LONG-RANGE COST ESTIMATES FOR CHANGES PROPOSED IN THE OLD-AGE AND SURVIVORS INSURANCE SYSTEM BY H.R. 7199, WITH SUPPLEMENTARY ESTIMATES FOR UNIVERSAL COVERAGE

By

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FOREWORD

This actuarial study presents detailed long-range cost estimates for the old-age and survivors insurance program as it would be modified by H.R. 7199. This bill is the administration bill introduced by Chairman Reed of the Committee on Ways and Means of the House of Representatives on January 14, 1954, embodying the general recommendations made by President Eisenhower in his Message transmitting "recommendations relating to the old-age and survivors insurance system and the Federal grant-in-aid programs for public assistance" (House Doc. No. 295, 83rd Cong., 2d sess.). In addition, cost estimates are presented for the same changes except that extension of coverage is made universal rather than according to the bill which omits a few categories of employment (principally, Federal civilian and military personnel). Except for a few minor modifications, the estimates of this report are consistent and comparable with those made for the present program in Actuarial Study No. 36.

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This study has been prepared for the use of the staff of the Social Security Administration and for limited circulation to other administrative, insurance, and research persons concerned with the subject treated. It has not been submitted to the Commissioner of Social Security for official approval.

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A. Introduction

This study presents long-range cost estimates for H.R. 7199, which is the administration bill introduced by Chairman Reed of the Committee on Ways and Means of the House of Representatives for consideration and discussion before his committee.

The main features of this bill are as follows:

(1) Extension of coverage to all gainful employment except Federal civilian service covered by a retirement system, military service, and policemen and firemen covered by a retirement system (insofar as the actuarial costs of the system are concerned, railroad employees are covered by OASI as a result of the financial interchange provisions of the 1951 amendments to the Railroad Retirement Act). In this connection, the cost estimates assume that in virtually all cases where elective coverage is available (as, for instance, for employees of non-profit organizations and employees of State and local Governments) such action occurs.

(2) Maximum wage base of $4,200 a year.

(3) Average monthly wage determined by dropping out the lowest 4 years.

(4) Monthly primary insurance amount based on 55% of the first $110 of average monthly wage, plus 20% thereafter. Minimum monthly benefit of $30 and maximum family benefit of $190. Beneficiaries on the roll are to be given an approximately equivalent increase, with at least a $5 increase in the primary insurance amount in any event, by means of a conversion table.

(5) Retirement test on an annual basis with the first $1,000 being exempt and with 1 month's reduction for each additional $80 of earnings.

(6) "Disability freeze" provisions such that an individual's benefit rights (both as to amount and insured status) are preserved in the event that he has an extended total disability.

(7) Contribution rates for employer and employee maintained as now scheduled up through 1969 (2% each for 1954-59, 2½% each for 1960-64, and 3% each for 1965-69) but increased thereafter to 3½% each (as against 3¼% each under present law).

B. Basic Assumptions and Methodology

On the whole, the cost estimates contained in this report have been prepared using exactly the same methodology and assumptions as those for the present OASI system as contained in Actuarial Study No. 36, which should be consulted for further details[a]. This is also true in regard to the meaning of the figures in connection with the financial interchange provisions between the old-age and survivors insurance system and the Railroad Retirement Act (as discussed on page 2 of Actuarial Study No. 36).

Actuarial Study No. 36 contains low-cost and high-cost estimates for both low-employment and high-employment assumptions. This report, however, uses only the high-employment assumptions since current conditions are more closely approximated thereby. In fact, current conditions tend to be somewhat above the high-employment assumptions.

This report contains cost estimates for two different bases as to how far coverage is extended--first, for the coverage extension in the bill and, second, for universal coverage, which would include in addition primarily Federal civilian and military personnel.

The assumed annual credited earnings of 4-quarter workers are modified because the wage base is raised to $4,200. Accordingly, for such men, the annual credited earnings are assumed to be $3,200 (instead of $2,980) while for women, the corresponding figure is $2,050 (as compared with $2,030). Certain other minor changes in assumptions arise because of the extended coverage.

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a/ A typographocal error appears in that Study in regard to the assumptions (in item 18 on page 10, the figures .40% and .45% should be .040% and .045% respectively).

C. Results of Cost Estimates

Table 1 repeats, for reference purposes, a summary of the population projections underlying the cost estimates. 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 the low-cost population is 55% greater than the high-cost one. In the high-cost projection there are nearly the same number of aged persons as in the low-cost projection but considerably fewer in the productive ages because of the lower mortality and lower fertility assumed in the former. For the year 2050, those aged 65 and over represent 11.4% of the total population for the low-cost projection as contrasted with 16.1% for the high-cost assumptions. Thus in contrast with 1950, when the corresponding figure was 8.0%, there is a relative increase in the proportion of the aged of 42% for the low-cost projection and about 100% for the high-cost one. In the 100-year period preceding 1950 the actual relative increase was about 225%.

Table 2 shows the estimated persons with wage credits, their total credited wages, and the average creditable wage for various future years under the bill, and in contrast the corresponding figures for what the situation would be if the bill contained provisions for coverage extension so as to be universal. Universal coverage would result in total credited wages being about 8% greater than for the extended coverage provided by the bill.

Table 3 gives the insured population by sex for all ages combined and for those aged 65 and over on the two coverage bases considered. Universal coverage results generally in about 5% more persons being insured than under the coverage extension in the bill, although ultimately this differential is only about 1% for the high-cost assumptions.

Table 4 presents the estimated monthly beneficiaries aged 65 and over in current payment status. There is again about the same difference between the number of beneficiaries for the coverage in the bill as against the number under universal coverage as there was in the case of the number of insured persons.

Table 5 relates the estimated total monthly beneficiaries aged 65 and over (as shown in Table 4) to the total aged population. Whereas at the present time close to 40% of all aged men and 30% of all aged women are actually drawing benefits, eventually under the coverage of the bill, this proportion will range from 70-80% for men and 80-90% for women. Under universal coverage, this proportion would be slightly higher. It should be noted that, especially in the ultimate situation, most of the difference between these proportions and 100% is accounted for by individuals remaining in substantial employment.

Table 6 shows the estimated monthly beneficiaries under age 65 in current payment status. Under the high-cost assumptions, there is relatively little increase after 1960 because of the lower mortality assumed (i.e., fewer survivor children created). Table 6 also gives the estimated number of lump-sum death payments which, in all instances, increases steadily as the insured population grows and becomes older on the average.

Table 7 summarizes the estimated benefit payments, along with the actual data for the years 1951-53. Under the extension of coverage in the bill, benefit payments increase from the level of about \$3.1 billion in 1953 to \$18-21 billion in the year 2000 and, correspondingly, to a range of \$19-22 billion if there were universal coverage.

Tables 8 and 9 relate the estimated benefits to taxable payroll for the coverage provisions of the bill and for universal coverage, respectively. The total cost for the ultimate condition (from about the year 2020 on) ranges from $7\frac{1}{2}$ to $11\frac{1}{2}$% of payroll for the coverage extension in the bill, and somewhat less than this for universal coverage.

In addition to the figures for the low-cost and high-cost estimates, there have been developed intermediate cost estimates which are merely an average of the low-cost and high-cost estimates and are not intended to represent "most probable" figures. Rather, they have been set down as a convenient and readily available single set of figures to be used for comparative purposes.

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

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

Another concept of long-range cost is the level-premium contribution rate required to support the system into perpetuity based on discounting at interest and assuming that benefit payments and taxable payrolls remain level after the year 2050 (actually the relationship between benefits and payroll is virtually constant after about 2020). If such a level rate were adopted, relatively large accumulations in the trust fund would result, and in consequence also sizable eventual income from interest. Even though such a method of financing is not followed, this concept may nevertheless be used as a convenient measure of long-range costs. In one respect this is a better cost concept since it takes into account the heavy deferred load although, on the other hand, some may feel it unrealistic because it deals with periods beyond the year 2050, and also it is dubious to assume a leveling off or stabilization at any time.

Table 10 deals with level-premium costs of the benefits in perpetuity by further taking into account administrative expenses and the accumulated fund on hand at the end of 1952 (the "beginning date" of January 1, 1953 is taken so that the figures will be comparable with those of Actuarial Study No. 36, relating to present law). The resulting "net cost" level-premium would, if actual experience is the same as the particular estimate, be the level contribution rate payable both by the self-employed and by the employer and employee combined, which if in effect hereafter would result in an exactly self-supporting system; then funds accumulating at interest would supply income eventually sufficient to offset the excess of benefit payments over contribution. The "adjusted net cost" level-premium shown is the corresponding figure for the level contribution rate payable by the employer and employee combined, with the self-employed paying only ¾ of this rate. The resulting figures are shown for three interest rates -- 2¼% (the rate used in the cost estimates for the 1952 Amendments when they were being considered by Congress), 2½%, and 2¾%. The average rate on investments of the trust fund is currently about 2.4%. The current rate on new investments in special issues is 2-3/8%, and in fact almost all investments in the trust fund carry at least this rate.

At 2½% interest the "adjusted net cost" level-premium ranges from 6.5 to 8.5% of payroll for the coverage in the bill and somewhat less than this for universal coverage. In other words, a level employer-employee contribution rate (self-employed paying ¾) of as little as 6½% might be sufficient or, 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-premium of about ¼% of payroll under the low-cost assumptions and of about ½% of payroll under the high-cost assumptions.

Table 10 also shows the level-premium equivalents of the present contributions based on the graded schedule in the bill which is the same as present law through 1969 but $\frac{1}{2}\%$ higher as to combined employer-employee rate thereafter. These figures are on a comparable basis with the "adjusted net cost" level-premium figures for benefits, and the difference shows the relative sufficiency (or insufficiency) of the contribution schedule, according to the assumptions made in the cost estimates. On this basis, considering the figures at $2\frac{1}{2}\%$ interest, which is the rate closest to the current actual rate, the low-cost estimate indicates that the contribution schedule proposed produces slightly more than would be necessary to have the system be in "exact actuarial balance" according to the assumptions made. On the other hand, in the high-cost estimate there is an insufficiency in the contribution schedule amounting to almost 2% of payroll, while for the intermediate-cost estimate, the corresponding insufficiency is about $\frac{3}{4}\%$ of payroll. On the basis of universal coverage, these insufficiencies would be slightly reduced. Before drawing any conclusion from the preceding analysis, it should be kept in mind that there is also such a situation as to insufficiency of the contribution schedule under present law, which, as will be indicated in the next section, is of about the same relative magnitude.

Table 11 presents the estimated progress of the trust fund at $2\frac{1}{4}\%$ interest under the coverage of the bill. Under the low-cost estimate the fund continues to grow in the future reaching $188 billion in the year 2050. However, under the other estimates the fund grows for a time and then declines until it is eventually exhausted. Under the high-cost estimate the fund reaches a peak in 1975 of $29 billion and is exhausted in 1989.

Under the provisions of the bill but with universal coverage and $2\frac{1}{4}\%$ interest (see Table 12) for the low-cost assumptions the fund reaches a peak of $204 billion in 2050. Under the high-cost assumptions the fund reaches a peak of $31 billion in 1975 and is exhausted in 1989.

Tables 13 and 14 give the estimated progress of the trust fund but using $2\frac{1}{2}\%$ interest. As would be anticipated, the fund grows to a larger size than under the $2\frac{1}{4}\%$ interest assumption, and any exhausting date comes later.

The level rate equivalent to the graded contribution schedule shown in Table 10 is greater than the net cost only for the low-cost assumptions. Thus it would be anticipated that the trust fund would continue to grow only under these assumptions and would be ultimately exhausted under the other assumptions.

D. Comparison with Estimates for Present Law

In considering the cost effects of the proposed legislation, it is essential that this be done on a relative basis or, in other words, in comparison with corresponding figures for the present law. As was indicated in Actuarial Study No. 36, the intermediate-cost estimate under high-employment assumptions indicated that for present law the contribution schedule was insufficient to support the benefit payments under the cost assumptions made by about ½ to ⅔% of payroll--actually .66% under a 2¼% interest rate and .52% under a 2½% interest rate (see Table 16 of Actuarial Study No. 36).

This lack of sufficiency is of long-range importance. It will be appreciated, however, that whether or not this eventuates will depend upon whether the assumptions made are realized in the future experience. It would not seem necessary to make any immediate legislative changes in the contribution schedule merely because an "insufficiency" shows up as a result of new cost estimates involving a change in actuarial assumptions of future experience, if such insufficiency is relatively small. On the other hand, a situation involving an insufficiency should very likely require some legislative action if it were borne out over subsequent actuarial cost estimates. In the meantime, it would seem that any proposed legislative changes as to benefits, coverage, etc. could be considered to be proper from a cost standpoint if, for the proposed plan, the resulting "actuarial insufficiency" were the same or substantially the same, provided that the insufficiency remains relatively small.

Table 15 contrasts estimated benefit payments as a percentage of taxable payroll according to the intermediate-cost estimate under the present law and under the proposed plan (with coverage as in the bill and with universal coverage). Except for the early years when the effect of the increased coverage more than offsets the effect of the benefit changes, the increase in cost under the bill is about ½% of payroll (slightly less if coverage were universal).

Next, there may be considered how each of the major changes contribute to the increase in the level-premium adjusted net cost as a percent of taxable payroll, namely from 6.74% to 7.41%. Based on an interest rate of 2¼%, the effect of various changes are as follows:

Item	Percent of Payroll
Extension of coverage	-.18%
Raising wage base	-.15
Increase in benefits under new benefit formula	+.80
Liberalization of retirement test	+.03
Elimination of 4 lowest years of earnings in computing benefits	+.10
Preservation of benefit rights to persons totally disabled for extended periods	+.07
Total increase in cost of benefits	+.67

Accordingly, for all items considered up to this time, the "cost insufficiency" of the proposed plan is about $\frac{2}{3}$% of payroll greater than under existing law, according to the intermediate-cost estimates based on high-employment assumptions and a $2\frac{1}{4}$% interest rate. If the savings resulting from the actual interest rate currently being earned (namely, 2.4%) being higher than the previous $2\frac{1}{4}$% valuation rate were considered, this "insufficiency" would be reduced to .56% of payroll. There would be a further reduction to .50% of payroll if the bill contained provisions for universal coverage. (It should be noted that the savings in cost arising from extending coverage beyond that in the bill to universal coverage is relatively small because a large part of this savings has already been obtained from the provisions of the new retirement test which make it applicable to all employment, whether covered or not. Under the present basis of the retirement test, under which it relates only to covered employment, extension of coverage reduces costs because of the wider application of the retirement test. If, however, first the retirement test is made applicable to all employment, then subsequent extension of coverage does not produce as great savings as would be the case under the present basis of the retirement test.)

As against the above-described insufficiency, the effect of the higher ultimate contribution rate is to provide additional income equivalent, on a level-premium basis, to .39% of payroll.

Table 1

ESTIMATED U. S. POPULATION IN FUTURE YEARS[a]
(Figures in millions of persons)

Calendar Year	Aged 20-64			Aged 65 and Over			All Ages		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
				Actual Census Data[a]					
1950	44	45	89	6	7	12	77	78	155
				Projection for Low-Cost Assumptions					
1960	46	48	95	7	8	15	86	88	174
1970	52	54	106	8	10	18	94	96	190
1980	58	59	117	9	13	22	103	106	209
1990	62	62	125	11	15	25	113	115	228
2000	70	69	139	11	15	26	123	125	248
2025	85	84	169	16	20	36	153	153	306
2050	104	102	206	19	23	42	186	185	371
				Projection for High-Cost Assumptions					
1960	47	48	95	7	8	15	86	87	173
1970	53	54	107	8	10	19	91	93	184
1980	58	59	116	10	13	23	97	100	197
1990	60	59	119	12	15	27	103	105	207
2000	64	63	128	12	16	28	108	108	216
2025	66	64	130	18	21	39	116	116	232
2050	69	67	136	18	21	38	120	119	239

a/ These data relate to the total United States and not merely to the Continental United States.

Table 2

ESTIMATED PERSONS WITH WAGE CREDITS, TOTAL CREDITED WAGES, AND AVERAGE CREDITABLE WAGES, H.R. 7199

Calendar Year	Persons with Wage Credits in Year (in millions) Males	Females	Total	Total Credited Wages in Year (in billions)	Average Wage
			Actual Data		
1951a/	b/	b/	58.0	$117.8	$2,030
1952a/	b/	b/	60.0	125.0	2,080
1953a/	b/	b/	61.0	130.0	2,130
			Coverage in Bill, Low-Cost Assumptions		
1960	49.4	26.0	75.4	$168.6	$2,236
1980	61.4	33.3	94.8	210.8	2,225
2000	74.2	41.6	115.8	256.1	2,212
2050	111.1	61.2	172.3	381.7	2,215
			Coverage in Bill, High-Cost Assumptions		
1960	48.8	25.8	74.7	$167.0	$2,237
1980	59.5	32.0	91.4	205.3	2,245
2000	66.5	36.5	103.0	230.4	2,237
2050	72.3	38.6	110.9	248.7	2,242
			Universal Coverage, Low-Cost Assumptions		
1960	51.7	28.2	79.9	$182.8	$2,289
1980	64.2	35.9	100.2	228.3	2,280
2000	77.7	44.6	122.3	277.3	2,269
2050	116.3	65.7	182.0	413.2	2,271
			Universal Coverage, High-Cost Assumptions		
1960	51.1	28.0	79.1	$181.3	$2,291
1980	62.2	34.5	96.6	222.4	2,302
2000	69.7	39.2	108.8	249.8	2,295
2050	75.8	41.6	117.3	269.6	2,298

a/ Preliminary
b/ Not available.

Note: All estimates are based on high-employment assumptions.

Table 3

ESTIMATED INSURED[a] POPULATIONS AS OF BEGINNING OF YEAR, H.R. 7199
(Figures in millions of persons)

Calendar Year	All Ages Males	All Ages Females	All Ages Total	Aged 65 and Over Males	Aged 65 and Over Females	Aged 65 and Over Total
			Actual Data (as of January 1)			
1951	37.9	21.9	59.8	2.5	.5	3.0
1952	39.3	23.1	62.6	2.7	.6	3.3
1953	41.7	25.0	66.6	3.2	.9	4.1
1954	42.6	26.6	69.2	3.6	1.0	4.6
			Coverage in Bill, Low-Cost Assumptions			
1960	45.4	26.3	71.8	4.9	2.0	6.9
1980	59.7	36.1	95.8	8.2	4.9	13.1
2000	72.7	45.1	117.8	10.1	7.4	17.5
2050	110.3	67.7	178.0	17.4	11.8	29.2
			Coverage in Bill, High-Cost Assumptions			
1960	47.5	27.9	75.4	5.2	2.2	7.4
1980	62.7	40.0	102.7	8.9	5.8	14.7
2000	72.0	47.4	119.4	11.8	9.3	21.1
2050	81.8	52.9	134.7	17.3	12.4	29.7
			Universal Coverage, Low-Cost Assumptions			
1960	47.1	28.0	75.1	5.0	2.2	7.2
1980	62.4	38.6	101.0	8.7	5.3	14.0
2000	76.1	48.4	124.5	10.5	8.0	18.5
2050	115.5	72.0	187.5	18.2	12.6	30.8
			Universal Coverage, High-Cost Assumptions			
1960	49.1	29.7	78.8	5.4	2.4	7.8
1980	64.6	41.9	106.5	9.4	6.0	15.4
2000	73.7	49.3	123.0	12.0	9.5	21.5
2050	83.6	54.4	138.0	17.5	12.4	29.9

a/ Includes both fully insured and currently insured only. In future years, relatively few of those aged 65 and over will be currently insured only.

Note: All estimates are based on high-employment assumptions.

Table 4

ESTIMATED MONTHLY BENEFICIARIES AGE 65 AND OVER IN CURRENT PAYMENT STATUS[a], H.R. 7199
(Figures in thousands of persons)

Calendar Year	Old-Age[b] Males	Old-Age[b] Females	Wife's[c]	Survivors Widow's[d]	Survivors Parents	Total Aged[e]
			Actual Data[f] (as of December)			
1950	1,469	302	499	314	15	2,599
1951	1,819	459	618	384	19	3,299
1952	2,052	592	704	455	21	3,824
1953	2,436[g]	786[g]	846[g]	541	24	4,633
			Coverage in Bill, Low-Cost Assumptions			
1960	3,327	1,511	1,124	1,291	27	7,217
1970	4,399	2,657	1,350	2,340	31	10,700
1980	5,896	4,136	1,604	3,068	35	14,632
2000	7,668	6,481	1,783	3,502	43	19,356
2050	13,022	10,300	3,056	5,226	43	31,432
			Coverage in Bill, High-Cost Assumptions			
1960	3,962	1,844	1,309	1,314	31	8,383
1970	5,416	3,234	1,617	2,424	39	12,637
1980	7,154	5,180	1,814	3,133	47	17,214
2000	9,866	8,623	1,976	3,304	63	23,713
2050	14,414	11,430	3,049	4,189	63	32,970
			Universal Coverage, Low-Cost Assumptions			
1960	3,474	1,709	1,087	1,269	27	7,566
1970	4,687	2,967	1,318	2,297	31	11,300
1980	6,348	4,502	1,568	3,059	35	15,512
2000	8,086	7,061	1,654	3,416	43	20,260
2050	13,748	11,035	2,864	5,149	43	32,839
			Universal Coverage, High-Cost Assumptions			
1960	4,116	2,061	1,255	1,291	31	8,754
1970	5,772	3,497	1,582	2,397	39	13,287
1980	7,582	5,425	1,773	3,167	47	17,994
2000	10,033	8,761	1,869	3,326	63	24,052
2050	14,579	11,424	2,907	4,238	63	33,211

a/ For estimated data, this corresponds to average monthly number in current payment status.
b/ I.e., retired workers. Persons qualified both for old-age benefits and for other benefits are shown as old-age beneficiaries.
c/ Including husband's benefits.
d/ Including widower's benefits.
e/ Excludes the relatively negligible number of mother's beneficiaries over 65 but not eligible for widow's benefits.
f/ Excluding effect of railroad coverage under financial interchange provisions.
g/ Preliminary.

Note: All estimates are based on high-employment assumptions.

Table 5

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

Calendar Year	Low-Cost Assumptions			High-Cost Assumptions		
	Males	Females	Total	Males	Females	Total
			Actual Data[a] (as of December)			
1950	25%	17%	21%	25%	17%	21%
1951	30	21	26	30	21	26
1952	33	25	29	33	25	29
1953	39	30	34	39	30	34
			Coverage in Bill			
1960	47%	46%	47%	56%	52%	54%
1980	63	69	66	72	78	75
2000	70	79	75	81	88	85
2050	69	78	74	81	90	86
			Universal Coverage			
1960	50%	49%	49%	58%	55%	57%
1980	67	73	70	77	81	79
2000	74	82	78	82	89	86
2050	73	81	77	82	90	86

a/ Excluding effect of railroad coverage under financial interchange provisions.

Note: All estimates are based on high-employment assumptions.

Table 6

ESTIMATED MONTHLY BENEFICIARIES UNDER AGE 65 IN CURRENT PAYMENT STATUS[a] AND LUMP-SUM DEATH PAYMENTS IN YEAR, H.R. 7199
(Figures in thousands of persons)

Calendar Year	Supplementary Benefits[b]		Survivor Benefits		Lump-Sum Payments[d]
	Wife's[c]	Child's	Mother's	Child's	
			Actual Data[e]		
1950	9	46	169	653	200
1951	29	68	204	776	414
1952	34	75	228	864	438
1953	42[f]	90	254	964	512
			Coverage in Bill, Low-Cost Assumptions		
1960	63	95	393	1,348	816
1970	77	116	457	1,502	1,075
1980	107	160	479	1,554	1,318
2000	121	181	539	1,778	1,730
2050	215	323	799	2,605	2,754
			Coverage in Bill, High-Cost Assumptions		
1960	77	116	477	1,397	846
1970	93	140	544	1,497	1,101
1980	114	171	540	1,445	1,342
2000	119	178	514	1,348	1,774
2050	175	263	537	1,376	2,365
			Universal Coverage, Low-Cost Assumptions		
1960	67	101	404	1,388	851
1970	85	128	479	1,579	1,135
1980	116	174	503	1,638	1,398
2000	129	193	567	1,876	1,834
2050	229	344	841	2,748	2,898
			Universal Coverage, High-Cost Assumptions		
1960	82	123	489	1,430	883
1970	102	153	563	1,551	1,154
1980	120	180	556	1,492	1,400
2000	120	180	525	1,384	1,818
2050	177	266	548	1,411	2,389

a/ For estimated data, this corresponds to average monthly number in current payment status.
b/ Payable to dependents of old-age beneficiaries (retired workers).
c/ Wife under age 65, with dependent child under 18 in her care.
d/ Number of decedents on whose account payments are made.
e/ For monthly benefits, as of December. Excluding effect of railroad coverage under financial interchange provisions.
f/ Preliminary.

Note: All estimates are based on high-employment assumptions.

Table 7

ESTIMATED BENEFIT PAYMENTS, H.R. 7199
(Figures in millions of dollars)

Calendar Year	Monthly Benefits: Old-Age[a]	Wife's[b]	Widow's[c]	Parent's	Child's	Mother's	Lump-Sum Death Payments	"Disability Freeze"[e]	Total Benefits
	Actual Data[d] (Certifications)								
1951	$1,169	$181	$160	$9	$281	$86	$57	--	$1,942
1952	1,392	209	197	10	324	97	63	--	2,292
1953	1,950	285	254	12	394	118	87	--	3,101
	Coverage in Bill, Low-Cost Assumptions								
1960	$4,102	$514	$825	$20	$679	$264	$179	$66	$6,649
1970	6,266	673	1,739	23	748	306	242	100	10,097
1980	8,885	814	2,449	26	777	317	297	136	13,701
2000	12,028	920	2,975	31	889	358	378	176	17,755
2050	19,927	1,574	4,428	31	1,321	530	602	284	28,697
	Coverage in Bill, High-Cost Assumptions								
1960	$4,932	$605	$864	$23	$682	$319	$186	$76	$7,687
1970	7,627	808	1,859	28	724	363	246	117	11,772
1980	10,713	934	2,620	34	700	356	297	157	15,811
2000	15,237	1,061	3,008	45	659	340	375	207	20,932
2050	21,495	1,624	3,924	45	697	354	502	286	28,927
	Universal Coverage, Low-Cost Assumptions								
1960	$4,484	$540	$825	$21	$715	$278	$190	$71	$7,124
1970	6,950	719	1,764	23	806	329	261	109	10,961
1980	9,863	881	2,534	26	839	341	323	148	14,955
2000	13,251	952	3,053	32	958	385	411	190	19,232
2050	21,835	1,643	4,558	32	1,423	571	652	307	31,021
	Universal Coverage, High-Cost Assumptions								
1960	$5,376	$636	$869	$23	$710	$337	$199	$82	$8,232
1970	8,431	874	1,913	29	765	388	265	127	12,792
1980	11,740	1,013	2,766	35	736	378	322	170	17,160
2000	16,322	1,110	3,158	46	688	358	403	221	22,306
2050	22,821	1,706	4,129	46	728	373	532	303	30,638

a/ I.e., for retired workers.
b/ Including husband's benefits.
c/ Including widower's benefits.
d/ Excluding effect of railroad coverage under financial interchange provisions.
e/ The cost of the "disability freeze" is here shown separately, although in actual practice it is spread among the various types of benefits.

Note: Where persons are qualified both for old-age benefits and for other benefits, the full old-age benefit is assumed to be paid with supplementary payment of the excess of the other benefit if larger. Benefit payments to children of old-age beneficiaries are combined with child's survivor benefits.

Table 8

ESTIMATED BENEFIT PAYMENTS AS PERCENT OF TAXABLE PAYROLL,
H.R. 7199 WITH COVERAGE IN BILL

Calendar Year	Monthly Benefits						Lump-Sum Death Payments	"Disability Freeze"c/	Total Benefits
	Old-Age	Wife's	Widow's	Parent's	Mother's	Child's			
Actual Datab/									
1951	.99%	.15%	.14%	.01%	.07%	.24%	.05%	--	1.65%
1952	1.11	.17	.16	.01	.08	.26	.05	--	1.83
1953	1.50	.22	.20	.01	.09	.30	.07	--	2.39
Low-Cost Assumptions									
1960	2.41%	.30%	.48%	.01%	.16%	.40%	.11%	.04%	3.91%
1970	3.25	.35	.90	.01	.16	.39	.13	.05	5.23
1980	4.17	.39	1.15	.01	.15	.36	.14	.06	6.43
1990	4.80	.38	1.24	.01	.14	.36	.15	.07	7.15
2000	4.65	.35	1.15	.01	.14	.34	.15	.07	6.86
2050	5.17	.41	1.15	.01	.14	.34	.16	.07	7.44
Level-Premium a/									
$2\frac{1}{4}$% interest	4.21	.36	1.00	.01	.14	.36	.14	.06	6.28
$2\frac{3}{4}$% interest	4.03	.35	.97	.01	.14	.36	.14	.06	6.05
High-Cost Assumptions									
1960	2.92%	.35%	.51%	.01%	.19%	.40%	.11%	.05%	4.56%
1970	4.00	.42	.97	.01	.19	.38	.13	.06	6.17
1980	5.17	.45	1.26	.02	.17	.34	.14	.08	7.63
1990	6.27	.46	1.38	.02	.16	.32	.16	.09	8.85
2000	6.55	.46	1.29	.02	.15	.28	.16	.09	9.00
2050	8.56	.64	1.56	.02	.14	.28	.20	.11	11.51
Level-Premium a/									
$2\frac{1}{4}$% interest	5.86	.48	1.16	.02	.16	.32	.15	.08	8.23
$2\frac{3}{4}$% interest	5.48	.47	1.10	.02	.16	.33	.15	.08	7.77
Intermediate-Cost Assumptions									
1960	2.66%	.33%	.50%	.01%	.17%	.40%	.11%	.04%	4.23%
1970	3.62	.38	.94	.01	.17	.38	.13	.06	5.70
1980	4.66	.42	1.21	.01	.16	.35	.14	.07	7.02
1990	5.51	.42	1.31	.02	.15	.34	.15	.08	7.97
2000	5.55	.41	1.22	.02	.14	.32	.15	.08	7.87
2050	6.51	.50	1.31	.01	.14	.32	.17	.09	9.05
Level-Premium a/									
$2\frac{1}{4}$% interest	4.97	.42	1.07	.01	.15	.34	.15	.07	7.19
$2\frac{3}{4}$% interest	4.71	.41	1.03	.01	.15	.34	.14	.07	6.86

a/ Level-premium contribution rate for benefit payments after 1952 and in perpetuity, not taking into account accumulated funds through 1952 or administrative expenses (see also Table 10). These level-premium rates assume benefits and payrolls remain level after the year 2050.
b/ Excluding effect of railroad coverage under financial interchange provisions.
c/ The cost of the "disability freeze" is here shown separately, although in actual practice it is spread among the various types of benefits.

Note: All estimates are based on high-employment assumptions.

Table 9

ESTIMATED BENEFIT PAYMENTS AS PERCENT OF TAXABLE PAYROLL, H.R. 7199
WITH UNIVERSAL COVERAGE

Calendar Year	Monthly Benefits: Old-Age	Wife's	Widow's	Parent's	Mother's	Child's	Lump-Sum Death Payments	"Disability Freeze"c/	Total Benefits
				Actual Data b/					
1951	.99%	.15%	.14%	.01%	.07%	.24%	.05%	--	1.65%
1952	1.11	.17	.16	.01	.08	.26	.05	--	1.83
1953	1.50	.22	.20	.01	.09	.30	.07	--	2.39
				Low-Cost Assumptions					
1960	2.43%	.29%	.45%	.01%	.15%	.39%	.10%	.04%	3.86%
1970	3.32	.34	.84	.01	.16	.39	.12	.05	5.24
1980	4.28	.39	1.10	.01	.15	.36	.14	.06	6.49
1990	4.89	.37	1.20	.01	.14	.35	.15	.07	7.18
2000	4.73	.34	1.09	.01	.14	.34	.15	.07	6.87
2050	5.23	.40	1.09	.01	.14	.34	.16	.07	7.43
Level-Premium a/									
2½% interest	4.28	.36	.95	.01	.14	.35	.14	.06	6.29
2¾% interest	4.09	.34	.92	.01	.14	.36	.13	.06	6.06
				High-Cost Assumptions					
1960	2.94%	.34%	.47%	.01%	.18%	.39%	.11%	.04%	4.50%
1970	4.07	.43	.92	.01	.19	.37	.13	.06	6.18
1980	5.23	.45	1.23	.02	.17	.33	.14	.08	7.64
1990	6.22	.46	1.37	.02	.16	.31	.15	.09	8.77
2000	6.47	.44	1.25	.02	.14	.27	.16	.09	8.84
2050	8.38	.63	1.52	.02	.14	.27	.20	.11	11.25
Level-Premium a/									
2½% interest	5.81	.48	1.13	.02	.15	.31	.15	.08	8.13
2¾% interest	5.45	.46	1.07	.02	.16	.32	.15	.08	7.68
				Intermediate-Cost Assumptions					
1960	2.68%	.32%	.46%	.01%	.17%	.39%	.11%	.04%	4.17%
1970	3.69	.38	.88	.01	.17	.38	.13	.06	5.71
1980	4.75	.42	1.16	.01	.16	.35	.14	.07	7.06
1990	5.53	.41	1.28	.01	.15	.33	.15	.08	7.95
2000	5.55	.39	1.17	.01	.14	.31	.15	.08	7.80
2050	6.48	.49	1.26	.01	.14	.31	.17	.09	8.94
Level-Premium a/									
2½% interest	4.99	.41	1.03	.01	.15	.33	.15	.07	7.14
2¾% interest	4.73	.40	.99	.01	.15	.34	.14	.07	6.82

a/ Level-premium contribution rate for benefit payments after 1952 and in perpetuity, not taking into account accumulated funds through 1952 or administrative expenses (see Table 10). These level-premium rates assume benefits and payrolls remain level after the year 2050.

b/ Excluding effect of railroad coverage under financial interchange provisions.

c/ The cost of the "disability freeze" is here shown separately, although in actual practice it is spread among the various types of benefits.

Note: Where persons are qualified both for old-age benefits and for other benefits, the full old-age benefit is assumed to be paid with supplementary payment of the excess of the other benefit if larger. Benefit payments to children of old-age beneficiaries are combined with child's survivor benefits.

Table 10

ESTIMATED LEVEL-PREMIUM CONTRIBUTION RATE IN PERPETUITY a/ FOR BENEFIT PAYMENTS AND ADMINISTRATIVE EXPENSES, H.R. 7199 TAKING INTO ACCOUNT ACCUMULATED FUND AS OF END OF 1952

Level-Premium Equivalent to	Coverage in Bill: Low Cost	Coverage in Bill: High Cost	Coverage in Bill: Intermediate Cost	Universal Coverage: Low Cost	Universal Coverage: High Cost	Universal Coverage: Intermediate Cost
		Interest at $2\frac{1}{4}$%				
Benefit Payments	6.28%	8.23%	7.19%	6.29%	8.13%	7.14%
Administrative Expenses	.08	.12	.10	.08	.11	.09
Interest on 1952 Fund b/	.16	.19	.18	.15	.18	.16
Net Cost c/	6.20	8.16	7.11	6.22	8.06	7.07
Adjusted Net Cost d/	6.46	8.50	7.41	6.46	8.37	7.35
Proposed Contributions e/	6.51	6.43	6.47	6.51	6.43	6.48
		Interest at $2\frac{1}{2}$%				
Benefit Payments	6.17%	7.99%	7.02%	6.17%	7.90%	6.98%
Administrative Expenses	.08	.12	.10	.08	.11	.09
Interest on 1952 Fund b/	.19	.21	.20	.17	.20	.18
Net Cost c/	6.06	7.90	6.92	6.08	7.81	6.89
Adjusted Net Cost d/	6.31	8.23	7.21	6.32	8.11	7.16
Proposed Contributions e/	6.44	6.37	6.41	6.45	6.38	6.42
		Interest at $2\frac{3}{4}$%				
Benefit Payments	6.05%	7.77%	6.86%	6.06%	7.68%	6.82%
Administrative Expenses	.08	.11	.10	.08	.11	.09
Interest on 1952 Fund b/	.21	.24	.22	.19	.22	.21
Net Cost c/	5.92	7.64	6.74	5.95	7.57	6.70
Adjusted Net Cost d/	6.17	7.96	7.02	6.18	7.86	6.96
Proposed Contributions e/	6.39	6.31	6.35	6.39	6.32	6.36

a/ Level-premium contribution rate (based on discounting at interest) for payments after 1952 and in perpetuity, as percent of payroll.

b/ Interest on trust fund existing at end of 1952 as earned in future years expressed as a level-premium (in percent of taxable payroll).

c/ Level-premium for benefit payments plus level-premiums for administrative expenses minus level-premium equivalent to interest on accumulated fund at end of 1952.

d/ Level contribution rate for employer and employee combined required to meet the "net cost" allowing for the self-employed paying only $\frac{3}{4}$ of such rate.

e/ Level contribution rate for employer and employee combined equivalent to the graded rates specified in the law; as to both such level and graded rates the self-employed pay only $\frac{3}{4}$.

Note: All estimates are based on high-employment assumptions.

Table 11

ESTIMATED PROGRESS OF OASI TRUST FUND, H.R. 7199 WITH COVERAGE IN BILL, 2¼% INTEREST
(In millions)

Calendar Year	Contributions[a]	Benefit Payments	Administrative Expenses	Net Income	Interest on Fund[b]	Fund at End of Year[c]
			Low-Cost Assumptions			
1960	$7,836	$6,649	$115	$1,072	$646	$29,071
1970	12,592	10,097	142	2,353	1,101	51,200
1980	14,308	13,701	171	436	1,785	81,351
1990	15,617	16,622	197	-1,202	2,124	95,927
2000	17,384	17,755	215	- 586	2,400	108,784
2025	21,289	24,037	277	-3,025	3,538	159,265
2050	25,906	28,697	334	-3,125	4,169	187,910
			High-Cost Assumptions			
1960	$7,765	$7,687	$150	-$72	$524	$23,763
1970	12,460	11,772	192	496	564	25,868
1980	13,933	15,811	231	-2,109	581	25,349
1990	14,631	19,261	266	-4,896	(Fund exhausted in 1989)	
2000	15,636	20,932	288	-5,584		
			Intermediate-Cost Assumptions			
1960	$7,800	$7,167	$132	$500	$585	$26,817
1970	12,526	10,934	167	1,424	832	38,534
1980	14,120	14,755	201	- 836	1,183	53,350
1990	15,124	17,942	232	-3,049	992	43,578
2000	16,510	19,343	252	-3,085	446	18,744
2025	18,790	26,388	317	-7,914	(Fund exhausted in 2007)	

a/ Combined rate of 4% in 1954-59, 5% in 1960-64, 6% in 1965-69, and 7% thereafter.
b/ Interest taken at 2¼% on fund at end of previous year plus ½ of the net income of the current year.
c/ In each instance, fund at end of 1952 is taken to be the actual figure of $19,157 million (including an estimated $450 million "owed" by Railroad Retirement Account).

Note: All estimates are based on high-employment assumptions.

Table 12

ESTIMATED PROGRESS OF OASI TRUST FUND, H.R. 7199 WITH UNIVERSAL COVERAGE, $2\frac{1}{4}$% INTEREST
(In millions)

Calendar Year	Contributions[a]	Benefit Payments	Administrative Expenses	Net Income	Interest on Fund[b]	Fund at End of Year[c]
			Low-Cost Assumptions			
1960	$8,549	$7,124	$121	$1,304	$670	$31,080
1970	13,712	10,961	151	2,600	1,176	54,747
1980	15,536	14,955	181	400	1,906	86,815
1990	16,941	18,049	208	-1,316	2,255	101,838
2000	18,873	19,232	227	- 586	2,547	115,476
2025	23,109	25,995	291	-3,177	3,783	170,310
2050	28,119	31,021	351	-3,253	4,518	203,701
			High-Cost Assumptions			
1960	$8,477	$8,232	$158	$87	$539	$24,539
1970	13,570	12,792	202	576	599	27,525
1980	15,133	17,160	243	-2,270	616	26,842
1990	15,882	20,678	276	-5,072	(Fund exhausted in 1989)	
2000	16,997	22,306	297	-5,606		
			Intermediate-Cost Assumptions			
1960	$8,513	$7,677	$140	$696	$604	$27,810
1970	13,641	11,875	176	1,588	888	41,136
1980	15,334	16.058	212	- 935	1,261	56,828
1990	16,412	19,364	242	-3,194	1,057	46,448
2000	17,935	20,771	262	-3,096	507	21,500
2025	20,406	28,216	328	-8,140	(Fund exhausted in 2009)	

a/ Combined rate of 4% in 1954-59, 5% in 1960-64, 6% in 1965-69, and 7% thereafter.
b/ Interest taken at $2\frac{1}{4}$% interest on fund at end of previous year plus $\frac{1}{2}$ of the net income of the current year.
c/ In each instance, fund at end of 1952 is taken to be the actual figure of $19,157 million (including an estimated $450 million "owed" by Railroad Retirement Account.)

Note: All estimates are based on high-employment assumptions.

Table 13

ESTIMATED PROGRESS OF OASI TRUST FUND, H.R. 7199 WITH COVERAGE IN BILL, 2½% INTEREST
(In millions)

Calendar Year	Contributions[a]	Benefit Payments	Administrative Expenses	Net Income	Interest on Fund[b]	Fund at End of Year[c]
			Low-Cost Assumptions			
1960	$7,836	$6,649	$115	$1,072	$727	$30,337
1970	12,592	10,097	142	2,353	1,261	52,869
1980	14,308	13,701	171	436	2,076	85,341
1990	15,617	16,622	197	-1,202	2,539	103,511
2000	17,384	17,755	215	- 586	2,966	121,302
2025	21,289	24,037	277	-3,025	4,767	193,945
2050	25,906	28,697	334	-3,125	6,541	266,630
			High-Cost Assumptions			
1960	$7,765	$7,687	$150	-$72	$591	$24,183
1970	12,460	11,772	192	496	654	27,080
1980	13,933	15,811	231	-2,109	701	27,679
1990	14,631	19,261	266	-4,896	(Fund exhausted in 1989)	
2000	15,636	20,932	288	-5,584		
			Intermediate-Cost Assumptions			
1960	$7,800	$7,167	$132	$500	$659	$27,260
1970	12,526	10,934	167	1,424	958	39,974
1980	14,120	14,755	201	- 836	1,388	56,510
1990	15,124	17,942	232	-3,049	1,233	49,026
2000	16,510	19,343	252	-3,085	687	26,610
2025	18,790	26,388	317	-7,914	(Fund exhausted in 2011)	

a/ Combined rate of 4% in 1954-59, 5% in 1960-64, 6% in 1965-69, and 7% thereafter.
b/ Interest taken at 2½% on fund at end of previous year plus ½ of the net income of the current year.
c/ In each instance, fund at end of 1952 is taken to be the actual figure of $19,157 million (including an estimated $450 million "owed" by Railroad Retirement Account).

Note: All estimates are based on high-employment assumptions.

Table 14

ESTIMATED PROGRESS OF OASI TRUST FUND, H.R. 7199 WITH UNIVERSAL COVERAGE, 2½% INTEREST
(In millions)

Calendar Year	Contributions a/	Benefit Payments	Administrative Expenses	Net Income	Interest on Fund b/	Fund at End of Year c/
			Low-Cost Assumptions			
1960	$8,549	$7,124	$121	$1,304	$754	$31,554
1970	13,712	10,961	151	2,600	1,346	56,492
1980	15,536	14,955	181	400	2,215	91,031
1990	16,941	18,049	208	-1,316	2,696	109,870
2000	18,873	19,232	227	- 586	3,148	128,757
2025	23,109	25,995	291	-3,177	5,091	207,157
2050	28,119	31,021	351	-3,253	7,052	287,524
			High-Cost Assumptions			
1960	$8,477	$8,232	$158	$87	$608	$24,966
1970	13,570	12,792	202	576	695	28,783
1980	15,133	17,160	243	-2,270	742	29,278
1990	15,882	20,678	276	-5,072	(Fund exhausted in 1989)	
2000	16,997	22,306	297	-5,606		
			Intermediate-Cost Assumptions			
1960	$8,513	$7,677	$140	$696	$681	$28,260
1970	13,641	11,875	176	1,588	1,020	42,638
1980	15,334	16,058	212	- 935	1,478	60,154
1990	16,412	19,364	242	-3,194	1,312	52,199
2000	17,935	20,771	262	-3,096	766	29,837
2025	20,406	28,216	328	-8,140	(Fund exhausted in 2012)	

a/ Combined rate of 4% in 1954-59, 5% in 1960-64, 6% in 1965-69, and 7% thereafter.
b/ Interest taken at 2½% interest on fund at end of previous year plus ½ of the net income of the current year.
c/ In each instance, fund at end of 1952 is taken to be the actual figure of $19,157 million (including an estimated $450 million "owed" by Railroad Retirement Account.)

Note: All estimates are based on high-employment assumptions.

Table 15

ESTIMATED BENEFIT PAYMENTS AS PERCENT OF TAXABLE PAYROLL,
PRESENT LAW AND H.R. 7199, INTERMEDIATE-COST ASSUMPTIONS

Calendar Year	Present Law	H.R. 7199 with: Coverage in Bill	H.R. 7199 with: Universal Coverage	Increase in Cost: Coverage in Bill, Amount	Increase in Cost: Coverage in Bill, Percent	Increase in Cost: Universal Coverage, Amount	Increase in Cost: Universal Coverage, Percent
1960	4.10%	4.23%	4.17%	.13%	3%	.07%	2%
1970	5.26	5.70	5.71	.44	8	.45	9
1980	6.40	7.02	7.06	.62	10	.66	10
1990	7.33	7.97	7.95	.64	9	.62	8
2000	7.30	7.87	7.80	.57	8	.50	7
2050	8.48	9.05	8.94	.57	7	.46	5
Level-Premium a/							
2¼% interest	6.69	7.19	7.14	.50	7	.45	7
2½% interest	6.54	7.02	6.98	.48	7	.44	7
2¾% interest	6.39	6.86	6.82	.47	7	.43	7

a/ Level-premium contribution rate for benefit payments after 1952 and in perpetuity, not taking into account accumulated funds through 1952 or administrative expenses (see Table 10). These level-premium rates assume benefits and payrolls remain level after the year 2050.

Note: All estimates are based on high-employment assumptions.