# Appendix A.—Details and Sensitivity of the Long-Range Cost Estimates

The first part of this appendix is a discussion of the assumptions and methods which underlie the cost estimates in this report. Within that discussion all comments pertain to the cost estimates under each of alternatives I, II and III unless specifically stated otherwise. The basic assumptions comprising each alternative have been summarized in an earlier section entitled "Economic and Demographic Assumptions" and thus will be discussed here only insofar as they are related to the methods used.

The second part of this appendix deals with the sensitivity of the estimates to changes in selected individual assumptions. Although the estimates under alternatives I, II and III illustrate the variations in the projected cost of the OASDI program resulting from different combinations of assumptions, they do not show the variations resulting from changes in any single assumption. This is because of the complex interactions which exist among the assumptions. In the sensitivity analysis, the intermediate set of assumptions is used as a basis, and one assumption at a time is varied.

#### DETAILS OF THE COST ESTIMATES

#### General population

Projections were made of the U.S. population (including persons overseas covered by the OASDI program) by age and sex for future years to 2055. The starting point is the population on July 1, 1977 as estimated by the Bureau of the Census from the 1970 Census and from births, deaths and net immigration during 1970–77. This population estimate was adjusted for net census undercount and increased by the estimated populations in the geographic areas covered by the OASDI program but not included in the estimate of the Bureau of the Census. The population in future years was then projected from anticipated deaths, births and net immigration.

The average annual improvement in age-sex specifc mortality by cause of death for the period 1969-77 was projected to continue until 1985 Lower average annual improvements were projected after 1985. For the period 1979-2050, the average annual improvement observed during 1900-77. As shown in appendix table A, projected mortality for 2050 under alternative II is 34.2 percent below that estimated for 1979. The average annual improvement for women is generally more than that for men, although this difference is projected to be less than experienced during 1900-77. Separate mortality projections were developed for alternatives I and III. For alternative I, the projected average annual improvement is 50 percent lower than under alternative II. For alternative III, the projected average annual improvement is twice that for alternative II.

Sex and age	Age-adjusted de (per 100,0		Overali mortality	Average annual mortality	
	1979	2050	improvement (percent)	improvemen (percent)	
Men:					
Under 20	140.4	102.3	27.2	41	
20 to 64	627.7	379.1	39.6	- 45	
65 and over	6. 340. 6			.71	
Total		4, 636. 3	26.9	. 44	
Nomen:	919.2	630.4	31.4	. 53	
Monitoria.					
Under 20	92. 3	60.9	34.0	. 58	
20-64	324.6	202.8	37.5	. 60	
65 and over	4, 045. 0	2, 501, 1	38.2	. 67	
Total	655.8	408.0	37.8	. 67	
Fotal:					
Under 20	116.8	82.0	29.8	. 50	
20 to 64	471.3	288.1	38.9		
65 and over	5, 005, 6	3, 394. 6	32.2	. 69	
Total	784.0	5, 594, 6	32. Z 34. 2	.55	

APPENDIX TABLE A .-- PROJECTED MORTALITY IMPROVEMENT TO CALENDAR YEAR 2050 UNDER ALTERNATIVE II

<sup>1</sup> Based on the age and sex distribution of the enumerated population of the United States as of April 1, 1970. Note: Alternative II is described in the text of this report.

Historically, fertility rates in the United States have fluctuated much more than mortality rates. The total fertility rate (which for a given year is the number of children a woman would have during her lifetime if she were to experience the age-specific birth rates observed in that year) decreased from 3.3 after World War I to 2.1 during the Great Depression, rose to about 3.7 in 1957 and then fell to 1.7 in 1976. Preliminary data indicate a slight upturn to 1.8 since 1976.

The historical variations in fertility rates are believed to be a result of changes in social attitudes, economic conditions and medical knowledge. After consideration of the recent behavior and trends of these factors, ultimate total fertility rates of 2.5, 2.1 and 1.5 children per woman were selected for alternatives I, II and III, respectively. For each alternative, the total fertility rate was projected from its current level to its ultimate level in the year 2005 separately for women born in different years. A range of 1.7 to 2.7 was used by the Bureau of Census in its latest series of population projections,<sup>1</sup> compared to the 1.5 to 2.5 range used in this report. Both the Census report and this report used an intermediate assumption of 2.1 children per woman, which is the theoretical population replacement rate, i.e., the total fertility rate which would eventually result in the same number of annual births as deaths, assuming no net migration and no change in present mortality.

Net immigration was assumed to be 400,000 persons per year in all three alternative sets of assumptions. The assumed net immigration excluded aliens entering the United States illegally, largely because no reliable estimate of their number exists. However, illegal aliens were included in the starting population.

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

Because a specific marital status is required for many categories of OASDI benefits, the projected total population by age and sex was subdivided into those married, widowed, divorced and never married for each year of the projection period. Marriage rates were based on data from the National Center for Health Statistics. An overall divorce rate consistent with recent experience was assumed to continue through the projection period.

<sup>&</sup>lt;sup>1</sup>U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 704, "Projections of the Population of the United States: 1977-2050," U.S. Government Printing Office, Washington, D.C., 1977.

	F	Population (	in thousands)		Dependency ratio		
Year	Under 20	20-64	65 and over	Total	Aged 1	Total	
1960	73, 116	98, 687	17, 146	188, 949	. 174	. 91	
1965	79, 931	104, 112	18, 963	203,006	. 182	. 95	
1970	80, 637	112, 500	20, 655	213, 792 223, 075	. 184	. 90	
1975	77, 947 77, 038	112, 500 122, 036	23, 092	223 075	. 189	. 82	
1976	77, 038	124, 145	23, 635	224, 818	. 190	. 81	
1977	76, 110	126, 405	24, 280	226, 795	. 192	.79	
1978	75, 195	128, 582	24, 828	228, 605	. 193	:/1	
1979	74, 382	130, 743	25, 376	230, 501	. 194	.76	
ernative I :		100,710	20,070	200,001	. 134	. / 0	
1980	73, 707	132, 864	25. 935	232, 506	. 195	. 75	
1985	72, 417	142, 629	28, 679	243, 724	. 201	.70	
1990	75, 389	148 891	31, 573	255, 852	. 212	. 71	
1995	80, 039	148, 891 154, 080	33, 573	267, 692	. 218	.73	
2000	84, 737	159, 851	34, 436	279, 024	. 215		
2005	87, 804	167, 324	35, 336	290, 464		. 74	
2010	90, 967		33, 330	230, 404	. 211	. 73	
	50, 507	173, 892	37, 918 42, 787	302, 776 315, 894	. 218	. 74	
2015	95, 296	177, 812	42, 787	315, 894	. 241	. 77	
2020	100, 387	180, 081	48, 615	329, 083	. 270	. 82	
2025	105, 315	181, 809	54, 786	341, 910	. 301	. 88	
2030	109, 657	185, 662	59, 292	354, 611	. 319	. 91	
2035	113, 962	193, 316	60, 416	354, 611 367, 695	. 313	. 90	
2040	118, 929	202, 852	59, 668	381, 449	. 294	. 88	
2045	124, 517	212, 719	58, 691	395, 927	. 276	. 86	
2050	130, 185	221, 380	59, 707	411, 271	. 270	. 85	
2055	135, 620	230, 169	62,026	427, 815	. 269	. 85	
2055 rnative II :	,	,					
1980	73, 668	132, 867	25, 941	232. 476	. 195	. 75	
1985	71, 579	142, 720	28, 865	243, 164	. 202	. 70	
1990	72, 801	149, 131	32, 126	254,059	. 215	. 70	
1995	74, 923	154, 487	34, 597	264,007	. 224	. 70	
2000	76, 568	160, 419	35, 998	272, 985	. 224	. 70	
2005	76, 734	167, 329	37, 435	281, 497			
	77, 734	107, 329	37, 430	201,497	. 224	. 68	
2010	77, 074	172, 384	40, 541	290,000	. 235	. 68	
2015	78, 334	173, 979	45, 986	298, 299	. 264	. 71	
2020	80, 016	173, 323	52, 469	305, 807	. 303	. 76	
2025	81, 365	171, 473	59, 407	312, 245 317, 776	. 346	. 82	
2030	82, 136	170, 888	64, 752	317, 776	. 379	. 86	
2035	82, 825	173, 186	66, 670	322, 680	. 385	. 86	
2040	83, 904	176, 575	66, 625	327, 104	. 377	. 85	
2045	85, 276	179, 679	66, 198	331, 152	. 368	. 84	
2050	86, 546	181, 438	67, 091	335, 074	. 370	. 84	
2055	87, 535	183, 150	68, 535	339, 220	. 374	. 85	
rnative III :		,	,				
1980	73, 609	132, 873	25, 952	232 434	. 195	. 74	
1985	70, 327	142, 892	29, 222	232, 434 242, 440	. 205	. 69	
1990	68, 921	149, 571	33, 192	251, 685	. 222	. 68	
1995	67, 238	155, 212	36, 583	259, 033	. 236	. 66	
2000	64, 294	161, 416 167, 507	39, 056	264, 766	. 242	. 64	
2005	60, 235	167, 507	41,605	269, 346	. 248	. 60	
2010	56, 864	170, 293	45, 824	272, 981	. 269	. 60	
2015	54, 591	168, 369	52, 469	275, 428	. 312	. 63	
2020	52, 751	163, 277	60, 280	276, 308 275, 540	. 369	, 69	
2025	50, 677	156, 129	68, 734	275, 540	. 440	. 76	
2030	48, 256	149, 306	75, 720	273, 282	. 507	. 83	
2035	45, 957	144, 486	79, 247	269, 691	. 548	. 86	
2040	44, 093	140, 031	80, 727	264, 851	576	. 89	
2045	42, 525	134, 771	81, 622	264, 851 258, 917	. 606	. 92	
2050	42, 525	128, 524	82, 714	252, 211	. 644	. 962	
	40.3/4	120, 324	04,714	202,211			
2055	39, 346	122, 787	82, 980	245, 114	. 676	. 996	

#### APPENDIX TABLE B .- SOCIAL SECURITY AREA POPULATION AS OF JULY 1 AND DEPENDENCY RATIOS BY BROAD AGE GROUP UNDER ALTERNATIVES I, II AND III, 1960-2055

Population 65 and over as ratio to population 20-64.
Population 65 and over plus population under 20 as ratio to population 20-64.

Note: Alternatives I, II and III are described in the text of this report.

# Covered population

Projections of the percentages of the population who worked in covered employment at any time during the year, i.e., coverage rates, were made by age and sex on the basis of the projections of unemployment rates, labor force participation rates and the relationships existing between those rates from 1970 to 1976.

The total unemployment rate has averaged about 5.4 percent for the last 25 years and 6.2 percent for the last 10 years. Under alternatives I, II and III, the ultimate total unemployment rate was assumed to

be 4 percent, 5 percent and 6 percent, respectively. Unemployment rates by age and sex were projected on the basis of their relationships with the total unemployment rate since 1966.

Labor force participation rates were projected on the basis of historical data since 1960. Under alternative II, the ultimate ageadjusted rates reflect a slight decrease for men of 0.6 percent from the 1979 level of 78.4 percent, while the rates for women reflect an 8 percent increase from the 1979 level of 51 percent. These assumptions result in ultimate labor force participation rates for women which average about 75 percent of those for men. The assumed ultimate rates are attained by 2020.

Under alternative I, each age-specific labor force participation rate was raised initially from its alternative II level by one percentage point for women and by one-half point for men. However, to be consistent with the fact that the assumed fertility rates for alternative I are higher than for alternative II, the labor force participation rates for women of child-bearing age were then reduced, each age separately, by the percentage point increase in the age-specific fertility rate. This resulted in an overall increase in the ultimate age-sex adjusted labor force participation rate for alternative I of 0.3 percentage points above that for alternative II. A similar procedure was used in deriving the assumed labor force participation rates under alternative III, resulting in an ultimate age-sex adjusted rate which was essentially unchanged from that projected for alternative II.

Under all three alternatives, coverage rates for women are projected to increase substantially for all ages over 15, thereby reflecting the projected increase in labor force participation of women. Under alternative II, coverage rates for men are projected to increase slightly for most age groups, except that small decreases are projected for ages 50-59 and for ages 70 and over. Under alternative I, coverage rates for men increase for all age groups except that very small decreases are projected for ages 50-54 and for ages 70 and over. The greatest increases are projected for men under 35. Under alternative III, coverage rates for men increase slightly for all age groups except that no change or small decreases are projected for ages 40-44, 50-59 and 70 and over. The aggregate ultimate coverage rate under alternative I is projected to be one percentage point higher than the aggregate rate under alternative II, while the corresponding rate under alternative III is projected to be one percentage point higher than the aggregate rate under alternative II, while the corresponding rate under alternative III is projected to be one percentage point lower than the rate under alternative II.

Under all three alternatives, ultimate coverage rates for persons aged 60-69 are projected to increase over present coverage rates. This represents a reversal of the historical trend toward earlier retirement. This reversal was projected because of an expected preference of more older workers to stay on the job, since mandatory retirement for persons under age 70 is now prohibited (Public Law 95-256) and because the health of older persons is expected to continue to improve. Т

For men aged 60-69, the ultimate coverage rates are projected to increase by 3 percent, 2 percent and 1 percent under alternatives I, II and III, respectively. The corresponding increases for women are 11 percent, 9 percent and 9 percent.

# Taxable payroll

The taxable payroll is defined as that amount which, when multiplied by the combined employer-employee tax rate, yields the total amount of taxes paid by employers, employees and the self-employed. Expenditures, when expressed as a percentage of taxable payroll, can be compared directly to the combined employer-employee tax rate to determine whether the system is operating at a surplus or deficit.

In practice, the taxable payroll is calculated as a weighted average of the earnings on which employers, employees and the self-employed persons are taxed, where the weighting is done to take into account the lower tax rates on self-employment income, on tips and on multiple-employer "excess wages" as compared with the combined employer-employee rate. For the period 1980–1990, the amounts of earnings for employers, employees and the self-employed were projected separately. After 1990, the amounts of earnings taxable for employers, employees and the self-employed were each assumed to increase at the compound rate of the estimated increases in covered workers and in average wages in covered employment.

Expenditures of the OASDI system are expressed as a percentage of gross national product as an additional way to measure the cost of the program. A long-range projection of the relationship between taxable payroll and GNP was developed in order to express the cost in this form.

The assumed ratios of taxable payroll to GNP for alternatives I. II and III are presented in appendix table C. These ratios were determined by applying a series of factors to the assumed ratio of total employee compensation in the economy to GNP. The ratio of total employee compensation in the economy to GNP was used as the initial point because it is a measure of the share of output going to workers. This ratio is also a convenient starting point because it has changed slowly over time and can be expected to remain fairly constant. Total employee compensation in the economy was related to taxable payroll by a series of five linkages which adjust for various differences in the two measures. The five linkages adjust total employee compensation by removing supplements to wages and salaries, removing wages and salaries earned in noncovered employment, removing wages and salaries earned above the taxable base, including covered selfemployment income and adjusting for the lower effective contribution rates on self-employment income, on tips and on multiple-employer "excess wages."

The ratio of taxable payroll to GNP has risen since 1960 due in part to the increases made to the contribution and benefit base. The longrange trend, however, is more likely to be downward due to an increase in fringe benefits, both public and private, which are not included in taxable payroll.

APPENDIX TABLE C.—RATIO OF TAXABLE PAYROLL TO GROSS NATIONAL PRODUCT UNDER ALTERNATIVES I.
II AND III, CALENDAR YEARS 1960-2050

Calendar year	Ratio of taxable payroll to gross national product		
	Pi	ast experience	
1960		. 396 . 351 . 412 . 424 . 439 e experience, by altern	ativa
		II	
	. 441 . 450 . 434 . 421 . 408 . 395 . 383 . 371	. 441 . 433 . 420 . 404 . 389 . 374 . 361 . 347	. 444 . 418 . 394 . 375 . 358 . 358 . 341 . 326 . 311

Note: Alternatives I, II and III and taxable payroll are described in the text of this report.

# Insured population

There are three types of insured statuses under the OASDI program: fully, currently and disability insured. Fully insured status is required of an aged worker for his eligibility for a primary retirement benefit and for his dependents' eligibility for secondary benefits. Fully insured status is also required of a deceased worker for his survivors' eligibility for benefits (with the exception of child survivors and parents of eligible child survivors, who may alternatively be eligible if the deceased worker had currently insured status). Disability-insured status, which is more restrictive than fully insured status, is required of a disabled worker for his eligibility for a primary benefit and for his dependents' eligibility for secondary benefits.

Projections of the percentage of the population that is fully insured were made by age and sex based on recent experience and projected coverage rates. Under all three sets of assumptions, the ultimate levels are projected to be 95 percent for aged men and 85 percent for aged women. Currently insured status was disregarded in the cost projection because the number of cases in which eligibility for benefits is based solely on currently insured status is relatively small. Projections of the percentage of the population who are disability-insured were developed from the percentages fully insured using projections of historical trends relating the two. Finally, the fully insured and disabilityinsured populations were developed from the projected total population by applying the percentages fully insured and disability-insured. I

The fully insured population by age and sex was further subdivided by marital status, in a manner consistent with the division of the total population by marital status. For males, it was assumed that the probability of being fully insured would not vary by marital status. For females, the probability of being fully insured was assumed to vary by marital status as follows: (1) single and divorced wonen were assumed to be more likely to be fully insured than married women or widowed women, but less likely to be fully insured than men, and (2) widowed women. The relative difference between a widowed women's probability of being fully insured and a married woman's probability of being fully insured was assumed to decrease through time, reflecting the projected large increase in labor force participation among married women.

# Old-Age and survivors insurance beneficiaries

Several types of benefits, at different benefit levels, are payable under the OASI program. Hence, the numbers of beneficiaries were projected by type of benefit.

The projected numbers of retired-worker beneficiaries were based on the projected aged fully insured population. The percentages, by age and sex, of the insured population that were receiving benefits at the beginning of 1980 were projected to increase gradually on the basis of past trends (after adjustments for changes in the earnings test, in the mandatory retirement age and in the level of unemployment). The proportions of retired-worker beneficiaries to aged population show gradual increases in the implicit retirement rates.

The number of wife beneficiaries aged 62 and over of male retiredworker beneficiaries was estimated from the population projection by marital and insured status. All uninsured wives aged 62 and over, excluding those having husbands not receiving retired-worker benefits, those withheld according to the retirement test and those eligible for a government pension from earnings in noncovered employment, were assumed to receive benefits. The number of husband beneficiaries aged 62 and over of female retired-worker beneficiaries was estimated in an analogous manner.

The projected numbers of child beneficiaries of retired-worker beneficiaries were based on projected ratios of the number of such child beneficiaries to the number of retired workers by sex of worker. The method of projecting these ratios reflected the fertility assumptions.

The number of young-wife beneficiaries was estimated by extrapolating the base year ratio of the number of such beneficiaries to the estimated number of child beneficiares of male retired-worker beneficiaries. The extrapolation reflects projected fertility and female labor force participation. Young-husband beneficiaries were not taken into account because of the negligible cost involved. The numbers of paternal, maternal and full orphans under age 22 in the United States were estimated from the projected population at those ages by applying age-specific probabilities 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 child-survivor beneficiaries was estimated from the number of orphans by adjusting to include eligible disabled orphans aged 18 and over and to eliminate orphans of uninsured deceased parents. For nondisabled children aged 18-21, a further reduction was made to exclude those not attending school.

The number of mother beneficiaries was estimated by a method similar to the one used to estimate the number of young-wife beneficiaries, i.e., extrapolating the present ratio of such beneficiaries to child-survivor beneficiaries (excluding those nondisabled children aged 18-21 who were attending school). The number of father beneficiaries was estimated in an analogous manner.

The number of widow beneficiaries aged 60 and over was estimated from the population by marital and insured status. All uninsured widows aged 60 and over, excluding those whose deceased husbands were not fully insured, those withheld according to the retirement test and those eligible for a government pension from earnings in noncovered employment, were assumed to receive benefits. In addition, some insured widows who had not applied for retired-worker benefits were assumed to receive widow benefits. The number of widower beneficiaries was estimated in an analogous manner.

The number of parent beneficiaries was projected on the basis of the past trend in the number of such beneficiaries. A decrease was assumed from 15,000 at the beginning of 1980 to an ultimate level of 7,000 in 1995.

Appendix table D shows the estimated numbers of beneficiaries under the OASI program.

Included among the beneficiaries who receive retired-worker benefits are some persons who also receive residual benefits consisting of the excess of any potential secondary benefits over their own retiredworker benefit. Estimates of the number of such residual payments were made separately for wives, widows, husbands, and widowers. Residual payments to other beneficiaries were not taken into account because of the negligible cost involved.

#### APPENDIX TABLE D.-OASI BENEFICIARIES WITH MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS AS OF JUNE 30 UNDER ALTERNATIVES I, II AND III, 1960-2055

		vorkers and by type of b		Surv	ivors, by t	ype of bene	fit	
Year	Worker	Wife- husband	Child	Mother- father	Child	Widow- widower	Parent	Total
1960	7, 813	2, 224 2, 601	260	388	1, 549	1, 471	35	13, 740
1965	10, 843	2, 601	429	472	1, 900	2, 228	36	18, 509
1970	13, 066	2,651	535	514	2, 673	3, 151	29	22, 618
1975	16, 210	2, 836	633	568	2, 905 2, 911	3, 823	22	26, 998
1976	16, 789	2,867	638	576	2, 911	3, 939	21	27,740
1977	17, 380 17, 924	2, 899 2, 942 2, 966	670 662	573	2, 843 2, 800	4,042	19	28, 428
1978 1979	17, 924	2, 942	651	569 567	2, 800	4, 147 4, 260	18 17	29, 062 29, 789
Alternative I:	10, 330	2, 500	031	507	2,733	4, 200	17	23,103
1980	19, 293	2, 993	638	566	2, 645	4, 354	15	30, 504
1985	22, 406	3, 089	610	534	2, 354	4,668	10	33, 671
1990	25, 420	3, 133	604	514	2, 198	4, 776	ĨŘ	36, 653
1995	26, 929	3, 157	595	587	2, 313	4, 723	7	38, 311
2000	28, 056	3, 065	622	632	2,461	4,617	7	39, 460
2005	29, 736	2, 999	684	6 <b>39</b>	2, 551	4, 501	7	41, 117
2010	33, 013	3, 045	818	634	2, 591	4, 453	7	44, 561
2015	38, 048	3, 155	985	639	2, 653	4, 452	2	49, 939
2020	44, 165	3, 227	1, 137	647	2, 761	4, 491	7	56, 435
2025	50, 128	3, 259	1, 245	651	2, 888	4, 537	1	62, 715
2030	53, 874	3, 179	1, 252	661	3,008	4, 552	7	66, 533
2035	55, 113 54, 577	3, 012	1, 213 1, 162	683 713	3, 100 3, 201	4, 527 4, 449	4	67, 655 66, 926
2040 2045	54, 377	2, 817 2, 756	1, 187	746	3, 201 3, 336	4, 339	7 7 7 7	66, 852
2050	55, 773	2, 832	1, 269	773	3, 330	4, 335	4	68, 474
2055	57, 990	2, 972	1, 351	798	3, 619	4, 315	÷	71,052
A ternative II:	07, 350	2, 372	1,001	750	0,010	4, 515	•	
1980	19, 295	2, 993	638	566	2.645	4, 355	15	30, 507
1985	22, 504	3, 104	610	529	2, 645 2, 333	4, 721	ĪÕ	33, 811
1990	25, 714	3, 176	603	494	2, 113	4, 934	8	37,042
1995	27, 777	3, 270	602	548	2,139	4, 823	7	39, 166
2000	29, 333	3, 219	615	567	2, 173	4, 761	7	40, 675
2005	31, 472	3, 196	662	556	2, 157 2, 112	4,671	7	42, 721
2010	35, 235	3, 281	771	541	2, 112	4, 649	7	46, 596
2015	40, 814	3, 422	909	535	2,085	4, 650	777	52, 422
2020	47, 566	3, 528	1,043	527	2, 098 2, 121 2, 131	4,687	4	59, 456
2025	54, 263 58, 773	3, 595	1, 137 1, 148	516	2, 121	4, 713 4, 726	777	66, 352 70, 841
2030	60.735	3, 546 3, 411	1, 115	510 509	2, 131	4, 746	7	72,652
2035	60, 847	3, 222	1, 073	514	2, 129 2, 124	4, 684	÷	72, 471
2045	61, 100	3, 147	1,073	518	2, 139	4,645	777	72, 643
2050	62, 218	3, 172	1, 137	519	2, 157	4, 547	ż	73, 757
2055	63, 550	3, 254	i, 171	517	2, 169	4, 478	ż	75, 146
Alternative III :	-	-,	-,		,	.,		
1980	19, 299	2, 994	638	566	2, 644	4, 355	15	30, 511
1985	22, 659	3, 130	610	520	2, 295	4, 837	10	34, 061
1990	26, 256	3, 256	602	462	1,973	5, 250	8	37, 807
1995	29, 338	3, 495	614	487	1, 879	5, 015	8 7 7	40, 835
2000	31, 733	3, 536	606	469	1,763	5,044	4	43, 158
2005	34, 806	3, 585	622	437	1,618	5,029	7 7 7 7 7 7 7 7 7	46, 104 50, 948
2010	39, 547	3,743	687	415	1, 484 1, 377	5,065 5,114	4	50, 948
2015	46, 189	3, 953 4, 143	778 872	399 382	1, 377	5, 114	4	66, 049
2020 2025	54, 177 62, 301	4, 143	943	360	1, 251	5, 159	÷	74, 310
2025	68, 310	4, 280	950	336	1, 251	5, 190	÷	80, 257
2035	71, 757	4, 280	922	316	1, 110	5, 233	ż	83, 544
2040	73, 296	4, 038	891	303	1,049	5, 241	7	84, 825
2045	74, 594	3, 965	893	287	998	5, 239	7	85, 983
							-	00'040
2050	75, 635	3, 902	897	270	952	5,186	7	86, 849

[In thousands]

Note: Alternatives I, II and III are described in the text of this report.

#### Disability insurance beneficiaries

The number of disabled-worker beneficiaries was projected from the exposed population, which was developed from the disabilityinsured population by removing those persons already entitled to disabled-worker benefits. The number of newly entitled beneficiaries was developed from the exposed population by applying disability incidence rates. To obtain the number of currently entitled beneficiaries, termination rates were applied to the population consisting of the newly entitled beneficiaries and those already currently entitled.

The incidence rates were projected by age, sex and year of exposure to disability. They were based on average annual rates for the period 1970-78, updated to reflect the aggregate disability benefit award experience through calendar year 1979. The projected rates were adjusted to reflect changes in the methods of calculating benefits as required by the 1977 amendments and by the Disability Amendments of 1980. Although disability awards declined by more than 10 percent during 1979, age-sex specific incidence rates were assumed to increase over the period 1980-1999 to a level about 16 percent higher than the average for 1978-79 and to remain constant thereafter. This represents a gradual increase to a level about 3 percent below the average disability incidence rate experienced during the 1970's.

The termination rates were projected by age, sex and duration of entitlement. The mortality rates used in the projection were those experienced by disabled-worker beneficiaries during 1975–78. The recovery rates were those of the same period increased by 20 percent to include the effect of the Disability Amendments of 1980. The termination rates were assumed to remain constant in the future. All disability benefits were assumed to terminate at age 65 (when retiredworker benefits become payable).

The number of children entitled to benefits under the DI program was projected as a proportion of the number of disabled-worker beneficiaries, by sex, based on recent experience and allowing for projected changes in fertility.

The number of young-wife beneficiaries was projected as a proportion of the number of child beneficiaries of male disabled-worker beneficiaries, based on recent experience and allowing for projected changes in fertility and female labor force participation. The number of young-husband beneficiaries was projected in an analogous manner.

The number of aged wife beneficiaries was projected as a proportion of the number of male disabled-worker beneficiaries. The number of aged husband beneficiaries was projected in an analogous manner.

Appendix table E shows the projected number of beneficiaries in the DI program.

# 69

# APPENDIX TABLE E.—DI BENEFICIARIES WITH MONTHLY BENEFITS IN CURRENT-PAYMENT STATUS AS OF JUNE 30 UNDER ALTERNATIVES 1, II AND III, 1960–2055

[In thousands]

	D	ependents of dis	abled workers	
Year	Disabled workers	Wives and husbands	Children	Tota
60	371	56	94	52:
65	944	187	518	1, 64
70	1, 436	271	861	2, 56
	2, 363	429	1, 333	4, 12
75	2,602	468	1, 462	4, 53
76	2, 755	482	1, 496	4, 73
77	2, 858	491	1, 512	4, 86
78	2, 877	483	1, 466	4, 82
79	2,011	465	1, 400	4, 02
ernative I:	2, 865	471	1, 412	4, 74
1980		421	1, 256	4, 57
1985	2, 899			
1990	3, 025	421	1,240	4,68
1995	3, 240	507	1, 228	4, 97
2000	3, 666	547	1, 404	5, 61
2005	4, 214	605	1, 625	6, 44
2010	4, 703	667	1, 846	7, 21
2015	4, 987	702	2,028	7, 71
2020	5, 056	710	2, 165	7,93
2025	4, 914	700	2, 193	7, 80
2030	4, 738	683	2, 132	7, 55
2035	4, 775	693	2, 124	7, 59
2040	5,024	725	2, 208	7, 95
2045	5, 367	771	2, 369	8, 50
	5, 620	807	2, 503	8, 93
2050	5, 795	835	2, 586	9, 21
2055	5,755	000	2, 300	5, 41
ernative II:	2 900	471	1. 413	4, 75
1980	2, 866		1, 295	4,72
1985	2, 991	435		
1990	3, 313	460	1, 358	5, 13
1995	3, 622	567	1, 309	5, 49
2000	4, 192	625	1, 471	6, 28
2005	4, 881	699	1,661	7,24
2010	5, 479	771	1, 843	8, 09
2015	5, 824	807	1, 986	8, 61
2020	5, 899	812	2,088	8, 79
2025	5,708	796	2,087	8, 59
2030	5, 454	766	1,996	8,21
2035	5, 410	763	1,950	8, 12
2040	5, 560	779	1, 984	8, 32
2045	5, 756	804	2,067	8, 62
2050	5, 829	815	2, 113	8,75
	5, 828	817	2, 114	8,75
2055	5, 620	017	-, '	-,
ernative III:	2, 868	471	1,414	4, 75
1980	3, 087	449	1, 337	4, 87
1985	3,607	502	1, 479	5, 58
1990				5, 98
1995	4,017	626	1, 345 1, 433	6, 87
2000	4, 736	703		
2005	5, 571	795	1, 521	7,88
2010	6, 282	876	1, 592	8,75
2015	6, 684	905	1, 641	9, 23
2020	6, 752	900	1,676	9, 32
	6, 483	870	1, 627	8, 98
2025		822	1, 509	8, 43
2025	6, 101			
2030	6, 101 5, 904	793	1, 428	
2030 2035	5, 904		1, 428 1, 402	8, 01
2030 2035 2040	5, 904 5, 833	793 776		8, 01
2030	5, 904 5, 833 5, 705	793 776 758	1, 402 1, 389	8, 12 8, 01 7, 85 7, 48
2030 2035 2040	5, 904 5, 833	793 776	1, 402	8,01 7,85

Note: Alternatives I, II and III are described in the text of this report.

#### AVERAGE WAGES AND INFLATION

Future increases in the Consumer Price Index (CPI) and in average wages will directly affect the OASDI program through the automatic adjustment provisions in the law. These provisions require that benefit payments be adjusted to reflect increases in the CPI and that the benefit formula, the taxable earnings base, the exempt amount in the retirement test and the amount required for a quarter of coverage be adjusted to reflect increases in average wages.

The alternative II ultimate real-wage differential of 1.75 percent was based on projections of productivity gains and consideration of the factors linking productivity gains and the real wage differential. Since 1951, annual increases in productivity have averaged 2.3 percent, while the real wage differential has averaged 1.5 percent. This difference of roughly 0.8 percent results from changes in such factors as the average number of hours worked per year, the degree to which employees share in productivity gains and the proportion of employee compensation reflected in wages. The ultimate annual increase in productivity is assumed to be 2.4 percent and the adjustment from the above mentioned factors is assumed to be 0.75 percent, thereby yielding an ultimate real-wage differential of 1.75 percent (to the nearest ¼ percent). The ultimate real-wage differentials for alternatives I and III were assumed to be 2.25 percent and 1.25 percent, respectively. The ultimate real-wage differentials are projected to be essentially attained by the year 1995.

For alternative II, the CPI was assumed to increase ultimately at an annual rate of 4 percent, which is slightly higher than the 3.8 percent average over the last 30 years. This level was selected because the historical trend indicates a tendency for the rate of increase in the CPI to rise slowly with time. The current outlook does not suggest a reversal of this trend, although the recent high rates of increase in the CPI are not expected to continue over the long range. The ultimate increases in the average annual CPI under alternatives I and III of 3 percent and 6 percent, respectively, were chosen so as to include a reasonable range of possible values.

The ultimate increases in average annual wages in covered employment were assumed to be 5.25 percent, 5.75 percent and 7.25 percent, for alternatives I, II, and III, respectively. These were obtained by adding the corresponding annual percentage increases in the CPI to the assumed percentage increase in real wages for each alternative.

## Average benefits

Future increases in the amount of the average retired-worker benefit awarded were projected by simulating the automatic benefit adjustment provisions and calculating future benefits for workers at various earnings levels. Future increases in the average male retired-worker benefit in current-payment status were projected on the basis of the distribution of current beneficiaries by year of award, their average awarded benefits and the increase in their benefits since the year of award. The average benefits for all other persons receiving monthly benefits from the OASI trust fund (except young survivors, female reitired workers and recipients of residual payments to wives, widows, husbands and widowers) were projected to increase at the same rate as the average male retired-worker benefit. The average benefits for young survivors were projected to increase at a slightly slower rate than the rate of increase in the average male retired-worker benefit. The average retired-worker benefit for women was projected to increase at a faster rate than for men, while the average residual benefit for women was projected to increase at a slower rate. The average benefits for all persons receiving monthly benefits from the DI trust fund were assumed to increase at the same rate as the average disabled-worker benefit, which was projected n a manner similar to that of the average male retired-worker benefit.

#### Benefit payments

For each category of beneficiary, monthly benefit payments were calculated as the product of the number of beneficiaries and the corresponding average benefit. These amounts were then adjusted to include retroactive payments to newly awarded beneficiaries. Retroactive payments result from delays between the date of filing for benefits and the date of first payment as well as from a provision in the law which allows a beneficiary to receive up to 12 months' benefits retroactively from the date of initial entitlement to benefits, on the condition that benefits are not thereby permanently reduced for early retirement.

Lump-sum death payments were calculated as the product of the number of such payments (which was projected by applying the assumed mortality rates to the projected fully insured population) and the amount of the lump-sum death payment (\$255).

### Administrative expenses

The projection of administrative expenses through 1990 was based on assumed increases in average wages, increases in the CPI and increases in the number of beneficiaries. For the years after 1990, administrative expenses were assumed to increase at the compounded rate of the estimated increases in the number of beneficiaries and in average wages in covered employment.

#### Railroad retirement financial interchange

The effect of the financial interchange with the railroad retirement program was evaluated on the basis of trends similar to those used in estimating the cost of the OASDI benefits. The resulting effect was an average annual long-range cost to the OASDI system of 0.01 percent of taxable payroll.

# Reimbursement for noncontributory credits

Reimbursement from the general fund of the Treasury for noncontributory credits for military service has not been reflected in the cost estimates. The reduction of cost resulting from such reimbursement is estimated to be about 0.05 percent of taxable payroll currently, and to decrease as a percentage of taxable payroll until about 2015, after which it is negligible.

Reimbursement from the general fund of the Treasury for special benefits to certain persons aged 72 and over has not been reflected in the cost estimates. The reduction in cost resulting from such reimbursement is estimated to be 0.01 percent of taxable payroll currently, and to decrease to a negligible amount after 1984.

# SENSITIVITY OF COST ESTIMATES TO CHANGES IN SELECTED INDIVIDUAL ASSUMPTIONS

# Mortality

Appendix table F shows the estimated average expenditure under alternative II with various assumptions about the future improvement in mortality. Those assumptions are that mortality will improve during the period 1979–2050 from the level experienced in 1979 by about 19 percent (as in alternative I), 34 percent (as in alternative II) and 56 percent (as in alternative III). Mortality is assumed to continue improving after 2050.

#### APPENDIX TABLE F.—ESTIMATED AVERAGE EXPENDITURE OF OASDI SYSTEM UNDER ALTERNATIVE II WITH VARIOUS MORTALITY ASSUMPTIONS

	Mortality improvement <sup>1</sup>				
Calendar years	19 percent	34 percent	56 percent		
1980-2004	10. 50	10, 66	10.97		
2005-29	12.94 15.73	13.57	14.70		
1980–2054	13.05	16.98 13.74	19.49 15.05		

#### [As percent of taxable payrol]]

<sup>1</sup> The mortality improvement is the ratio of the age-adjusted death rate in the year 2050 to that in 1979. Mortality i<sup>3</sup> asumed to continue improving after 2050.

Note: Alternative II and taxable payroll are described in the text of this report.

Over the medium-range period, the estimated average expenditure increases with increasing mortality improvement from 10.57 percent of taxable payroll (for 19 percent mortality improvement) to 10.95 percent of taxable payroll (for 56 percent improvement). Over the long-range period, a similar but more pronounced trend exists. The estimated long-range average varies from 13.08 percent of taxable payroll (for 19 percent mortality improvement) to 15.05 percent of taxable payroll (for 56 percent improvement).

The estimated average expenditure increases with increasing improvement in mortality because of the relationship between age and mortality. Any mortality improvement in the population over age 65, where mortality rates are the highest, extends the length of time that retirement benefits are paid. Between ages 50 and 65, mortality improvement results in relatively more tax contributions, but this gain in revenues to the system is more than offset by the resulting increase in benefits payable to the additional new retirees at age 65. At ages 20 through 50, mortality rates are so low that even substantial improvement in the rates would not result in significant increases in the number of covered workers paying social security taxes. Mortality improvement at ages under 20 has relatively little long term effect on the relationship between expenditures and income. Consequently, the net effect of mortality improvement is to increase expenditures more than taxable income, thereby resulting in higher costs as percent of taxable payroll.

# Total fertility rate

Appendix table G shows the estimated average expenditure under alternative II with various ultimate total fertility rate assumptions. Those assumptions are: 1.5 (as in alternative III), 2.1 (as in alternative II) and 2.5 children per woman (as in alternative I). The rates are assumed to change gradually from their current levels and to reach their ultimate values in 2005.

·	Ultimate total fertility rate 1				
Calendar years	1.5	2. 1	2. 5		
980–2004	10.67	10.66	10.65		
105–29	14.78	13.57	12.89		
30–54	22.25	16.98	14.54		
180–2054	15.90	13.74	12.70		

[As percent of taxable payrol]]

<sup>1</sup> The total fertility rate for a given year is the number of children a woman would have during her lifetime if she were to experience the age-specific birth rates observed in that year and were to survive the entire child-bearing period. Ultimate rates are assumed to be attained by 2005.

Note: Alternative II and taxable payroll are described in the text of this report.

Over the medium-range period, the estimated average expenditure is nearly identical under the three fertility assumptions, varying only from 10.67 percent of taxable payroll (for 1.5 children per woman) to 10.65 percent of taxable payroll (for 2.5 children per woman). The long-range estimated average expenditure varies from 15.90 percent of taxable payroll (for 1.5 children per woman) to 12.70 percent of taxable payroll (for 2.5 children per woman).

During the medium-range period, changes in fertility affect the working population only slightly and contribute a relatively unimportant number of additional child beneficiaries. Hence the program cost is affected only slightly. Later in the 75-year period, however, under higher fertility the labor force increases more than the beneficiary population, so that the estimated average long-range expenditure as a percentage of taxable payroll decreases with increasing fertility.

#### Disability

Appendix table H shows the estimated average expenditure under alternative II with various disability incidence assumptions. Those assumptions are that the ultimate disability incidence rates by age and sex will differ from the corresponding average rates of 1978–79 as follows: they will be about 1 percent lower (as in alternative I), 16 percent higher (as in alternative II) and 34 percent higher (as in alternative III). The rates are assumed to change gradually from their current levels and to reach their ultimate values initially in 1999.

APPENDIX TABLE H.—ESTIMATED AVERAGE EXPENDITURE OF OASDI SYSTEM UNDER ALTERNATIVE II WITH VARIOUS DISABILITY INCIDENCE ASSUMPTIONS

[As percent of taxable payrol
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Calendar years	Disabil	ity incidence increase	<b>,</b> 1
	-1 percent	16 percent	34 percent
1980-2004 2005-29	10.56 13.34 16.76	10. 66 13. 57 16. 98	10.76 13.80 17.20
1980–2054	13.55	13, 74	13.92

<sup>1</sup> The disability incidence increase is based on the ratio of the age-sex adjusted incidence rate in 1999 and later to the average age-sex adjusted incidence rate during 1978–79.

Note: Alternative II and taxable payroll are described in the text of this report.

Over the medium-range period, the estimated average expenditure varies with changing disability incidence from 10.56 percent of taxable payroll (for 1 percent decrease) to 10.76 percent of taxable payroll (for 34 percent increase). Over the long-range period, it varies from 13.55 percent of taxable payroll (for 1 percent decrease) to 13.92 percent of taxable payroll (for 34 percent increase).

# Consumer Price Index

Appendix table I shows the estimated average expenditure under alternative II with various CPI assumptions. These assumptions are that the ultimate annual CPI increase will be 2 percent, 3 percent (as in alternative I), 4 percent (as in alternative II), 5 percent and 6 percent (as in alternative III). In each case the ultimate real-wage differential is assumed to be  $1\frac{3}{4}$  percent, yielding ultimate percentage increases in average annual wages of  $3\frac{3}{4}$ ,  $4\frac{3}{4}$ ,  $5\frac{3}{4}$ ,  $6\frac{3}{4}$  and  $7\frac{3}{4}$  percent, respectively. The annual CPI increase is assumed to change gradually from its current level and to reach its ultimate value in 2003.

APPENDIX TABLE I.—ESTIMATED AVERAGE EXPENDITURE OF OASDI SYSTEM UNDER ALTERNATIVE II WITH VARIOUS CONSUMER PRICE INDEX ASSUMPTIONS

Calendar years	U	ages-CPI 1			
	33⁄4-2	43⁄4-3	53⁄4-4	63⁄4-5	73/4-6
1980–2004	10. 82 13. 98 17. 60 14. 13	10. 75 13. 78 17. 29 13. 94	10. 66 13. 57 16. 98 13. 74	10. 57 13. 37 16. 68 13. 54	10. 48 13. 16 16. 36 13. 34

[As percent of taxable payroll]

<sup>1</sup> The first value in each pair is the assumed annual percentage increase in average wages after 2002. The second value is the assumed annual percentage increase in CPI after 2002. The assumptions used in earlier years gradually reflect the ultimate values.

Note: Alternative II and taxable payroll are described in the text of this report.

Over both the medium-range and long-range periods, the estimated average expenditure as a percentage of taxable payroll decreases as the assumed rate of change in the CPI increases. Over the medium-range, the estimated average expenditure varies from 10.82 percent of taxable payroll (assuming an ultimate rate of increase in the CPI of 2 percent) to 10.48 percent of taxable payroll (assuming an ultimate rate of 6 percent). Over the long-range, it varies from 14.13 percent of taxable payroll to 13.34 percent of taxable payroll.

The relationship described above results primarily from the time lag between the effect on income and on benefit expenditures. When assuming a higher rate of increase in the CPI (in conjunction with a constant real-wage differential), the effect on income of the implied higher rate of increase in wages is experienced immediately, while the effect on benefits of the higher rate of increase in the CPI is experienced with about a half-year lag. In addition, the earliest effect on benefits of the higher rate of increase in wages is experienced with about a 2-year lag.

# Real wage differential

Appendix table J shows the estimated average expenditure under alternative II with various real-wage assumptions. These assumptions are that the ultimate real-wage differential will be 1<sup>'</sup>/<sub>4</sub> percent (as in alternative III),  $1\frac{3}{4}$  percent (as in alternative II) and  $2\frac{1}{4}$  percent (as in alternative I). In each case the ultimate annual CPI increase is assumed to be 4 percent, yielding ultimate percentage increases in average annual wages of  $5\frac{1}{4}$  percent,  $5\frac{3}{4}$  percent and  $6\frac{1}{4}$  percent, respectively. The real-wage differential is assumed to change gradually from its current level and to reach its ultimate value in 2003.

APPENDIX TABLE J.—ESTIMATED AVERAGE EXPENDITURE OF OASDI SYSTEM UNDER ALTERNATIVE II WITH VARIOUS REAL WAGE ASSUMPTIONS

	Ultimate percentage increase in wages-CPI 1				
Calendar years	51/4-4	53⁄4-4	6}4-4		
1980-2004	10. 99	10.66	10.35		
2005–29	14. 24 17. 93	13.57 16.98	12.94 16.09		
1980-2054	14. 38	13.74	13. 13		

[As percent o	f taxab	le payroll]
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<sup>1</sup> The first value in each pair is the assumed annual percentage increase in average wages after 2002. The second value is the assumed annual percentage increase in CPI after 2002. The difference between the two values is the real wage differential. The assumptions used in earlier years gradually reflect the ultimate values.

Note: Alternative II and taxable payroll are described in the text of this report.

Over the medium-range period, the estimated average expenditure decreases from 10.99 percent of taxable payroll (assuming a 1¼ percent real-wage differential) to 10.35 percent of taxable payroll (assuming a 2¼ percent differential). Over the long-range period, it decreases from 14.38 percent of taxable payroll to 13.13 percent of taxable payroll.

The average expenditure decreases with increasing real-wage differentials for two reasons. One is that there is a lag between the time when a worker makes contributions based on the assumed higher earnings and the time when he draws benefits based on those higher earnings. The other is that the benefits to those already eligible—benefits which increase according to the increase in the CPI, not wages—are smaller relative to the payrolls based on the higher real-wage differentials.

# Appendix B.—Determination and Announcement of Social Security Benefit Increases <sup>1</sup>

I hereby determine and announce a cost-of-living increase of 9.9 percent in benefits under titles II and XVI of the Social Security Act.

Under title II, old-age, survivors and disability insurance benefits will increase by 9.9 percent beginning with the June 1979 benefits which are payable on July 3, 1979. This increase is based on the authority contained in section 215(i) of the Social Security Act (42 U.S.C. 415(i)), as amended by section 201 of Pub. L. 95-216 enacted December 20, 1977.

Under title XVI, supplemental security income payment levels will increase by 9.9 percent effective for payments made on June 29, 1979. This is based on the authority contained in section 1617 of the Social Security Act (42 U.S.C. 1382f).

### TITLE II BENEFITS

Title II benefits are payable under the Federal old-age, survivors and disability insurance program. Individuals entitled under this program include insured workers, wives, husbands, children, widows, widowers, mothers, fathers and parents.

In accordance with section 215(i)(4) of the Social Security Act (the Act), the primary insurance amounts and the maximum family benefits shown in columns IV and V of the revised benefit table (table 1) set forth below were obtained by increasing by 9.9 percent of the corresponding amounts established by: (1) the last cost-of-living increase and (2) the extension of the benefit table made under section 215(i)(4) and published on November 16, 1978 at FR 53504. The table applies only to those persons who attained age 62, became disabled, or died before January 1979 and is deemed to appear in section 215(a) of the Act. Note that this table does not apply to those individuals who become eligible for retirement benefits, become disabled, or die after 1978; for persons first becoming eligible for benefits in 1979, benefits will generally be determined by a new benefit formula provided by the Social Security Amendments of 1977 (Pub. L. 95-216), and will also be increased by 9.9 percent beginning with the June 1979 benefits.

Section 215(i)(2)(D) of the Act also requires that, when the Secretary determines a cost-of-living increase in social security benefits, he shall publish in the Federal Register a revision of the range of the primary insurance amounts, and corresponding maximum family benefits, based on the dollar amount and other provisions described in section 215(a)(1)(C)(i)(II). These benefits are referred to as "special minimum benefits;" and are payable to certain individuals with long periods of relatively low earnings. In accordance with section 215(a)(1)(C)(i)(II), the attached table 2 shows the revised range of primary insurance amounts and corresponding maximum family benefit amounts after the 9.9 percent benefit increase.

<sup>&</sup>lt;sup>1</sup> This statement, edited for presentation here, was published in the Federal Register for May 15, 1979 (Vol. 44, No. 95, pp. 28423-29).

Section 227 of the Act provides limited benefits to a worker, who became age 72 before 1969 and was not insured under the usual requirements, and to his wife or widow. Section 228 of the Act provides similar benefits at age 72 for certain uninsured persons. The current monthly benefit amounts of \$83.70 and \$41.90 established under sections 227 and 228, respectively, of the Act are increased by 9.9 percent to obtain the new amounts of \$92.00 and \$46.10.

#### TITLE XVI BENEFITS

Section 1617 of the Act provides that whenever title II benefits are increased under section 215(i), the amounts in sections 1611(a)(1)(A), 1611(a)(2)(A) and 1611(b) of the Act and in section 211(a)(1)(A) of Pub. L. 93-66 shall be increased. The new amounts are effective for months after the month in which the title II increase is effective. The percentage increase is the same as the title II benefit increase and the annual payment amount is rounded, when not a multiple of \$1.20, to the next higher multiple of \$1.20.

In accordance with section 1617, Federal Supplemental Security Income (SSI) guarantees for the aged, blind and disabled are increased effective with July 1979 by 9.9 percent. The current Federal SSI guarantees of \$2,272.80 and \$3,409.20 per year are thereby increased to \$2,498.40 and \$3,747.60 respectively. The actual monthly payment received by the individual is the Federal SSI guarantee less any countable income. The actual monthly payment received by the individual is one-twelfth of the annual SSI guarantee, less any countable income assigned to that month. The current Federal SSI guarantee amount of \$1,137.60 per year to essential persons under section 211(a)(1)(A) of Pub. L. 93-66 is also increased by 9.9 percent to obtain a new amount of \$1,250.40.

#### AUTOMATIC BENEFIT INCREASE DETERMINATION

Section 215(i) of the 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 is due. Section 215(i) of the Act also specifies the formula for determining the amount of any cost-of-living increase in benefits. This formula utilizes the Consumer Price Index for urban wage earners and clerical workers reported by the Department of Labor.

Section 215(i)(2)(A) of the Act requires the Secretary to determine each year, whether there is a cost-of-living computation quarter in that year. If he so determines, he shall, effective with June of that year, increase benefits for individuals entitled under section 227 and 228 of the Act, and shall increase the primary insurance amounts of all other individuals entitled under title II of the Act, subject to the limitations provided in section 215(i)(2)(A) of the Act. The percentage increase is equal to the percentage increase in the Consumer Price Index for the cost-of-living computation quarter over the index for the most recent 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. Section 215(i)(1) 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 the index in the later of (1) the last prior cost-of-living computation quarter or (2) the most recent calendar quarter in which a general benefit increase was effective. It is specified, however, that there shall be no cost-of-living computation quarter in any calendar year if, in the prior year, a general benefit increase was enacted or becomes effective. Section 215(i)(1) of the Act also provides that the Consumer Price Index for a cost-for-living computation quarter shall be the arithmetical mean of such index for the 3 months in that quarter.

The Department of Labor's revised Consumer Price Index for urban wage earners and clerical workers for each month in the quarter ending March 31, 1978, was: for January 1978, 187.1; for February 1978, 188.4; for March 1978, 189.7. The arithmetical mean for that calendar quarter was 188.4. The corresponding Consumer Price Index for each month in the quarter ending March 31, 1979, was: for January 1979, 204.7; for February 1979, 207.1; for March 1979, 209.3. The arithmetical mean for this calendar quarter is 207.0. The increase for the calendar quarter ending March 31, 1979, is 9.9 percent. Thus, since the percentage of increase in the Consumer Price Index from the calendar quarter ending March 31, 1978, to the calendar quarter ending March 31, 1979, is not less than 3 percent, the quarter ending March 31, 1979, is a cost-of-living computation quarter. Consequently, a cost-of-living benefit increase of 9.9 percent is effective for benefits under title II of the Act beginning June 1979.

(Catalog of Federal Domestic Assistance Programs Nos. 13.802-5, and 13.807 Social Security Programs.) Dated: May 8, 1979.

HALE CHAMPION,

Acting Secretary of Health, Education, and We fare.

(The revised tables of benefits which were published at the end of the above announcement in the Federal Register are not reproduced here because of their length.)