b/	a/	2.56	3.74	5.33	7.08	10.08
1952	36	Low	3.76	4.97	6.27	7.58	9.33
1952	36	High	3.29	4.44	5.66	6.95	8.42
1954	39	a/	3.10 d/	4.63	6.39	7.90	9.31
1956	48	a/	3.26 d/	4.95 c/	6.62	8.15	9.61
1958	b/	a/	3.26 d/	5.29 d/	6.84	8.49	10.06
1960	b/	a/	3.26 d/	5.33 d/	7.02	8.57	9.89
1961	b/	a/	3.26 d/	5.33 d/	7.37	8.78	10.12
1961	58	a/	3.26 d/	5.33 d/	7.45 c/	8.78	10.01
1965	b/	a/	3.26 d/	5.33 d/	7.42 c/	8.88	10.51
1965	63	a/	3.26 d/	5.33 d/	6.73	7.63	8.37
			DI				
1956	48	a/		.23% c/	.45%	.48%	.50%
1958	b/	a/		.33 c/	.63	.72	.68
1960	b/	a/		.28 d/	.65	.72	.74
1961	b/	a/		.28 d/	.65	.72	.74
1961	58	a/		.28 d/	.68	.69	.71
1965	b/	a/		.28 d/	.68	.71	.74
1965	63	a/		.28 d/	.73	.86	.93

a/ Only one employment assumption was made.
b/ Prepared at time of enactment.
c/ Not shown in Actuarial Study; taken from worksheets.
d/ Actual experience.

Actuarial Studies Available from the Office of the Actuary*

40. The Financial Principle of Self-Support in the OASI System--April 1955.

41. Analysis of Benefits, OASI Program, 1954 Amendments--May 1955.

46. Illustrative United States Population Projections--May 1957.

48. Long-Range Cost Estimates for Old-Age, Survivors, and Disability Insurance under 1956 Amendments--August 1958.

49. Methodology Involved in Developing Long-Range Cost Estimates for the Old-Age, Survivors, and Disability Insurance System--May 1959.

50. Analysis of Benefits, OASDI Program, 1960 Amendments--December 1960.

51. Present Values of OASI Benefits in Current Payment Status, 1960--February 1961.

52. Actuarial Cost Estimates for Health Insurance Benefits Bill--July 1961.

53. Medium-Range Cost Estimates for Old-Age, Survivors, and Disability Insurance and Increasing-Earnings Assumption--August 1961.

54. Estimated Amount of Life Insurance in Force as Survivor Benefits under OASI 1959-60--October 1961.

55. Remarriage Tables Based on Experience under OASDI and U. S. Employees' Compensation Systems--December 1962.

56. Analysis of Benefits under 26 Selected Private Pension Plans--January 1963.

57. Actuarial Cost Estimates for Hospital Insurance Bill--July 1963.

58. Long-Range Cost Estimates for Old-Age, Survivors, and Disability Insurance System, 1963--January 1964.

59. Actuarial Cost Estimates for Hospital Insurance Act of 1965 and Social Security Amendments of 1965--January 1965.

60. Mortality Experience of Workers Entitled to Old-Age Benefits under OASDI 1941-1961--August 1965.

61. History of Cost Estimates for Hospital Insurance--December 1966.

62. United States Population Projections for OASDHI Cost Estimates--January 1967.

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* Numbers not listed are out of print.