APPENDIX A.—STATEMENT OF ASSUMPTIONS, METH-ODOLOGY, AND DETAILS OF LONG-RANGE COST ESTIMATES

The basic assumptions and methodology used in the long-range cost estimates of the old-age, survivors, and disability insurance system are described in this appendix. Some detailed results are also presented, along with an analysis of the sensitivity of the cost esti-

mates to changes in selected assumptions.

The cost estimates were prepared under three different sets of basic assumptions, designated as alternatives, I, II, and III. The assumptions comprising each alternative have been both summarized and described in detail in an earlier section entitled "Demographic an Economic Assumptions." They will not be resummarized here but will be discussed within the context of the discussion of methodology. Within that latter discussion it will be assumed that all comments pertain to the cost estimates under each of the three alternatives unless specifically stated otherwise.

The first part of this appendix covers the assumptions and methodology underlying the cost estimates, as well as the results themselves. The second part deals with the sensitivity of the estimates to changes

in particular assumptions.

Assumptions, Methodology, and Results

Population

Projections were made of the United States population (including persons overseas covered by the old-age, survivors, and disability insurance program) by age and sex for future years to 2050. The starting point was the population on July 1, 1975, as estimated by the Bureau of the Census from the 1970 Census and from births, deaths, and migration in 1970–75. This population estimate (which included an adjustment for net census undercount) was augmented by the population in the geographical areas not covered by the estimate of the Bureau of the Census but covered by the old-age, survivors, and disability insurance system.

In the population projections it was assumed that through 2050 mortality rates will continue to follow the general trends established over the period 1950–1973. This results in an overall reduction in mortality rates of about 15 percent from 1973 to 2050. In addition, the projections assumed an annual net immigration of 400,000 persons.

Reviewing the historic trends in the total fertility rate in this country provides little assistance to those who wish to estimate its future course. That rate had decreased from a post-World-War I level of about 3.3 children per woman to a Great-Depression level of about 2.1, only to rise again to about 3.7 in 1957 and then fall to its 1974 level of about 1.8. It is estimated that the fertility rate in 1975 was only slightly lower than in 1974, still approximately 1.8 children per woman.

History has shown that fertility rates are highly dependent on such changeable and unpredictable factors as social attitudes and economic conditions. Since this fact precludes forecasting long-range fertility rates with any great degree of certainty, it was decided that a range of projected values would be preferable to a single estimate. The choice of a suitable lower limit of such range is facilitated somewhat by the

fact that such limit must be somewhat greater than zero.

On the other hand, the upper limit is much less predictable. With due consideration given to recent social attitudes and developments, a range of 1.7 to 2.3 children per woman was chosen. By way of comparison it may be noted that the Bureau of the Census used an ultimate total fertility rate range of 1.7 to 2.7 children per woman in their latest series of population projections. Included in both ranges is the theoretical replacement rate, that is, the total fertility rate which in the absence of migration would eventually result in the equality of the number of births and the number of deaths in the same period. This rate, equal to 2.1 children per woman, was used as the fertility assumption in last year's report. Also included in both ranges is the ultimate rate of 1.9 children per woman which is the assumption used in the intermediate set of assumptions in this report.

In each projection, the total fertility rate was initially assumed to decrease from its current level of 1.8 to a level of 1.75 children per woman in fiscal year 1977. The rate was then projected by the cohort method to reach its ultimate value in a gradual manner. Alternatives I, II, and III specify ultimate total fertility rates of 2.3, 1.9, and 1.7 children per woman, respectively. In each case, the ultimate central birth rates were assumed to be first experienced by the 1970-born cohort of females, or by fiscal year 2005, whichever occurred first. On this basis, the yearly total fertility rates under alternatives I and II reach their ultimate values in fiscal year 2005 while the alternative

ultimate rate of 1.7 is achieved by fiscal year 1984.

Appendix table A presents the projected population by broad age groups under alternatives I, II, and III.

APPENDIX TABLE A.—PROJECTIONS OF THE U.S. POPULATION BY BROAD AGE GROUPS

	Popula	tion (in thousa	ıly 1	65 and over as		
Year	Under 20	20 to 64	65 and over	Total	Percent of total	Ratio to 20 to 64
rnative I1—2,3 ultimate fertility:				_		
1985	72, 427	141, 645	26, 891	240, 9 62	11.2	0. 190
1990	75, 150	147, 571	28, 975	251, 695	11.5	. 196
1995	79, 330	152, 405	30, 244	261, 979	11.5	. 198
2000	82, 858	157, 810	30, 470	271, 138	11, 2	. 193
2005	84, 229	164, 830	30, 857	279, 916	11.0	. 187
2010	85, 581	170, 826	32. 9 63	289, 370	11.4	. 193
2015	88, 046	174, 078	37, 268	299, 392	12. 4	. 21
2020	91. 517	175, 119	42, 470	309, 106	13. 7	. 24:
2025	94, 832	175, 170	47, 922	317, 924	15. 1	. 274
2030	97, 239	177, 041	51, 758	326, 038	15. 9	. 297
2035	99, 352	182, 290	52, 415	334, 057	15. 7	. 288
2040	102, 025	188, 958	51, 368	342, 352	15.0	. 272
2045	105, 337	195, 349	50, 263	350, 949	14. 3	. 25
2050	108, 695	200, 100	51, 090	359, 885	14. 2	. 25

¹ U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 601, "Projections of the Population of the United States: 1975-2050," U.S. Government Printing Office. Washington, D.C. 1975.

APPENDIX TABLE A .- PROJECTIONS OF THE U.S. POPULATION BY BROAD AGE GROUPS-Continued

	Popula	tion (in thous:	uly 1	65 and over as—		
Year	Under 20	20 to 64	65 and over	Total	Percent of total	Ratio 20 to 6
ternative II1—1.9 ultimate f	ertility:					
1985		141, 645	26, 891	239, 247	11. 2	0. 19
1990		147, 571	28, 975	247, 464	11.7	. 19
1995		152, 401	30, 244	254, 576	11.9	. 19
2000		157, 528	30, 470	260, 259	ii. 7	. 1
2000		163, 137	30, 470	265, 043	11.6	i
2005					12. 2	: 1
2010	69, 918	166, 664	32, 963	269, 545		
2015	69, 517	166, 815	37, 268	273, 599	13.6	. 2
2020	69, 700	164, 473	42, 470	276, 643	15. 4	. 2
2025	69, 753	160, 655	47, 922	278, 331	17. 2	. 2
2030		157, 749	51, 758	278, 750	18. 6	. 3
2035	68, 555	157, 281	52, 415	278, 251	18.8	. 3
2040		157, 639	51, 365	277, 162	18.5	. 3
2045		157, 608	50, 052	275, 735	18. 2	. 3
2043		156, 374	49, 861	274, 232	18. 2	
2050 ternative IIII—1,7 ultimate	fartilitus	130, 374	43, 001	2/4, 232	10, 2	
ternative ini1.7 ultimate	reithity:	141 C45	20 001	238, 392	11. 3	. 1
1985		141, 645	26, 891			
1990		147, 571	28, 975	245, 354	11.8	. 1
1995		152, 401	30, 244	250, 882	12. 1	. 1
2000	66, 982	157, 390	30, 470	254, 842	12.0	. 1
2005	64, 548	162, 295	30, 857	257, 701	12 0	. 1
2010		164, 590	32, 963	259, 913	15.7	. 2
2015		163, 193	37, 268	261, 300	14.3	. 2
2020		159, 174	42, 470	261, 428	16. 2	. 2
2025		153, 493	47, 922	260, 063	18. 4	. 3
		148, 381	51, 758	257, 279	20. 1	. 3
2030			52, 415	253, 356	20. 7	. 3
2035		145, 364				
2040	54, 283	142, 975	51, 365	248, 623	20. 7	. 3
2045		140, 231	49, 948	243, 426	20. 5	. 3
2050	52, 245	136, 627	49. 249	238. 122	20.7	. 3

¹ See text for definitions of alternatives I, II, and III.

Employment

Estimates of the percentage of the population that has covered employment during a year were made by age and sex for future years under alternatives I, II, and III. For men, under the intermediate (alternative II) assumptions, the latest estimated average percentages (1971-73) were projected to increase for teenagers and those aged 20-24, to decrease slightly for those aged 25-59, and to decrease significantly for those aged 60 and over (thus reflecting the trend toward earlier retirement). Under the alternative I assumptions, the corresponding percentages show the same trend, except for the percentages for those aged 25-34 which were projected to increase slightly. Under alternative III, the trend is the same as under alternative II except for the percentages for those aged 20-24 which were projected to decrease slightly. Under all three alternatives, the corresponding percentages for women were assumed to increase except for those women aged 60 and over for whom a decrease was projected.

As measured by the age-adjusted labor force participation rate for ages 16 and over, the projected ultimate covered employment for the intermediate set of assumptions is equivalent to a decrease from the 1975 rate of about 1 percent for men and an increase over that rate of about 22 percent for women. On the average, the ultimate assumed labor force participation rates for women are about 73 percent of those for men. These rates were determined on the basis of historical data of the last fifteen years or so during which time the unemployment rate had averaged about 5 percent, which is the rate assumed

under alternative II. In the projection of the covered workers under alternatives I and III, changes in the labor force participation rates resulting from changing the assumed ultimate unemployment rate from 5 percent to 4.5 percent and 5.5 percent (under alternatives I and III, respectively) were reflected.

Insured population

The term "insured" as used herein means fully-insured; the number of persons who are currently-insured only is relatively small and can be disregarded for long-range cost analysis purposes. The number of insured persons as a percent of population was projected by age and sex based on both recent experience and the covered-worker projections. Under each alternative the ultimate percentage is estimated to be 95 percent for aged men and 85 percent for aged women. This difference reflects the difference in the labor force participation of men and women. The variations in the unemployment rate among the three alternative assumptions have only a negligible effect on these percentages although they resulted in differences at the lower ages.

The estimated numbers of persons insured for disability benefits are lower than those insured for old-age and survivor benefits because of the more restrictive insured status provisions for disability benefits. They, too, were projected on the basis of both recent experience and the corresponding covered-worker projections.

Old-age and survivors insurance beneficiaries

Since several types of benefits are payable under the old-age and survivors insurance program, the numbers of beneficiaries have been projected by the type of benefit received. Old-age beneficiaries were projected on the basis of the aged insured population. The proportions, by age and sex, of the insured population who were receiving benefits at the beginning of 1975 were projected to increase gradually on the basis of past trends which were adjusted for changes in the earnings test and in the level of unemployment. The resulting proportions thereby imply gradual increases in the implicit retirement rates.

Wives aged 62 and over of male old-age beneficiaries were estimated by using census data and mortality projections. These potential wife beneficiaries, after adjustment for eligibility for their own old-age benefits, were assumed to claim benefits as soon as they became eligible, even if this occurred at ages 62-64, when they would have to take reduced benefits. The experience to date indicates that in the vast majority of the cases, such immediate claiming of wife's benefits does occur.

Young wives and children of retired workers were projected by means of their ratios to male old-age beneficiaries, as derived from recent actual data and projected according to the aforementioned mortality assumptions and the appropriate fertility assumptions.

Child-survivor benefits were obtained from estimates of orphans in the country in future years. The projected child population, by age group, was multiplied by the probability of being an orphan. These probabilities were derived by using distributions of age of parent at birth of child and death rates consistent with the population projections. The number of orphans was then adjusted to eliminate orphans of uninsured deceased parents, and to include the eligible disabled orphans aged 18 and over. For nondisabled children aged 18–21 a further reduction was made to exclude those not attending school.

Mother-survivor beneficiaries were estimated by extrapolating the present ratio of such beneficiaries to child-survivor beneficiaries excluding those non-disabled children 18–21 who were attending school. Such extrapolation reflects projected fertility and female labor force participation rates. Benefits payable to father-survivor bene-

ficiaries were estimated in a similar manner.

To estimate widow beneficiaries the proportions of widows in the female aged population were projected according to mortality assumptions and adjusted for both eligibility for their own old-age benefits and for the insured status of their deceased husbands. These uninsured eligible widows were assumed to claim benefits as soon as available even if this occurred at ages 60 to 64, when they would have to take reduced benefits. For ages 50–59, the disabled-widow beneficiaries were estimated from the eligible widows by using disability prevalence rates.

Several minor categories of beneficiaries were projected on the basis of past trends in their gross numbers. Parents were projected by assuming a decrease from a level of 21,000 at the beginning of 1976 to an ultimate level of 7,000 in 1990 under the intermediate set of assumptions. Similarly, husband beneficiaries were projected to decrease from their level of 7,000 at the beginning of 1976 to an ultimate level of 5,000 in 1995. Widower beneficiaries were projected

to remain at their current level of about 3,000.

It may be observed that the assumed wife and widow beneficiaries consist of the uninsured potential beneficiaries. In actual practice, some of the insured potential beneficiaries also receive a residual benefit consisting of the excess of the potential wife's or widow's benefit over their own old-age benefit. Estimates of such residual benefits, although not giving rise to additional aged beneficiaries, were incorporated into the projections of both the wife's and widow's benefits. The insignificant effect of the retirement test as it applies to wife's and widow's as well as parent's benefits was ignored.

Appendix table B shows the estimated number of beneficiaries in

the old-age and survivors insurance program.

See footnotes at end of table.

APPENDIX TABLE B.—OLD-AGE AND SURVIVORS INSURANCE BENEFICIARIES WITH MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS UNDER ALTERNATIVES I, II, AND III

iin thousandsi

		ed workers ependents		Surv	ivors of de	ceased work	ers ¹	
Calendar year	Old-age	Wives 2	Children	Mothers 3	Children	Widows 4	Parents	Total
Actual data (as of June 30): 1970. 1971. 1972. 1973. 1974. 1975.	13, 066 13, 604 14, 181 14, 880 15, 589 16, 210	2, 651 2, 673 2, 706 2, 756 2, 806 2, 836	535 556 578 602 619 633	514 523 536 548 565 568	2, 673 2, 745 2, 847 2, 887 2, 908 2, 905	3, 151 3, 287 3, 433 3, 575 3, 706 3, 823	29 28 27 25 24 22	22, 619 23, 416 24, 308 25, 273 26, 217 26, 997

APPENDIX TABLE B .- OLD-AGE AND SURVIVORS INSURANCE BENEFICIARIES WITH MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS UNDER ALTERNATIVES 1, 11, AND 111-Continued

[In thousands]

		ed workers ependents		Surv	ivors of dec	eased work	ers ¹	
Calendar year	Old-age	Wives 2	Children	Mothers 3	Children	Widows 4	Parents	Total
ALTERNATIVE 15								
rojection (as of June 30):								
1985	21, 177	2, 962	583	652	2, 996	3, 836	8	32, 214
1990 1995		2, 993 2, 968	465 355	693 832	3, 097 3, 392	3, 733 3, 636	7	34, 396 35, 893
2000		2, 900	358	947	3, 392	3, 590	7	35, 893 36, 796
2005		2, 586	396	1.018	3, 949	3, 596	7 7 7 7 7 7	38, 030
2010		2, 426	476	1,060	3, 971	3, 671	7	40, 815
2015		2, 399	583	1, 102	4, 018	3, 709	7	45, 521
2020	39, 231	2, 374	675	1, 150	4, 168	3, 724	7	51, 329
2025	44, 627	2, 359	735	1, 192	4, 363	3. 671	7	56, 954
2030	47, 919	2, 305	734	1, 224	4, 506	3, 635	7	60, 330
2035	48, 790	2, 168	700	1, 250	4, 589	3, 549	7	61, 053
2040		2,010	665	1, 281	4,676	3, 514	7	60, 139
2045		1, 897	674	1, 320	4, 813	3, 492	7	59, 839
2050	48, 630	1, 906	720	1, 364	4, 995	3, 496	7	61, 118
ALTERNATIVE II 5								
rojection (as of June 30):								
1985	21, 353	2, 994	591	645	2, 974	3, 836	8	32, 401
1990		3, 013	468	658	3,010	3, 733	7	34, 376
1995		3, 003	359	744	3, 173	3, 636	7 7 7	35, 758
2000		2, 856 2, 613	354	789	3, 337 3, 391	3, 590 3, 596	4	36, 387 37, 394
2005	29, 366	2, 613	373 430	798 787	3, 391	3, 596	7	40, 022
2015	33, 901	2, 419	503	778	3, 253	3, 709	7	44, 570
2020	39, 458	2, 391	572	771	3, 258	3, 724		50. 181
2025		2, 376	622	762	3, 284	3, 671	7 7 7 7	55, 596
2030	48, 161	2, 321	620	751	3, 273	3, 634	7	58, 767
2035	49, 012	2, 181	592	745	3, 234	3, 547	7	59, 318
2040	48, 178	2, 020	561	742	3, 198	3, 489	7 7	58, 195
2045	47, 437	1, 899	560	743	3, 188	3, 410	7	57, 244
2050	47, 369	1, 869	575	741	3, 192	3, 341	7	57, 094
ALTERNATIVE III 5								
rojection (as of June 30):	01 474	0.010	F07	640	0.000	2 000		20 52
1985		3, 013 3, 034	597 473	643 654	2, 963 2, 967	3, 836 3, 733	8 7	32, 534 34, 483
1990 1995		3, 034	362	726	3, 062	3, 733	7	35, 774
2000		2, 872	349	759	3, 137	3, 590	7	36, 289
2005		2, 627	359	760	3, 115	3, 596	ź	37, 21
2010	29, 536	2, 469	413	745	2, 988	3, 671	7	39, 829
2015	34, 104	2, 436	471	732	2, 887	3, 709	7	44, 346
2020	39, 690	2, 404	522	729	2, 835	3, 724	7 7	49, 91
2025	45, 120	2, 388	567	694	2, 795	3, 671	7	55, 24
2030	. 48, 3 9 2	2, 331	566	673	2, 732 2, 653	3, 634	7	58, 33
2035		2, 189	539	657	2, 653	3, 547	7	58, 814
2040	. 48, 369	2,028	512	643	2,579	3, 477	7	57, 61
2045	47, 433	1, 903	504	631	2, 524	3, 371 3, 263	7	56, 373 55, 56
2050	. 46, 827	1.852	508	620	2, 488	3 /03	7	יחר בר

¹ Excludes the effect of the railroad financial interchange.

Lump-sum death payments

The numbers of lump-sum death payments were estimated by multiplying the insured population by the death rates used in the population projections.

Disability insurance beneficiaries

The future number of persons receiving monthly disability benefits based on their own earnings was estimated by the application of disability incidence and termination rates which were developed

² Includes dependent husband beneficiaries.

³ Includes father beneficiaries
4 Includes dependent widower beneficiaries.
5 See text for definitions of alternatives I, II, and III.

from past experience. The population insured for disability (by sex and age) was multiplied by the incidence rates to arrive at the number of newly entitled disabled workers. To obtain the number of disabledworker beneficiaries these newly entitled disabled workers were projected through the use of termination rates based on the mortality

and recovery experience of the system during 1968-74.

The assumed incidence rates depend on age, sex, and the calendar year of exposure to disability. They were based on estimated rates for 1973, adjusted for the effect of the 1973 change in the waiting period, smoothed to reflect the relative age-sex distributions experienced over a six-year period, and updated to reflect the increases in awarded disability benefits through calendar year 1975. Although the reasons for the increases in incidence rates experienced over the past decade are not yet fully understood, it was assumed that the trend experienced through the end of calendar year 1975 will not be reversed. Future incidence rates were assumed to increase gradually over the period 1975-86 to a level about 33% higher than that estimated for 1975, and to remain at that level thereafter. This level of extrapolated incidence rates, based primarily on the experience of some Western European countries with disability cash benefit programs that are more mature than our own, represents our best opinion at this time as to the course of future incidence rates under the disability insurance program.

The number of child beneficiaries entitled under the disability insurance program was projected as a proportion of the disabled male beneficiaries, allowing for future projected changes in fertility.

The number of wife beneficiaries under this program was projected as a proportion of child beneficiaries after allowing for projected future changes in fertility and female labor force participation rates.

Appendix table C shows the projected number of beneficiaries in

the disability insurance program.

APPENDIX TABLE C.—DISABILITY INSURANCE BENEFICIARIES WITH MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS UNDER ALTERNATIVES 1, 11, AND III 1

[In thousands]									
Calendar year	Workers	Wives ²	Children	Total					
Actual data (as of June 30):	1, 436	271	861	2, 568					
1971 1972	1, 561 1, 737	293 327	934 1, 028	2,788 3,092					
1973	1, 925	364	1, 127	3,416					
1974 1975	2, 098 2, 363	391 429	1, 203 1, 333	3, 692 4, 125					
ALTERNATIVE 13									
Projection (as of June 30):			1 700	C 417					
1985	4, 033	596 642	1, 788 1, 855	6, 417 7, 120					
1990	4, 623 5, 246	718	1, 903	7, 867					
1995	6, 078	816	2, 024	8, 918					
2005	7, 014	933	2, 228	10, 175					
2010	7, 779	1, 025	2, 482	11, 286					
2015	8, 177	1,066	2,718	11, 961					
2020	8, 215	1,065	2, 871 2, 864	12, 151 11, 847					
2025	7, 954 7, 714	1, 029 1, 001	2, 768	11, 483					
2030	7, 714	1, 001	2,764	11, 585					
2040	8, 179	1,061	2, 878	12, 118					
2046	8, 613	1, 118	3, 052	12, 783					
2050	8, 853	1, 148	3, 162	13, 163					

See footnotes at end of table.

APPENDIX TABLE C.—DISABILITY INSURANCE BENEFICIARIES WITH MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS UNDER ALTERNATIVES 1, II, AND III -- Continued

[In thousands]

Calendar year	Workers	Wives 2	Children	Total
ALTERNATIVE II 3				
Projection (as of June 30):				
1985	4.031	596	1, 745	6, 372
1990	4, 618	643	1, 753	7. 014
1995	5, 240	708	1, 727	7, 675
2000	6, 070	796		
2005	7, 001		1, 765	8, 631
2010	7, 751	901	1, 878	9, 780
2015		980	2, 022	10, 753
2013	8, 120	1,013	2, 138	11, 271
2020	8, 110	1,008	2, 198	11, 316
2025	7,773	964	2, 152	10, 889
2030	7, 414	919	2, 044	10, 377
2035	7, 316	909	1.994	10, 219
2040	7, 406	920	2,007	10, 333
2045	7, 502	932	2, 045	10, 479
2050	7. 450	926	2,048	10, 424
ALTERNATIVE III 3			.,	,
Projection (as of June 30):				
1000			1 704	
1960	4 023	596		6 242
1985	4, 023 4, 623	596	1, 724	
1990	4, 623	646	1, 706	6, 975
1990	4, 623 5, 251	646 708	1, 706 1, 649	6, 343 6, 975 7, 608
1990 1995 2000	4, 623 5, 251 6, 075	646 708 787	1, 706 1, 649 1, 640	6, 975 7, 608 8, 502
1990 1995 2000 2005	4, 623 5, 251 6, 075 7, 000	646 708 787 884	1, 706 1, 649 1, 640 1, 708	6, 975 7, 608 8, 502 9, 592
1990 1995 2000 2005 2010	4, 623 5, 251 6, 075 7, 000 7, 720	646 708 787 884 959	1, 706 1, 649 1, 640 1, 708 1, 802	6, 975 7, 608 8, 502 9, 592 10, 481
1990 1995 2000 2005 2010	4, 623 5, 251 6, 075 7, 000 7, 720 8, 080	646 708 787 884 959 989	1, 706 1, 649 1, 640 1, 708 1, 802 1, 869	6, 975 7, 608 8, 502 9, 592 10, 481 10, 938
1990 1995 2000 2005 2010 2015 2020	4, 623 5, 251 6, 075 7, 000 7, 720 8, 080 8, 079	646 708 787 884 959 989 979	1,706 1,649 1,649 1,708 1,802 1,869 1,886	6, 975 7, 608 8, 502 9, 592 10, 481 10, 938
1990 1995 2000 2005 2010 2015 2020 2025	4, 623 5, 251 6, 075 7, 000 7, 720 8, 080 8, 079 7, 702	646 708 787 884 959 989 979 932	1, 706 1, 649 1, 640 1, 708 1, 802 1, 869 1, 886 1, 829	6, 975 7, 608 8, 502 9, 592 10, 481 10, 938 10, 944
1990 1995 2000 2005 2010 2015 2020 2020 2025	4, 623 5, 251 6, 075 7, 000 7, 720 8, 080 8, 079 7, 702 7, 702 7, 274	646 708 787 884 959 989 979 932 883	1,706 1,649 1,649 1,708 1,802 1,869 1,886	6, 975 7, 608 8, 502 9, 592 10, 481 10, 938 10, 944
1990 1995 2000 2005 2010 2015 2020 2025 2036 2038	4, 623 5, 251 6, 075 7, 000 7, 720 8, 080 8, 079 7, 702	646 708 787 884 959 989 979 932	1, 706 1, 649 1, 640 1, 708 1, 802 1, 869 1, 886 1, 829	6, 975 7, 608 8, 502 9, 592 10, 481 10, 944 10, 944 10, 463 9, 877
1990 1995 2000 2005 2010 2015 2020 2025 2036 2035 2040	4, 623 5, 251 6, 075 7, 000 7, 720 8, 080 8, 079 7, 702 7, 702 7, 274	646 708 787 884 959 989 979 932 883	1, 706 1, 649 1, 640 1, 708 1, 802 1, 869 1, 886 1, 829 1, 720 1, 655	6, 975 7, 608 8, 502 9, 592 10, 481 10, 938 10, 944 10, 463 9, 877 9, 587
1990 1995 2000 2005 2010 2015 2020 2020 2025	4, 623 5, 251 6, 075 7, 000 7, 720 8, 080 8, 079 7, 702 7, 274 7, 073	646 708 787 884 959 989 979 932 883 859	1, 706 1, 649 1, 640 1, 708 1, 802 1, 869 1, 886 1, 829 1, 720	6, 975 7, 608 8, 502 9, 592 10, 481 10, 944 10, 944 10, 463 9, 877

¹ Excludes the effect of the railroad financial interchange.

Annual increases in average wages and in the Consumer Price Index

The importance of the assumptions as to future increases in average wages and the Consumer Price Index (CPI) results from the automatic adjustment provisions in the present law. These provisions require that the benefit table be adjusted to keep up with increases in the CPI and that the taxable earnings base, as well as the exempt amount in the retirement test, be adjusted to keep up with increases in average wages.

The ultimate percentage increases in average annual wages under alternatives I, II, and III are 5¼ percent, 5¾ percent, and 6¼ percent, respectively. The corresponding increases in the average annual CPI are 3 percent, 4 percent, and 5 percent, respectively. The respective differences of 2¼ percent, 1¾ percent, and 1¾ percent represent a measure of the increase in average annual real wages; it is referred to somewhat loosely herein as the percentage increase in average annual real wages or, more briefly, as the real-wage differential. These interrelated assumptions were developed as stated below.

For alternative II, the CPI was assumed to increase at an annual rate of 4 percent which is slightly higher (by approximately ½ of one precent) than the average over the last 30 years. This level was selected since the trends over the last 60 years indicate a tendency for the CPI to increase slowly with time. Moreover, current outlook does not support a cessation or reversal of these trends. Although the long-term average of the annual CPI increases is highly speculative,

² Includes dependent husband beneficiaries.
3 See text for definition of alternatives I, II, and III.

4 percent is considered a reasonable choice in view of today's expectations. The assumption of a real-wage differential was based on the trend in real wages over the last 20-25 years. The sum of this differential and the percentage increase in the average annual CPI yielded the assumed percentage increase in the average annual wage

of 5\% percent.

For alternatives I and III the ultimate real-wage differentials of 2½ percent and 1½ percent were chosen as so to be ½ of 1 percent higher and lower respectively than the 1¾ percent real-wage differential utilized in alternative II. Similarly, the ultimate percentage increases in the average annual CPI of 3 percent under alternative I and 5 percent under alternative III were chosen so as to be one percent lower and higher respectively than the 4 percent assumption utilized in alternative II. These assumptions yielded assumed ultimate percentage increases in average annual wages of 5¼ percent and 6¼ percent for alternatives I and III, respectively, as compared with the 5¾ percent assumptions utilized in alternative II.

The short-range wage-CPI assumptions for all three alternatives are the ones described in the section of this report dealing with the

expected operations of the trust funcs through 1981.

Average benefits

The average benefit for new old-age beneficiaries—that is, the average awarded old-age benefit—was projected by simulating the present-law automatic adjustment provisions for workers at various earnings levels. The average benefit for all old-age beneficiaries—that is, the new beneficiaries cited above as well as those earlier retirees still receiving benefits—was projected on the basis of the distribution of those beneficiaries by year of award, the average awarded benefit, and the increases in that benefit between the year of award and the current year. The average benefit for all other persons receiving monthly benefits from the old-age and survivors insurance trust fund was projected to increase at the same rate as the average old-age benefit. The average benefit for persons receiving monthly benefits from the disability insurance trust fund was similarly developed based on the average disabled-worker benefit which was, in turn, projected in a manner analogous to that of the average old-age benefit.

Benefit payments

Total benefit payments were calculated as the product of the number of beneficiaries and their corresponding average benefits. These values were adjusted to reflect retroactive payments.

 $Administrative\ expenses$

It was assumed that future administrative expenses would be 1.5 percent of benefit payments for old-age and survivors insurance and 4.0 percent of benefit payments for disability insurance. These percentages include the allocation of funds to be used to rehabilitate disabled beneficiaries under the beneficiary rehabilitation program enacted in 1965.

Railroad retirement financial interchange

The effect of the financial interchange was evaluated on the basis of trends similar to those used for old-age, survivors, and disability insurance direct costs. This results in a small long-range loss to the old-age, survivors, and disability insurance system.

SENSITIVITY OF COST ESTIMATES TO CHANGE IN SELECTED ASSUMPTIONS

While the estimates under alternatives I, II, and III provide an indication of the variation that would result from different combinations of assumptions, they cannot be used to determine the effect on the ong-range cost of changes in a single assumption, due to the complex interrelationships between the assumed variables themselves. For this reason, this section of Appendix A is devoted to an analysis of the sensitivity of the long-range cost estimates to changes in selected assumptions. The intermediate assumptions underlie all of the sensitivity analyses shown herein; only the factor being tested is varied from its counterpart in the intermediate set of assumptions.

Sensitivity to mortality improvement assumptions

Appendix table D shows the average expenditures under both present law and the modified theoretical system in combination with three distinct assumption: as to the improvement in mortality. Those three are: no improvement in mortality rates from the evel experienced in 1973; improvement of approximately 15 percent as assumed in alternatives I, II, and III; and improvement of approximately 30 percent.

APPENDIX TABLE D.—ESTIMATED LONG-RANGE EXPENDITURES OF OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE PROGRAM AS PERCENT OF TAXABLE PAYROLL, UNDER ALTERNATIVE II AND UNDER VARIOUS MOR-TALITY IMPROVEMENT ASSUMPTIONS

[In percent]

	Average expenditures as percent of taxable payroll 1 under ultimate mortality improve ment of—2				
System ³	0 percent	15 percent	30 percent		
25 yr period: Present law. Modified theoretical. 0 yr period:	11. 70	11. 81	11. 92		
	11. 48	11. 58	11. 68		
Present law	14. 53	14. 89	15. 26		
	12. 92	13. 24	13. 57		
Present law Modified theoretical	18, 08	18. 93	19.78		
	14, 56	15. 25	15.94		

Payroll is adjusted to take into account the lower contribution rate on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

The rate of mortality improvement refers to the ratio of the age-adjusted death rate in the year 2050 to that in 1973. The 15-percent improvement in mortality was used in alternatives 1, II, and III.

See text for discussion of present law versus modified theoretical systems.

Under both present law and the modified theoretical system there is a similar variation in cost associated with identical changes in levels of mortality. Under either system, over the next 25, 50, and 75 years the expenditures shown in the table reflect increases of about 1 percent, 2½ percent, and 4½ to 4¾ percent, respectively, for every 15 percent improvement in the ultimate mortality rates. That the cost increases with greater improvement in mortality is largely due to the distribution of improvement by age. Mortality at the very young ages and at the ages over 55 is projected to improve relatively more than at the in-between ages. This factor, in conjunction with a fertility rate which is below the rate which would ultimately result in zero population growth, results in an increase in the average size of the aged population

in relation to the working-age population, thus increasing the cost of the program.

Sensitivity to ultimate total fertility rate assumptions

Appendix table E shows average expenditures over periods of 25, 50, and 75 years based on ultimate total fertility rates of 1.5, 1.7, 1.9, 2.1, and 2.3 children per woman; all other assumptions are the same as those included in the intermediate set. The table shows the cost under present law as well as under the modified theoretical system previously discussed.

APPENDIX TABLE E.-ESTIMATED LONG-RANGE EXPENDITURES OF OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE PROGRAM AS PERCENT OF TAXABLE PAYROLL, UNDER ALTERNATIVE II AND UNDER VARIOUS FERTILITY ASSUMPTIONS [In percent]

System ³	Average expenditures as percent of taxable payroll 1 assuming ultimate total fertility rate of—2							
	1.5	1.7	1.9	2.1	2.3			
5 yr period: Present law Modified theoretical	11. 78	11. 79	11. 81	11. 81	11. 84			
	11. 54	11. 56	11. 58	11. 58	11. 60			
0 yr period: Present law Modified theoretical	15. 27	15. 08	14. 89	14. 70	14. 56			
	13. 55	13. 40	13. 24	13. 10	12. 99			
5 yr period: Present law Modified theoretical	20. 84	19. 83	18. 93	18. 16	17. 53			
	16. 64	15. 90	15. 25	14. 69	14. 24			

¹ Payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

2 The total fertility rate is expressed in terms of children per woman. See text for further details of fertility projection.

All other assumptions are given by alternative 11.

3 See text for discussion of present law versus modified theoretical systems.

As shown in appendix table E, over a 75-year period average expenditures as percent of payroll of the old-age, survivors, and disability insurance system are highly sensitive to changes in fertility assumptions under both the present-law and the modified theoretical

systems.

Over the first 25-year period the average expenditures under either system would be lower if based on lower fertility and higher if based on higher fertility; however, the opposite effect exists over the entire 75year period. The reason for this reversal of effect is that, under lower fertility, for example, the lower number of child's benefits that would be payable during the 25-year period is not offset by a lower number of workers, since the workers in that period are affected by earlier fertility and not by the fertility assumptions of the early years of the projection period. Later in the projection period, however, the size of the working population is affected relatively more than the beneficiary population so that the lower number of workers results in a decrease in the size of the payroll and hence an increase in the expenditures expressed as a percentage of payroll.

It is significant to note from this table that, for the next 25-year period regardless of future fertility, the average expenditures of the old-age, survivors, and disability insurance system will be significantly higher than the tax rate of 9.9 percent of taxable payroll scheduled in present law. The excess of the expenditures over the tax rate ranges from 1.88 to 1.94 percentage points under present law and from 1.64 to 1.70 percentage points under the modified theoretical system.

Sensitivity to Consumer Price Index assumptions

Appendix table F shows the average expenditures over periods of 25, 50, and 75 years under assumptions of annual CPI increases of 2 percent, 4 percent, and 6 percent. In each case the ultimate real-wage differential is assumed to be 1% percent yielding percentage increases in average annual wages of 3% percent, 5% percent and 7% percent, respectively. The table indicates the expenditures under both present law and the modified theoretical system.

APPENDIX TABLE F.—ESTIMATED LONG-RANGE EXPENDITURES OF OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE PROGRAM AS PERCENT OF TAXABLE PAYROLL, UNDER ALTERNATIVE II AND UNDER VARIOUS CONSUMER PRICE INDEX ASSUMPTIONS [In percent]

	Average expenditures as percent of taxa payroll 1 assuming ultimate earnings-C increases of—2				
System 3	33/4-2	53/44	73/4—6		
yr period:					
Present law	11,77	11.81	11.88		
widdined theoretical	11.80	11.58	11.38		
		11.50	11. 30		
Present law	. 13, 80	14.89	16.08		
modified theoretical	. 13.58	13. 24	12.96		
yr period:			, 12.00		
Present law.	16.12	18. 93	21, 98		
Modified theoretical	. 15.67	15. 25	14, 92		

1 Payroll is adjusted to take into account the lower contribution rate on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

2 The initial value in each pair refers to the assumed annual percentage increase after 1981 in average earnings. The 2d value refers to the assumed annual percentage increases after 1982 in CPI. The assumptions used in the 1976-81 period were adjusted appropriately. All other assumptions are given by alternative II.

3 See text for discussion of present law versus modified theoretical systems

As shown in appendix table F the average expenditures of the oldage, survivors, and disability insurance system over a 75-year period under present law are highly sensitive to changes in CPI assumptions. However, under the modified theoretical system those expenditures would be significantly less sensitive to CPI assumptions.

Under that system the average expenditures as a percent of payroll decrease slightly with increases in the CPI. This is due in large part to the specific assumptions used in this case in which there is a lag between the increases in earnings and the assumed increases in average awarded benefits. Normally, costs are computed as a percent of the taxable payroll in the year, while awarded benefits normally

are based on earnings in years prior to retirement.

A significant element in appendix table F is that, for the next 25-year period, the average expenditures of the old-age, survivors, and disability insurance system will be essentially the same (11.38 to 11.88 percent of taxable payroll) regardless of the CPI assumption or of a possible modification in the procedure for computing benefits.

Sensitivity to average real earnings assumptions

Appendix table G shows the average expenditures over periods of 25, 50, and 75 years under assumptions of real-wage differentials of 1 percent, 1% percent and 2% percent. In each case the annual increases in the CPI are assumed to be 4 percent, thereby yielding annual ncreases in average earnings of 5 percent, 5% percent, and 6% percent, respectively. The table shows the expenditures under present law as well as under the modified theoretical system.

APPENDIX TABLE G.—ESTIMATED LONG-RANGE EXPENDITURES OF OLD-AGE, SURVIVORS, AND DISABILITY IN-SURANCE PROGRAM AS PERCENT OF TAXABLE PAYROLL, UNDER ALTERNATIVE II AND UNDER VARIOUS REAL EARNINGS ASSUMPTIONS

[In percent]

	Average expenditures as percent of taxable payroll 1 under ultimate earnings-CPI increases of 2			
System ³	5—4	53/4—4	6½-4	
5-yr period:				
Present law	12.66	11.81	11. 04 11. 12	
Modified theoretical	12. 07	11. 58	11. 12	
0-yr period: Present law	17. 33	14, 89	12.89	
Modified theoretical	13, 97	13. 24	12.58	
5-yr period:	00.00	10.00	15 40	
Present law	23. 68 16. 18	18. 93 15. 25	15. 42 14. 43	

3 See text for discussion of present law versus modified theoretical systems.

As shown in appendix table G, over a 75-year period the average expenditures of the old-age, survivors, and disability insurance system under present law are highly sensitive to changes in the real-wage differential, whereas under the modified theoretical system they are

significantly less sensitive to such changes.

Under present law over the next 25-year period the average expenditures would vary by about 1.1 percent of taxable payroll for every percent change in the real-wage differential. However, under the modified theoretical system those expendituers would only vary by about 0.6 percent of taxable payroll for every one percent change in the real-wage differential. In all cases the average expenditures over the next 25 years are higher than the tax rate in present law of 9.9 percent of taxable payroll that is scheduled for the period. The execss of the expenditures over the tax rate ranges from 1.14 to 2.76 percentage points under present law and from 1.22 to 2.17 percentage points under the modified theoretical system.

¹ Payroll is adjusted to take into account the lower contribution rate on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.
² The initial value in each pair refers to the assumed annual percentage increases after 1981 in average earnings. The 2d value refers to the assumed annual percentage increases after 1982 in CPI. The difference in the 2 values is approximately the annual increase in real earnings. The assumptions used in the 1976–1981 period were adjusted appropriately. All other recurrent or a region by alternative the assumptions are given by alternative 11.

APPENDIX B.—LONG-RANGE COST ESTIMATES UNDER PRESENT LAW BASED ON ASSUMPTIONS SIMILAR TO THOSE USED IN THE 1975 REPORT

This appendix is intended to show estimates of the long-range cost of the old-age, survivors, and disability insurance program under present law based on assumptions similar to those incorporated in the central set of assumptions used in the 1975 report. The following chart shows a comparison of the principal economic and demographic assumptions for 1982–2050 included in the central set of assumptions used in last year's report with those included in the intermediate set of assumptions (alternative II) used in this year's report.

VALUES ASSUMED FOR SELECTED ECONOMIC AND DEMOGRAPHIC FACTORS FOR THE PERIOD 1982-2050
[In percent]

	Percentage in	creases in aver			
	Wages	Consumer Price Index	Rea. wages 1	Unemploy- ment rate	Ultimate fertility rate ²
1975 trustees report (central assumptions)	6	4	2	. 5	2. 1
sumptions)	53/4	4	13/4	5	1.9

¹ Expressed as the difference between percentage increases in average annual wages and average annual CPI.
2 Average number of children born per woman in her lifetime

The assumptions underlying the estimates in this appendix are the following. For those factors specified in the above chart, the ones identified as central assumptions have been used herein. For all other factors, the assumptions incorporated in the previously mentioned intermediate set (alternative II) have been used herein; in particular, this applies with respect to the assumptions for 1976–81 which correspond to those in the above chart (see table 10 in the body of this report).

The major differences between the assumptions underlying the estimates in this appendix and those underlying the estimates in last year's report are the same as those identified in the discussion of table 28 in the body of this report. In terms of their effect on the cost estimates, the most notable ones are the projections of higher increases in the average old-age benefit, of higher rates at which persons become entitled to disabled-worker benefits, and of lower rates at which disabled-worker beneficiaries recover or die.

Under the assumptions specified above, the expenditures (as a percent of payroll) of the old-age, survivors, and disability insurance system under present law are projected to be the values shown in the following table (which is presented in the same format as table 26 in the body of this report).

APPENDIX TABLE—ESTIMATED EXPENDITURES OF OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE SYSTEM AS PERCENT OF TAXABLE PAYROLL FOR SELECTED YEARS, 1985-2050 UNDER ASSUMPTIONS SIMILAR TO THOSE USED IN THE 1975 REPORT

[In percent]

	Expenditures as	percent of taxable	e payroll 1		
Calendar year	Old-age and survivors insurance	Disability insurance	Total	Tax rate in law	Difference
1985 1990 1995 2000 2010 2015 2020 2025 2030 2035 2040 2045 2040	11. 29 13. 00 15. 21 17. 40 18. 77 19. 19	1. 70 2. 04 2. 45 2. 82 3. 27 3. 65 3. 91 4. 03 3. 98 3. 89 3. 89 4. 06 4. 22 4. 28	11. 16 11. 83 12. 52 12. 89 13. 60 14. 94 16. 91 19. 24 21. 38 22. 66 23. 12 23. 07 23. 16 23. 53	9. 90 9. 90 9. 90 9. 90 9. 90 9. 90 11. 90 11. 90 11. 90 11. 90 11. 90 11. 90	-1. 2 -1. 9 -2. 69 -2. 99 -3. 70 -5. 01 -7. 34 -9. 48 -10. 76 -11. 22 -11. 17
25-yr averages: 1976-2000	9. 65 12. 85 18. 88 13. 80	1, 99 3, 68 4, 05 3, 24	11.64 16.53 22.93 17.04	9. 90 11. 10 11. 90 10. 97	-1.74 -5.43 -11.03 -6.07

¹ Expenditures and payroll are calculated under assumptions of an ultimate annual increase of 6 percent in average earnings and an ultimate fertility rate of 2.1 children per woman; all other assumptions are the same as those incorporated in the intermediate set defined in the body of this report. Payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

This table shows that, as under the intermediate set of assumptions, the expenditures are projected to increase slowly during the remainder of the century, very rapidly shortly after the turn of the century, and much more slowly during the last years of the projection period. (See the discussion of table 26 in the body of this report.)

The table also shows that, for the 75-year projection period, the average expenditures are estimated to be 6.07 percentage points higher than the average tax rate. This figure is comparable to the actuarial deficit reported in last year's report after it is adjusted to eliminate the trust fund cost (see the discussion of table 28 in the body of this report). The deficit reported last year was 5.32 percent of payroll; after adjustment for the trust fund cost of 0.13 percent of payroll (see table 28), it becomes 5.19 percent of payroll. This last figure differs from 6.07 because of the net effect of the changes in assumptions cited above.

APPENDIX C.—DETERMINATION AND ANNOUNCEMENT OF SOCIAL SECURITY BENEFIT INCREASES ¹

Pursuant to authority contained in section 215(i) of the Social Security Act (42 U.S.C. 415(i)), as amended by section 3 of Public Law 93-233, enacted December 31, 1973, and in section 1617 of the Social Security Act (42 U.S.C. 1382f), I hereby determine and announce a cost-of-living increase of 8.0 percent in benefits under the Social Security Act, title II effective June 1975 and title XVI effective July 1975; that the following revised table of benefits is deemed to appear in section 215(a) of the Act; that, with respect to benefits for transitional insured persons aged 72 and over entitled under section 227 of the Act (42 U.S.C. 427) and for uninsured persons aged 72 and over entitled under section 228 of the Act (42 U.S.C. 428), the amounts \$69.60 and \$34.80 are established in lieu of the respective amounts of \$64.40 and \$32.20, that appear in sections 227 and 228 of the Act; that, regarding the additional amount of the supplemental security income benefit with respect to essential persons payable under section 211 of Public Law 93-66, as amended, the amount of \$946 is established in lieu of the amount of \$876 that appears in section 211(a)(1)(A) of that law; and that, with respect to income limitations under the program of supplemental security income for the aged, blind, and disabled, the amounts of \$1,892.40 and \$2,839.20 are established in lieu of the respective amounts of \$1,752 and \$2,628 that appear in sections 1611(a)(1)(A), 1611(a)(2)(A), 1611(b)(1), and 1611(b)(2) of the Act.

AUTOMATIC BENEFIT INCREASE DETERMINATION

Section 215(i) of the Social Security Act requires that, when certain conditions are met in the first calendar quarter of a year, the Secretary shall determine that a cost-of-living increase in benefits and income limitations is due. That section further specifies a formula which automatically determines the amount of any cost-of-living increase in benefits and income limitations, based on the Consumer Price Index reported by the Department of Labor.

Section 215(i)(2)(A) of the Act provides that the Secretary shall determine each year, beginning with 1975, whether there is a cost-of-living computation quarter in such year. If he so determines, such subsection also provides that he shall, effective with June of that year, increase benefits for individuals entitled under sections 227 and 228 of the Act, and that he shall increase the primary insurance amounts of all other individuals entitled to benefits under title II of the Act (excluding primary insurance amounts determined under section 215(a)(3)). The subsection further provides that the percentage of increase in benefits shall be equal to the percentage of

 $^{^{1}\,\}mathrm{This}$ statement was published in the Federal Register for May 22, 1975 (Vol. 40, No. 100, pp. 22289-90).

increase by which the Consumer Price Index for the cost-of-living computation quarter exceeds the Index for the most recent prior

base quarter or cost-of-living computation quarter.

Section 215(i)(1) of the Act defines a base quarter as a calendar quarter ending on March 31 in each year after 1974, or any other calendar quarter in which occurs the effective month of a general benefit increase. This subsection of the Act also defines a cost-of-living computation quarter as a base quarter in which the Consumer Price Index prepared by the Department of Labor exceeds by not less than 3 percent such Index in the last prior cost-of-living computation quarter or, if later, the most recent calendar quarter in which a general benefit increase was effective. This subsection of the Act further provides that the Consumer Price Index for a base quarter or a cost-of-living computation quarter shall be the arithmetical

mean of such Index for the 3 months in such quarter.

Under the provisions of the Act described above, the first possible cost-of-living computation quarter was the calendar quarter ending March 31, 1975. The Consumer Price Index prepared by the Department of Labor for each month in that quarter was: for January 1975. 156.1; for February 1975, 157.2; for March 1975, 157.8. The arithmetical mean for the calendar quarter ending March 31, 1975, is thus 157.0. This result is to be compared to the most recent calendar quarter in which a general benefit increase was effective. The most recent such quarter was the quarter ending June 30, 1974. (Public Law 93-233, enacted December 31, 1973, provided for a general benefit increase effective June 1974. See section 3(i) of Public Law 93-233 and section 215(i)(3) of the Social Security Act, as amended.) The Consumer Price Index prepared by the Department of Labor for each month in that quarter was: for April 1974, 143.9; for May 1974, 145.5; for June 1974, 146.9. The arithmetical mean for the calendar quarter ending June 30, 1974, is thus 145.4. Comparing this result to the arithmetical mean for the calendar quarter ending March 31, 1975, yields an increase of 8.0 percent. Thus, since the percentage of increase in the Consumer Price Index from the calendar quarter ending June 30, 1974, to the calendar quarter ending March 31, 1975, exceeds 3 percent, the quarter ending March 31, 1975, is a cost-of-living computation quarter. Consequently, a cost-of-living benefit increase of 8.0 percent is effective for benefits under title II of the Act for June 1975

TITLE II BENEFITS

In accordance with section 215(i)(2)(D)(iv) of the Act, the primary insurance amounts and the maximum family benefits shown in columns IV and V, respectively, of the revised benefit table set forth in this announcement were obtained by increasing by 8.0 percent the corresponding amounts shown in the benefit table heretofore established by Public Law 93–233. (So much of the table as applies to average monthly wages of \$1,101 through \$1,175 does not appear in the table as amended by P.L. 93–233, but results from the operation of section 215(i)(2)(D)(v), section 230 of the Social Security Act, as amended, and P.L. 93–233, particularly, section 3(i) of P.L. 93–233.) With respect to benefits for persons entitled under sections 227 and 228 of the Act, the amounts of \$64.40 and \$32.20 heretofore estab-

lished, were increased by 8.0 percent to obtain the new amounts of \$69.60 and \$34.80, respectively. The table extensions referred to in section 215(i)(2)(D)(v) will be published concurrent with the publication of a contribution and benefit base determination pursuant to section 230(a).

TITLE XVI BENEFITS

Section 1617 of the Social Security Act provides that, whenever the benefits under title II are increased as a result of a determination made under section 215(i), the amounts in sections 1611(a)(1)(A), 1611(a)(2)(A), 1611(b)(1), and 1611(b)(2) of the Social Security Act and in section 211(a)(1)(A) of Public Law 93-66, shall be increased, effective with months after the month in which the title II increase is effective, and that such percentage of increase shall be the same as the percentage of increase by which the title II benefits are increased (and rounded, when not a multiple of \$1.20, to the next higher multiple of \$1.20).

In accordance with section 1617, benefit amounts under the program of supplemental security income for the aged, blind, and disabled and the maximum amounts of income, other than income excluded under section 1612(b), under the program of supplemental security income for the aged, blind, and disabled, of \$1,752 and \$2,628 heretofore established are increased effective July 1975, by 8.0 percent to obtain the new amounts of \$1,892.40 and \$2,839.20, respectively. With respect to the amount of the additional supplemental security income benefit with respect to essential persons payable under section 211(a)(1)(A) of Public Law 93–66, as amended, the amount of \$876 heretofore established is increased by 8.0 percent to obtain the new amount of \$946.

(Catalog of Federal Domestic Assistance Programs Nos. 13.802-5, and 13.807 Social Security Programs.)

Dated: May 14, 1975

Caspar W. Weinberger, Secretary.

(The revised table of benefits that followed the above announcement in the Federal Register is not reproduced here because of its length.)

APPENDIX D.—DETERMINATION AND ANNOUNCEMENT OF SOCIAL SECURITY CONTRIBUTION AND BENEFIT BASE AND RETIREMENT TEST EXEMPT AMOUNT FOR 1976 ¹

Pursuant to authority contained in sections 203(f)(8) and 230 of the Social Security Act (42 U.S.C. 403(f)(8) and 430), as amended by section 3 (j) and (k) of Public Law 93–233, enacted December 31, 1973, I hereby determine and announce that the contribution and benefit base with respect to remuneration paid in, and taxable years beginning in 1976 shall be \$15,300 and the monthly exempt amount under the retirement test shall be \$230 with respect to taxable years ending in calendar year 1976.

There follows a statement of the actuarial bases employed in arriving at the amounts of \$230 and \$15,300 for the retirement test monthly exempt amount and the contribution and benefit base,

respectively, for the calendar year 1976.

In determining each of the 1976 amounts, the law specifies a formula which automatically produces a mathematical result based upon re-

ported statistics.

Section 203(f)(8) of the Act provides that the retirement test monthly exempt amount for 1976 shall be equal to the 1975 amount of \$210 multiplied by the ratio of (1) the average amount, per employee, of the taxable wages of all employees reported under the prorgam for the first calendar quarter of 1975 to (2) the average amount of such wages reported for the first calendar quarter of 1974. The section further provides that if the amount so determined is not a multiple of \$10, it shall be rounded to the nearest multiple of \$10.

Similarly, section 230 of the Act provides that the contribution and benefit base for 1976 shall be equal to the 1975 amount of \$14,100 multiplied by the ratio of (1) the average amount, per employee, of the taxable wages of all employees reported under the program for the first calendar quarter of 1975 to (2) the average amount of such wages reported for the first calendar quarter of 1974. The section further provides that if the amount so determined is not a multiple of \$300,

it shall be rounded to the nearest multiple of \$300.

The data used to make the necessary computations of such average taxable wages were derived from reports submitted to the Social Security Administration of taxable wages paid to employees by their employers. Each quarter, taxable wages are posted to the record of earnings of each individual employee for whom wages were reported. These records are referred to hereinafter as Summary Earnings Records. As the wages were posted to the Summary Earnings Records, the data were tabulated on a 100-percent basis to obtain the total amount of reported taxable wages and the total number of employees for whom such wages were reported.

 $^{^1\,\}mathrm{This}$ statement was published in the Federal Register for Oct. 30, 1975 (Vol. 40, No. 210, pp. 50556-7).

Because of the requirement in the law that the foregoing determinations be made on or before November 1, 1975, the tabulated data on taxable wages reported for the first calendar quarter of 1975 were necessarily limited to those wages that were reported and posted to the Summary Earnings Records by the end of the quarterly updating operations completed in September 1975. In order that the required ratio referred to above be based on data reflecting comparable reporting and posting periods, the tabulated data on taxable wages reported for the first calendar quarter of 1974 were limited to those wages that were reported and posted to the Summary Earnings Records by the end of the quarterly updating operations completed in September 1974.

About 71.1 million employees had taxable wages reported for the first calendar quarter of 1974 that were posted to the Summary Earnings Records by the end of September 1974, and the average amount of their taxable wages was \$2,007.69 per employee. The corresponding number of employees and average amount of taxable wages for the first calendar quarter of 1975 were 70.6 million and \$2,157.73, respectively. The ratio of average taxable wages reported for the first quarter of 1975 to average taxable wages reported for the

first quarter of 1974 is therefore 1.074733.

Multiplying the 1975 retirement test monthly exempt amount of \$210 by the ratio of 1.074733 produces the amount of \$225.69, which must then be rounded to \$230. Accordingly, the retirement test exempt amount for taxable years ending in calendar year 1976 is \$230 on a monthly basis, or \$2,760 on an annual basis.

Multiplying the 1975 contribution and benefit base of \$14,100 by the ratio of 1.074733 produces the amount of \$15,153.74, which must then be rounded to \$15,300. Accordingly, the contribution and benefit base for remuneration paid in, and taxable years beginning in, calendar

year 1976 is \$15,300.

The following is an extension of the Table for Determining Primary Insurance Amount and Maximum Family Benefits provided in section 215(a) of the Social Security Act. This extension reflects the new higher average monthly wage and related benefit amounts now possible under the increased contribution and benefit amounts promulgated herein effective January 1976 in accordance with section 215(i) of the Act.

TABLE FOR DETERMINING PRIMARY INSURANCE AMOUNT AND MAXIMUM FAMILY BENEFITS BEGINNING JANUARY 1976

(Primary insurance benefit under 1939 Act, as modified) If an individual's primary insurance benefit (as deter- mined under subsec. (d)) is—		II (Primary insurance amount effective for June 1974) Or his primary	(Average monthly wage) Or his average monthly wage (as determined under subsec. (b)) is—		(Primary insurance amount) The amount referred	(Maximum family benefits) And the maximum amount of benefits payable (as provided in sec. 203(a))							
							At least	But not more than—	insurance amount (as determined under subsec. (c)) is—	At least—	But not more than—	to in the preceding paragraphs of this subsection shall be—	on the basis of his wages and self- employment income shall be—
										\$1, 176 1, 181 1, 186 1, 191 1, 196 1, 201 1, 211 1, 216 1, 221 1, 226 1, 231 1, 236 1, 241 1, 246 1, 251 1, 256 1, 266 1, 266 1, 271	\$1, 180 1, 185 1, 190 1, 195 1, 200 1, 215 1, 210 1, 215 1, 225 1, 230 1, 240 1, 245 1, 255 1, 265 1, 270 1, 275	\$623. 80 524. 80 525. 80 527. 80 528. 80 529. 80 530. 80 531. 80 532. 80 533. 80 534. 80 535. 80 536. 80 537. 80 538. 80 539. 80 540. 80	\$916. 70 918. 40 920. 20 921. 90 923. 70 925. 40 927. 20 928. 90 930. 70 932. 40 933. 70 933. 70 939. 40 941. 20 942. 90 944. 90 944. 40 948. 20

(Catalog of Federal Domestic Assistance Programs Nos. 13.802.5, and 13.807 Social Security Programs.)
Dated: October 22, 1975.

DAVID MATHEWS, Secretary.