SOCIAL SECURITY AREA POPULATION PROJECTIONS 1991

ACTUARIAL STUDY NO. 106

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FOREWORD

Actuarial Study No. 106 describes the population projections that underlie the long-range cost estimates for the Old-Age, Survivors, and Disability Insurance (OASDI) program, which are included in the 1991 Report of the OASDI Board of Trustees to Congress.

The population projections presented in this study differ from those published by the Bureau of the Census. The projections prepared by the Bureau of the Census are generally for only the United States including armed forces overseas. Those presented here include Puerto Rico, Guam, American Samoa, the Northern Mariana Islands, the Virgin Islands, and other U.S. citizens living abroad. In addition, the assumptions used by the Bureau of the Census in making population projections are generally not the same as the assumptions used by the Office of the Actuary.

The reader should also be aware that the historical populations referenced in this study include geographical regions and population subgroups that vary through time. Therefore, the historical populations for one particular year may not be consistent with those for an earlier or later year.

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I. INTRODUCTION

Each year, estimates of future income and expenditures of the Old-Age and Survivors Insurance and Disability Insurance (OASDI) program are presented to the Congress in the Annual Report of the Board of Trustees. These estimates provide fundamental financial guidelines in the policymaking process for the OASDI program.

The initial step in the estimating process is to project the number of people in the geographical areas covered by OASDI for each of the next 75 years. This study provides details about the population projections used in preparing the 1991 Annual Report of the OASDI Board of Trustees. The population projections were also used in estimating the future financial status of the Hospital Insurance (HI) program as described in the 1991 Annual Report of the HI Board of Trustees. The population projections described in this study supersede those published in Actuarial Study Number 105, which were used in the preparation of the 1989 Annual Reports. These new projections start from an estimate of the January 1, 1989 population; reflect more recent data on fertility, mortality, immigration, marriage, and divorce; and revise the projections of mortality, fertility, immigration, divorce, and marriage. Considerably more detail than is published here is available from the Office of the Actuary, upon request.

Because eligibility for many categories of OASDI benefits depends on marital status, the population is projected by marital status, as well as by age and sex. The projections start from a recent estimate of the population in the Social Security Area by age, sex, and marital status and from a recent estimate of existing marriages by age of husband and age of wife. Three separate projections, denoted alternatives I, II, and III, are developed by analyzing historical data and making three different sets of assumptions about future net immigration, birth rates, death rates, and marriage rates.

Alternative II, also referred to as the intermediate projection, is based on assumptions that are thought to be the most likely to occur among the three sets presented. Alternative I is designated as optimistic because among the three projections the assumptions selected produce the most favorable financial effect for the OASDI program. Similarly, the assumptions chosen for alternative III, designated pessimistic, produce the most unfavorable financial effect. Alternatives I and III are designed to give policymakers a sense of the variation in the financial projections that might occur if the intermediate assumptions are not realized.

II. STARTING POPULATION

The starting population for the projections was the estimated population in the Social Security Area as of January 1, 1989, by single year of age, sex, and marital status. Table 1 shows this starting population by age group, sex, and marital status.

Table 1.—January 1, 1989 Population in the Social Security Area by Age Group, Sex, and Marital Status
[In thousands]

Age group	Total	Male					Female				
		Total	Single	Married	Widowed	Divorced	Total	Single	Married	Widowed	Divorced
0-4	19,509	9,986	9,986	0	0	0	9,523	9,523	0	0	0
5-9	18,915	9,679	9,679	0	0	0	9,235	9,235	0	0	0
10-14	17,324	8,872	8,871	0	0	0	8,452	8,449	3	0	0
15-19	18,463	9,440	9,302	129	2	8	9,023	8,576	420	10	17
20-24	19,835	10,093	7,826	2,115	6	146	9,742	6,097	3,333	15	296
25-29	22,832	11,632	5,454	5,587	5	587	11,200	3,309	6,954	37	900
30-34	22,698	11,548	3,101	7,462	26	960	11,150	1,896	7,978	78	1,198
35-39	20,162	10,178	1,659	7,362	37	1,119	9,984	990	7,550	136	1,309
40-44	17,189	8,610	790	6,697	54	1,069	8,580	545	6,434	279	1,322
45-49	13,842	6,891	545	5,435	79	832	6,951	406	5,209	301	1,035
50-54	11,622	5,737	403	4,583	115	636	5,885	313	4,356	417	798
55-59	11,090	5,389	344	4,382	145	519	5,701	267	4,008	804	621
60-64	11,116	5,254	311	4,282	237	425	5,862	257	3,843	1,247	515
65-69	10,042	4,606	254	3,704	365	283	5,435	241	3,124	1,704	366
70-74	8,028	3,469	177	2,706	419	166	4,559	218	2,159	1,950	232
75-79	6,009	2,367	112	1,764	411	79	3,643	208	1,228	2,089	118
80-84	3,858	1,333	60	921	317	35	2,525	155	596	1,709	65
85-89	2,077	605	27	328	235	15	1,472	91	261	1,082	38
90-94	835	206	9	76	116	5	629	39	75	499	16
95+	256	55	2	10	41	1	201	12	11	172	5
0-19	74,212	37,978	37,840	129	2	8	36,233	35,783	423	10	17
20-64	150,387	75,333	20,433	47,904	704	6,292	75,054	14,080	49,665	3,313	7,995
65+	31,104	12,640	642	9,509	1,904	585	18,464	965	7,454	9,205	840
20-65	152,512	76,319	20,489	48,700	771	6,358	76,193	14,130	50,352	3,631	8,080
20-66	154,605	77,285	20,543	49,479	843	6,420	77,320	14,180	51,015	3,965	8,160
20-67	156,668	78,235	20,595	50,243	919	6,478	78,433	14,229	51,653	4,316	8,235
20-68	158,642	79,135	20,644	50,965	996	6,531	79,507	14,277	52,254	4,673	8,303
20-69	160,428	79,939	20,687	51,608	1,069	6,575	80,489	14,321	52,789	5,017	8,362
Total	255,702	125,951	58,915	57,542	2,610	6,885	129,751	50,828	57,542	12,528	8,853

Because the most complete data were available as of July 1, the population as of January 1, 1989 was interpolated from estimates of the Social Security Area population as of July 1, 1988, and July 1, 1989. For some of the components, estimates were not available as of July 1, 1989, and in these cases, the July 1, 1989 population estimates were assumed equal to the July 1, 1988 estimates. The components of the Social Security Area and the total estimated population of each component (in thousands) as of the above July 1 dates are as follows:

	July 1	
	1988	1989
Residents of the fifty States and D.C. and armed forces overseas	246,334	248,759
Adjustment for net census undercount	3,389	3,724
Civilian residents of Puerto Rico	3,287	3,287
Civilian residents of the Virgin Islands	103	103
Civilian residents of Guam	123	123
Civilian residents of American Samoa and N. Mariana Islands	61	61
Federal civilian employees overseas	58	58
Dependents of Armed Forces and Federal employees overseas	442	442
Crew members of merchant vessels	11	11
Other citizens overseas	525	525
Total	254,333	257,093

The estimates of the number of residents of the fifty States and D.C. and Armed Forces overseas as of the above July 1 dates by sex for single years of age through 84, and for the group aged 85 or older were obtained from *Current Population Reports,* Series P-25, No. 1057, published by the Bureau of the Census. The numbers of persons in the other components of the Social Security Area as of the above July 1 dates were estimated by sex for single years of age through 84, and for the group aged 85 or older from data of varying detail. The adjustment for net census undercount was estimated using data published in *Current Population Reports,* Series P-25, No. 1057. The numbers of civilian residents of Puerto Rico, the Virgin Islands, Guam, and American Samoa were estimated from data obtained from the Bureau of the Census. The numbers of Federal civilian employees overseas, dependents of these Federal civilian employees, and dependents of Armed Forces overseas were based on estimates used by the Bureau of Census. The number of crew members of merchant vessels was estimated from data obtained from the Maritime Administration. The number of other citizens overseas covered by Social Security was estimated from data supplied by the Department of State. The overlap among the components, believed to be small, was ignored.

The July 1, 1988 and July 1, 1989 Social Security Area population estimates by sex for single years of age through 84, and for the group aged 85 or older were then interpolated to obtain the starting population as of January 1, 1989. Data from the Medicare program was used to distribute the starting population aged 85 or older into single years of age.

The distribution of the starting population by marital status (never married, currently married, currently widowed, and currently divorced) was estimated by age and sex from data published by the Bureau of the Census in *Current Population Reports,* Series P-20, No. 445. The distribution of the number of marriages in the starting population by age of husband crossed with age of wife was estimated from data published by the Bureau of the Census in the 1980 *Census of Population,* Subject Report on Marital Status No. PC80-2-4C. The 1980 census distribution was adjusted to represent January 1, 1989 by an iterative proration method designed to assure consistency with the previously estimated number of marriages by age and sex in the starting population. Table 2 shows the number of marriages in the starting population by age group of husband crossed with age group of wife.

Table 2.—January 1, 1989 Existing Marriages in the Social Security Area by Age of Husband and Wife
[In thousands]

	Age group of wife															
Age group of husband	Total	14-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
14-19	129	83	36	4	1	1	1	1	1	1	0	0	0	0	0	0
20-24	2,115	271	1,481	296	43	12	4	2	2	1	1	1	0	0	0	0
25-29	5,587	51	1,412	3,488	514	82	22	8	4	2	1	2	1	1	0	0
30-34	7,462	10	293	2,473	4,011	529	105	26	7	3	2	1	1	1	0	0
35-39	7,362	3	72	496	2,621	3,574	471	90	21	6	3	2	1	1	0	0
40-44	6,697	2	23	132	565	2,569	2,918	383	75	18	6	3	1	1	0	0
45-49	5,435	1	7	38	141	534	2,137	2,180	305	60	19	8	3	2	1	0
50-54	4,583	1	3	14	48	154	527	1,767	1,664	288	77	27	9	3	1	1
55-59	4,382	0	2	7	20	58	162	516	1,565	1,560	354	95	30	9	2	1
60-64	4,282	0	1	3	8	24	59	162	504	1,452	1,563	378	96	24	5	2
65-69	3,704	0	1	2	4	9	20	51	146	450	1,324	1,300	308	71	14	6
70-74	2,706	0	0	1	1	3	7	16	44	123	370	962	918	207	36	17
75-79	1,764	0	0	0	1	1	2	5	14	35	96	274	625	551	105	54
80-84	921	0	0	0	0	0	0	1	2	6	16	43	107	241	311	192
85+	414	0	0	0	0	0	0	1	2	4	10	27	61	116	121	73
Total	57,542	423	3,333	6,954	7,978	7,550	6,434	5,209	4,356	4,008	3,843	3,124	2,159	1,228	596	347

III. ANALYSIS AND PROJECTION OF COMPONENTS OF POPULATION CHANGE

In attempting to estimate net immigration and numbers of births, deaths, marriages, and divorces in future years, it is instructive to review and analyze historical trends. Since the actual numbers of births, deaths, marriages, and divorces depend on the size of the population, it is better to analyze them as rates rather than as absolute numbers. A rate is defined as the ratio of the number of occurrences of an event during a year to the midyear population having the potential to experience the event. Because death rates vary significantly by sex, they are calculated for males and females separately. Because rates of birth, death, marriage, and divorce vary greatly by age, they are calculated on an age-specific basis (each age or age group separately) rather than on a crude basis (all ages combined).

Although calculating the rates on an age-specific basis improves accuracy, it also yields a vast number of figures for each year. Thus, to study trends through time, it becomes helpful, if not necessary, to use a single statistic that summarizes the age-specific rates for each year. A summarizing statistic is described in this section for each component of population change.

A. Fertility

Age-specific birth rates are defined as the births during the year to mothers at the specified age divided by the midyear female population at that age. Birth rates for women at each age 14 through 49 were obtained from the National Center for Health Statistics for each year 1917 through 1988. To summarize the fertility experience for a single year, total fertility rates were used. The total fertility rate is a simple sum of the age-specific birth rates applicable during the year. Thus the total fertility rate can be interpreted as the number of children that would be born to a woman if she were to survive her childbearing years and were to experience those age-specific birth rates throughout her childbearing years. Table 3 and Chart 1 give past and projected total fertility rates by alternative.

Table 3.—Total Fertility Rates by Calendar Year and Alternative

[Per thousand women]

Calendar year	Total fertility rate
1920	3,263.3
1921	3,326.2
1922	3,109.4
1923	3,101.2
1924	3,120.7
1925	3,011.6
1926	2,900.7
1927	2,824.3
1928	2,659.8
1929	2,532.0
1930	2,532.5
1931	2,401.7
1932	2,318.6
1933	2,172.0
1934	2,232.0
1935	2,188.7
1936	2,145.6
1937	2,173.3
1938	2,221.7
1939	2,171.7
1940	2,229.0
1941	2,331.5
1942	2,554.8

Table 3.—Total Fertility Rates by Calendar Year and Alternative —Continued

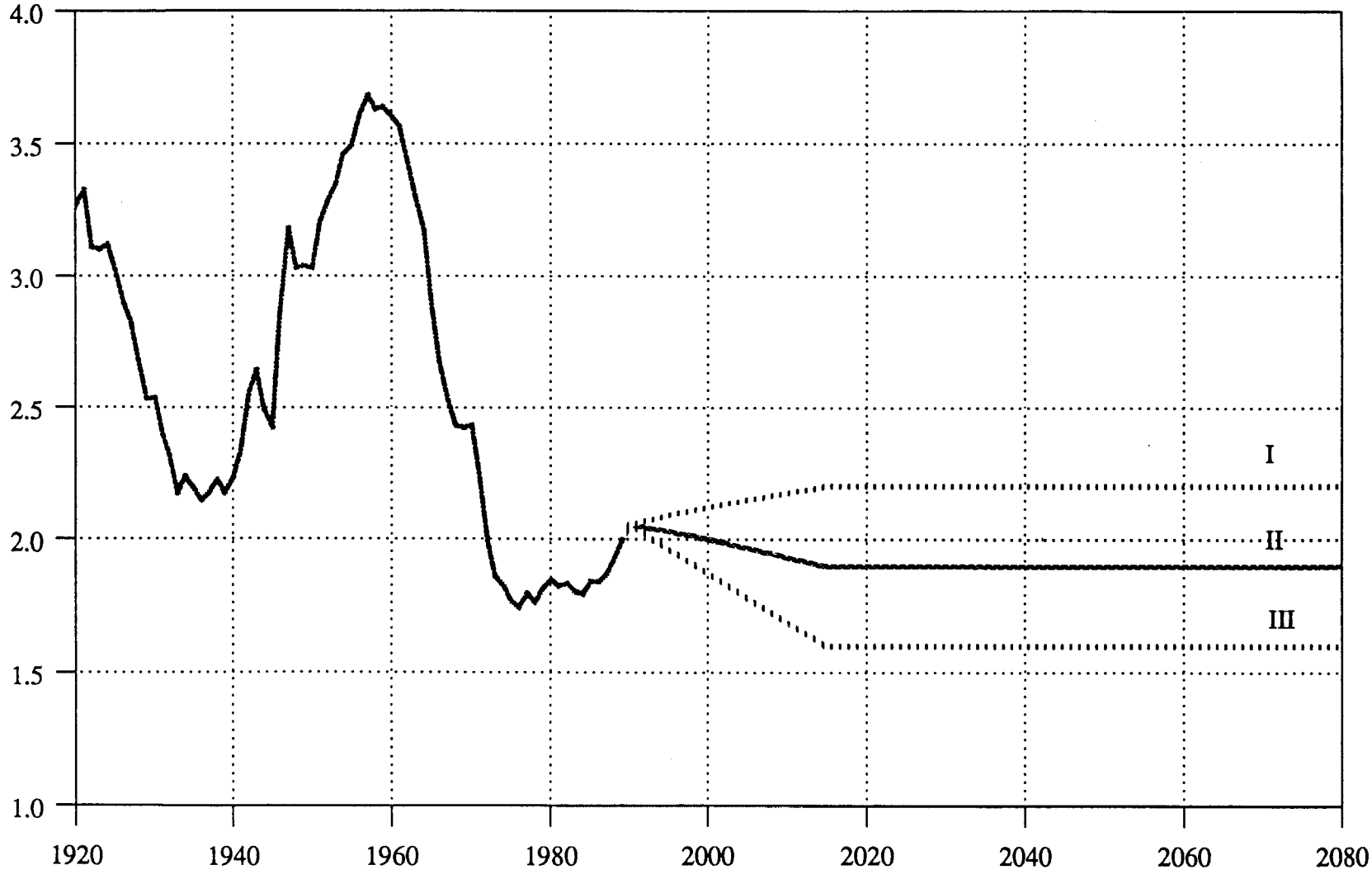
[Per thousand women]

Calendar year	Total fertility rate		
1943	2,640.2		
1944	2,494.5		
1945	2,421.8		
1946	2,857.9		
1947	3,181.2		
1948	3,026.2		
1949	3,036.2		
1950	3,028.0		
1951	3,199.1		
1952	3,286.5		
1953	3,349.4		
1954	3,461.2		
1955	3,498.3		
1956	3,604.7		
1957	3,682.4		
1958	3,628.9		
1959	3,638.2		
1960	3,605.7		
1961	3,563.9		
1962	3,423.3		
1963	3,297.8		
1964	3,170.9		
1965	2,881.6		
1966	2,670.4		
1967	2,525.5		
1968	2,431.0		
1969	2,422.9		
1970	2,431.7		
1971	2,245.4		
1972	1,993.6		
1973	1,862.5		
1974	1,824.4		
1975	1,770.3		
1976	1,744.8		
1977	1,795.0		
1978	1,764.4		
1979	1,816.7		
1980	1,849.0		
1981	1,825.4		
1982	1,834.7		
1983	1,805.3		
1984	1,796.4		
1985	1,839.6		
1986	1,838.8		
1987	1,869.9		
1988	1,925.7		
1989	1,996.6		
1990	2,051.8		
	Alternative I	Alternative II	Alternative III
1991	2,060.0	2,047.7	2,033.7
1992	2,067.8	2,043.3	2,015.8
1993	2,075.4	2,038.5	1,998.0
1994	2,082.6	2,033.6	1,980.3
1995	2,089.5	2,028.4	1,962.5
1996	2,096.1	2,023.1	1,944.5
1997	2,102.6	2,017.6	1,926.5
1998	2,108.9	2,012.0	1,908.5
1999	2,114.8	2,006.1	1,890.5
2000	2,120.6	2,000.1	1,872.5
2001	2,126.3	1,993.8	1,854.6
2002	2,132.0	1,987.5	1,836.3
2003	2,137.5	1,981.1	1,818.0
2004	2,142.9	1,974.5	1,799.6
2005	2,148.2	1,967.9	1,781.1
2006	2,153.5	1,961.2	1,762.6
2007	2,158.8	1,954.4	1,744.3
2008	2,164.1	1,947.6	1,725.9
2009	2,169.3	1,940.8	1,707.6
2010	2,174.4	1,934.0	1,689.3
2011	2,179.5	1,927.1	1,671.1
2012	2,184.7	1,920.2	1,653.0
2013	2,189.7	1,913.4	1,635.1
2014	2,194.9	1,906.7	1,617.4
2015	2,200.0	1,900.0	1,600.0

Chart 1 - Total Fertility Rate

(in Children per Woman) 1920-2080

Actual and Projected by Alternative



As a first step in projecting fertility, it is instructive to examine the recent history of fertility in the United States. During the period 1917 to 1925, the total fertility rate was more than three children per woman. During the period 1924 to 1933 the total fertility rate declined from 3.1 children per woman to 2.2, and then remained level at 2.1 to 2.2 children per woman through 1940. After 1940, the total fertility rate once again began to rise, reaching a peak of 3.7 in 1957. This period of high fertility was followed by a period of low fertility beginning in the mid-1970's. In one decade, from 1962 to 1972, the total fertility rate declined from 3.4 to 2.0 children per woman. The total fertility rate reached a low of 1.74 in 1976. Since then, the total fertility rate was 1.8 children per woman until 1987 when it began to increase substantially. The estimated total fertility rates for 1989 and 1990 are 2.00 and 2.05, respectively.

On average, the total fertility rate is expected to be 1.9. The total fertility rate is not expected to return to the high levels of the 1940's, the 1950's, and early 1960's. Several changes in our society have occurred during the past 20 years which have contributed to reducing the number of children being born. Some of these changes are increased availability and use of birth control methods, increased female participation in the labor force, increased prevalence of divorce, increased postponement of marriage and childbearing among young women, and the shift in the perception of the status of children within their families from economic assets to economic liabilities. No significant reversal of these changes is anticipated. Recent birth expectation surveys, such as that published by the Bureau of the Census in the *Current Population Reports,* Series P-20, No. 436, show birth expectations in the neighborhood of 2.0-2.1 children per woman. However, when comparing past birth expectation surveys with actual experience, birth expectations have tended to be higher. Single women and childless married women who were surveyed have consistently had fewer births than they expected (see, "Assessing Birth Expectations from Current Population Survey: 1971-1981" by Martin O'Connell and Carolyn Rogers in *Demography,* August, 1983). Taking into account all these factors, an ultimate total fertility rate of 1.9 children per woman was selected as the intermediate (alternative II) assumption for the 1991 Report of the Board of Trustees.

To help in selecting ultimate rates for alternatives I and III, an examination of the recent total fertility rates in other nations is useful. A comparison of the total fertility rates for the most recent calendar year prior to 1987 for which data was available as listed in the *Demographic Yearbook, 1987,* for the U.S., Canada, and fifteen countries in Western Europe revealed a range of 2.5 in Ireland to 1.4 in West Germany. The U.S., Greece, Sweden, and the United Kingdom shared the third highest ranking with 1.8. Ireland was the only country to have a total fertility rate equal to or over 2.2 and ten countries had a total fertility rate equal to or under 1.6. For reasons already cited, we do not believe that the total fertility rate for the U.S. will return to a level as high as 2.5 for any sustained period, and have selected 2.2 as the optimistic (alternative I) assumption. It is plausible that the total fertility rate could be as low as 1.6 children per woman over a long period of time. Thus, we have selected 1.6 as the pessimistic (alternative III) assumption. The ultimate total fertility rate for each alternative was assumed to be first reached in calendar year 2015. The ultimate values selected for the 1991 Trustees Report are slightly higher than those used by the Bureau of the Census in its latest series of population projections, published in *Current Population Reports,* Series P-25, No. 1018. The Bureau of the Census used a range of 1.5 to 2.2, with an intermediate assumption of 1.8.

Total fertility rates for 1989 and 1990 were estimated from provision al data published by the National Center for Health Statistics in *Monthly Vital Statistics Reports,* Volumes 38 and 39. Between 1990 and 2015, the age-specific birth rates were projected separately for each cohort of women such that the completed cohort fertility rate would gradually approach the assumed ultimate total fertility rate. Table 4 gives the assumed age-specific birth rates by alternative for selected calendar years.

Table 4.—Central Birth Rates by Age, Calendar Year, and Alternative

[Per thousand women]

Alternative and age	Calendar year									
	1986	1987	1988	1989	1990	1995	2000	2005	2010	2015
Alternative I :										
14	6.5	6.8	7.2	7.5	7.7	7.7	7.7	7.7	7.7	7.7
15	16.7	17.4	18.4	19.1	19.6	19.6	19.6	19.6	19.9	20.1
16	31.3	32.0	33.6	34.8	35.8	36.3	36.8	37.3	37.8	38.3
17	50.8	50.7	52.7	54.6	56.2	56.7	57.2	57.7	58.2	58.8
18	71.6	71.3	73.4	76.1	78.2	79.2	80.2	81.2	82.2	83.2
19	88.5	88.2	90.3	93.6	96.2	97.3	98.3	99.3	100.5	101.8
20	100.0	100.3	102.5	106.3	109.2	110.7	112.2	113.7	115.2	116.7
21	105.4	106.2	108.9	112.9	116.0	117.6	119.1	120.6	122.1	123.6
22	109.0	110.1	112.4	116.6	119.8	121.5	123.0	124.5	126.0	127.5
23	111.6	112.3	114.9	119.1	122.4	124.3	125.8	127.3	128.8	130.3
24	113.3	113.8	116.4	120.7	124.0	126.0	127.5	129.0	130.5	132.0
25	113.9	114.6	117.0	121.3	124.7	126.9	128.5	130.0	131.5	133.0
26	113.1	114.2	116.6	120.9	124.2	126.5	128.2	129.7	131.2	132.7
27	110.0	111.8	114.3	118.5	121.8	124.1	125.9	127.4	128.9	130.4
28	105.2	107.3	110.0	114.1	117.2	119.6	121.4	122.9	124.4	125.9
29	98.6	100.5	103.4	107.2	110.2	112.6	114.5	116.0	117.5	119.0
30	90.1	91.9	94.4	97.9	100.6	102.9	104.7	106.2	107.7	109.2
31	79.9	81.9	84.3	87.4	89.8	91.8	93.5	94.8	95.8	96.8
32	69.1	71.2	73.5	76.2	78.3	80.3	81.8	83.0	84.0	85.0
33	58.8	60.9	63.4	65.7	67.6	69.2	70.7	71.7	72.7	73.7
34	48.9	51.0	53.4	55.4	56.9	58.4	59.7	60.7	61.5	62.0
35	39.8	41.8	43.8	45.4	46.7	48.0	49.0	50.0	50.5	51.0
36	31.4	33.2	35.1	36.4	37.4	38.4	39.4	40.1	40.6	41.1
37	23.5	25.3	26.9	27.9	28.7	29.7	30.2	30.7	31.2	31.7
38	17.4	18.5	20.1	20.8	21.4	22.0	22.5	23.0	23.5	24.0
39	12.6	13.2	14.3	14.8	15.2	15.7	16.2	16.7	17.1	17.1
40	8.6	9.1	9.8	10.2	10.4	10.9	11.4	11.8	11.8	11.8
41	5.8	6.2	6.4	6.6	6.8	6.8	6.8	6.8	6.8	6.8
42	3.5	3.8	4.1	4.3	4.4	4.4	4.4	4.4	4.4	4.4
43	1.9	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3
44	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4
45	.7	.8	.6	.6	.6	.6	.6	.6	.6	.6
46	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
47	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Alternative II :										
14	6.5	6.8	7.2	7.5	7.7	7.7	7.7	7.7	7.7	7.7
15	16.7	17.4	18.4	19.1	19.6	19.1	18.6	18.1	17.6	17.3
16	31.3	32.0	33.6	34.8	35.8	35.3	34.8	34.3	33.8	33.3
17	50.8	50.7	52.7	54.6	56.2	55.2	54.2	53.2	52.2	51.3
18	71.6	71.3	73.4	76.1	78.2	76.7	75.2	73.7	72.2	70.9
19	88.5	88.2	90.3	93.6	96.2	94.7	93.2	91.7	90.2	88.7
20	100.0	100.3	102.5	106.3	109.2	107.3	105.3	103.3	101.3	99.3
21	105.4	106.2	108.9	112.9	116.0	114.1	112.1	110.1	108.1	106.1
22	109.0	110.1	112.4	116.6	119.8	118.0	116.0	114.0	112.0	110.0
23	111.6	112.3	114.9	119.1	122.4	120.6	118.6	116.6	114.6	112.6
24	113.3	113.8	116.4	120.7	124.0	122.3	120.3	118.3	116.3	114.3
25	113.9	114.6	117.0	121.3	124.7	123.2	121.2	119.2	117.2	115.2
26	113.1	114.2	116.6	120.9	124.2	122.9	120.9	118.9	116.9	114.9
27	110.0	111.8	114.3	118.5	121.8	120.6	118.8	116.8	114.8	112.8
28	105.2	107.3	110.0	114.1	117.2	116.1	114.4	112.4	110.4	108.4
29	98.6	100.5	103.4	107.2	110.2	109.4	108.0	106.0	104.0	102.0
30	90.1	91.9	94.4	97.9	100.6	100.0	98.8	97.3	95.8	94.3
31	79.9	81.9	84.3	87.4	89.8	89.3	88.4	86.9	85.4	83.9
32	69.1	71.2	73.5	76.2	78.3	77.8	77.1	75.9	74.4	72.9
33	58.8	60.9	63.4	65.7	67.6	67.1	66.6	65.6	64.6	63.6
34	48.9	51.0	53.4	55.4	56.9	56.4	55.9	55.2	54.2	53.2
35	39.8	41.8	43.8	45.4	46.7	46.2	45.7	45.2	44.3	43.3
36	31.4	33.2	35.1	36.4	37.4	37.1	37.0	36.5	36.0	35.5
37	23.5	25.3	26.9	27.9	28.7	28.7	28.7	28.4	27.9	27.4
38	17.4	18.5	20.1	20.8	21.4	21.4	21.4	21.4	20.9	20.4
39	12.6	13.2	14.3	14.8	15.2	15.2	15.2	15.2	15.2	14.7

Table 4.—Central Birth Rates by Age, Calendar Year, and Alternative —Continued
[Per thousand women]

Alternative and age	Calendar year									
	1986	1987	1988	1989	1990	1995	2000	2005	2010	2015
Alternative II : (Cont.)										
40	8.6	9.1	9.8	10.2	10.4	10.4	10.4	10.4	10.4	10.4
41	5.8	6.2	6.4	6.6	6.8	6.8	6.8	6.8	6.8	6.8
42	3.5	3.8	4.1	4.3	4.4	4.4	4.4	4.4	4.4	4.4
43	1.9	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3
44	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4
45	.7	.8	.6	.6	.6	.6	.6	.6	.6	.6
46	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
47	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Alternative III :										
14	6.5	6.8	7.2	7.5	7.7	7.2	6.7	6.2	5.7	5.6
15	16.7	17.4	18.4	19.1	19.6	18.6	17.6	16.6	15.6	14.9
16	31.3	32.0	33.6	34.8	35.8	33.9	32.4	30.5	28.9	27.7
17	50.8	50.7	52.7	54.6	56.2	53.3	50.8	48.2	45.6	43.4
18	71.6	71.3	73.4	76.1	78.2	74.2	70.5	66.8	63.0	59.8
19	88.5	88.2	90.3	93.6	96.2	91.6	87.1	82.6	78.1	73.9
20	100.0	100.3	102.5	106.3	109.2	103.7	98.7	93.7	88.7	83.8
21	105.4	106.2	108.9	112.9	116.0	110.5	105.0	99.5	94.0	88.7
22	109.0	110.1	112.4	116.6	119.8	114.2	108.7	103.2	97.7	92.2
23	111.6	112.3	114.9	119.1	122.4	116.8	111.0	105.5	100.0	94.5
24	113.3	113.8	116.4	120.7	124.0	118.5	112.6	107.1	101.6	96.1
25	113.9	114.6	117.0	121.3	124.7	119.4	113.4	107.9	102.4	96.9
26	113.1	114.2	116.6	120.9	124.2	119.0	113.2	107.7	102.2	96.7
27	110.0	111.8	114.3	118.5	121.8	117.0	111.5	106.0	100.5	95.0
28	105.2	107.3	110.0	114.1	117.2	112.6	107.4	102.1	97.1	92.1
29	98.6	100.5	103.4	107.2	110.2	106.1	101.4	96.4	91.4	86.4
30	90.1	91.9	94.4	97.9	100.6	97.0	92.8	88.3	83.8	79.3
31	79.9	81.9	84.3	87.4	89.8	86.6	83.0	79.0	75.0	71.0
32	69.1	71.2	73.5	76.2	78.3	75.3	72.3	68.8	65.3	61.8
33	58.8	60.9	63.4	65.7	67.6	65.1	62.6	59.7	56.7	53.7
34	48.9	51.0	53.4	55.4	56.9	54.7	52.7	50.3	47.8	45.3
35	39.8	41.8	43.8	45.4	46.7	44.8	43.3	41.4	39.4	37.4
36	31.4	33.2	35.1	36.4	37.4	35.8	34.3	32.8	31.3	29.8
37	23.5	25.3	26.9	27.9	28.7	27.4	26.4	25.4	24.4	23.4
38	17.4	18.5	20.1	20.8	21.4	20.4	19.6	18.9	17.9	16.9
39	12.6	13.2	14.3	14.8	15.2	14.4	13.9	13.4	12.9	12.4
40	8.6	9.1	9.8	10.2	10.4	9.8	9.3	8.8	8.3	7.8
41	5.8	6.2	6.4	6.6	6.8	6.3	6.0	6.0	5.7	5.2
42	3.5	3.8	4.1	4.3	4.4	4.0	4.0	4.0	4.0	4.0
43	1.9	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.2
44	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4
45	.7	.8	.6	.6	.6	.6	.6	.6	.6	.6
46	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
47	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

The central birth rate is the ratio of the number of births during the year to mothers at the tabulated age to the midyear female population at that age.

B. Mortality

Death rates (generally referred to as *central* death rates) are defined as the number of deaths during the year divided by the midyear population. These rates were calculated by sex on an age-specific basis for each year 1900 through 1987. To summarize the mortality experience of a single year and to control for changes in the age distribution of the population from year to year, age-adjusted death rates (as shown in Table 5) were calculated as a weighted average of the age-specific death rates. The weights used were the numbers of people in the corresponding age groups of the 1980 U.S. census population. Thus, if the age-adjusted death rate for a particular year and sex is multiplied by the 1980 U.S. census population, the result gives the number of deaths that would have occurred in 1980 for the U.S. census population if the age-specific death rates for that particular year and sex had been experienced. The age-adjusted death rate is, therefore, equivalent to the crude death rate that would have been experienced in the 1980 U.S. census population.

Table 5.—Age-Adjusted Central Death Rates by Sex, Calendar Year, and Alternative
[Per hundred thousand]

Calendar year	Male	Female
1900	2,415.5	2,198.6
1901	2,379.5	2,133.0
1902	2,240.4	1,971.0
1903	2,293.4	2,041.5
1904	2,420.7	2,140.7
1905	2,336.4	2,072.4
1906	2,335.3	2,036.1
1907	2,423.4	2,101.7
1908	2,213.1	1,953.1
1909	2,164.5	1,902.9
1910	2,250.0	1,975.7
1911	2,167.2	1,915.4
1912	2,141.4	1,870.7
1913	2,148.9	1,864.7
1914	2,090.8	1,824.1
1915	2,097.4	1,847.4
1916	2,174.3	1,901.3
1917	2,195.8	1,901.4
1918	2,507.8	2,175.3
1919	1,946.8	1,784.1
1920	1,997.0	1,866.0
1921	1,817.2	1,681.6
1922	1,908.1	1,740.8
1923	1,990.4	1,811.6
1924	1,917.7	1,703.8
1925	1,941.9	1,726.2
1926	2,012.1	1,788.0
1927	1,882.7	1,644.6
1928	2,006.0	1,751.6
1929	1,977.8	1,712.7
1930	1,866.1	1,592.7
1931	1,825.1	1,541.9
1932	1,807.4	1,546.7
1933	1,781.2	1,495.9
1934	1,829.0	1,514.3
1935	1,800.8	1,482.9
1936	1,897.8	1,555.4
1937	1,832.8	1,482.7
1938	1,709.0	1,398.3
1939	1,707.9	1,391.6
1940	1,728.8	1,378.4
1941	1,672.4	1,307.0
1942	1,621.7	1,255.7
1943	1,681.0	1,302.8
1944	1,611.8	1,236.7
1945	1,586.6	1,189.8
1946	1,519.3	1,158.6
1947	1,524.8	1,141.9
1948	1,504.1	1,108.5
1949	1,466.9	1,070.8
1950	1,455.4	1,046.7
1951	1,447.2	1,032.9
1952	1,424.3	1,010.3
1953	1,421.3	995.4
1954	1,353.2	940.8
1955	1,371.1	947.8
1956	1,378.6	942.2
1957	1,405.2	956.2
1958	1,393.4	943.4
1959	1,374.6	920.5
1960	1,396.5	921.6
1961	1,365.0	896.2
1962	1,392.5	909.1
1963	1,425.2	916.3
1964	1,386.9	885.7
1965	1,399.4	879.3
1966	1,408.9	877.9
1967	1,381.5	849.8
1968	1,421.3	854.4
1969	1,385.5	825.2
1970	1,359.5	803.6
1971	1,349.5	796.7
1972	1,352.4	788.7
1973	1,334.7	774.7
1974	1,279.7	743.2
1975	1,237.5	709.1
1976	1,223.3	702.0

Table 5.—Age-Adjusted Central Death Rates by Sex, Calendar Year, and Alternative —Continued
[Per hundred thousand]

Calendar year	Male	Female				
1977	1,194.8	679.9				
1978	1,185.8	677.0				
1979	1,151.1	653.4				
1980	1,165.1	668.1				
1981	1,132.0	650.2				
1982	1,096.4	632.3				
1983	1,105.0	640.1				
1984	1,093.4	637.0				
1985	1,096.4	638.0				
1986	1,084.1	633.8				
1987	1,069.3	629.2				
1988	1,084.2	634.6				
1989	1,022.3	620.9				
	Alternative I		Alternative II		Alternative III	
	Male	Female	Male	Female	Male	Female
1990	1,013.7	618.4	1,014.8	614.0	1,008.9	608.7
1991	1,008.0	616.5	1,007.7	607.4	995.8	597.2
1992	1,001.5	614.5	1,000.9	601.2	984.7	586.5
1993	996.4	612.8	994.1	595.2	975.2	576.6
1994	992.2	611.4	987.3	589.5	967.2	567.5
1995	988.5	610.1	980.3	584.0	960.3	559.1
1996	985.3	609.0	973.1	578.8	954.3	551.3
1997	982.3	608.0	965.6	573.8	948.6	544.1
1998	979.6	607.1	957.8	568.9	942.7	537.3
1999	977.1	606.3	951.3	564.5	946.0	532.2
2000	974.7	605.5	943.6	560.1	946.2	527.2
2005	962.5	600.2	898.9	540.6	881.1	495.9
2010	949.6	592.6	867.9	524.9	795.9	464.5
2015	937.4	584.7	844.7	510.8	746.2	439.7
2020	925.6	577.1	823.4	497.3	712.8	418.3
2025	914.1	569.7	803.1	484.5	684.4	398.5
2030	903.0	562.6	783.6	472.1	657.8	379.8
2035	892.2	555.7	764.9	460.3	632.0	362.1
2040	881.7	549.0	747.0	448.9	607.1	345.3
2045	871.5	542.5	729.8	438.0	583.1	329.4
2050	861.6	536.2	713.3	427.6	560.1	314.4
2055	852.0	530.1	697.4	417.5	538.1	300.2
2060	842.7	524.1	682.2	407.9	517.1	286.8
2065	833.6	518.4	667.5	398.6	497.2	274.1
2070	824.7	512.8	653.4	389.6	478.2	262.1
2075	816.1	507.3	639.9	381.1	460.2	250.7
2080	807.8	502.0	626.8	372.8	443.1	240.0

Note: The age-adjusted central death rate is the weighted average of the age-specific central death rates for a particular sex and year. The weights are the number of people in the corresponding age groups of the 1980 U.S. census population.

An examination of the age-adjusted death rates since 1900 reveal several distinct periods of mortality reduction. During the period 1900 to 1936, annual mortality reduction averaged about 0.8 percent for males and 0.9 percent for females. Following this was a period of rapid reduction, 1936-1954, in which mortality decreased an average of 1.6 percent per year for males and 2.5 percent for females. The period 1954 to 1968 saw an actual increase for males of 0.2 percent per year and a much slower reduction of 0.8 percent per year for females. From 1968 through 1982 rapid reduction in mortality resumed averaging 1.8 percent for males and 2.1 percent for females, annually. From 1982 to 1987, mortality rates have decreased an average of 0.5 percent for males and have roughly stabilized for females. Provisional statistics for 1988 indicate a continuation of the stable trend; whereas, the provisional statistics for 1989 indicate a substantial reduction in mortality from the 1988 rates.

Age-sex-adjusted death rates are often calculated when one is interested in summarizing death rates for both sexes combined. Age-sex-adjusted death rates (as

shown in Table 6) were calculated as a weighted average of the age-sex-specific death rates, where each weight was the number of people in the corresponding age and sex group of the 1980 U.S. census population.

Table 6. Age-Sex-Adjusted Central Death Rates by Calendar Year, and Alternative
[Per hundred thousand]

Calendar year	Age-sex-adjusted death rate
1900	2,295.5
1901	2,243.9
1902	2,090.0
1903	2,154.0
1904	2,265.0
1905	2,190.4
1906	2,172.2
1907	2,249.5
1908	2,072.0
1909	2,021.3
1910	2,101.2
1911	2,030.6
1912	1,994.5
1913	1,994.9
1914	1,945.4
1915	1,960.6
1916	2,026.1
1917	2,035.5
1918	2,328.9
1919	1,856.7
1920	1,923.8
1921	1,742.6
1922	1,816.5
1923	1,893.1
1924	1,799.7
1925	1,822.6
1926	1,888.3
1927	1,750.0
1928	1,864.9
1929	1,830.5
1930	1,713.7
1931	1,666.3
1932	1,661.3
1933	1,621.0
1934	1,653.0
1935	1,622.9
1936	1,707.0
1937	1,637.2
1938	1,535.5
1939	1,531.0
1940	1,532.8
1941	1,467.1
1942	1,417.2
1943	1,469.3
1944	1,403.5
1945	1,366.4
1946	1,318.5
1947	1,310.2
1948	1,282.2
1949	1,244.7
1950	1,225.3
1951	1,214.9
1952	1,193.2
1953	1,183.1
1954	1,122.6
1955	1,134.2
1956	1,133.8
1957	1,153.1
1958	1,140.3
1959	1,119.2
1960	1,128.6
1961	1,099.9
1962	1,118.5
1963	1,135.9
1964	1,102.7
1965	1,103.6
1966	1,107.2
1967	1,079.0
1968	1,097.7
1969	1,065.7
1970	1,041.8

Table 6. Age-Sex-Adjusted Central Death Rates by Calendar Year, and Alternative —Continued
[Per hundred thousand]

Calendar year	Age-sex-adjusted death rate		
1971	1,033.0		
1972	1,029.4		
1973	1,013.5		
1974	972.1		
1975	934.0		
1976	923.2		
1977	898.0		
1978	892.4		
1979	864.2		
1980	878.0		
1981	853.4		
1982	827.8		
1983	835.0		
1984	828.2		
1985	830.0		
1986	822.8		
1987	813.9		
1988	822.6		
1989	790.1		
	Alternative I	Alternative II	Alternative III
1990	784.5	791.7	800.4
1991	780.3	783.7	789.9
1992	775.5	775.4	780.0
1993	771.6	767.9	771.8
1994	768.3	760.9	764.8
1995	765.3	754.2	758.6
1996	762.6	747.6	752.9
1997	760.1	741.1	747.2
1998	757.8	734.6	741.3
1999	755.6	729.0	741.3
2000	753.6	722.8	738.8
2005	743.3	690.7	683.7
2010	732.9	667.8	623.0
2015	723.1	649.8	586.5
2020	713.7	633.2	560.2
2025	704.6	617.2	537.1
2030	695.8	601.9	515.4
2035	687.2	587.3	494.6
2040	678.9	573.2	474.7
2045	670.8	559.8	455.6
2050	663.0	546.8	437.4
2055	655.4	534.4	420.1
2060	648.0	522.5	403.6
2065	640.8	511.0	388.0
2070	633.8	500.0	373.2
2075	627.0	489.3	359.2
2080	620.4	479.1	345.9

Note: The age-sex-adjusted central death rate is the weighted average of the age-sex-specific central death rates for a particular year. The weights are the number of people in the corresponding age and sex groups of the 1980 U.S. census population.

Past reduction in mortality has varied greatly by cause of death. Because it is expected that future reduction in mortality rates will also vary greatly by cause of death, death rates for the years 1968 through 1987 were calculated and analyzed by age group and sex for ten groups of causes of death (based on the Ninth Revision of the International List of Diseases and Causes of Death code numbers). These groups of causes of death are as follows:

I. Diseases of the Heart (390-398, 402, 404-429)
II. Malignant Neoplasms (140-208)
III. Vascular Diseases (400-401, 403, 430-459, 582-583, 587)
IV. Accidents, Suicide, and Homicide (E800-E989)
V. Diseases of the Respiratory System (460-519)
VI. Congenital Malformations and Diseases of Early Infancy (740-779)
VII. Diseases of the Digestive System (520-570, 572-579)
VIII. Diabetes Mellitus (250)
IX. Cirrhosis of the Liver (571)

X. All Other Causes excluding the three categories (042-044) of HTLV-III/LAV infection (AIDS)

For the years 1968-1987, death rates for ages under 65 by age group, sex, and cause of death were calculated using the numbers of deaths as tabulated in *Vital Statistics of the United States* and using the latest census estimates of the resident population as published in the P-25 Series of *Current Population Reports*. For the years 1968 through 1978, an adjustment was made to the distribution of the numbers of deaths among the ten causes. This adjustment was needed in order to reflect the revision in the cause of death coding that occurred in 1979, thereby making the data for the years 1968 through 1978 more comparable with the coding used for the years 1979 and later. The adjustments were based on comparability ratios published by the National Center for Health Statistics in *Monthly Vital Statistics Report*, Volume 28, Number 11. For the ages 65 and over, records of the Medicare program were used to determine rates by age and sex. The numbers of deaths by cause in *Vital Statistics of the United States* were used to distribute the age-sex specific death rates for ages over 65 into age-sex-cause specific death rates. A detailed analysis of Medicare mortality statistics and a comparison to the statistics provided by the National Center for Health Statistics is contained in 'Recent Trends in the Mortality of the Aged' by John C. Wilkin in the *Transactions of the Society of Actuaries*, Volume XXXIII.

Average annual reductions in mortality were determined for the period 1968-1987 by age group, sex, and cause of death. The values, shown in Table 7, were calculated as the complement of the exponential of the slope of the least-squares line through the logarithms of the death rates. The sharpest reductions were in the category of Congenital Malformations and Diseases of Early Infancy and in the category of Vascular Disease, averaging about 4.6 percent per year. Averaging 2 to 2.5 percent average reduction per year were Heart Diseases, Cirrhosis of the Liver, Diabetes Mellitus and Violence. Digestive Diseases averaged about 1.4 percent reduction per year. The categories of Cancer and of Respiratory Disease and the residual group of other Causes (excluding AIDS) averaged an increase of about 0.1 to 1.0 percent per year.

Table 7.—Average Annual Percentage Reductions in Central Death Rates During 1968-87 by Age Group, Sex, and Cause of Death

Sex and age group	Cause of death										
	Total*	Heart disease	Cancer	Vascular disease	Violence	Respiratory disease	Infancy	Digestive disease	Diabetes mellitus	Cirrhosis (liver)	Other**
Male:											
0	4.44	-3.75	2.78	1.36	5.39	11.35	5.17	6.77	7.70	4.33	-2.66
1-4	2.99	-1.96	3.80	6.32	2.50	8.37	2.06	1.29	6.35	6.03	2.61
5-9	3.53	-.48	3.75	6.95	3.34	6.74	4.09	4.09	6.07	7.65	3.18
10-14	2.59	.43	2.84	8.17	2.31	4.56	3.01	5.34	4.93	2.29	2.51
15-19	1.88	.25	2.88	7.29	1.52	5.69	2.72	5.74	5.37	7.10	3.39
20-24	1.72	.61	2.80	6.86	1.39	5.84	2.57	6.30	4.39	4.84	3.30
25-29	1.06	1.12	2.11	5.91	.95	4.38	3.68	5.77	3.91	3.14	1.18
30-34	1.00	2.29	1.58	5.77	1.05	3.20	2.73	4.28	2.95	2.31	.38
35-39	1.88	3.38	1.68	5.55	1.66	4.11	2.68	3.77	2.24	3.10	1.20
40-44	2.45	3.44	1.22	5.39	2.13	4.42	2.78	3.83	1.83	3.65	1.65
45-49	2.58	3.50	.72	5.03	2.42	4.33	3.40	3.75	1.55	3.60	1.62
50-54	2.25	3.11	.07	4.87	2.54	3.52	3.65	2.98	1.84	3.04	1.20
55-59	2.19	3.10	-.12	5.12	2.89	2.88	2.88	3.07	1.78	2.76	1.04
60-64	2.05	2.92	-.23	5.07	3.11	2.14	1.73	2.84	1.98	2.55	.65
65-69	1.59	2.41	-.67	4.86	2.75	1.00	.70	2.40	1.99	1.51	-.09
70-74	1.31	2.09	-.92	4.62	2.13	.06	-.01	1.83	1.99	.29	-1.03
75-79	1.09	1.83	-1.10	4.40	1.65	-.82	-.28	1.25	1.85	-.16	-1.93
80-84	1.05	1.70	-1.23	4.39	1.81	-1.54	-2.14	.68	1.78	-.28	-2.43
85-89	1.06	1.62	-1.40	4.46	1.95	-2.07	-.01	-.12	1.76	.13	-2.64
90-94	1.06	1.50	-1.69	4.47	2.34	-1.90	-2.47	-.99	.47	.58	-2.73
Total	1.56	2.18	-.61	4.63	1.90	.21	4.83	1.78	1.87	2.26	-.77
Female:											
0	4.21	-3.20	3.19	1.85	5.15	11.64	4.74	6.74	8.69	5.00	-2.33
1-4	3.22	-2.38	3.85	6.25	2.75	8.13	2.81	.33	4.13	8.51	2.98
5-9	3.51	-.11	3.88	6.34	3.09	6.61	4.88	3.07	6.21	9.78	2.99
10-14	2.65	.26	2.93	5.95	1.86	5.46	2.71	6.78	6.32	8.28	2.79
15-19	1.71	1.06	2.46	7.50	.68	5.18	3.46	6.05	5.46	10.24	3.20
20-24	1.92	.93	2.29	7.07	.76	5.45	2.91	7.20	5.11	6.31	3.16
25-29	2.08	1.46	1.90	6.67	.95	5.17	3.36	6.25	3.92	3.87	2.85
30-34	2.65	3.10	1.75	7.36	1.66	4.87	3.42	5.83	3.79	4.00	2.75
35-39	3.21	3.98	1.71	7.03	2.48	5.15	2.51	5.32	2.88	5.70	3.38
40-44	3.06	3.45	1.56	6.05	2.76	4.76	3.06	4.66	2.83	5.83	3.20
45-49	2.57	2.86	1.20	5.47	2.85	3.32	3.88	4.08	2.94	5.34	2.41
50-54	1.84	2.45	.38	4.88	2.97	1.59	2.77	3.02	2.31	4.02	1.65
55-59	1.54	2.52	-.09	4.90	2.98	.15	2.59	2.66	2.77	3.06	.99
60-64	1.11	2.33	-.87	4.72	2.92	-1.44	2.07	1.82	2.51	1.52	.02
65-69	.86	2.09	-1.41	4.58	2.44	-2.84	1.15	1.03	2.74	-.34	-1.11
70-74	1.26	2.33	-1.22	4.73	2.47	-2.92	-.79	.88	3.12	-1.24	-1.66
75-79	1.67	2.40	-.67	4.85	3.03	-2.13	-1.60	.57	3.24	-1.58	-2.45
80-84	1.84	2.27	-.40	4.73	3.70	-1.19	-1.46	.06	2.79	-1.41	-3.04
85-89	1.69	1.92	-.33	4.38	4.34	-.95	-2.12	-.72	1.76	-.43	-3.47
90-94	1.33	1.37	-.80	3.97	4.80	-.66	-3.10	-1.71	.14	-.33	-3.64
Total	1.66	2.13	-.42	4.63	2.44	-.45	4.46	1.01	2.69	2.40	-1.00

*Includes AIDS **Excludes AIDS

Note: The average annual percentage reduction is the complement of the exponential of the least-squares line through the logarithms of the central death rates.

Future reductions in mortality will depend upon such factors as the development and application of new diagnostic, surgical, and life-sustaining techniques, the presence of enviornmental pollutants, improvements in exercise and nutrition, the incidence of violence, the isolation and treatment of causes of disease, the emergence of new forms of disease, improvements in prenatal care, the prevalence of cigarette smoking, the misuse of drugs (including alcohol), the extent to which people assume responsibility for their own health, and changes in our conception of the value of life. After considering how these and other factors might affect mortality, we postulated three alternative sets of ultimate annual percentage reductions in death rates by sex, age group, and cause of death for the years after 2015. The age groups for which specific rates of reduction have been selected are: (1) under age 15, (2) 15-64, and (3) 65-84, and (4) 85 and older. These ultimate annual percentage reductions are as follows:

Assumed Ultimate Annual Percentage Reductions in Death Rates by Alternative, Sex, Age Group, and Causes

Alternative, sex, and age group	Cause of death									
	I	II	III	IV	V	VI	VII	VIII	IX	X
Alternative I:										
Male:										
< 15	0.2	0.2	0.7	0.3	0.3	2.0	0.6	0.5	0.3	0.0
15-64	0.6	0.1	0.9	0.2	0.2	1.8	0.4	0.4	0.2	0.0
65-84	0.5	0.0	0.8	0.3	0.0	1.6	0.2	0.3	0.1	0.0
85+	0.5	0.0	0.8	0.3	0.0	1.6	0.2	0.3	0.1	0.0
Female:										
< 15	0.2	0.2	0.7	0.3	0.3	2.0	0.6	0.5	0.3	0.0
15-64	0.6	0.1	0.9	0.2	0.2	1.8	0.4	0.4	0.2	0.0
65-84	0.5	0.0	0.8	0.3	0.0	1.6	0.2	0.3	0.1	0.0
85+	0.5	0.0	0.8	0.3	0.0	1.6	0.2	0.3	0.1	0.0
Alternative II:										
Male:										
< 15	0.4	0.5	1.2	0.6	0.5	1.5	0.8	0.8	0.5	0.2
15-64	1.2	0.3	1.4	0.3	0.3	1.3	0.6	0.7	0.3	0.2
65-84	1.1	0.2	1.3	0.4	0.2	1.1	0.4	0.6	0.2	0.2
85+	0.9	0.2	1.3	0.4	0.2	1.1	0.4	0.6	0.2	0.2
Female:										
< 15	0.4	0.5	1.2	0.6	0.5	1.5	0.8	0.8	0.5	0.2
15-64	1.2	0.3	1.4	0.4	0.3	1.3	0.6	0.8	0.4	0.2
65-84	1.1	0.2	1.3	0.5	0.2	1.1	0.4	0.6	0.2	0.2
85+	0.9	0.2	1.3	0.5	0.2	1.1	0.4	0.6	0.2	0.2
Alternative III:										
Male:										
< 15	0.9	1.3	1.4	0.9	0.6	0.8	1.0	1.0	0.8	0.4
15-64	1.5	1.2	1.8	0.6	0.5	0.6	0.9	0.9	0.6	0.4
65-84	1.3	1.1	1.7	0.8	0.4	0.4	0.8	0.9	0.6	0.4
85+	1.1	1.1	1.7	0.8	0.4	0.4	0.8	0.9	0.6	0.4
Female:										
< 15	0.9	1.3	1.4	0.9	0.6	0.8	1.0	1.0	0.8	0.4
15-64	1.5	1.3	1.8	0.8	0.5	0.6	0.9	1.0	0.7	0.4
65-84	1.4	1.2	1.7	0.9	0.4	0.4	0.8	0.9	0.6	0.4
85+	1.2	1.2	1.7	0.9	0.4	0.4	0.8	0.9	0.6	0.4

The annual percentage reductions in the table above are greatest for alternative III and smallest for alternative I, with the exception of the ultimate reductions assumed due to Congenital Malformations and Diseases of Early Infancy. For this cause-of-death group, the alternative I reductions are greatest and the alternative III reductions are smallest because most of the deaths due to this cause of death occur to those under 5 years of age. Thus, unlike the other causes of death, higher death rates for this cause of death would produce an unfavorable financial effect.

Due to the nature of AIDS, this disease was treated as a separate cause of death and death rates due to AIDS were projected by a different method. Although much has been learned about AIDS during the last few years, many uncertainties exist about the future course of this disease. For historical years beginning in 1981 through projected years ending with 1992, central death rates due to AIDS were projected based on numbers of deaths due to AIDS as estimated by the Centers for Disease Control. Among the three alternatives, the death rates assumed for alternative III were the greatest and those assumed for alternative I were the smallest. Higher death rates for AIDS result in more cost to the OASDI program.

Under alternatives II and III, the central death rates due to AIDS are assumed to reach their peak value around the year 2000. During the next ten years, death rates due to AIDS are assumed to decline rather rapidly as a result of changes in behavior. Thereafter, the rates are assumed to remain relatively constant throughout the remainder of the projection period. For alternative I, the peak in central death rates due to AIDS is reached around 1990, with rates then stabilizing around the year 2000.

Rapid reductions in infant mortality are expected to continue in the future. However, for the total group younger than 65, future reductions are projected to be relatively small compared with past reductions because very little additional improvement in death rates from infectious diseases (such as poliomyelitis and influenza) is possible and because only a small reduction in mortality from violent causes (accidents, suicide, and homicide) is expected. Reductions for the aged are expected to continue at a relatively rapid pace, as further advances are made against degenerative diseases (such as heart and vascular disease). The gap between male and female mortality is expected to stabilize as women become increasingly subject to many of the same enviornmental hazards and social pressures as men. After adjustment for changes in the age and sex distribution of the population, alternative II mortality is projected to decrease at an average rate of 0.57 percent per year during the period 1990-2066. This is about half the average annual reduction observed during 1900-1990. During the period 1990-2066, alternative I mortality is projected to decrease at a rate about one-fourth the average rate observed during 1900-1990, while for alternative III mortality, the projected rate of reduction is about the same as for 1900-1990.

Death rates for ages under 65 in 1988 and for all ages in 1989 were estimated from provisional data published in *Monthly Vital Statistics Reports,* Volumes 37 and 38. Medicare provisional data was used to estimate death rates for those 65 and over in 1988. For years after 1989, death rates were projected by age group, sex, and cause of death by applying annual percentage reductions (except, as previously explained, for the cause of death category of AIDS) to the estimated or projected prior year death rates. The annual reductions that were applied to obtain the 1990 levels were 50 percent, 100 percent, and 150 percent of the average annual reduc-

tions during 1968-1987[1] period. for alternatives I, II, and III, respectively. The annual reductions that were assumed to apply to obtain rates for 1991-2015 were calculated by a logarithmic formula designed to gradually transform the reductions applied to obtain the 1990 levels into the postulated ultimate annual reductions. The ultimate reductions were assumed to apply during 2015-2080. Table 8 gives the resulting death rates by age group, sex, and alternative for selected years.

Tables 9 and 10 give the resulting life expectancies for males and f emales at birth and at age 65, respectively, for historical years and by alternative for selected future years. Life expectancy for any year is the number of years of life remaining for a person who is assumed to experience the death rates by age observed in or assumed for the selected year. Thus, the life expectancies at birth shown in Table 9 are summary statistics of the overall mortality for the applicable calendar year. Similarly, the life expectancies at age 65 in Table 10 summarize the mortality at ages 65 and older for the applicable calendar year.

[1]The average annual reductions for the "All Other" category for age 0 were calculated using the period 1974-1987, rather than 1968-1987. This was done because a distinct shift occurred in 1974, making the earlier data inappropriate for this category.

Table 8.—Central Death Rates by Age Group, Sex, Calendar Year, and Alternative

[Per hundred thousand]

Alternative, sex, and age group	Calendar year										
	1985	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080
Alternative I :											
Male:											
0	1,201.3	1,055.5	880.5	763.6	684.0	619.2	565.9	521.9	485.6	455.6	430.7
1-4	58.1	45.6	39.9	37.0	35.3	33.9	32.7	31.6	30.5	29.6	28.7
5-9	28.2	28.8	24.2	22.1	21.4	20.7	20.1	19.6	19.0	18.5	18.1
10-14	34.9	35.0	30.9	28.7	27.8	27.0	26.2	25.5	24.8	24.1	23.5
15-19	114.7	121.9	111.3	105.3	103.0	100.8	98.7	96.7	94.8	92.9	91.0
20-24	164.9	176.8	159.2	151.1	147.8	144.8	141.9	139.1	136.4	133.7	131.1
25-29	167.3	173.2	149.5	143.4	140.4	137.7	135.1	132.6	130.1	127.7	125.4
30-34	189.7	209.8	172.2	164.6	161.2	158.2	155.3	152.4	149.6	146.9	144.4
35-39	235.3	257.0	205.7	193.6	189.0	185.0	181.1	177.3	173.7	170.3	167.0
40-44	333.0	317.7	261.3	243.5	236.8	230.7	224.9	219.4	214.1	209.1	204.3
45-49	514.2	480.1	409.6	381.4	370.0	359.6	349.8	340.4	331.5	323.0	314.9
50-54	835.9	774.0	690.8	650.1	630.2	611.7	594.2	577.5	561.7	546.6	532.3
55-59	1,342.5	1,231.9	1,120.4	1,061.2	1,029.1	999.2	970.7	943.7	918.0	893.6	870.3
60-64	2,062.0	1,878.7	1,731.2	1,646.5	1,595.8	1,548.4	1,503.4	1,460.7	1,420.2	1,381.6	1,345.0
65-69	3,199.2	2,771.6	2,643.7	2,565.6	2,510.5	2,458.5	2,409.3	2,362.7	2,318.4	2,276.5	2,236.6
70-74	4,872.9	4,245.4	4,145.6	4,063.1	3,974.6	3,890.8	3,811.4	3,736.1	3,664.9	3,597.3	3,533.3
75-79	7,349.1	6,554.1	6,559.9	6,496.4	6,353.5	6,216.5	6,086.9	5,964.2	5,848.0	5,738.0	5,633.8
80-84	10,974.6	10,514.2	10,691.5	10,639.4	10,395.6	10,161.7	9,940.7	9,731.6	9,533.8	9,346.7	9,169.5
85-89	16,164.3	15,038.7	15,459.1	15,430.3	15,063.7	14,711.5	14,378.6	14,063.8	13,766.1	13,484.4	13,217.8
90-94	23,364.7	22,591.4	23,289.9	23,250.0	22,666.5	22,106.7	21,577.6	21,077.2	20,604.1	20,156.5	19,733.0
Female:											
0	936.3	873.3	729.8	630.2	560.3	503.5	456.7	418.2	386.4	360.1	338.4
1-4	44.5	39.9	34.5	31.9	30.5	29.2	28.2	27.2	26.3	25.5	24.8
5-9	21.2	20.4	17.2	15.8	15.3	14.9	14.5	14.1	13.7	13.4	13.1
10-14	20.5	20.1	17.8	16.6	16.1	15.6	15.2	14.8	14.4	14.0	13.7
15-19	46.5	49.9	46.6	44.6	43.6	42.7	41.8	41.0	40.2	39.4	38.6
20-24	52.8	56.6	51.8	49.4	48.3	47.3	46.3	45.4	44.5	43.6	42.8
25-29	60.0	64.2	56.5	53.5	52.4	51.3	50.3	49.3	48.3	47.4	46.6
30-34	78.5	82.4	69.6	65.2	63.8	62.6	61.4	60.2	59.2	58.1	57.1
35-39	110.2	115.1	97.5	90.5	88.5	86.7	85.0	83.3	81.8	80.3	78.9
40-44	173.7	166.9	144.0	133.7	130.5	127.6	124.9	122.3	119.8	117.5	115.2
45-49	286.2	255.9	227.6	212.8	207.5	202.7	198.1	193.7	189.6	185.6	181.9
50-54	463.7	427.1	394.5	374.9	365.3	356.6	348.3	340.3	332.8	325.6	318.7
55-59	721.2	691.6	652.6	628.9	613.0	597.9	583.6	569.9	556.9	544.5	532.7
60-64	1,120.1	1,072.4	1,065.7	1,051.2	1,024.2	998.3	973.6	950.0	927.6	906.2	885.8
65-69	1,699.1	1,594.6	1,651.7	1,663.9	1,635.8	1,608.3	1,582.2	1,557.5	1,534.1	1,512.0	1,491.0
70-74	2,608.7	2,495.6	2,544.9	2,543.6	2,494.1	2,446.2	2,400.9	2,358.0	2,317.5	2,279.1	2,242.7
75-79	4,108.0	3,986.4	3,947.8	3,890.4	3,800.4	3,714.5	3,633.3	3,556.6	3,484.0	3,415.3	3,350.3
80-84	6,716.7	6,704.2	6,551.2	6,398.1	6,226.4	6,064.0	5,910.6	5,765.6	5,628.6	5,499.1	5,376.6
85-89	11,264.3	10,738.5	10,603.2	10,367.3	10,065.1	9,779.6	9,510.0	9,255.3	9,014.8	8,787.5	8,572.7
90-94	18,115.7	17,825.6	17,939.2	17,649.9	17,102.8	16,584.0	16,094.2	15,631.5	15,194.4	14,781.4	14,391.0
Alternative II :											
Male:											
0	1,201.3	1,036.8	743.4	630.9	578.3	533.1	493.3	458.3	427.4	400.0	375.8
1-4	58.1	45.8	37.9	32.4	30.5	28.8	27.3	25.8	24.5	23.3	22.2
5-9	28.2	28.5	21.5	18.3	17.3	16.4	15.6	14.8	14.1	13.4	12.8
10-14	34.9	34.6	27.6	24.2	22.8	21.6	20.4	19.4	18.4	17.4	16.5
15-19	114.7	121.2	103.2	93.7	90.5	87.6	84.8	82.2	79.6	77.2	74.8
20-24	164.9	179.4	163.7	143.6	139.0	134.8	131.0	127.2	123.5	120.1	116.7
25-29	167.3	187.5	208.1	167.9	162.8	158.9	155.2	151.6	148.2	144.9	141.8
30-34	189.7	236.6	288.5	220.6	213.5	209.4	204.9	200.9	197.0	193.3	189.7
35-39	235.3	286.8	339.0	256.5	246.6	240.9	235.5	230.3	225.6	221.1	216.8
40-44	333.0	338.9	355.5	279.1	266.0	256.9	249.1	241.5	234.5	228.0	222.0
45-49	514.2	495.0	466.2	382.8	363.3	347.6	333.3	320.4	308.3	297.2	286.8
50-54	835.9	778.8	690.9	605.1	571.3	542.6	515.9	491.7	469.3	448.6	429.6
55-59	1,342.5	1,227.9	1,061.0	. 954.2	900.0	852.6	808.8	768.5	731.6	697.4	665.9
60-64	2,062.0	1,866.6	1,610.8	1,464.8	1,380.4	1,304.8	1,235.4	1,171.7	1,113.2	1,059.3	1,009.5
65-69	3,199.2	2,752.0	2,460.1	2,292.8	2,177.7	2,072.7	1,976.6	1,888.0	1,806.3	1,730.9	1,661.0
70-74	4,872.9	4,215.9	3,868.8	3,650.5	3,465.0	3,294.8	3,138.6	2,995.0	2,862.6	2,740.6	2,627.7
75-79	7,349.1	6,507.1	6,107.7	5,812.6	5,511.2	5,233.9	4,979.9	4,746.6	4,532.1	4,334.4	4,151.8
80-84	10,974.6	10,432.3	9,899.8	9,453.1	8,946.4	8,481.0	8,055.1	7,664.7	7,306.5	6,976.8	6,673.0
85-89	16,164.3	14,914.3	14,250.3	13,688.0	13,011.6	12,382.3	11,799.7	11,259.6	10,758.2	10,292.1	9,858.2
90-94	23,364.7	22,402.5	21,451.2	20,592.9	19,535.3	18,553.1	17,645.2	16,804.9	16,026.2	15,303.4	14,631.8

Table 8.—Central Death Rates by Age Group, Sex, Calendar Year, and Alternative —Continued
[Per hundred thousand]

Alternative, sex, and age group	Calendar year										
	1985	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080
Alternative II : (Cont.)											
Female:											
0	936.3	859.2	620.9	520.7	474.6	435.1	400.5	370.2	343.4	319.9	299.1
1-4	44.5	40.1	32.8	27.8	26.3	24.9	23.6	22.4	21.3	20.3	19.3
5-9	21.2	20.2	15.6	13.3	12.5	11.9	11.4	10.8	10.3	9.8	9.4
10-14	20.5	19.9	15.9	14.1	13.4	12.7	12.0	11.4	10.9	10.3	9.8
15-19	46.5	49.7	44.1	40.8	39.0	37.4	35.9	34.5	33.1	31.8	30.6
20-24	52.8	56.4	49.4	44.9	43.0	41.2	39.6	38.0	36.5	35.1	33.8
25-29	60.0	66.6	65.3	54.6	52.5	50.7	48.9	47.3	45.8	44.3	42.9
30-34	78.5	86.5	86.9	69.7	67.0	65.1	63.1	61.3	59.6	57.9	56.4
35-39	110.2	116.3	99.3	83.5	79.9	77.0	74.3	71.7	69.3	67.0	64.9
40-44	173.7	166.4	133.8	115.7	110.3	105.6	101.3	97.2	93.4	89.9	86.5
45-49	286.2	253.7	206.5	182.9	173.8	165.8	158.4	151.5	145.1	139.1	133.5
50-54	463.7	424.2	367.5	335.6	318.8	303.7	289.7	276.7	264.6	253.3	242.8
55-59	721.2	687.6	616.0	575.6	547.2	520.9	496.6	474.0	453.1	433.5	415.3
60-64	1,120.1	1,065.8	1,001.0	954.1	906.1	861.4	820.0	781.8	746.3	713.3	682.6
65-69	1,699.1	1,582.9	1,534.6	1,488.1	1,422.7	1,361.6	1,305.2	1,252.9	1,204.4	1,159.2	1,117.2
70-74	2,608.7	2,473.8	2,337.0	2,244.6	2,137.9	2,039.1	1,948.1	1,864.2	1,786.7	1,714.9	1,648.3
75-79	4,108.0	3,948.4	3,601.5	3,404.2	3,224.7	3,060.0	2,909.1	2,770.6	2,643.4	2,526.3	2,418.2
80-84	6,716.7	6,637.2	5,946.2	5,557.6	5,232.7	4,936.6	4,666.7	4,420.4	4,195.1	3,988.7	3,799.4
85-89	11,264.3	10,635.0	9,643.4	9,047.3	8,540.2	8,073.9	7,644.7	7,249.0	6,883.9	6,546.4	6,234.2
90-94	18,115.7	17,675.1	16,487.6	15,559.4	14,635.1	13,786.4	13,006.8	12,289.8	11,629.6	11,020.9	10,459.2
Alternative III:											
Male:											
0	1,201.3	1,016.9	692.3	551.4	521.5	495.2	468.5	442.6	418.1	395.0	373.6
1-4	58.1	45.4	37.3	27.3	25.4	23.9	22.3	20.8	19.5	18.2	17.1
5-9	28.2	28.1	20.9	15.9	14.1	13.3	12.4	11.7	10.9	10.1	9.5
10-14	34.9	34.3	25.4	21.5	19.0	17.6	16.3	15.0	13.9	12.8	11.9
15-19	114.7	120.2	96.4	82.4	76.9	72.4	68.1	64.2	60.4	56.8	53.5
20-24	164.9	179.1	172.7	127.3	119.7	114.7	109.4	103.9	98.5	93.6	88.8
25-29	167.3	190.8	284.4	158.5	148.3	148.9	146.2	142.2	137.5	132.9	128.5
30-34	189.7	243.3	451.6	230.4	205.1	214.6	214.9	211.9	207.7	202.7	198.0
35-39	235.3	294.1	550.5	298.3	245.7	258.9	262.1	259.2	254.7	249.4	244.1
40-44	333.0	342.2	529.2	340.7	265.0	269.7	270.4	264.7	257.5	250.3	243.2
45-49	514.2	495.6	597.2	423.8	343.2	332.6	321.8	308.5	293.9	280.2	267.7
50-54	835.9	774.1	747.1	606.4	511.0	472.1	438.2	406.6	376.6	349.3	325.0
55-59	1,342.5	1,217.5	1,042.9	889.8	769.8	695.8	632.4	574.5	522.8	476.2	434.8
60-64	2,062.0	1,850.6	1,537.7	1,320.8	1,165.3	1,045.7	942.0	849.0	766.8	693.5	628.4
65-69	3,199.2	2,730.5	2,318.6	2,057.2	1,848.4	1,671.0	1,515.3	1,375.4	1,249.5	1,136.9	1,035.7
70-74	4,872.9	4,185.3	3,634.2	3,274.8	2,962.9	2,686.0	2,439.7	2,219.2	2,021.2	1,843.9	1,684.5
75-79	7,349.1	6,459.1	5,708.9	5,187.8	4,711.0	4,282.9	3,900.1	3,557.7	3,250.5	2,974.6	2,726.8
80-84	10,974.6	10,350.1	9,191.6	8,394.7	7,637.4	6,958.5	6,350.6	5,806.1	5,317.8	4,879.0	4,484.4
85-89	16,164.3	14,789.7	13,168.3	12,125.8	11,122.9	10,215.2	9,394.6	8,652.3	7,980.1	7,370.5	6,817.2
90-94	23,364.7	22,213.6	19,801.3	18,256.1	16,766.2	15,417.2	14,197.6	13,093.6	12,093.1	11,185.2	10,360.0
Female:											
0	936.3	843.9	590.9	456.5	432.1	410.9	388.8	367.3	346.8	327.5	309.6
1-4	44.5	39.7	32.9	23.2	21.6	20.5	19.2	18.0	16.9	15.8	14.8
5-9	21.2	19.9	15.5	12.0	10.4	9.9	9.3	8.8	8.2	7.7	7.3
10-14	20.5	19.7	14.7	13.0	11.3	10.5	9.7	9.0	8.3	7.7	7.2
15-19	46.5	49.4	42.3	37.1	34.0	31.5	29.1	26.9	24.9	23.0	21.3
20-24	52.8	55.9	47.0	39.9	36.7	34.0	31.4	29.1	27.0	25.0	23.2
25-29	60.0	67.3	82.4	50.0	46.7	45.1	43.2	41.0	38.8	36.9	35.1
30-34	78.5	87.7	128.9	71.4	63.9	64.6	63.0	60.9	58.7	56.5	54.4
35-39	110.2	115.5	118.5	87.1	70.8	68.7	65.9	62.4	59.1	56.1	53.2
40-44	173.7	164.5	134.4	109.3	90.6	83.7	77.7	71.7	66.3	61.3	57.0
45-49	286.2	250.9	194.3	161.1	140.4	126.1	114.2	103.3	93.6	84.9	77.3
50-54	463.7	421.0	347.5	301.5	266.7	237.7	212.6	190.5	170.8	153.5	138.2
55-59	721.2	683.2	586.6	519.8	461.4	411.4	367.5	328.7	294.5	264.2	237.5
60-64	1,120.1	1,058.6	946.7	850.0	757.3	676.8	605.7	543.0	487.6	438.6	395.3
65-69	1,699.1	1,570.7	1,432.6	1,307.9	1,177.6	1,062.9	960.8	869.9	788.9	716.8	652.4
70-74	2,608.7	2,451.5	2,156.2	1,959.7	1,768.1	1,598.4	1,447.5	1,313.2	1,193.6	1,086.9	991.6
75-79	4,108.0	3,910.1	3,307.2	2,975.7	2,689.8	2,436.2	2,210.7	2,010.2	1,831.4	1,672.2	1,529.9
80-84	6,716.7	6,570.0	5,426.8	4,856.0	4,389.7	3,976.5	3,609.9	3,284.4	2,994.9	2,737.0	2,506.7
85-89	11,264.3	10,531.5	8,805.9	7,922.3	7,211.3	6,576.0	6,007.5	5,498.2	5,041.2	4,630.7	4,261.3
90-94	18,115.7	17,524.7	15,196.5	13,758.8	12,510.7	11,396.8	10,401.1	9,509.9	8,711.2	7,994.2	7,349.6

Note: The central death rate is the ratio of the number of deaths during the year to persons at the tabulated age to the midyear population at that age.

Table 9.—Life Expectancy at Birth by Sex, Calendar Year, and Alternative
[In years]

Calendar year	Male	Female
1900	46.4	49.0
1901	47.9	50.9
1902	49.0	52.1
1903	49.2	52.1
1904	48.1	51.1
1905	48.7	51.9
1906	48.3	52.0
1907	48.3	52.2
1908	50.2	53.6
1909	51.1	54.5
1910	50.1	53.6
1911	51.8	55.0
1912	52.3	55.9
1913	51.7	55.4
1914	52.9	56.3
1915	53.5	56.8
1916	52.4	56.0
1917	52.2	55.9
1918	45.3	49.1
1919	54.2	56.5
1920	54.5	56.3
1921	57.3	59.3
1922	57.0	59.3
1923	56.3	58.7
1924	57.2	59.9
1925	57.2	59.9
1926	56.6	59.3
1927	57.9	60.9
1928	56.8	59.8
1929	57.0	60.2
1930	58.0	61.3
1931	58.6	62.0
1932	59.4	62.6
1933	59.6	63.0
1934	58.8	62.7
1935	59.4	63.3
1936	58.7	62.9
1937	59.4	63.6
1938	60.8	64.7
1939	61.4	65.4
1940	61.4	65.7
1941	61.9	66.5
1942	62.6	67.4
1943	62.2	67.1
1944	62.7	67.8
1945	62.9	68.4
1946	64.3	69.2
1947	64.6	69.7
1948	64.8	70.2
1949	65.3	70.7
1950	65.6	71.1
1951	65.7	71.4
1952	65.8	71.6
1953	66.0	72.0
1954	66.7	72.7
1955	66.7	72.8
1956	66.7	72.9
1957	66.5	72.7
1958	66.6	72.9
1959	66.8	73.2
1960	66.7	73.2
1961	67.1	73.6

Table 9.—Life Expectancy at Birth by Sex, Calendar Year, and Alternative —Continued
[In years]

Calendar year	Male	Female
1962	66.9	73.5
1963	66.6	73.4
1964	66.8	73.7
1965	66.8	73.8
1966	66.7	73.9
1967	66.9	74.3
1968	66.6	74.2
1969	66.9	74.6
1970	67.1	74.9
1971	67.4	75.1
1972	67.4	75.2
1973	67.6	75.5
1974	68.3	76.0
1975	68.7	76.6
1976	69.1	76.8
1977	69.4	77.2
1978	69.6	77.2
1979	70.0	77.7
1980	69.9	77.5
1981	70.4	77.9
1982	70.8	78.2
1983	70.9	78.1
1984	71.1	78.2
1985	71.1	78.2
1986	71.2	78.3
1987	71.3	78.4
1988	71.2	78.4
1989	71.8	78.6

	Alternative I		Alternative II		Alternative III	
	Male	Female	Male	Female	Male	Female
1990	72.0	78.7	71.9	78.8	72.0	78.9
1991	72.2	78.7	72.0	78.9	72.1	79.1
1992	72.3	78.8	72.1	79.0	72.2	79.3
1993	72.5	78.8	72.1	79.2	72.3	79.5
1994	72.6	78.9	72.2	79.3	72.3	79.7
1995	72.7	78.9	72.3	79.4	72.3	79.9
1996	72.7	79.0	72.4	79.5	72.3	80.0
1997	72.8	79.0	72.5	79.6	72.3	80.2
1998	72.9	79.0	72.7	79.7	72.3	80.3
1999	73.0	79.1	72.8	79.8	72.1	80.4
2000	73.0	79.1	72.9	79.9	72.0	80.5
2005	73.3	79.3	73.8	80.4	73.3	81.3
2010	73.5	79.4	74.3	80.8	75.1	82.1
2015	73.7	79.6	74.7	81.1	76.1	82.7
2020	73.9	79.7	75.0	81.4	76.7	83.3
2025	74.0	79.9	75.3	81.7	77.1	83.8
2030	74.2	80.1	75.6	82.0	77.5	84.3
2035	74.4	80.2	75.9	82.2	78.0	84.8
2040	74.5	80.3	76.2	82.5	78.5	85.3
2045	74.7	80.5	76.4	82.8	79.0	85.9
2050	74.8	80.6	76.7	83.1	79.5	86.4
2055	75.0	80.7	77.0	83.4	79.9	86.9
2060	75.1	80.9	77.3	83.6	80.4	87.4
2065	75.2	81.0	77.5	83.9	80.9	87.8
2070	75.4	81.1	77.8	84.1	81.4	88.3
2075	75.5	81.3	78.1	84.4	81.9	88.8
2080	75.6	81.4	78.3	84.7	82.4	89.3

Note: The life expectancy is the average number of years of life remaining to a person if he were to experience the age-specific mortality rates for the tabulated year throughout the remainder of his life.

Table 10.—Life Expectancy at Age 65 by Sex, Calendar Year, and Alternative
[In years]

Calendar year	Male	Female
1900	11.3	12.0
1901	11.3	12.0
1902	11.7	12.6
1903	11.4	12.2
1904	11.1	11.9
1905	11.4	12.0
1906	11.4	12.2
1907	11.0	11.8
1908	11.6	12.3
1909	11.6	12.4
1910	11.4	12.1
1911	11.5	12.2
1912	11.5	12.3
1913	11.6	12.4
1914	11.6	12.4
1915	11.4	12.2
1916	11.3	12.0
1917	11.2	12.1
1918	11.6	12.5
1919	12.3	12.8
1920	11.8	12.3
1921	12.2	12.8
1922	11.8	12.4
1923	11.5	12.2
1924	11.8	12.6
1925	11.6	12.5
1926	11.4	12.2
1927	11.7	12.7
1928	11.3	12.3
1929	11.4	12.4
1930	11.8	12.9
1931	12.0	13.1
1932	11.9	13.0
1933	12.0	13.2
1934	11.9	13.1
1935	11.9	13.2
1936	11.6	12.8
1937	11.8	13.1
1938	12.1	13.4
1939	12.0	13.4
1940	11.9	13.4
1941	12.2	13.8
1942	12.4	14.1
1943	12.1	13.7
1944	12.5	14.1
1945	12.6	14.4
1946	12.9	14.6
1947	12.6	14.5
1948	12.7	14.7
1949	12.8	14.9
1950	12.8	15.1
1951	12.8	15.2
1952	13.0	15.3
1953	12.9	15.3
1954	13.2	15.7
1955	13.1	15.6
1956	13.0	15.7
1957	12.9	15.6
1958	12.9	15.7
1959	13.1	15.9
1960	12.9	15.9
1961	13.1	16.1
1962	12.9	16.0
1963	12.7	16.0
1964	13.0	16.3
1965	12.9	16.3
1966	12.9	16.3
1967	13.0	16.6
1968	12.8	16.6
1969	13.0	16.9

Table 10.—Life Expectancy at Age 65 by Sex, Calendar Year, and Alternative —Continued
[In years]

Calendar year	Male	Female	Alternative I Male	Alternative I Female	Alternative II Male	Alternative II Female	Alternative III Male	Alternative III Female
1970	13.1	17.1						
1971	13.1	17.1						
1972	13.1	17.2						
1973	13.2	17.3						
1974	13.5	17.7						
1975	13.7	18.0						
1976	13.7	18.1						
1977	13.9	18.3						
1978	13.9	18.3						
1979	14.2	18.6						
1980	14.0	18.4						
1981	14.2	18.6						
1982	14.5	18.8						
1983	14.3	18.6						
1984	14.4	18.7						
1985	14.4	18.6						
1986	14.5	18.7						
1987	14.6	18.7						
1988	14.6	18.7						
1989	15.2	18.9						
1990			15.2	18.9	15.3	19.0	15.3	19.0
1991			15.2	18.9	15.4	19.0	15.5	19.2
1992			15.2	18.9	15.4	19.1	15.6	19.3
1993			15.3	18.9	15.5	19.2	15.7	19.5
1994			15.3	18.9	15.5	19.2	15.8	19.6
1995			15.3	18.9	15.6	19.3	15.9	19.7
1996			15.3	18.9	15.7	19.4	16.0	19.8
1997			15.3	18.9	15.7	19.4	16.1	19.9
1998			15.3	18.9	15.8	19.5	16.2	20.0
1999			15.3	18.9	15.8	19.5	16.3	20.1
2000			15.3	18.9	15.9	19.6	16.4	20.2
2005			15.3	18.9	16.1	19.8	16.8	20.7
2010			15.4	19.0	16.3	20.0	17.2	21.1
2015			15.5	19.0	16.5	20.2	17.6	21.5
2020			15.6	19.1	16.7	20.4	18.0	21.9
2025			15.7	19.2	16.9	20.7	18.4	22.3
2030			15.7	19.3	17.1	20.9	18.8	22.7
2035			15.8	19.4	17.3	21.1	19.1	23.1
2040			15.9	19.5	17.5	21.3	19.5	23.5
2045			16.0	19.6	17.7	21.5	19.9	24.0
2050			16.1	19.7	17.9	21.7	20.3	24.4
2055			16.1	19.8	18.1	22.0	20.7	24.8
2060			16.2	19.9	18.3	22.2	21.1	25.2
2065			16.3	20.0	18.5	22.4	21.5	25.6
2070			16.4	20.1	18.7	22.6	21.9	26.0
2075			16.4	20.1	18.8	22.8	22.2	26.4
2080			16.5	20.2	19.0	23.0	22.6	26.8

Note: The life expectancy is the average number of years of life remaining to a person if he were to experience the age-specific mortality rates for the tabulated year throughout the remainder of his life.

Charts 2 and 3 are graphs of the past and projected life expectancies at birth of males and females, respectively, from 1900 to 2080 by alternative. Rapid gains in expectancy at birth occurred from 1900 through the mid-1950's for both males and females. From the mid-1950's through the late 1960's, male life expectancy at birth remained level, while female life expectancy at birth increased moderately. During the 1970's rapid gains resulted for both males and females. During this century life expectancy at birth for males increased 24.9 years from 46.4 in 1900 to 71.3 years in 1987. During the same period, life expectancy at birth for females increased 29.4 years from 49.0 to 78.4 years. Thus the

difference in male and female life expectancies, the sex gap, at birth has increased from 2.6 years in 1900 to 7.1 years in 1987. For calendar year 1970, the sex gap in life expectancy at birth was 7.8 years. This gap stabilized during the 1970's and has decreased slightly since 1979.

Under all three alternatives, the life expectancy at birth is projected to increase. For males, the life expectancy at birth increases from 71.3 years in 1987 to 75.6 years, 78.3 years, and 82.4 years in 2080 under alternatives I, II, and III, respectively. This represents an increase ranging from 4.3 years to 11.1 years. For females the increase ranges from 3.0 years to 10.9 years. The female life expectany is projected to increase from 78.4 years in 1987, to 81.4 years, 84.7 years, and 89.3 years in 2080 under alternatives I, II, and III, respectively. The sex gap at birth is projected to decrease from 7.1 years in 1987 to 5.8 in 2080 under alternative I, to 6.4 under alternative II, and to 6.9 under alternative III.

Life expectancy at age 65 for males increased from 11.3 years in 1900 to 14.6 years in 1987, while life expectancy at age 65 for females increased from 12.0 years to 18.7 years. The life expectancy for males at age 65 is projected to increase from 14.6 years in 1987 to 16.5 years, 19.0 years, and 22.6 years in 2080 under alternatives I, II, and III, respectively. This represents an increase ranging from 1.9 years to 8.0 years. For females the increase ranges from 1.5 years to 8.1 years. The female age 65 life expectancy is projected to increase from 18.7 years in 1987 to 20.2 years, 23.0 years, and 26.8 years under alternatives I, II, III, respectively. The sex gap at age 65 has increased from .7 years in 1900 to 4.4 years in 1979. Since then, this gap has decreased slightly to 4.1 years in 1987 and, in 2080, is projected to be 3.7, 4.0, and 4.2 under alternatives I, II, and III, respectively.

A complete projection of age-sex-specific death rates was not done for each marital status. However, historical data indicate that the differential in mortality by marital status is significant. To reflect this, future relative differences in death rates by marital status were projected to be the same as for calendar years 1980 and 1981. Death rates for this period are shown in Table 11. These rates were calculated using deaths as tabulated from the 1980 and 1981 Mortality Cause-of-Death Summary Public Use Data Tapes available from the National Center for Health Statistics and population distributions as published in *Current Population Reports,* Series P-20 and P-25, by the Bureau of the Census.

Table 11.—Central Death Rates by Age Group, Sex, and Marital StatusBased on 1980-81 Data
[Per hundred thousand]

Sex and age group	Total	Single	Married	Widowed	Divorced
Male:					
15-19	135.9	134.8	169.4	933.0	400.0
20-24	193.9	211.7	135.9	1,100.0	430.3
25-29	192.5	276.2	123.0	1,120.0	458.5
30-34	192.1	355.3	128.5	1,145.0	500.0
35-39	241.8	592.5	171.7	1,186.5	562.7
40-44	357.6	746.4	275.8	1,200.0	773.6
45-49	581.0	1,238.6	459.1	1,266.6	1,342.0
50-54	932.8	1,991.2	754.8	1,748.4	2,146.9
55-59	1,444.5	2,556.0	1,225.6	2,414.0	3,044.8
60-64	2,195.9	3,398.1	1,926.0	3,473.3	4,154.8
65-69	3,338.9	4,756.3	2,945.4	5,559.8	5,736.1
70-74	4,991.0	7,147.0	4,436.2	7,160.9	7,860.3
75-79	7,323.9	12,872.2	6,235.5	10,567.0	13,034.5
80-84	11,027.0	19,506.0	9,317.1	14,027.2	17,258.6
85-89	16,433.6	26,107.9	14,240.1	18,432.6	19,259.8
90-94	21,981.3	32,226.8	19,333.7	23,250.2	23,000.0
Female:					
15-19	51.8	51.5	50.7	270.0	75.0
20-24	60.3	71.9	40.5	274.2	105.0
25-29	67.5	110.7	46.5	282.3	120.3
30-34	82.6	178.7	60.6	285.0	137.6
35-39	122.4	277.9	95.0	300.0	205.7
40-44	195.3	408.8	157.9	381.0	333.1
45-49	319.0	544.0	265.3	587.3	508.1
50-54	496.5	754.0	421.5	776.0	734.8
55-59	746.3	1,160.7	634.6	1,006.8	1,084.3
60-64	1,131.5	1,606.3	939.0	1,478.7	1,573.9
65-69	1,705.2	2,114.4	1,426.6	1,982.9	2,475.8
70-74	2,621.7	3,176.6	2,137.3	2,921.4	3,719.3
75-79	4,132.5	4,960.0	3,409.5	4,314.0	6,340.0
80-84	7,095.9	8,324.6	5,179.4	7,463.0	9,920.4
85-89	11,797.1	14,681.1	7,894.2	12,717.1	12,620.6
90-94	17,983.4	23,584.7	12,717.5	19,202.2	17,000.0

Chart 2 - Male Life Expectancy

(in years), 1900 - 2080

Actual and Projected by Alternative

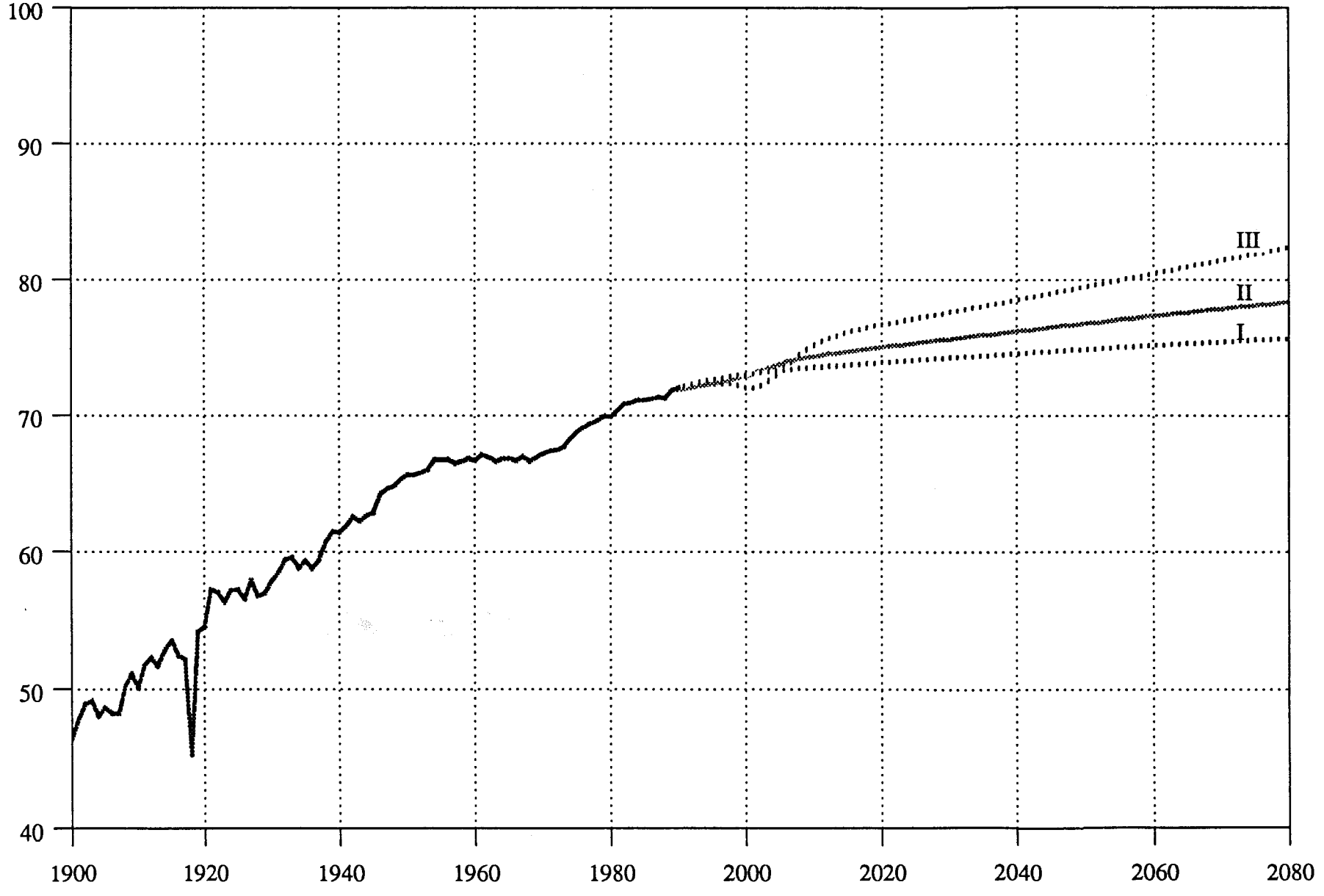
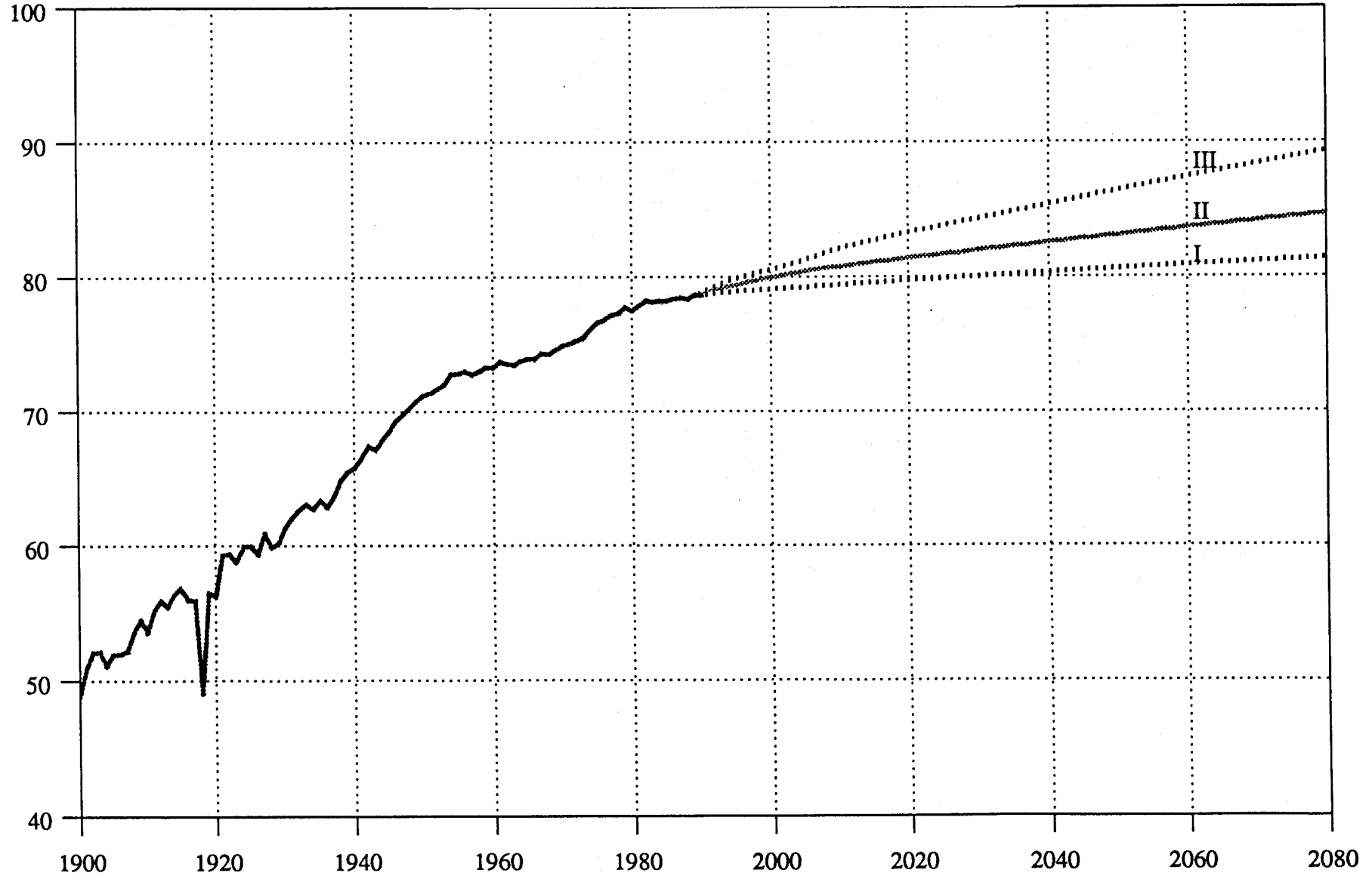


Chart 3 - Female Life Expectancy

(in years), 1900 - 2080

Actual and Projected by Alternative



C. Net Immigration

Immigration was once a very important element in the growth of the United States population. During 1904 through 1913 for example, immigration averaged nearly one million per year, which represented quite sizeable percentage increases in the United States population. Immigration decreased greatly during World War I and following the adoption of quotas based on national origin in 1921. The economic depression in the 1930's caused an additional but temporary decrease, which resulted in more emigration than immigration. Annual immigration increased after World War II to around 300,000 persons per year and stayed at that level through the 1950's and into the 1960's. With the Immigration Act of 1965 and other related changes, annual legal immigration increased to about 400,000 and remained about that level until 1977 when annual legal immigration began a substantial increase. For the years 1977-1989, legal immigration (excluding aliens admitted under the Immigration Reform and Control Act of 1986 [1]) averaged approximately 560,000 per year. This increase was mainly due to the large numbers of refugees and political asylees that were admitted based on specific legislation during this period.

Although statistics on emigration are sparse and largely estimated (see, "Foreign-Born Emmigration From the United States: 1960 to 1970" by Robert Warren and Jennifer Peck in *Demography*, February 1980), they suggest that annual emigration of legal residents has been over 100,000. Recent research done by the Bureau of the Census using census data and data provided by the Immigration and Naturalization Service estimates foreign-born emigration to be about 30 percent of legal immigration. We expect emigration from the Social Security Area to be less than emigration from the United States, especially at the older ages. This is due primarily from the fact that individuals who leave the United States having achieved fully insured status are still eligible to receive OASDI benefits and thus are considered to be in the Social Security Area.

The Immigration Act of 1990, which takes effect in fiscal year 1992, will increase the number of immigrants legally entering the United States each year by approximately 200,000. An overall cap of 700,000 for the first 3 years falling to 675,000 thereafter was set on legal immigration, excluding refugees and political asylees, as well as other legalized aliens who are primarily from the Immigration Reform and Control Act of 1986. This cap can be increased when the immigration of immediate relatives is greater then 264,000. Assuming the ultimate levels of refugees and political asylees to be 50,000 per year, of other legal immigrants to be 675,000 per year, and of emigration to be approximtely 25 percent of the level of legal immigration, yields an assumption of 550,000 per year for net legal immigration. For years after 1991, net legal immigration is assumed to be 650,000, 550,000, and 500,000 persons per year for alternatves I, II, III, respectively.

The age-sex distribution of the assumed legal immigration was based on data supplied by the Immigration and Naturalization Service on immigration during 1978 through 1987. The age-sex distribution of the assumed legal emigration was based on estimates of foreign-born emigration for 1960 to 1970 in "Foreign-Born Emigration From the United States: 1960 to 1970" by Robert Warren and Jennifer Peck in *Demography*, February 1980. Table 12 shows the age-sex distributions of the annual net legal immigration (excess of immigration over emigration) assumed for years after 1991.

[1] The Immigration Reform and Control Act of 1986 permitted certain aliens, who had been residing in the United States illegally, to apply directly for permanent residency. 574,000 persons were legalized during 1987 through 1989 under this and similar legislation.

Table 12.—Assumed Annual Net Legal Immigration by Age Group, Sex, and Alternative

Alternative and age group	Total	Male	Female
Alternative I :			
0-4	46,127	22,741	23,386
5-9	39,681	19,962	19,719
10-14	50,708	25,761	24,947
15-19	59,718	30,365	29,353
20-24	93,458	49,674	43,784
25-29	103,703	56,559	47,144
30-34	74,515	39,351	35,164
35-39	46,696	24,161	22,535
40-44	30,509	15,432	15,077
45-49	22,864	11,465	11,399
50-54	20,059	9,112	10,947
55-59	18,435	7,960	10,475
60-64	16,051	6,934	9,117
65-69	12,125	5,330	6,795
70-74	8,470	3,665	4,805
75-79	4,310	1,824	2,486
80-84	2,571	1,040	1,531
85+	0	0	0
0-19	196,234	98,829	97,405
20-64	426,290	220,648	205,642
65+	27,476	11,859	15,617
Total	650,000	331,336	318,664
Alternative II :			
0-4	39,033	19,245	19,788
5-9	33,575	16,891	16,684
10-14	42,909	21,799	21,110
15-19	50,529	25,693	24,836
20-24	79,082	42,033	37,049
25-29	87,749	47,858	39,891
30-34	63,054	33,298	29,756
35-39	39,511	20,443	19,068
40-44	25,815	13,058	12,757
45-49	19,346	9,701	9,645
50-54	16,972	7,709	9,263
55-59	15,598	6,735	8,863
60-64	13,578	5,865	7,713
65-69	10,258	4,510	5,748
70-74	7,166	3,101	4,065
75-79	3,649	1,545	2,104
80-84	2,176	880	1,296
85+	0	0	0
0-19	166,046	83,628	82,418
20-64	360,705	186,700	174,005
65+	23,249	10,036	13,213
Total	550,000	280,364	269,636
Alternative III:			
0-4	35,475	17,490	17,985
5-9	30,524	15,355	15,169
10-14	39,009	19,817	19,192
15-19	45,937	23,357	22,580
20-24	71,893	38,214	33,679
25-29	79,772	43,507	36,265
30-34	57,320	30,270	27,050
35-39	35,921	18,585	17,336
40-44	23,468	11,871	11,597
45-49	17,587	8,818	8,769
50-54	15,431	7,009	8,422
55-59	14,182	6,125	8,057
60-64	12,345	5,334	7,011
65-69	9,328	4,101	5,227
70-74	6,513	2,819	3,694
75-79	3,317	1,405	1,912
80-84	1,978	800	1,178
85+	0	0	0
0-19	150,945	76,019	74,926
20-64	327,919	169,733	158,186
65+	21,136	9,125	12,011
Total	500,000	254,877	245,123

In deciding upon the level of annual net immigration to be assumed for future years, the possibility of making some provision for persons not legally entering the United States arises. Estimates of these aliens are included in our starting population, in accordance with the offical policy of the Bureau of Census to enumerate or to include in the estimated undercount all persons residing in the U.S.. The Bureau of the Census has estimated 3 million other-than-legal alien residents as of 1980 and a net increase of 200,000 other-than-legal aliens per year during the postcensal period.

Even after considering the Immigration Reform and Control Act of 1986 which attempted to discourage illegal immigration, annual net other-than-legal immigration is anticipated to continue because of the limited economic opportunity in the native countries of the majority of these aliens. For years after 1989, the alternative II assumption for annual net other-than-legal immigration is 200,000. For alternatives I and III, the corresponding numbers are 350,000 and 100,000, respectively. The age-sex distribution of the other-than-legal immigrants was based on unpublished estimates by the Bureau of Census of the undocumented population counted in the 1980 Census. Table 13 shows the age-sex distribution of the assumed net other-than-legal immigration for the three Alternatives.

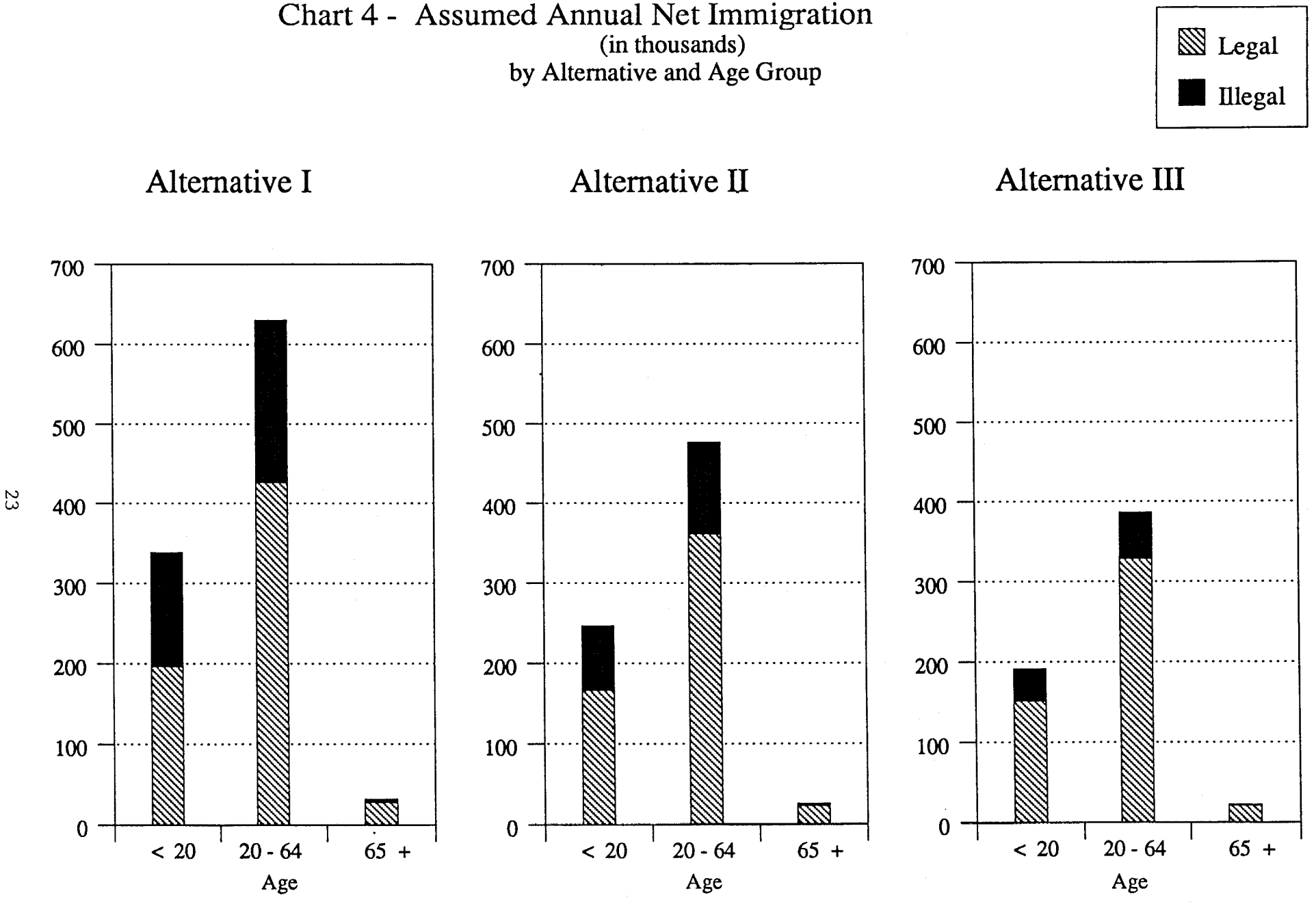
Table 13.—Assumed Annual Net Other-Than-Legal Immigration by Age Group, Sex, and Alternative

Age group	Total	Male	Female
Alternative I :			
0-4	32,055	16,400	15,655
5-9	35,783	19,010	16,773
10-14	24,601	12,301	12,300
15-19	49,201	27,955	21,246
20-24	92,066	54,793	37,273
25-29	53,302	30,192	23,110
30-34	22,736	11,928	10,808
35-39	11,183	5,592	5,591
40-44	8,945	4,845	4,100
45-49	6,337	3,355	2,982
50-54	4,473	2,237	2,236
55-59	2,984	1,492	1,492
60-64	1,774	418	1,356
65-69	1,519	357	1,162
70-74	1,267	298	969
75-79	1,013	238	775
80-84	761	180	581
85+	0	0	0
0-19	141,640	75,666	65,974
20-64	203,800	114,852	88,948
65+	4,560	1,073	3,487
Total	350,000	191,591	158,409
Alternative II :			
0-4	18,324	9,375	8,949
5-9	20,445	10,861	9,584
10-14	14,058	7,030	7,028
15-19	28,114	15,974	12,140
20-24	52,609	31,310	21,299
25-29	30,458	17,252	13,206
30-34	12,992	6,816	6,176
35-39	6,390	3,194	3,196
40-44	5,111	2,769	2,342
45-49	3,621	1,917	1,704
50-54	2,555	1,278	1,277
55-59	1,704	852	852
60-64	1,013	238	775
65-69	869	205	664
70-74	724	170	554
75-79	579	136	443
80-84	434	102	332
85+	0	0	0
0-19	80,941	43,240	37,701
20-64	116,453	65,626	50,827
65+	2,606	613	1,993
Total	200,000	109,479	90,521
Alternative III:			
0-4	9,157	4,685	4,472
5-9	10,224	5,431	4,793
10-14	7,028	3,514	3,514
15-19	14,058	7,987	6,071
20-24	26,305	15,655	10,650
25-29	15,229	8,627	6,602
30-34	6,497	3,409	3,088
35-39	3,193	1,596	1,597
40-44	2,556	1,384	1,172
45-49	1,810	958	852
50-54	1,278	639	639
55-59	853	427	426
60-64	508	120	388
65-69	435	103	332
70-74	362	85	277
75-79	289	68	221
80-84	218	51	167
85+	0	0	0
0-19	40,467	21,617	18,850
20-64	58,229	32,815	25,414
65+	1,304	307	997
Total	100,000	54,739	45,261

Chart 4 displays the annual net immigration assumed for years after 1991 under all three alternatives. The differences among the three alternatives for other-than-legal status are greater than the differences for legal status, reflecting both the uncertainties of future other-than-legal immigration and the existing limitations in the law for legal immigration.

Chart 4 - Assumed Annual Net Immigration

(in thousands)
by Alternative and Age Group



D. Marriage

Because marriage is the combination of a male and a female into a couple, marriage rates can be computed as a ratio of the number of marriages to (1) the number of nonmarried males (not taking into account the number of nonmarried females), (2) the number of nonmarried females (not taking into account the number of nonmarried males), or (3) a theoretical number of nonmarried couples that takes into account both the number of nonmarried males and nonmarried females. The marriage rates referred to in this study are computed using the third concept of a theoretical number of nonmarried couples as the denominator. The rates were computed as the number of marriages for given ages of husband and wife divided by the square root of the product (geometric mean) of the midyear nonmarried males and nonmarried females of the given ages.

In order to calculate these rates, data on new marriages in the Marriage Registration Area (MRA) were obtained from the National Center for Health Statistics for calendar years 1957 through 1986 by age of husband crossed with age of wife. In 1986, the MRA consisted of 42 States and D.C. and accounted for 80 percent of all marriages in the U.S. Estimates of the nonmarried population in the MRA were obtained from the National Center for Health Statistics by age and sex.

The number of marriages depends upon the age distribution of both the nonmarried male population and the nonmarried female population. Thus, an acceptable summary statistic could be calculated by age-adjustment to a set of standard nonmarried populations. When only one population is involved (as in calculating death rates), equal results are obtained by viewing the age-adjusting concept as the weighted average of the age-specific rates or as the crude rate that would occur in the standard population. When two populations are involved (as in calculating marriage rates), these two concepts do not produce the same results.

Using either concept, the first step in calculating the age-adjusted statistic is to determine the number of marriages that would occur in the standard population. We determine this number, the expected number of marriages, by applying the age-of-husband-age-of-wife-specific marriage rates to the geometric mean of the corresponding standard age-specific populations. To age-adjust using the weighted average concept, the expected number of marriages is divided by the sum of all of the factors to which the marriage rates were applied, i.e., the sum of the geometric means of the corresponding age-specific populations. To age-adjust using the crude rate concept, the expected number of marriages is divided by the geometric mean of the total male nonmarried population and the total female nonmarried population. In this study we have calculated rates (as shown in Tables 14 and 15 and in Chart 5) under the latter concept, i.e., the crude rate that would be experienced in the standard population, which we express per hundred thousand nonmarried of each sex.

Table 14.—Age-Adjusted Central Marriage Rates in the Marriage Registration Area by Calendar Year
[Per hundred thousand unmarried of each sex]

Calendar year	Age-adjusted marriage rate
1957	9,975
1958	9,775
1959	10,024
1960	10,015
1961	9,519
1962	9,465
1963	9,716
1964	9,812
1965	9,851
1966	10,158
1967	9,929
1968	10,168
1969	10,129
1970	9,680
1971	9,302
1972	9,412
1973	9,077
1974	8,332
1975	7,687
1976	7,303
1977	6,982
1978	6,784
1979	6,661
1980	6,256
1981	6,120
1982	5,967
1983	5,743
1984	5,623
1985	5,364
1986	5,249

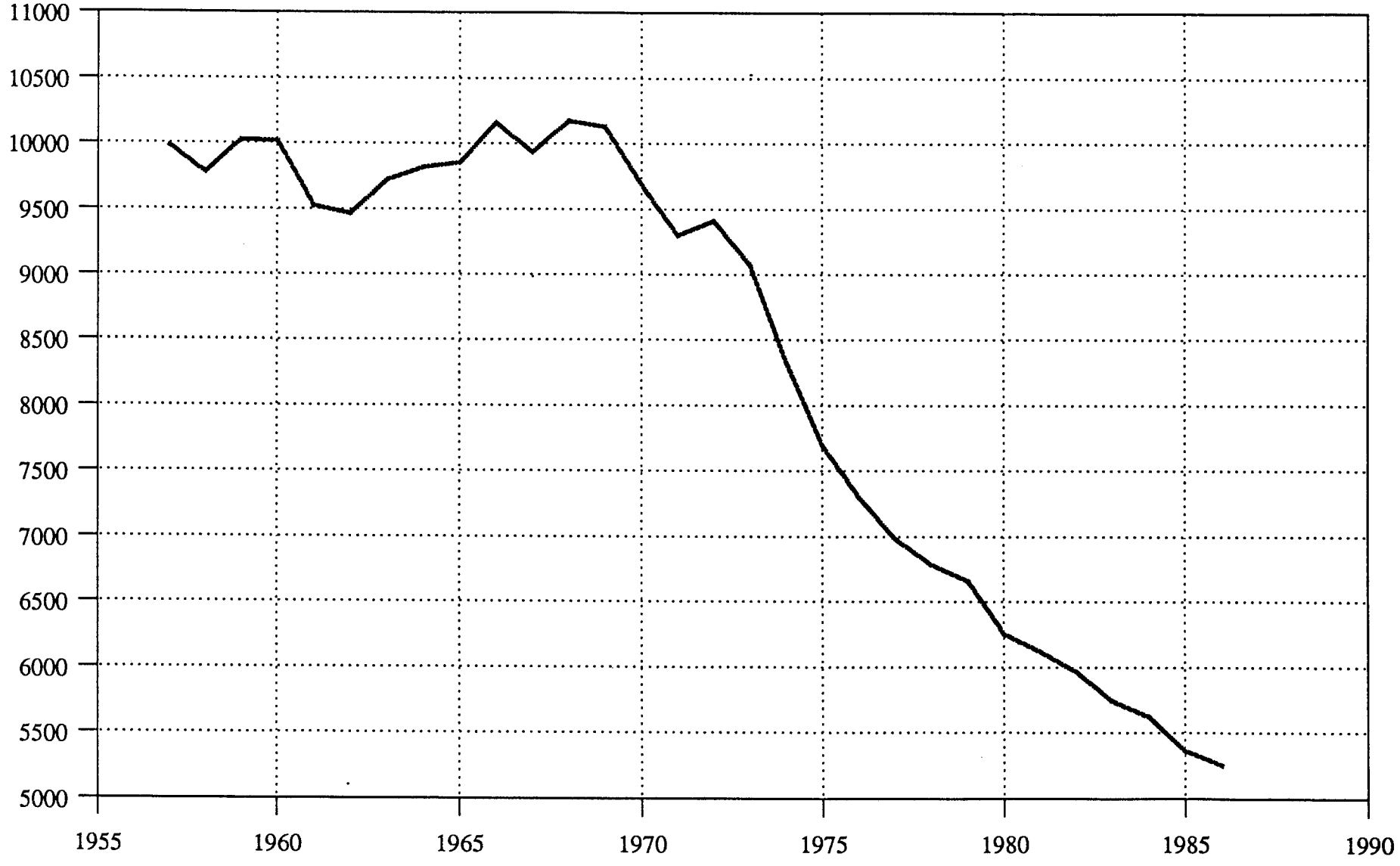
Table 15.—Age-Adjusted Central Marriage Rates Assumed for the Social Security Area by Calendar Year and Alternative
[Per hundred thousand unmarried of each sex]

Calendar year	Age-adjusted marriage rate		
1986		5,832	
1987		5,801	
1988		5,725	
1989		5,684	
1990		5,736	
	Alternative I	Alternative II	Alternative III
1991	5,654	5,736	5,841
1992	5,573	5,736	5,947
1993	5,494	5,736	6,055
1994	5,415	5,735	6,165
1995	5,337	5,735	6,277
1996	5,261	5,735	6,391
1997	5,186	5,735	6,507
1998	5,111	5,734	6,626
1999	5,038	5,734	6,746
2000	4,966	5,734	6,869
2001	4,895	5,734	6,994
2002	4,825	5,733	7,121
2003	4,756	5,733	7,250
2004	4,688	5,733	7,382
2005	4,621	5,733	7,516
2006	4,554	5,732	7,653
2007	4,489	5,732	7,792
2008	4,425	5,732	7,934
2009	4,362	5,732	8,078
2010	4,299	5,731	8,225
2011	4,238	5,731	8,374
2012	4,177	5,731	8,526
2013	4,117	5,731	8,682
2014	4,058	5,730	8,839
2015	4,000	5,730	9,000

Chart 5 - Age-Adjusted Marriage Rates

(per hundred thousand unmarried of each sex)

in the MRA, 1957 - 1986



An examination of the age-adjusted marriage rates since 1957 shows that the rates remained relatively stable during the late 1950's and throughout the 1960's. A major decrease in the age-adjusted rate was experienced during the 1970's and continued into the 1980's. The total rates shown in Table 14 and in Chart 5 range from a high in 1968 of 10,168 per hundred thousand nonmarried persons of each sex to a low in 1986 of 5,249. At first glance the provisional statistics for 1987-1989, as shown in Table 15, indicate a reversal of the declining trend. However, the provisional age-adjusted marriage rates are based on United States data, which historically produce higher rates than the MRA data. This is because the MRA does not include the state of Nevada. In order to compare the rates determined from the two sources of data, a factor in the neighborhood of .9 should be applied to the age-adjusted marriage rates based on United States data. Once this factor is applied, the provisional age-adjusted marriage rates for 1987-1989 indicate a continuation, yet slowing down, of the declining trend.

Because we are uncertain whether marriage rates will increase or decrease, we assumed, for alternative II that future age-adjusted rates of marriage for the Social Security Area would remain at the same level as the average of the 1987-1989 age-adjusted rates of marriage for the United States. The use of constant age-adjusted rates does not imply that the crude rate of marriage in the projected population remains constant.

While it is possible that marriage rates will continue to decline, it is not likely that the rate of decline over the past 10 years will continue indefinitely into the future. Taking this into account, for alternative I, we assume that the ultimate age-adjusted marriage rate will decline to 4,000 in the year 2015 and stay at this level for the remainder of the projection period. This ultimate rate is 70% of the 1989 rate of 5,684.

It is also, possible that marriage rates will, on the average, rise above their present low level. We, however, believe that the rates will not, on the average, return to the high levels found in the 1950's and 1960's. To reflect this in alternative III, we assume that the ultimate age-adjusted marriage rate will increase to 9,000 in the year 2015 and stay at this level for the remainder of the projection period.

To obtain the age-of-husband-age-of-wife-specific rates for a particular year from the age-adjusted rate projected for that year, the age-of-husband-age-of-wife-specific rates for the years 1978-1979 and 1981-1986 were averaged, graduated, and proportionally ratioed so as to produce the age-adjusted rate for the particular year. Data for 1980 were not available. The rates assumed for years after 1989 for alternative II are shown in Table 16 grouped by 5 year age groups based on Social Security Area population as of July 1, 1990.

Table 16.—Assumed Central Marriage Rates for Alternative II by Age of Husband and Wife
[Per hundred thousand unmarried of each sex]

Age group of husband	Age group of wife															
	14-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94
14-19	1,461.1	383.4	68.2	23.5	8.4	2.1	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0
20-24	2,505.9	5,565.9	1,290.2	328.2	104.6	27.8	7.9	2.7	1.4	.2	.0	.0	.0	.0	.0	.0
25-29	625.2	4,221.7	4,514.2	1,416.0	399.7	117.0	31.2	9.0	2.2	.3	.0	.0	.0	.0	.0	.0
30-34	209.2	1,536.6	3,364.1	2,786.6	1,035.6	307.2	94.1	21.0	5.6	1.4	.3	.0	.0	.0	.0	.0
35-39	79.4	638.5	1,708.0	2,398.7	1,923.9	737.5	230.6	58.2	13.5	3.8	1.4	.7	.1	.0	.0	.0
40-44	31.0	229.6	741.8	1,314.5	1,710.9	1,281.1	498.6	131.5	35.0	9.1	3.4	1.5	.4	.2	.0	.0
45-49	17.1	87.4	310.2	671.5	1,080.4	1,299.0	934.0	322.9	88.5	24.8	6.5	2.0	.8	.0	.0	.0
50-54	8.6	34.8	122.8	294.5	558.9	822.8	931.1	631.8	206.6	61.3	16.9	5.0	1.6	.2	.0	.0
55-59	3.5	15.6	52.0	120.2	248.9	441.2	626.3	664.4	445.6	162.0	41.4	12.1	3.6	1.1	.5	.0
60-64	2.1	6.7	20.7	45.9	97.6	189.7	308.2	417.7	452.9	348.2	108.7	27.8	6.3	1.6	.0	.0
65-69	1.3	3.0	8.2	17.2	34.6	64.8	119.8	186.2	268.8	338.2	243.0	70.4	15.3	3.5	.5	.0
70-74	1.0	2.3	3.2	6.5	13.6	27.3	45.9	75.1	119.7	191.2	234.6	154.4	38.2	6.6	1.7	.0
75-79	.1	2.0	1.6	2.9	5.6	10.3	17.7	31.5	51.7	86.2	125.6	135.6	85.2	14.6	2.9	.2
80-84	.0	.4	1.1	1.2	2.8	3.2	6.8	13.3	19.9	32.2	49.0	64.2	51.1	26.6	4.5	.4
85-89	.0	.0	.0	.0	.2	.1	2.5	4.5	7.2	9.2	13.0	16.8	20.8	16.2	4.2	.7
90-94	.0	.0	.0	.0	.0	.0	.0	1.3	1.5	1.8	3.1	4.7	4.6	3.1	2.0	6.6

Note: The central marriage rate is the ratio of the number of marriages during the year in the tabulated age cell to the square root of the product of the midyear number of unmarried males in the age group of husband and the midyear number of unmarried females in the age group of wife.

A complete projection of age-of-husband-age-of-wife-specific marriage rates was not done separately for each previous marital status. However, experience data indicated that the differential in marriage rates by previous marital status is significant. Future relative differences in marriage rates by previous marital status were assumed to be the same as the average of those experienced during 1979 and 1981-1986. Data for 1980 were not available. The marriage rates for the years 1979 and 1981-1986 were obtained from unpublished data supplied by the National Center for Health Statistics. The average of these marriage rates, with slight modifications, grouped by 5-year age groups based on the MRA population as of July 1, 1982, are given in Table 17.

Table 17.—Average of Calendar Years 1979 and 1981-86 Central Marriage Rates by Age Group, Sex, and Marital Status
[Per thousand]

Sex and age group	Marital status			
	Total	Single	Widowed	Divorced
Male:				
14-19	17.4	17.3	202.0	174.3
20-24	83.1	78.4	236.7	221.5
25-29	121.8	101.7	256.3	217.0
30-34	117.3	74.1	206.5	198.7
35-39	98.2	40.8	104.2	166.4
40-44	89.2	35.0	90.8	158.1
45-49	59.2	15.4	65.7	111.3
50-54	56.0	12.8	63.1	102.5
55-59	38.5	7.5	55.7	61.3
60-64	36.1	6.5	51.0	54.4
65-69	16.6	2.8	20.1	29.1
70-74	14.5	2.3	17.0	25.7
75-79	14.8	2.4	17.1	25.9
80-84	15.2	2.4	17.1	25.9
85-89	15.9	2.4	17.1	25.9
90-94	16.2	2.4	17.1	25.9
Female:				
14-19	39.3	38.6	225.6	215.6
20-24	111.2	101.9	134.3	221.4
25-29	131.2	106.4	86.4	189.2
30-34	103.0	67.1	56.0	136.7
35-39	67.1	34.2	35.2	92.1
40-44	60.4	28.9	32.1	83.9
45-49	31.3	11.9	21.0	47.9
50-54	25.2	9.7	18.9	41.9
55-59	11.5	4.9	10.0	19.4
60-64	9.1	4.1	8.4	16.0
65-69	2.8	1.1	2.6	7.1
70-74	2.1	.8	2.0	6.0
75-79	2.1	.8	2.0	6.0
80-84	2.1	.8	2.0	6.0
85-89	2.1	.8	2.0	6.0
90-94	2.1	.8	2.0	6.0

Note: The central marriage rate is the ratio of the number of marriages during the year in the tabulated age group and marital status to the midyear population in that age group and marital status.

E. Divorce

Data on divorces (including annulments) in the Divorce Registration Area (DRA) during calendar years 1979-1986 by age group of husband crossed with age group of wife were obtained from the National Center for Health Statistics. For each of the above calendar years, the number of divorces occurring in the DRA (which in 1986 consisted of 31 States and accounted for about 48 percent of all divorces in the U.S.) were inflated to represent the Social Security Area, based on the total number of divorces during the corresponding calendar year in the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. Divorce rates for each age of husband crossed with each age of wife were then calculated as the ratio of the inflated number of divorces in the Social Security Area for the given age of husband and age of wife to the number of existing marriages in the Social Security Area with the given age of husband and age of wife. Table 18 contains the resulting rates age-adjusted to the married Social Security Area population as of July 1, 1982.

Table 18.—Age-Adjusted Central Divorce Rates by Calendar Year and Alternative
[Per hundred thousand married couples]

Calendar year	Age-adjusted divorce rate		
1979	2,221		
1980	2,227		
1981	2,278		
1982	2,198		
1983	2,173		
1984	2,185		
1985	2,212		
1986	2,185		
1987	2,122		
1988	2,124		
1989	2,059		
1990	2,102		
	Alternative I	Alternative II	Alternative III
1991	2,113	2,103	2,089
1992	2,124	2,105	2,076
1993	2,135	2,106	2,063
1994	2,147	2,108	2,050
1995	2,158	2,109	2,038
1996	2,170	2,111	2,025
1997	2,181	2,112	2,012
1998	2,193	2,114	2,000
1999	2,205	2,115	1,988
2000	2,216	2,117	1,975
2001	2,228	2,118	1,963
2002	2,240	2,120	1,951
2003	2,252	2,122	1,939
2004	2,264	2,123	1,927
2005	2,276	2,125	1,915
2006	2,288	2,126	1,903
2007	2,300	2,128	1,891
2008	2,312	2,129	1,880
2009	2,325	2,131	1,868
2010	2,337	2,132	1,857
2011	2,350	2,134	1,845
2012	2,362	2,135	1,834
2013	2,375	2,137	1,822
2014	2,387	2,138	1,811
2015	2,400	2,140	1,800

As shown in the above table, the age-adjusted central divorce rates were quite stable during the period 1979-1986. Age-adjusted central divorce rates for 1987-1989 were computed using the age distributions of the DRA data during 1979-1986 and using provisional data estimating the total divorces in the U.S. for 1987-1989. The resulting age-adjusted rates are slightly lower than those for 1979-86. For 1990, the age-adjusted central divorce rate was assumed to be equal to the average of the age-adjusted rates for the three provisional years for all three alternatives.

Because age-adjusted central divorce rates have remained fairly constant over the last ten years, we assumed under alternative II that throughout the projection period the age-adjusted rate would remain at the same level as that recently experienced. For alternative I, we assumed that the age-adjusted rate would gradually increase to 114 percent of the 1990 estimated value in 25 years and then remain at this level throughout the remaining projection period. For alternative III, age-adjusted rates are assumed to decrease reaching approximately 86 percent of the 1990 estimated rate in 25 years and then to remain constant throughout the remaining projection period.

To obtain age-specific rates for use in the projections, the age-of-husband-age-of-wife-specific rates for the years 1979-1986 were averaged and then graduated. For each alternative and year after 1990, the graduated and averaged rates were adjusted by a factor so as to produce the age-adjusted central divorce rate assumed for that particular year and alternative. The rates assumed for years after 1989 for alternative II are shown in Table 19 grouped by 5 year age groups based on Social Security Area population as of January 1, 1990.

Table 19.—Assumed Central Divorce Rates for Alternative II by Age of Husband and Wife
[Per hundred thousand]

Age group of husband	Age group of wife														
	14-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
14-19	8,000.5	5,494.6	2,780.0	5,786.2	5,827.1	5,137.0	3,086.4	2,222.2	—	—	—	—	—	—	—
20-24	7,559.6	5,766.9	4,040.7	4,333.7	6,416.5	6,881.3	5,998.1	3,996.1	2,315.6	1,196.2	150.7	—	—	—	—
25-29	5,544.3	5,136.8	4,295.8	3,348.2	4,565.0	6,082.1	6,426.2	5,185.4	3,551.1	2,698.7	2,298.9	819.7	384.6	—	—
30-34	5,645.4	4,463.8	3,815.9	3,165.3	2,951.5	4,203.0	5,059.3	4,772.1	3,647.6	3,332.3	2,597.4	1,305.3	179.7	—	—
35-39	7,204.0	5,178.0	3,751.4	2,830.7	2,568.3	2,484.7	3,385.9	3,744.5	3,342.7	3,134.2	2,778.5	2,574.3	3,054.5	—	—
40-44	7,407.4	6,107.4	4,541.5	3,026.1	2,158.9	1,928.8	1,823.8	2,317.6	2,443.9	2,462.7	2,369.1	2,287.7	2,387.3	—	—
45-49	8,559.9	6,296.3	5,085.0	3,473.5	2,260.1	1,541.0	1,292.0	1,196.1	1,410.0	1,480.7	1,484.1	1,410.3	1,568.1	—	—
50-54	5,594.4	5,209.2	4,712.6	3,646.3	2,633.6	1,557.8	1,000.7	766.5	638.1	715.9	750.0	759.6	820.0	253.5	—
55-59	2,479.3	4,189.0	4,054.7	3,548.6	2,854.6	1,870.7	1,032.7	537.7	268.4	247.4	297.6	337.0	366.9	164.7	—
60-64	2,739.7	3,369.2	3,571.9	3,371.8	2,856.4	1,953.9	1,079.5	504.5	239.3	236.3	232.5	239.2	250.8	220.3	—
65-69	1,328.9	3,182.1	3,280.5	3,255.0	2,817.6	1,939.9	1,085.6	530.2	253.9	237.5	243.0	223.3	222.4	223.2	206.2
70-74	—	3,102.4	3,285.2	2,955.0	2,689.1	1,868.5	1,067.0	541.3	259.2	226.3	235.4	238.9	220.1	210.5	248.6
75-79	—	383.1	2,948.4	3,596.6	2,596.4	1,634.4	1,013.1	536.9	262.5	227.8	226.6	233.3	236.5	213.0	237.7
80-84	—	—	—	—	1,758.8	1,346.3	709.2	508.4	243.2	223.3	210.1	210.7	217.3	238.6	240.7
85-89	—	—	—	—	—	—	—	—	—	312.9	253.7	240.0	240.9	217.8	189.2

Note: The central divorce rate is the ratio of the number of divorces during the year in the tabulated age cell to the midyear number of married couples in that cell.

IV. METHODS

Future numbers of births, deaths, net immigrants, marriages, and divorces are estimated by applying the following methods to the projected data described in the preceding section. End of year population data is determined from the beginning of year population data.

Estimates of the size of the single (never married) population at the end of the year for each age and sex is calculated from the single population estimates at the beginning of the year by subtracting the number of deaths and marriages to single persons during the year, and adding the number of net immigrants of single persons during the year. The married population at the end of the year is calculated from that at the beginning of the year by subtracting estimates of the numbers of deaths, widowings, and divorces during the year and adding estimates of the numbers of marriages and net married immigration during the year. Similarly, the widowed population at the end of the year is calculated by subtracting the deaths and marriages, and adding the widowings and the net immigration of widowed persons. The divorced population at the end of the year is calculated by subtracting the deaths and marriages, and adding the divorces and the net immigration of divorced persons.

A. Mortality

1. Probability of Survival

Earlier in this study, death rates (generally referred to as *central* death rates) were presented which were calculated as the number of deaths occurring in a given year divided by the midyear population in that year. This concept is a useful one in the context of analyzing historical trends, but is not so readily applicable to the actual projection of population. What is more suitable is the concept of probability of death (or of survival). This concept involves dividing the number of deaths occurring to a group in a given year by the number of persons in that group at the beginning of the year (rather than the population at the middle of the year). As one would expect, these two concepts are closely related, although the mathematics of their relationsip is not trivial.

Future probabilities of survival by age last birthday were calculated for each sex and each single year of age from the projected central death rates by sex and age group. For each future year in the projection period, the probability of death at age 0 was calculated from the projected central death rate for age 0 assuming the relationship between the probability of death and the central death rate that existed in 1987 remained constant. For each single year of age 1 through 4, probabilities of death were calculated in the same manner using central death rates for the age group 1 through 4 ($_4m_1$). Probabilities of death at ages 5 and older were calculated by an iterative method. As a first approximation, the probability of death for each five-year age group from 5-9 to 90-94 was calculated from the corresponding central death rate assuming that on the average deaths occurred at the middle of the age interval. As part of the iterative process, the probability of death for each single age in each five-year age group was determined by interpolating the logarithms of the complements of the surrounding five-year probabilities of death with Beer's minimized fifth-difference formula. The probability of death for each age 95 and over was calculated to produce a rapid decline in the ratio of succeeding probabilities of death to a minimum ratio of 1.06 for females and 1.05 for males. These ratios were chosen based on the analysis by Francisco R. Bayo and Joseph F. Faber contained in the paper "Mortality Experience Around Age 100," in the *Transactions of the Society of Actuaries,* Volume XXXV. An initial life table for each sex was then constructed using these probabilities of death. On subsequent iterations, the life table probability of death for each age 5 through 94 was adjusted so that the central death rates for the five-year age groups obtained by weighting the single age life table central death rates by the population would equal the corresponding population five-year age group cen-

tral death rates. This adjustment corrects for the fact that the distribution within each quinquennial age group in the life table population generally differs from that in the actual population. For more detail on the method used to produce the life tables for these population projections see Actuarial Study No. 89, "Life Tables For The United States: 1900-2050" by Joseph F. Faber and Alice H. Wade.

2. Number of Deaths

The number of deaths occurring at each age and sex was calculated as the difference between the number of people alive at the beginning of the year and the product of the number of people alive at the beginning of the year and the probability of survival. Deaths to newborn babies were computed using a similar formula. However, deaths to immigrants newly arriving in the year were disregarded. The numbers of deaths were then distributed by marital status in the same proportions as would have been produced by applying the marital-status specific probabilities of survival to the population by marital status at the beginning of the year. Projected numbers of deaths are given in Table 20 by alternative.

3. Number of Widowings

The number of marriages dissolved by death at each age of husband crossed with each age of wife was calculated by applying joint-life probabilities of death to the existing marriages by age of husband crossed with age of wife at the beginning of the year. (The joint-life probabilities were developed to be consistent with the projected death rates and the assumed mortality differential by marital status, and assumed independence of the partners). The number of widowings for a particular age and sex was calculated as the difference between the marriages of individuals of that particular age and sex dissolved by death of either partner and the number of deaths to married persons of that age and sex.

B. Net Immigration

The assumed net immigration for each age and sex was distributed among the single (never married), married, widowed, and divorced populations based on the proportions as existed in the nonmarried population at the beginning of the year. Adjustments were required in order to ensure that the numbers of net married immigrants would be consistent with the estimates of the married population by age of husband crossed with age of wife at the beginning of the year.

C. Divorce

The number of divorces during a year occurring at each age of husband crossed with each age of wife is, in theory, obtained by multiplying the the age-of-husband-age-of-wife-specific divorce rates for that year with the midyear number of married couples in that age crossing. Because the numbers of marriages by age of husband crossed with age of wife are only available as of the beginning of the year, midyear estimates of these numbers must be made. In addition, because these estimates depend on the number of marriages and divorces occurring during the first half of the year, the process of obtaining these estimates is performed by a series of iterations.

For the first iteration, the numbers of new marriages during the first half of the year is assumed to be zero. As a first approximation, for each age of husband crossed with age of wife, the midyear married population is estimated from the beginning of year married population by adjusting for the number of widowings, dissolutions occurring when both husband and wife die, and net immigrants during the first half of the year. As as second approximation, the married population is calculated in the same manner with an additional adjustment of subtracting one-half of all divorces occurring during the year to couples of those age crossing. (The number of divorces being obtained by using the first midyear married population approximations). The total numbers of divorces over all age crossings using the two midyear married population approximations were calculated and the difference between the totals was determined. The first iterative process was continued until the difference between the totals was small.

For the second iteration, the process above was repeated except using an additional adjustment of adding in one-half of the new marriages to all of the midyear population calculations. (The number of new marriages being estimated by an iterative process as described in the next section). This process was continued until the iteration series described above and the iteration described in the next section, using the most recent estimates of numbers of new divorces, were completed with acceptable results. Projected numbers of divorces are given in Table 20 by alternative.

D. Marriage

The number of marriages occurring at each age of husband crossed with each age of wife is, in theory, obtained by multiplying the age-of-husband-age-of-wife-specific marriage rates with the geometric mean of the midyear male population exposed to marriage and the midyear female population exposed to marriage. Thus, the midyear populations exposed to marriage must be estimated from the beginning of the year nonmarried populations. Because the midyear populations exposed to marriage depend on the number of marriages during the first half of the year, the process of obtaining the number of marriages is performed iteratively.

As a first approximation, the midyear male population exposed to marriage was calculated by age as the average of the number of nonmarried males at the beginning of the year and an estimate of the number of nonmarried males at the end of the year. The nonmarried male population at the end of the year was estimated from the population at the beginning of the year by subracting deaths and adding new immigrants, widows, and divorces during the year. The female population exposed to marriage was approximated similarly. As a second approximation, the midyear male population exposed to marriage was calculated in the same manner as the previously calculated midyear male population of the given age exposed to marriage less one-half of all marriages involving men of the given age. (The number of marriages being obtained by using the first midyear nonmarried population approximations). The female population exposed to marriage was similarly approximated. The difference between the number of marriages obtained by using the two midyear population approximations was calculated. The iterative process was continued until the difference between the number of marriages was small. The numbers of mar-

riages were then distributed by previous marital status in the same proportions as would have been produced by applying the previous marital-status-specific marriage rates to the population by marital status at the beginning of the year. Projected numbers of marriages are given in Table 20 by alternative.

E. Fertility

In order to determine the number of births during a year, birth rates for that year were applied to the average of the beginning-of-year and end-of-year female population. Projected numbers of births are given in Table 20 by alternative.

Table 20.—Selected Vital Events in the Social Security Area by Calendar Year and Alternative
[In thousands]

Alternative and calendar year	Births	Deaths	Marriages	Divorces
Alternative I :				
1989	4,136	2,227	2,469	1,146
1990	4,220	2,254	2,592	1,192
1991	4,201	2,285	2,568	1,209
1992	4,179	2,315	2,547	1,212
1993	4,157	2,346	2,529	1,215
1994	4,136	2,379	2,508	1,221
1995	4,117	2,412	2,490	1,228
1996	4,103	2,446	2,475	1,235
1997	4,095	2,480	2,464	1,237
1998	4,093	2,514	2,457	1,237
1999	4,096	2,548	2,453	1,237
2000	4,105	2,582	2,452	1,238
2005	4,238	2,741	2,466	1,239
2010	4,498	2,899	2,494	1,244
2015	4,742	3,080	2,501	1,255
2020	4,857	3,305	2,626	1,250
2025	4,937	3,582	2,714	1,265
2030	5,060	3,896	2,809	1,291
2035	5,245	4,197	2,917	1,324
2040	5,446	4,431	3,020	1,362
2045	5,617	4,566	3,108	1,402
2050	5,757	4,618	3,190	1,441
2055	5,900	4,634	3,276	1,481
2060	6,069	4,667	3,373	1,523
2065	6,254	4,750	3,473	1,566
2070	6,437	4,876	3,570	1,610
2075	6,607	5,019	3,664	1,654
2080	6,773	5,153	3,759	1,698
Alternative II :				
1989	4,136	2,227	2,469	1,146
1990	4,217	2,251	2,592	1,192
1991	4,167	2,275	2,599	1,201
1992	4,115	2,300	2,606	1,200
1993	4,062	2,325	2,611	1,200
1994	4,010	2,351	2,611	1,202
1995	3,962	2,377	2,612	1,207
1996	3,919	2,402	2,615	1,212
1997	3,882	2,427	2,620	1,212
1998	3,852	2,452	2,630	1,212
1999	3,827	2,479	2,642	1,211
2000	3,808	2,504	2,656	1,212
2005	3,796	2,615	2,749	1,221
2010	3,890	2,752	2,859	1,241
2015	3,935	2,915	2,930	1,270
2020	3,950	3,109	2,935	1,291
2025	3,907	3,342	2,926	1,303
2030	3,880	3,611	2,936	1,312
2035	3,894	3,880	2,957	1,319
2040	3,926	4,102	2,976	1,324
2045	3,942	4,238	2,982	1,328
2050	3,937	4,286	2,980	1,331
2055	3,928	4,274	2,979	1,334
2060	3,929	4,250	2,986	1,337
2065	3,942	4,254	2,995	1,341
2070	3,954	4,296	3,002	1,345
2075	3,960	4,355	3,004	1,348
2080	3,960	4,400	3,006	1,351
Alternative III:				
1989	4,136	2,227	2,469	1,146
1990	4,215	2,236	2,592	1,192
1991	4,133	2,245	2,642	1,192
1992	4,049	2,259	2,686	1,185
1993	3,967	2,277	2,725	1,180
1994	3,887	2,299	2,757	1,178
1995	3,812	2,324	2,786	1,181
1996	3,741	2,351	2,814	1,183
1997	3,678	2,379	2,844	1,182
1998	3,621	2,407	2,876	1,180
1999	3,571	2,452	2,910	1,179
2000	3,526	2,493	2,946	1,179
2005	3,386	2,575	3,135	1,188
2010	3,335	2,615	3,327	1,215
2015	3,217	2,720	3,422	1,249
2020	3,165	2,870	3,184	1,285
2025	3,042	3,057	3,034	1,284
2030	2,917	3,281	2,940	1,267
2035	2,823	3,518	2,862	1,242
2040	2,753	3,732	2,792	1,213
2045	2,683	3,879	2,717	1,182
2050	2,604	3,943	2,635	1,153
2055	2,522	3,933	2,556	1,124
2060	2,447	3,886	2,486	1,096
2065	2,382	3,842	2,422	1,069
2070	2,322	3,829	2,359	1,043
2075	2,263	3,838	2,296	1,018
2080	2,204	3,839	2,234	994

V. RESULTS

A. Total Population

Table 21 displays the resulting Social Security Area population by age group, sex, marital status, and alternative as of January 1 for selected years. The past and projected total population is shown graphically in Chart 6. Under alternative I (with greater-than-replacement fertility), the total population increases rapidly from 256 million in 1989 to 475 million in 2080. Under alternative II, the total population increases gradually to 357 million in 2080 as a 1.9 total fertility rate plus 750,000 annual net immigrants are more than enough to replenish the population. Under alternative III, the total population increases to 312 million in 2034 and then decreases to 279 million in 2080. The decline in population size after 2034 is due to the compounding effect of below-replacement fertility which is only partially offset by the positive net immigration.

Chart 6 - Social Security Area Population

(in millions), 1960 - 2080

Actual and Projected by Alternative

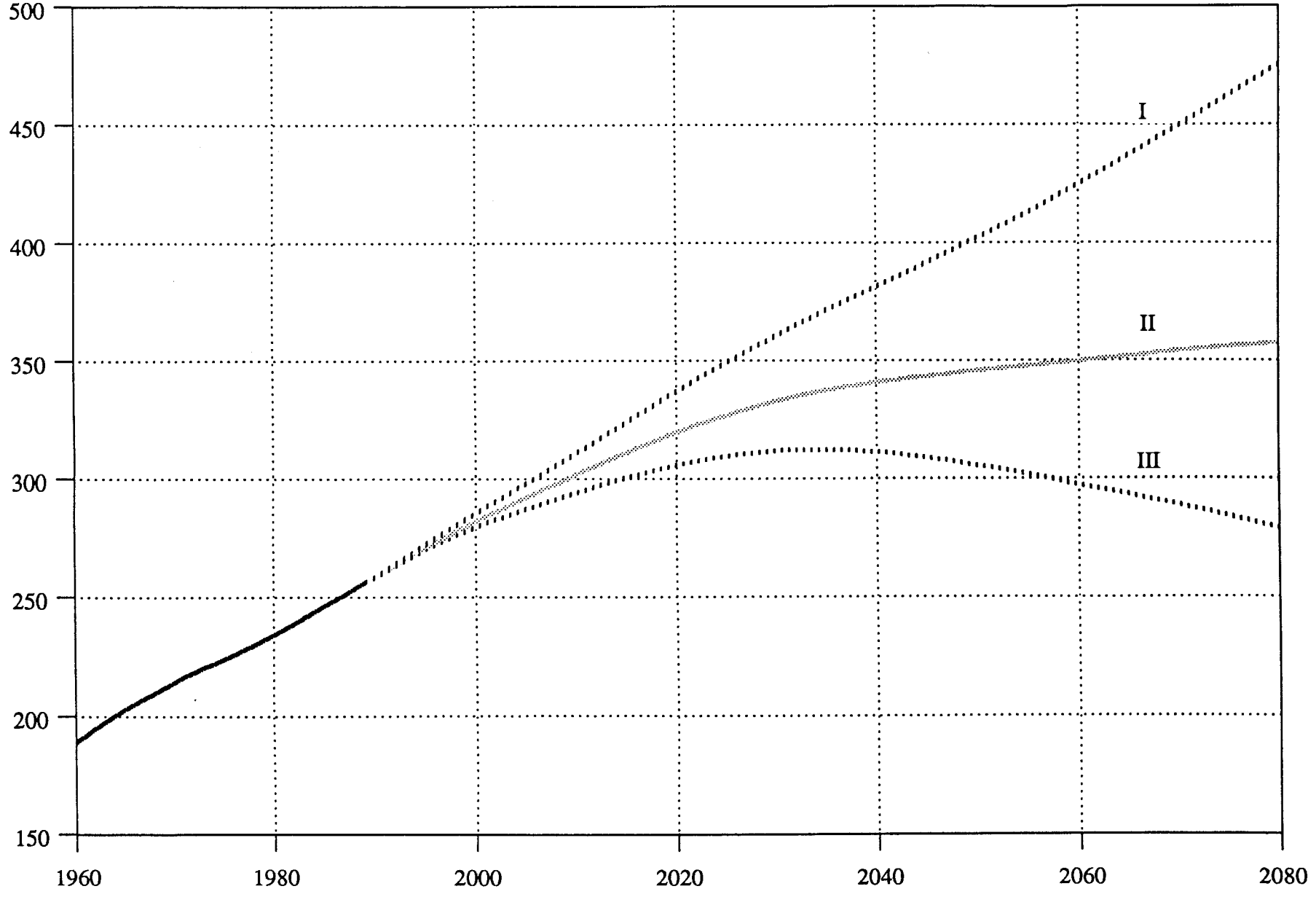


Table 21.—January 1 Population in the Social Security Area by Alternative, Year, Age Group, Sex, and Marital Status

[In thousands]

Alternative, year, and age group	Total	Sex and marital status									
		Male					Female				
		Total	Single	Married	Widowed	Divorced	Total	Single	Married	Widowed	Divorced
1989:											
0-4	19,509	9,986	9,986	0	0	0	9,523	9,523	0	0	0
5-9	18,915	9,679	9,679	0	0	0	9,235	9,235	0	0	0
10-14	17,324	8,872	8,871	0	0	0	8,452	8,449	3	0	0
15-19	18,463	9,440	9,302	129	2	8	9,023	8,576	420	10	17
20-24	19,835	10,093	7,826	2,115	6	146	9,742	6,097	3,333	15	296
25-29	22,832	11,632	5,454	5,587	5	587	11,200	3,309	6,954	37	900
30-34	22,698	11,548	3,101	7,462	26	960	11,150	1,896	7,978	78	1,198
35-39	20,162	10,178	1,659	7,362	37	1,119	9,984	990	7,550	136	1,309
40-44	17,189	8,610	790	6,697	54	1,069	8,580	545	6,434	279	1,322
45-49	13,842	6,891	545	5,435	79	832	6,951	406	5,209	301	1,035
50-54	11,622	5,737	403	4,583	115	636	5,885	313	4,356	417	798
55-59	11,090	5,389	344	4,382	145	519	5,701	267	4,008	804	621
60-64	11,116	5,254	311	4,282	237	425	5,862	257	3,843	1,247	515
65-69	10,042	4,606	254	3,704	365	283	5,435	241	3,124	1,704	366
70-74	8,028	3,469	177	2,706	419	166	4,559	218	2,159	1,950	232
75-79	6,009	2,367	112	1,764	411	79	3,643	208	1,228	2,089	118
80-84	3,858	1,333	60	921	317	35	2,525	155	596	1,709	65
85-89	2,077	605	27	328	235	15	1,472	91	261	1,082	38
90-94	835	206	9	76	116	5	629	39	75	499	16
95+	256	55	2	10	41	1	201	12	11	172	5
0-19	74,212	37,978	37,840	129	2	8	36,233	35,783	423	10	17
20-64	150,387	75,333	20,433	47,904	704	6,292	75,054	14,080	49,665	3,313	7,995
65+	31,104	12,640	642	9,509	1,904	585	18,464	965	7,454	9,205	840
20-65	152,512	76,319	20,489	48,700	771	6,358	76,193	14,130	50,352	3,631	8,080
20-66	154,605	77,285	20,543	49,479	843	6,420	77,320	14,180	51,015	3,965	8,160
20-67	156,668	78,235	20,595	50,243	919	6,478	78,433	14,229	51,653	4,316	8,235
20-68	158,642	79,135	20,644	50,965	996	6,531	79,507	14,277	52,254	4,673	8,303
20-69	160,428	79,939	20,687	51,608	1,069	6,575	80,489	14,321	52,789	5,017	8,362
66+	28,979	11,655	586	8,713	1,837	519	17,324	914	6,767	8,887	755
67+	26,886	10,688	532	7,934	1,765	457	16,197	864	6,104	8,553	676
68+	24,823	9,739	480	7,170	1,689	399	15,084	815	5,465	8,203	601
69+	22,848	8,838	431	6,448	1,612	346	14,011	767	4,865	7,845	533
70+	21,062	8,034	388	5,805	1,539	301	13,029	724	4,330	7,501	474
Total	255,702	125,951	58,915	57,542	2,610	6,885	129,751	50,828	57,542	12,528	8,853
Alternative I:											
1990:											
0-4	19,824	10,147	10,147	0	0	0	9,677	9,677	0	0	0
5-9	19,085	9,767	9,767	0	0	0	9,318	9,318	0	0	0
10-14	17,672	9,047	9,047	0	0	0	8,625	8,624	1	0	0
15-19	18,065	9,241	9,089	146	1	5	8,824	8,327	477	4	16
20-24	19,473	9,914	7,695	2,061	5	153	9,559	6,013	3,243	16	288
25-29	22,580	11,500	5,464	5,419	5	612	11,079	3,402	6,737	38	902
30-34	22,999	11,704	3,274	7,409	22	999	11,295	1,977	8,004	78	1,236
35-39	20,714	10,468	1,810	7,477	38	1,143	10,246	1,084	7,676	135	1,351
40-44	17,996	9,020	887	6,940	54	1,139	8,975	592	6,709	273	1,401
45-49	14,324	7,130	566	5,612	80	872	7,193	418	5,356	322	1,098
50-54	11,842	5,846	412	4,661	114	659	5,996	324	4,426	403	844
55-59	10,960	5,332	342	4,320	150	520	5,628	269	3,948	770	640
60-64	11,047	5,234	310	4,259	232	433	5,813	255	3,817	1,206	536
65-69	10,243	4,701	260	3,766	373	303	5,542	245	3,177	1,723	397
70-74	8,117	3,526	181	2,749	418	178	4,591	214	2,197	1,931	249
75-79	6,133	2,430	113	1,788	441	88	3,703	204	1,268	2,097	134
80-84	3,962	1,377	59	942	338	38	2,585	157	595	1,765	68
85-89	2,130	624	26	348	235	16	1,506	91	266	1,110	39
90-94	859	212	8	83	114	5	648	39	81	511	17
95+	267	56	2	12	41	1	210	12	14	179	6
0-19	74,646	38,202	38,050	146	1	5	36,444	35,947	477	4	16
20-64	151,935	76,148	20,760	48,157	701	6,530	75,787	14,334	49,916	3,240	8,296
65+	31,711	12,926	649	9,687	1,960	630	18,785	961	7,598	9,316	910
20-65	154,089	77,148	20,817	48,966	763	6,603	76,941	14,385	50,618	3,549	8,388
20-66	156,177	78,111	20,870	49,738	835	6,667	78,066	14,434	51,278	3,881	8,472
20-67	158,229	79,053	20,922	50,492	912	6,726	79,177	14,484	51,912	4,229	8,551
20-68	160,249	79,976	20,973	51,228	992	6,783	80,273	14,532	52,522	4,593	8,625
20-69	162,178	80,850	21,019	51,923	1,074	6,833	81,328	14,579	53,093	4,963	8,693
66+	29,557	11,927	593	8,879	1,898	557	17,630	910	6,895	9,008	817
67+	27,469	10,964	539	8,106	1,826	493	16,505	861	6,236	8,676	733
68+	25,417	10,022	487	7,353	1,749	434	15,394	812	5,601	8,327	654
69+	23,397	9,099	437	6,616	1,668	378	14,298	763	4,991	7,963	580
70+	21,468	8,225	390	5,922	1,587	327	13,243	716	4,421	7,593	513
Total	258,292	127,276	59,459	57,991	2,661	7,165	131,015	51,242	57,991	12,561	9,221

Table 21.—January 1 Population in the Social Security Area by Alternative, Year, Age Group, Sex, and Marital Status —Continued
[In thousands]

Alternative, year, and age group	Total	Sex and marital status									
		Male					Female				
		Total	Single	Married	Widowed	Divorced	Total	Single	Married	Widowed	Divorced
Alternative I: (Cont.)											
1995:											
0-4	20,823	10,655	10,655	0	0	0	10,168	10,168	0	0	0
5-9	20,175	10,323	10,323	0	0	0	9,852	9,852	0	0	0
10-14	19,403	9,928	9,928	0	0	0	9,475	9,475	1	0	0
15-19	18,012	9,213	9,083	127	0	3	8,798	8,308	469	0	20
20-24	18,643	9,544	7,414	1,957	1	171	9,100	5,567	3,206	9	318
25-29	20,209	10,308	4,959	4,722	7	620	9,900	3,286	5,788	32	794
30-34	23,040	11,726	3,698	6,903	14	1,111	11,314	2,133	7,783	74	1,324
35-39	23,174	11,763	2,493	7,938	32	1,301	11,411	1,493	8,229	131	1,558
40-44	20,725	10,441	1,514	7,556	57	1,313	10,284	921	7,546	214	1,603
45-49	17,895	8,934	784	6,837	85	1,229	8,961	535	6,491	383	1,552
50-54	14,118	6,981	513	5,493	119	857	7,138	395	5,112	477	1,154
55-59	11,512	5,619	368	4,491	162	598	5,893	310	4,124	623	836
60-64	10,421	4,982	299	4,016	223	444	5,439	256	3,525	1,044	614
65-69	10,184	4,702	262	3,730	347	363	5,482	238	3,183	1,551	509
70-74	9,020	3,980	207	3,034	491	248	5,040	222	2,410	2,041	367
75-79	6,658	2,719	125	1,960	499	136	3,939	181	1,448	2,092	218
80-84	4,464	1,600	60	1,055	425	59	2,865	154	682	1,924	105
85-89	2,424	731	23	410	277	22	1,693	97	250	1,301	45
90-94	996	247	6	111	123	7	749	40	90	598	21
95+	308	63	1	19	41	2	245	11	21	205	9
0-19	78,413	40,119	39,989	127	0	3	38,294	37,803	470	0	20
20-64	159,737	80,297	22,042	49,913	700	7,643	79,439	14,896	51,804	2,987	9,752
65+	34,055	14,042	685	10,319	2,202	836	20,013	943	8,084	9,712	1,275
20-65	161,830	81,281	22,098	50,705	755	7,725	80,548	14,945	52,488	3,251	9,864
20-66	163,915	82,253	22,153	51,479	820	7,801	81,662	14,993	53,153	3,544	9,972
20-67	165,966	83,201	22,205	52,231	891	7,874	82,765	15,040	53,795	3,856	10,074
20-68	167,957	84,110	22,255	52,947	966	7,942	83,846	15,087	54,403	4,185	10,171
20-69	169,921	84,999	22,304	53,643	1,046	8,006	84,922	15,134	54,988	4,538	10,262
66+	31,962	13,058	629	9,527	2,147	755	18,904	894	7,400	9,448	1,163
67+	29,877	12,087	574	8,753	2,082	678	17,790	846	6,735	9,155	1,055
68+	27,826	11,138	521	8,001	2,010	605	16,687	798	6,094	8,843	953
69+	25,835	10,229	471	7,285	1,935	538	15,606	751	5,485	8,513	856
70+	23,871	9,341	423	6,589	1,855	474	14,531	704	4,901	8,161	765
Total	272,205	134,459	62,716	60,359	2,901	8,483	137,746	53,641	60,359	12,699	11,047
2000:											
0-4	20,457	10,468	10,468	0	0	0	9,989	9,989	0	0	0
5-9	21,202	10,845	10,845	0	0	0	10,357	10,357	0	0	0
10-14	20,522	10,499	10,499	0	0	0	10,023	10,022	1	0	0
15-19	19,774	10,109	9,974	132	0	4	9,664	9,169	474	0	21
20-24	18,635	9,540	7,563	1,815	1	161	9,095	5,811	2,971	7	306
25-29	19,445	9,974	4,995	4,346	5	628	9,472	3,164	5,464	27	817
30-34	20,755	10,584	3,464	6,048	12	1,061	10,171	2,095	6,828	61	1,187
35-39	23,276	11,820	2,914	7,487	26	1,393	11,456	1,633	8,072	122	1,630
40-44	23,209	11,749	2,126	8,040	55	1,528	11,460	1,279	8,134	209	1,838
45-49	20,626	10,354	1,350	7,483	90	1,431	10,271	835	7,316	334	1,787
50-54	17,647	8,756	717	6,682	135	1,223	8,891	507	6,203	556	1,625
55-59	13,741	6,723	461	5,297	178	787	7,018	378	4,782	712	1,146
60-64	10,976	5,272	324	4,202	232	514	5,704	296	3,695	915	798
65-69	9,628	4,495	254	3,539	328	374	5,133	241	2,942	1,373	578
70-74	8,976	3,994	210	3,015	476	294	4,981	216	2,404	1,898	463
75-79	7,394	3,071	144	2,164	578	186	4,322	189	1,582	2,236	315
80-84	4,840	1,786	67	1,158	475	86	3,054	137	777	1,974	166
85-89	2,726	842	23	476	311	32	1,883	95	289	1,430	69
90-94	1,129	286	6	121	150	10	843	43	74	702	25
95+	352	72	1	22	46	3	280	11	19	239	11
0-19	81,955	41,922	41,786	132	0	4	40,033	39,537	474	0	21
20-64	168,310	84,773	23,914	51,399	734	8,725	83,538	15,998	53,465	2,941	11,134
65+	35,044	14,546	705	10,495	2,363	984	20,498	932	8,087	9,852	1,627
20-65	170,297	85,714	23,970	52,148	788	8,809	84,583	16,049	54,105	3,166	11,263
20-66	172,212	86,615	24,021	52,861	849	8,884	85,597	16,098	54,695	3,425	11,379
20-67	174,113	87,501	24,071	53,559	915	8,956	86,612	16,145	55,273	3,701	11,492
20-68	176,027	88,387	24,121	54,253	986	9,028	87,640	16,192	55,846	3,998	11,604
20-69	177,939	89,268	24,169	54,939	1,062	9,098	88,671	16,239	56,407	4,314	11,711
66+	33,057	13,605	649	9,746	2,310	900	19,452	881	7,446	9,627	1,498
67+	31,143	12,704	598	9,034	2,248	825	18,438	832	6,856	9,368	1,381
68+	29,242	11,818	548	8,335	2,182	752	17,424	785	6,279	9,092	1,268
69+	27,327	10,932	499	7,641	2,111	681	16,395	738	5,706	8,795	1,157
70+	25,416	10,051	450	6,955	2,035	610	15,365	691	5,145	8,479	1,049
Total	285,309	141,241	66,405	62,026	3,097	9,712	144,068	56,467	62,026	12,793	12,782

Table 21.—January 1 Population in the Social Security Area by Alternative, Year, Age Group, Sex, and Marital Status —Continued
[In thousands]

Alternative, year, and age group	Total	Sex and marital status									
		Male					Female				
		Total	Single	Married	Widowed	Divorced	Total	Single	Married	Widowed	Divorced
Alternative I: (Cont.)											
2020:											
0-4	23,939	12,252	12,252	0	0	0	11,687	11,687	0	0	0
5-9	23,354	11,949	11,949	0	0	0	11,405	11,405	0	0	0
10-14	22,385	11,451	11,451	0	0	0	10,934	10,933	1	0	0
15-19	21,793	11,140	11,019	117	0	4	10,654	10,200	431	0	22
20-24	22,173	11,339	9,418	1,746	1	175	10,834	7,591	2,892	6	345
25-29	23,321	11,942	6,964	4,260	4	713	11,379	5,048	5,333	23	975
30-34	22,848	11,701	4,858	5,626	10	1,207	11,148	3,323	6,344	50	1,430
35-39	22,001	11,248	3,610	6,190	18	1,429	10,754	2,351	6,641	89	1,673
40-44	20,351	10,390	2,692	6,167	34	1,497	9,962	1,633	6,446	148	1,735
45-49	20,281	10,318	2,320	6,323	66	1,608	9,963	1,298	6,549	262	1,855
50-54	20,736	10,435	2,049	6,624	126	1,635	10,300	1,206	6,702	461	1,931
55-59	22,268	11,079	1,965	7,222	240	1,653	11,189	1,163	7,058	827	2,142
60-64	21,108	10,356	1,470	7,094	389	1,404	10,752	995	6,471	1,276	2,010
65-69	17,437	8,346	888	5,905	541	1,011	9,091	663	5,042	1,738	1,648
70-74	13,371	6,161	415	4,381	670	696	7,210	385	3,406	2,140	1,280
75-79	8,809	3,815	204	2,615	646	350	4,994	258	1,829	2,138	768
80-84	5,382	2,094	86	1,330	519	159	3,288	165	818	1,883	421
85-89	3,113	1,029	30	569	362	69	2,084	91	308	1,473	211
90-94	1,544	417	8	181	201	28	1,126	40	94	890	102
95+	558	120	1	33	77	9	438	12	18	366	42
0-19	91,471	46,791	46,671	117	0	4	44,680	44,226	432	0	22
20-64	195,088	98,807	35,346	51,252	888	11,321	96,281	24,608	54,436	3,142	14,095
65+	50,213	21,983	1,632	15,014	3,015	2,322	28,229	1,614	11,516	10,629	4,470
20-65	198,913	100,659	35,569	52,552	978	11,560	98,253	24,773	55,573	3,437	14,471
20-66	202,573	102,421	35,771	53,793	1,085	11,772	100,152	24,920	56,640	3,789	14,803
20-67	206,061	104,091	35,948	54,975	1,197	11,971	101,970	25,051	57,646	4,147	15,125
20-68	209,382	105,670	36,100	56,099	1,312	12,159	103,712	25,166	58,596	4,511	15,440
20-69	212,525	107,154	36,234	57,158	1,429	12,333	105,371	25,271	59,478	4,880	15,742
66+	46,388	20,132	1,409	13,714	2,925	2,084	26,257	1,450	10,378	10,334	4,095
67+	42,728	18,370	1,206	12,473	2,819	1,871	24,358	1,303	9,312	9,982	3,762
68+	39,240	16,700	1,030	11,291	2,707	1,672	22,540	1,172	8,305	9,624	3,440
69+	35,919	15,121	877	10,168	2,591	1,484	20,798	1,057	7,356	9,260	3,126
70+	32,776	13,637	743	9,109	2,475	1,310	19,139	952	6,473	8,891	2,823
Total	336,772	167,582	83,648	66,383	3,904	13,647	169,190	70,448	66,383	13,771	18,587
2040:											
0-4	26,618	13,624	13,624	0	0	0	12,994	12,994	0	0	0
5-9	26,015	13,312	13,312	0	0	0	12,703	12,703	0	0	0
10-14	25,613	13,104	13,104	0	0	0	12,509	12,508	1	0	0
15-19	25,511	13,042	12,901	137	0	4	12,468	11,941	502	0	25
20-24	25,635	13,109	10,895	2,012	1	201	12,526	8,835	3,292	7	392
25-29	25,462	13,037	7,607	4,657	4	768	12,425	5,583	5,777	24	1,041
30-34	24,697	12,642	5,378	5,993	9	1,261	12,055	3,733	6,779	49	1,493
35-39	24,000	12,263	4,223	6,549	18	1,473	11,737	2,831	7,087	86	1,732
40-44	23,827	12,146	3,677	6,808	35	1,626	11,682	2,435	7,169	149	1,928
45-49	24,075	12,231	3,419	7,012	63	1,737	11,844	2,300	7,179	259	2,105
50-54	22,792	11,526	2,937	6,860	109	1,621	11,265	2,011	6,760	427	2,068
55-59	21,172	10,619	2,458	6,543	180	1,438	10,553	1,694	6,211	694	1,954
60-64	18,694	9,269	1,897	5,911	278	1,183	9,425	1,275	5,391	1,046	1,713
65-69	17,280	8,409	1,577	5,338	454	1,039	8,872	1,029	4,676	1,581	1,585
70-74	15,813	7,427	1,238	4,603	693	894	8,386	905	3,807	2,220	1,454
75-79	14,350	6,374	939	3,746	957	732	7,976	776	2,880	2,925	1,395
80-84	10,509	4,240	448	2,394	958	440	6,269	548	1,640	3,032	1,049
85-89	5,888	2,044	127	1,066	661	190	3,844	260	649	2,326	609
90-94	2,506	722	20	314	322	66	1,784	80	169	1,243	291
95+	769	177	2	51	107	18	592	19	24	438	112
0-19	103,757	53,083	52,942	137	0	4	50,674	50,146	502	0	25
20-64	210,355	106,843	42,491	52,345	698	11,309	103,512	30,698	55,646	2,742	14,427
65+	67,115	29,393	4,350	17,512	4,152	3,379	37,722	3,617	13,845	13,765	6,495
20-65	213,796	108,534	42,812	53,434	770	11,518	105,263	30,904	56,616	3,002	14,740
20-66	217,173	110,185	43,118	54,497	849	11,721	106,988	31,099	57,557	3,284	15,048
20-67	220,584	111,845	43,426	55,556	938	11,926	108,738	31,297	58,486	3,595	15,360
20-68	224,109	113,553	43,749	56,627	1,039	12,138	110,556	31,511	59,416	3,943	15,686
20-69	227,635	115,251	44,068	57,683	1,152	12,348	112,384	31,727	60,322	4,323	16,012
66+	63,673	27,701	4,030	16,422	4,080	3,170	35,972	3,411	12,874	13,504	6,182
67+	60,297	26,050	3,723	15,359	4,001	2,967	34,247	3,216	11,934	13,223	5,874
68+	56,886	24,390	3,415	14,300	3,912	2,762	32,496	3,018	11,005	12,912	5,562
69+	53,360	22,682	3,092	13,229	3,810	2,550	30,678	2,804	10,075	12,564	5,236
70+	49,834	20,984	2,773	12,174	3,697	2,340	28,850	2,587	9,169	12,184	4,910
Total	381,226	189,318	99,783	69,993	4,850	14,692	191,908	84,461	69,993	16,507	20,947

Table 21.—January 1 Population in the Social Security Area by Alternative, Year, Age Group, Sex, and Marital Status —Continued
[In thousands]

Alternative, year, and age group	Total	Sex and marital status									
		Male					Female				
		Total	Single	Married	Widowed	Divorced	Total	Single	Married	Widowed	Divorced
Alternative I: (Cont.)											
2060:											
0-4	29,819	15,264	15,264	0	0	0	14,555	14,555	0	0	0
5-9	29,433	15,062	15,062	0	0	0	14,370	14,370	0	0	0
10-14	29,082	14,881	14,881	0	0	0	14,202	14,201	1	0	0
15-19	28,659	14,654	14,496	153	0	5	14,005	13,418	559	0	28
20-24	28,303	14,474	12,029	2,222	1	222	13,829	9,752	3,637	7	433
25-29	28,103	14,386	8,387	5,146	5	849	13,717	6,124	6,415	25	1,153
30-34	27,890	14,269	6,085	6,749	10	1,425	13,621	4,201	7,674	54	1,691
35-39	27,663	14,126	4,890	7,514	20	1,702	13,537	3,304	8,134	95	2,004
40-44	27,234	13,876	4,200	7,778	38	1,861	13,357	2,840	8,144	163	2,211
45-49	26,186	13,307	3,663	7,701	66	1,876	12,879	2,501	7,840	270	2,268
50-54	24,611	12,450	3,215	7,418	112	1,706	12,161	2,219	7,337	441	2,165
55-59	23,116	11,603	2,855	7,076	184	1,487	11,514	2,004	6,787	715	2,008
60-64	21,921	10,875	2,593	6,709	296	1,277	11,046	1,878	6,174	1,121	1,873
65-69	20,638	10,062	2,341	6,143	474	1,103	10,576	1,806	5,325	1,668	1,776
70-74	17,577	8,334	1,797	5,008	664	865	9,242	1,506	4,008	2,184	1,543
75-79	13,910	6,270	1,204	3,631	808	626	7,640	1,142	2,642	2,582	1,273
80-84	9,578	3,945	607	2,184	778	376	5,634	720	1,420	2,587	907
85-89	6,020	2,151	245	1,076	626	205	3,869	411	633	2,221	604
90-94	3,124	935	69	384	386	95	2,189	197	208	1,432	352
95+	1,446	346	13	90	199	45	1,100	65	45	748	242
0-19	116,992	59,860	59,703	153	0	5	57,132	56,544	560	0	28
20-64	235,028	119,365	47,917	58,313	732	12,404	115,662	34,824	62,141	2,890	15,807
65+	72,292	32,044	6,276	18,515	3,936	3,316	40,249	5,849	14,280	13,422	6,698
20-65	239,274	121,452	48,407	59,597	810	12,638	117,821	35,191	63,285	3,176	16,170
20-66	243,467	123,506	48,888	60,857	896	12,866	119,961	35,555	64,392	3,485	16,529
20-67	247,602	125,523	49,357	62,088	991	13,087	122,079	35,916	65,460	3,818	16,885
20-68	251,671	127,498	49,814	63,290	1,094	13,301	124,173	36,275	66,486	4,176	17,236
20-69	255,665	129,427	50,258	64,456	1,206	13,508	126,238	36,630	67,467	4,559	17,582
66+	68,046	29,956	5,786	17,231	3,858	3,082	38,090	5,482	13,137	13,136	6,334
67+	63,852	27,903	5,305	15,972	3,772	2,854	35,950	5,118	12,030	12,827	5,975
68+	59,718	25,886	4,836	14,740	3,677	2,633	33,831	4,756	10,962	12,494	5,619
69+	55,648	23,911	4,379	13,539	3,574	2,419	31,737	4,397	9,936	12,136	5,268
70+	51,654	21,982	3,935	12,372	3,462	2,212	29,673	4,042	8,955	11,754	4,922
Total	424,312	211,269	113,896	76,981	4,668	15,725	213,043	97,217	76,981	16,313	22,532
2080:											
0-4	33,358	17,076	17,076	0	0	0	16,282	16,282	0	0	0
5-9	32,896	16,836	16,836	0	0	0	16,060	16,060	0	0	0
10-14	32,353	16,556	16,556	0	0	0	15,798	15,797	1	0	0
15-19	31,782	16,253	16,078	170	0	5	15,529	14,877	621	0	31
20-24	31,489	16,103	13,380	2,474	1	247	15,386	10,840	4,055	8	483
25-29	31,495	16,117	9,397	5,764	5	951	15,378	6,867	7,189	27	1,294
30-34	31,322	16,019	6,831	7,576	11	1,601	15,304	4,745	8,600	58	1,901
35-39	30,772	15,708	5,423	8,371	21	1,893	15,063	3,693	9,039	102	2,230
40-44	29,866	15,216	4,579	8,559	40	2,038	14,650	3,096	8,962	171	2,421
45-49	28,786	14,628	4,019	8,477	70	2,062	14,158	2,712	8,672	285	2,489
50-54	27,723	14,027	3,651	8,325	121	1,929	13,697	2,489	8,293	474	2,440
55-59	26,629	13,373	3,331	8,109	204	1,729	13,256	2,342	7,808	782	2,324
60-64	25,119	12,480	2,988	7,692	325	1,475	12,639	2,196	7,062	1,224	2,157
65-69	22,599	11,051	2,534	6,812	501	1,204	11,548	1,970	5,882	1,771	1,925
70-74	19,161	9,122	1,994	5,504	700	924	10,039	1,668	4,418	2,325	1,627
75-79	15,415	6,991	1,432	4,032	862	666	8,424	1,362	2,965	2,772	1,326
80-84	11,466	4,758	863	2,582	886	427	6,708	1,070	1,707	2,917	1,014
85-89	7,511	2,723	401	1,345	737	240	4,788	750	800	2,528	710
90-94	3,726	1,144	117	482	439	107	2,582	356	258	1,563	405
95+	1,586	391	20	111	213	47	1,195	111	52	777	254
0-19	130,389	66,720	66,545	170	0	5	63,669	63,015	622	0	31
20-64	263,201	133,671	53,600	65,346	799	13,926	129,531	38,980	69,681	3,132	17,738
65+	81,466	36,182	7,361	20,868	4,338	3,615	45,284	7,288	16,081	14,653	7,261
20-65	267,963	136,017	54,147	66,797	884	14,189	131,946	39,395	70,966	3,440	18,144
20-66	272,611	138,299	54,675	68,207	976	14,441	134,312	39,800	72,199	3,771	18,541
20-67	277,137	140,513	55,182	69,572	1,076	14,682	136,625	40,195	73,378	4,125	18,927
20-68	281,536	142,655	55,669	70,891	1,184	14,912	138,881	40,578	74,500	4,503	19,300
20-69	285,801	144,722	56,134	72,159	1,300	15,130	141,078	40,949	75,564	4,903	19,662
66+	76,704	33,836	6,813	19,418	4,253	3,352	42,868	6,873	14,797	14,344	6,854
67+	72,057	31,554	6,285	18,008	4,161	3,099	40,502	6,468	13,563	14,013	6,458
68+	67,530	29,340	5,778	16,642	4,061	2,859	38,190	6,073	12,385	13,659	6,072
69+	63,131	27,198	5,291	15,324	3,953	2,629	35,933	5,690	11,263	13,282	5,698
70+	58,867	25,130	4,826	14,056	3,837	2,411	33,736	5,319	10,199	12,882	5,336
Total	475,056	236,573	127,505	86,385	5,137	17,546	238,483	109,284	86,385	17,785	25,030

Table 21.—January 1 Population in the Social Security Area by Alternative, Year, Age Group, Sex, and Marital Status —Continued
[In thousands]

Alternative, year, and age group	Total	Sex and marital status									
		Male					Female				
		Total	Single	Married	Widowed	Divorced	Total	Single	Married	Widowed	Divorced
Alternative II:											
1990:											
0-4	19,824	10,147	10,147	0	0	0	9,677	9,677	0	0	0
5-9	19,085	9,767	9,767	0	0	0	9,318	9,318	0	0	0
10-14	17,672	9,047	9,047	0	0	0	8,625	8,624	1	0	0
15-19	18,065	9,241	9,089	146	1	5	8,824	8,327	477	4	16
20-24	19,473	9,914	7,695	2,061	5	153	9,559	6,013	3,243	16	288
25-29	22,580	11,500	5,464	5,419	5	612	11,079	3,402	6,737	38	902
30-34	22,999	11,704	3,274	7,409	22	999	11,295	1,977	8,004	78	1,236
35-39	20,714	10,468	1,810	7,477	38	1,143	10,246	1,084	7,676	135	1,351
40-44	17,996	9,020	887	6,940	54	1,139	8,975	592	6,709	273	1,401
45-49	14,324	7,130	566	5,612	80	872	7,193	418	5,356	322	1,098
50-54	11,842	5,846	412	4,661	114	659	5,996	324	4,426	403	844
55-59	10,960	5,332	342	4,320	150	520	5,628	269	3,948	770	640
60-64	11,047	5,234	310	4,259	232	433	5,813	255	3,817	1,206	536
65-69	10,243	4,701	260	3,766	373	303	5,542	245	3,177	1,723	397
70-74	8,117	3,526	181	2,749	418	178	4,591	214	2,197	1,931	249
75-79	6,133	2,430	113	1,788	441	88	3,703	204	1,268	2,097	134
80-84	3,962	1,377	59	942	338	38	2,585	157	595	1,765	68
85-89	2,130	624	26	348	235	16	1,506	91	266	1,110	39
90-94	859	212	8	83	114	5	648	39	81	511	17
95+	267	56	2	12	41	1	210	12	14	179	6
0-19	74,646	38,202	38,050	146	1	5	36,444	35,947	477	4	16
20-64	151,935	76,148	20,760	48,157	701	6,530	75,787	14,334	49,916	3,240	8,296
65+	31,711	12,926	649	9,687	1,960	630	18,785	961	7,598	9,316	910
20-65	154,089	77,148	20,817	48,966	763	6,603	76,941	14,385	50,618	3,549	8,388
20-66	156,177	78,111	20,870	49,738	835	6,667	78,066	14,434	51,278	3,881	8,472
20-67	158,229	79,053	20,922	50,492	912	6,726	79,177	14,484	51,912	4,229	8,551
20-68	160,249	79,976	20,973	51,228	992	6,783	80,273	14,532	52,522	4,593	8,625
20-69	162,178	80,850	21,019	51,923	1,074	6,833	81,328	14,579	53,093	4,963	8,693
66+	29,557	11,927	593	8,879	1,898	557	17,630	910	6,895	9,008	817
67+	27,469	10,964	539	8,106	1,826	493	16,505	861	6,236	8,676	733
68+	25,417	10,022	487	7,353	1,749	434	15,394	812	5,601	8,327	654
69+	23,397	9,099	437	6,616	1,668	378	14,298	763	4,991	7,963	580
70+	21,468	8,225	390	5,922	1,587	327	13,243	716	4,421	7,593	513
Total	258,292	127,276	59,459	57,991	2,661	7,165	131,015	51,242	57,991	12,561	9,221
1995:											
0-4	20,477	10,479	10,479	0	0	0	9,999	9,999	0	0	0
5-9	20,069	10,269	10,269	0	0	0	9,800	9,800	0	0	0
10-14	19,313	9,881	9,881	0	0	0	9,432	9,431	1	0	0
15-19	17,914	9,163	9,027	132	0	3	8,751	8,243	488	0	20
20-24	18,448	9,432	7,259	2,003	1	169	9,016	5,433	3,262	10	311
25-29	19,961	10,162	4,803	4,752	7	600	9,799	3,184	5,810	38	768
30-34	22,865	11,619	3,618	6,912	14	1,075	11,246	2,088	7,786	86	1,286
35-39	23,057	11,684	2,455	7,938	32	1,259	11,373	1,476	8,228	146	1,523
40-44	20,651	10,389	1,498	7,555	57	1,278	10,262	915	7,544	226	1,578
45-49	17,847	8,899	778	6,835	83	1,203	8,947	534	6,491	388	1,535
50-54	14,090	6,962	511	5,493	116	842	7,128	394	5,113	477	1,145
55-59	11,496	5,611	367	4,494	160	590	5,885	309	4,127	619	831
60-64	10,417	4,982	299	4,023	220	440	5,435	255	3,532	1,036	612
65-69	10,191	4,708	263	3,742	343	361	5,483	237	3,195	1,542	508
70-74	9,039	3,991	207	3,049	487	248	5,047	221	2,425	2,034	367
75-79	6,685	2,733	126	1,976	495	136	3,953	181	1,463	2,090	219
80-84	4,499	1,614	61	1,069	425	59	2,885	154	692	1,932	106
85-89	2,456	742	23	418	278	22	1,714	98	256	1,315	46
90-94	1,016	253	7	114	125	8	763	41	92	608	22
95+	318	65	1	20	42	2	252	11	21	210	9
0-19	77,773	39,792	39,656	132	0	3	37,982	37,473	488	0	20
20-64	158,833	79,740	21,588	50,006	690	7,456	79,093	14,587	51,893	3,024	9,588
65+	34,204	14,108	689	10,387	2,195	836	20,097	944	8,144	9,732	1,277
20-65	160,926	80,725	21,644	50,799	745	7,537	80,201	14,636	52,579	3,287	9,700
20-66	163,013	81,698	21,699	51,576	809	7,613	81,315	14,684	53,246	3,578	9,807
20-67	165,065	82,648	21,752	52,330	879	7,686	82,418	14,731	53,890	3,887	9,910
20-68	167,058	83,558	21,802	53,049	954	7,753	83,499	14,777	54,501	4,215	10,006
20-69	169,024	84,449	21,851	53,747	1,033	7,817	84,575	14,824	55,088	4,566	10,097
66+	32,110	13,123	633	9,594	2,141	755	18,988	895	7,458	9,469	1,165
67+	30,024	12,150	578	8,817	2,076	679	17,874	847	6,791	9,178	1,057
68+	27,972	11,200	525	8,063	2,006	606	16,771	800	6,147	8,869	955
69+	25,979	10,290	475	7,344	1,932	539	15,690	753	5,536	8,541	859
70+	24,013	9,399	426	6,646	1,852	475	14,614	707	4,949	8,190	768
Total	270,810	133,640	61,933	60,526	2,885	8,295	137,171	53,003	60,526	12,757	10,885

Table 21.—January 1 Population in the Social Security Area by Alternative, Year, Age Group, Sex, and Marital Status —Continued
[In thousands]

Alternative, year, and age group	Total	Sex and marital status									
		Male					Female				
		Total	Single	Married	Widowed	Divorced	Total	Single	Married	Widowed	Divorced
Alternative II: (Cont.)											
2000:											
0-4	19,387	9,922	9,922	0	0	0	9,465	9,465	0	0	0
5-9	20,745	10,612	10,612	0	0	0	10,133	10,133	0	0	0
10-14	20,319	10,395	10,395	0	0	0	9,925	9,924	1	0	0
15-19	19,580	10,010	9,859	147	0	4	9,570	9,025	523	0	22
20-24	18,335	9,375	7,250	1,962	1	162	8,960	5,481	3,170	8	301
25-29	18,986	9,706	4,582	4,523	5	596	9,281	2,851	5,632	36	762
30-34	20,303	10,310	3,174	6,151	13	973	9,993	1,906	6,918	82	1,087
35-39	22,941	11,599	2,744	7,561	27	1,267	11,342	1,544	8,135	156	1,507
40-44	22,981	11,582	2,038	8,093	53	1,398	11,399	1,242	8,185	243	1,729
45-49	20,485	10,246	1,312	7,524	85	1,324	10,239	822	7,352	355	1,709
50-54	17,566	8,695	705	6,715	127	1,147	8,872	503	6,233	559	1,576
55-59	13,705	6,700	457	5,328	169	747	7,005	375	4,807	700	1,122
60-64	10,972	5,275	324	4,235	221	495	5,697	293	3,724	893	787
65-69	9,654	4,516	256	3,579	316	366	5,138	239	2,979	1,347	573
70-74	9,037	4,031	212	3,065	463	292	5,006	215	2,452	1,876	463
75-79	7,490	3,120	147	2,219	568	186	4,370	189	1,631	2,231	318
80-84	4,954	1,836	70	1,205	473	88	3,118	140	814	1,995	170
85-89	2,836	882	25	506	318	33	1,953	99	308	1,474	72
90-94	1,201	307	6	133	158	11	894	46	81	741	26
95+	387	80	1	25	51	3	307	12	21	261	12
0-19	80,032	40,939	40,788	147	0	4	39,093	38,547	523	0	22
20-64	166,274	83,488	22,586	52,091	702	8,108	82,786	15,017	54,157	3,033	10,579
65+	35,559	14,774	717	10,731	2,347	978	20,786	939	8,288	9,925	1,633
20-65	168,264	84,432	22,642	52,847	754	8,190	83,831	15,068	54,804	3,253	10,707
20-66	170,182	85,336	22,693	53,567	813	8,264	84,846	15,116	55,401	3,506	10,822
20-67	172,088	86,227	22,744	54,273	876	8,335	85,861	15,163	55,986	3,777	10,934
20-68	174,009	87,118	22,793	54,975	945	8,405	86,891	15,210	56,567	4,069	11,045
20-69	175,928	88,004	22,842	55,670	1,018	8,474	87,924	15,256	57,136	4,380	11,152
66+	33,570	13,829	662	9,975	2,296	897	19,740	888	7,641	9,705	1,506
67+	31,652	12,925	610	9,255	2,237	823	18,726	840	7,044	9,451	1,390
68+	29,746	12,034	560	8,549	2,173	752	17,711	793	6,459	9,181	1,278
69+	27,825	11,143	510	7,847	2,105	682	16,681	747	5,878	8,889	1,168
70+	25,905	10,257	461	7,152	2,031	613	15,648	701	5,309	8,578	1,061
Total	281,865	139,201	64,092	62,969	3,050	9,091	142,665	54,503	62,969	12,958	12,235
2020:											
0-4	19,725	10,097	10,097	0	0	0	9,629	9,629	0	0	0
5-9	19,835	10,149	10,149	0	0	0	9,686	9,686	0	0	0
10-14	19,666	10,061	10,061	0	0	0	9,605	9,604	1	0	0
15-19	19,729	10,086	9,932	150	0	4	9,643	9,067	551	0	24
20-24	20,611	10,534	8,136	2,210	1	187	10,077	6,102	3,616	8	351
25-29	22,230	11,360	5,409	5,244	5	702	10,870	3,487	6,449	31	904
30-34	21,925	11,188	3,428	6,668	10	1,081	10,737	2,080	7,377	67	1,213
35-39	21,074	10,716	2,459	7,064	19	1,174	10,358	1,441	7,467	113	1,336
40-44	19,447	9,854	1,846	6,815	33	1,161	9,593	1,028	7,057	173	1,335
45-49	19,429	9,792	1,688	6,835	59	1,209	9,637	892	7,050	285	1,409
50-54	20,064	9,998	1,617	7,073	110	1,198	10,066	939	7,165	476	1,486
55-59	21,882	10,804	1,692	7,689	208	1,214	11,078	1,016	7,513	827	1,722
60-64	21,003	10,262	1,343	7,534	336	1,049	10,740	931	6,870	1,241	1,698
65-69	17,570	8,415	851	6,300	476	788	9,155	643	5,381	1,664	1,467
70-74	13,684	6,341	416	4,735	609	582	7,343	383	3,700	2,060	1,199
75-79	9,212	4,038	214	2,904	607	313	5,174	263	2,058	2,101	753
80-84	5,831	2,318	98	1,548	516	157	3,512	173	975	1,926	437
85-89	3,561	1,219	38	713	392	76	2,342	101	399	1,607	236
90-94	1,913	544	11	254	244	35	1,369	49	135	1,063	123
95+	805	185	2	55	115	13	620	17	29	517	57
0-19	78,955	40,393	40,239	150	0	4	38,562	37,986	552	0	24
20-64	187,665	94,509	27,618	57,133	782	8,976	93,156	17,916	60,564	3,222	11,455
65+	52,576	23,060	1,629	16,509	2,958	1,964	29,516	1,630	12,677	10,937	4,272
20-65	191,499	96,363	27,829	58,516	861	9,158	95,136	18,074	61,772	3,507	11,783
20-66	195,178	98,134	28,021	59,838	954	9,321	97,044	18,216	62,910	3,842	12,076
20-67	198,693	99,818	28,190	61,099	1,052	9,477	98,875	18,343	63,985	4,184	12,363
20-68	202,049	101,416	28,338	62,300	1,154	9,625	100,633	18,455	65,000	4,532	12,646
20-69	205,235	102,924	28,469	63,433	1,258	9,764	102,311	18,559	65,945	4,885	12,921
66+	48,742	21,206	1,418	15,127	2,879	1,782	27,536	1,472	11,468	10,652	3,944
67+	45,063	19,435	1,226	13,805	2,786	1,619	25,628	1,330	10,330	10,316	3,651
68+	41,548	17,751	1,057	12,544	2,688	1,463	23,797	1,203	9,256	9,975	3,364
69+	38,192	16,153	909	11,343	2,586	1,315	22,039	1,090	8,241	9,627	3,081
70+	35,006	14,645	778	10,209	2,482	1,176	20,361	987	7,295	9,273	2,806
Total	319,196	157,962	69,486	73,793	3,740	10,944	161,234	57,532	73,793	14,159	15,750

Table 21.—January 1 Population in the Social Security Area by Alternative, Year, Age Group, Sex, and Marital Status —Continued
[In thousands]

Alternative, year, and age group	Total	Sex and marital status									
		Male					Female				
		Total	Single	Married	Widowed	Divorced	Total	Single	Married	Widowed	Divorced
Alternative II: (Cont.)											
2040:											
0-4	19,539	10,002	10,002	0	0	0	9,537	9,537	0	0	0
5-9	19,693	10,077	10,077	0	0	0	9,616	9,616	0	0	0
10-14	19,995	10,230	10,230	0	0	0	9,765	9,764	1	0	0
15-19	20,470	10,467	10,307	156	0	4	10,003	9,412	567	0	24
20-24	20,962	10,717	8,287	2,240	1	189	10,245	6,258	3,628	7	353
25-29	21,349	10,917	5,175	5,065	4	673	10,432	3,313	6,227	29	862
30-34	21,306	10,879	3,354	6,463	9	1,053	10,427	1,931	7,265	62	1,170
35-39	21,251	10,813	2,524	7,074	18	1,197	10,438	1,358	7,642	108	1,330
40-44	21,706	10,999	2,180	7,453	34	1,332	10,706	1,149	7,874	178	1,506
45-49	22,641	11,422	2,059	7,848	62	1,453	11,219	1,138	8,088	296	1,696
50-54	21,732	10,909	1,767	7,714	104	1,324	10,823	1,043	7,664	460	1,655
55-59	20,307	10,118	1,515	7,323	169	1,111	10,189	936	7,023	714	1,515
60-64	18,051	8,905	1,225	6,572	253	856	9,145	758	6,074	1,039	1,275
65-69	16,949	8,226	1,123	5,963	413	726	8,724	694	5,313	1,552	1,166
70-74	15,961	7,508	992	5,248	639	629	8,453	708	4,441	2,200	1,105
75-79	15,131	6,788	865	4,456	916	552	8,343	705	3,508	2,973	1,156
80-84	11,741	4,859	474	3,033	978	374	6,882	559	2,137	3,214	972
85-89	7,111	2,591	160	1,493	748	190	4,521	295	937	2,648	641
90-94	3,380	1,050	31	512	426	82	2,330	104	283	1,590	353
95+	1,295	330	4	109	188	29	965	31	51	716	167
0-19	79,697	40,776	40,616	156	0	4	38,921	38,329	568	0	24
20-64	189,304	95,679	28,084	57,752	656	9,188	93,625	17,884	61,485	2,894	11,363
65+	71,569	31,351	3,649	20,814	4,307	2,582	40,218	3,096	16,669	14,892	5,560
20-65	192,648	97,316	28,300	58,962	721	9,334	95,332	18,013	62,579	3,149	11,591
20-66	195,939	98,920	28,510	60,143	792	9,475	97,019	18,138	63,641	3,424	11,815
20-67	199,281	100,542	28,728	61,324	873	9,618	98,738	18,271	64,695	3,729	12,044
20-68	202,757	102,223	28,966	62,525	966	9,766	100,534	18,421	65,757	4,071	12,285
20-69	206,254	103,905	29,206	63,715	1,070	9,914	102,349	18,577	66,797	4,446	12,529
66+	68,226	29,715	3,433	19,604	4,242	2,435	38,511	2,967	15,575	14,637	5,332
67+	64,934	28,110	3,222	18,423	4,171	2,294	36,824	2,841	14,513	14,361	5,108
68+	61,593	26,488	3,004	17,242	4,090	2,152	35,104	2,709	13,459	14,057	4,879
69+	58,116	24,807	2,767	16,040	3,997	2,003	33,309	2,559	12,397	13,715	4,638
70+	54,620	23,125	2,526	14,851	3,894	1,855	31,494	2,403	11,357	13,340	4,395
Total	340,571	167,807	72,349	78,722	4,963	11,773	172,764	59,309	78,722	17,786	16,948
2060:											
0-4	19,652	10,060	10,060	0	0	0	9,592	9,592	0	0	0
5-9	19,957	10,213	10,213	0	0	0	9,744	9,744	0	0	0
10-14	20,253	10,363	10,363	0	0	0	9,890	9,889	1	0	0
15-19	20,495	10,481	10,321	155	0	4	10,014	9,425	564	0	24
20-24	20,789	10,630	8,220	2,222	1	187	10,158	6,196	3,605	7	350
25-29	21,223	10,857	5,147	5,036	4	670	10,367	3,261	6,221	27	857
30-34	21,649	11,057	3,429	6,548	9	1,072	10,592	1,949	7,392	60	1,190
35-39	22,000	11,197	2,640	7,295	17	1,245	10,802	1,435	7,876	106	1,385
40-44	22,077	11,195	2,215	7,590	32	1,357	10,882	1,197	7,979	171	1,536
45-49	21,830	11,028	1,941	7,639	56	1,392	10,802	1,054	7,868	268	1,612
50-54	21,201	10,659	1,739	7,533	95	1,292	10,542	951	7,592	420	1,578
55-59	20,577	10,275	1,583	7,385	160	1,147	10,303	876	7,264	670	1,492
60-64	20,269	10,027	1,492	7,258	267	1,010	10,243	852	6,896	1,061	1,433
65-69	19,991	9,754	1,419	6,974	450	910	10,237	892	6,284	1,637	1,425
70-74	17,654	8,421	1,126	5,924	649	722	9,233	801	4,958	2,212	1,262
75-79	14,540	6,654	811	4,501	813	528	7,886	670	3,451	2,711	1,055
80-84	10,651	4,529	467	2,900	829	332	6,122	478	2,007	2,863	775
85-89	7,373	2,791	239	1,604	746	202	4,583	333	1,010	2,683	557
90-94	4,411	1,441	93	689	548	111	2,970	210	397	1,991	372
95+	2,773	748	29	231	414	74	2,026	111	118	1,441	356
0-19	80,357	41,117	40,957	155	0	4	39,240	38,650	565	0	24
20-64	191,616	96,924	28,405	58,505	641	9,373	94,691	17,772	62,695	2,791	11,434
65+	77,394	34,337	4,185	22,824	4,448	2,881	43,057	3,494	18,225	15,536	5,801
20-65	195,647	98,904	28,695	59,932	714	9,563	96,743	17,945	64,013	3,066	11,719
20-66	199,668	100,873	28,983	61,347	794	9,749	98,795	18,121	65,304	3,366	12,005
20-67	203,673	102,828	29,267	62,745	884	9,931	100,845	18,299	66,565	3,692	12,290
20-68	207,656	104,765	29,548	64,124	983	10,110	102,891	18,480	67,791	4,046	12,575
20-69	211,607	106,678	29,825	65,479	1,091	10,283	104,929	18,664	68,978	4,428	12,859
66+	73,363	32,357	3,894	21,397	4,375	2,691	41,005	3,321	16,907	15,261	5,516
67+	69,342	30,389	3,607	19,983	4,294	2,505	38,953	3,146	15,616	14,961	5,231
68+	65,337	28,434	3,323	18,584	4,205	2,322	36,903	2,968	14,355	14,635	4,946
69+	61,354	26,497	3,042	17,205	4,106	2,144	34,857	2,787	13,128	14,281	4,660
70+	57,403	24,583	2,765	15,850	3,998	1,970	32,819	2,602	11,941	13,899	4,377
Total	349,366	172,378	73,547	81,485	5,089	12,258	176,988	59,916	81,485	18,327	17,260

Table 21.—January 1 Population in the Social Security Area by Alternative, Year, Age Group, Sex, and Marital Status —Continued
[In thousands]

Alternative, year, and age group	Total	Sex and marital status									
		Male					Female				
		Total	Single	Married	Widowed	Divorced	Total	Single	Married	Widowed	Divorced
Alternative II: (Cont.)											
2080:											
0-4	19,825	10,149	10,149	0	0	0	9,676	9,676	0	0	0
5-9	20,090	10,282	10,282	0	0	0	9,808	9,808	0	0	0
10-14	20,298	10,387	10,387	0	0	0	9,911	9,910	1	0	0
15-19	20,510	10,489	10,330	155	0	4	10,020	9,429	566	0	24
20-24	20,911	10,695	8,269	2,236	1	189	10,216	6,223	3,634	7	353
25-29	21,498	10,999	5,220	5,098	4	679	10,499	3,305	6,298	26	869
30-34	21,922	11,200	3,476	6,629	8	1,086	10,722	1,985	7,472	58	1,206
35-39	22,046	11,226	2,640	7,322	16	1,247	10,820	1,440	7,892	101	1,387
40-44	21,935	11,130	2,197	7,555	30	1,348	10,805	1,176	7,948	160	1,520
45-49	21,743	10,993	1,940	7,613	52	1,389	10,750	1,028	7,875	250	1,596
50-54	21,586	10,864	1,798	7,649	90	1,327	10,722	963	7,757	397	1,605
55-59	21,379	10,692	1,679	7,650	154	1,210	10,686	932	7,551	641	1,562
60-64	20,768	10,302	1,538	7,465	252	1,047	10,466	894	7,091	1,005	1,476
65-69	19,525	9,570	1,363	6,913	406	889	9,955	835	6,252	1,501	1,367
70-74	17,543	8,423	1,140	5,951	604	728	9,120	743	5,073	2,085	1,219
75-79	15,153	7,006	891	4,738	802	575	8,147	642	3,757	2,682	1,066
80-84	12,464	5,384	616	3,415	929	424	7,080	555	2,475	3,141	910
85-89	9,349	3,640	351	2,094	910	286	5,709	458	1,377	3,141	733
90-94	5,467	1,871	131	925	663	152	3,596	268	545	2,309	475
95+	3,288	934	37	313	492	92	2,354	130	156	1,677	391
0-19	80,722	41,307	41,147	155	0	4	39,416	38,824	567	0	24
20-64	193,787	98,102	28,757	59,218	606	9,521	95,685	17,947	63,520	2,645	11,573
65+	82,790	36,828	4,529	24,349	4,806	3,144	45,961	3,631	19,635	16,534	6,160
20-65	197,813	100,086	29,044	60,658	673	9,712	97,726	18,120	64,849	2,902	11,856
20-66	201,786	102,040	29,325	62,073	747	9,896	99,746	18,290	66,143	3,179	12,135
20-67	205,698	103,958	29,598	63,459	828	10,074	101,740	18,457	67,396	3,478	12,408
20-68	209,542	105,837	29,863	64,813	916	10,245	103,706	18,621	68,607	3,800	12,677
20-69	213,312	107,672	30,119	66,131	1,013	10,410	105,640	18,782	69,772	4,146	12,939
66+	78,764	34,844	4,241	22,909	4,739	2,954	43,920	3,459	18,306	16,278	5,877
67+	74,791	32,890	3,961	21,494	4,665	2,770	41,901	3,289	17,012	16,001	5,599
68+	70,879	30,972	3,688	20,108	4,584	2,592	39,906	3,121	15,759	15,701	5,325
69+	67,034	29,093	3,423	18,754	4,496	2,421	37,941	2,957	14,548	15,379	5,056
70+	63,265	27,258	3,166	17,436	4,399	2,256	36,007	2,796	13,383	15,034	4.794
Total	357,299	176,237	74,433	83,722	5,412	12,670	181,062	60,403	83,722	19,180	17,757
Alternative III:											
1990:											
0-4	19,824	10,147	10,147	0	0	0	9,677	9,677	0	0	0
5-9	19,085	9,767	9,767	0	0	0	9,318	9,318	0	0	0
10-14	17,672	9,047	9,047	0	0	0	8,625	8,624	1	0	0
15-19	18,065	9,241	9,089	146	1	5	8,824	8,327	477	4	16
20-24	19,473	9,914	7,695	2,061	5	153	9,559	6,013	3,243	16	288
25-29	22,580	11,500	5,464	5,419	5	612	11,079	3,402	6,737	38	902
30-34	22,999	11,704	3,274	7,409	22	999	11,295	1,977	8,004	78	1,236
35-39	20,714	10,468	1,810	7,477	38	1,143	10,246	1,084	7,676	135	1,351
40-44	17,996	9,020	887	6,940	54	1,139	8,975	592	6,709	273	1,401
45-49	14,324	7,130	566	5,612	80	872	7,193	418	5,356	322	1,098
50-54	11,842	5,846	412	4,661	114	659	5,996	324	4,426	403	844
55-59	10,960	5,332	342	4,320	150	520	5,628	269	3,948	770	640
60-64	11,047	5,234	310	4,259	232	433	5,813	255	3,817	1,206	536
65-69	10,243	4,701	260	3,766	373	303	5,542	245	3,177	1,723	397
70-74	8,117	3,526	181	2,749	418	178	4,591	214	2,197	1,931	249
75-79	6,133	2,430	113	1,788	441	88	3,703	204	1,268	2,097	134
80-84	3,962	1,377	59	942	338	38	2,585	157	595	1,765	68
85-89	2,130	624	26	348	235	16	1,506	91	266	1,110	39
90-94	859	212	8	83	114	5	648	39	81	511	17
95+	267	56	2	12	41	1	210	12	14	179	6
0-19	74,646	38,202	38,050	146	1	5	36,444	35,947	477	4	16
20-64	151,935	76,148	20,760	48,157	701	6,530	75,787	14,334	49,916	3,240	8,296
65+	31,711	12,926	649	9,687	1,960	630	18,785	961	7,598	9,316	910
20-65	154,089	77,148	20,817	48,966	763	6,603	76,941	14,385	50,618	3,549	8,388
20-66	156,177	78,111	20,870	49,738	835	6,667	78,066	14,434	51,278	3,881	8,472
20-67	158,229	79,053	20,922	50,492	912	6,726	79,177	14,484	51,912	4,229	8,551
20-68	160,249	79,976	20,973	51,228	992	6,783	80,273	14,532	52,522	4,593	8,625
20-69	162,178	80,850	21,019	51,923	1,074	6,833	81,328	14,579	53,093	4,963	8,693
66+	29,557	11,927	593	8,879	1,898	557	17,630	910	6,895	9,008	817
67+	27,469	10,964	539	8,106	1,826	493	16,505	861	6,236	8,676	733
68+	25,417	10,022	487	7,353	1,749	434	15,394	812	5,601	8,327	654
69+	23,397	9,099	437	6,616	1,668	378	14,298	763	4,991	7,963	580
70+	21,468	8,225	390	5,922	1,587	327	13,243	716	4,421	7,593	513
Total	258,292	127,276	59,459	57,991	2,661	7,165	131,015	51,242	57,991	12,561	9,221

Table 21.—January 1 Population in the Social Security Area by Alternative, Year, Age Group, Sex, and Marital Status —Continued
[In thousands]

Alternative, year, and age group	Total	Sex and marital status									
		Male					Female				
		Total	Single	Married	Widowed	Divorced	Total	Single	Married	Widowed	Divorced
Alternative III: (Cont.)											
1995:											
0-4	20,147	10,311	10,311	0	0	0	9,837	9,837	0	0	0
5-9	19,999	10,233	10,233	0	0	0	9,766	9,766	0	0	0
10-14	19,255	9,851	9,851	0	0	0	9,404	9,403	1	0	0
15-19	17,851	9,131	8,987	140	0	3	8,721	8,186	514	0	21
20-24	18,323	9,360	7,117	2,075	1	166	8,963	5,293	3,357	10	303
25-29	19,804	10,070	4,659	4,825	7	579	9,734	3,077	5,881	39	737
30-34	22,761	11,558	3,544	6,965	15	1,035	11,203	2,040	7,832	90	1,240
35-39	22,994	11,644	2,423	7,977	32	1,212	11,349	1,458	8,260	151	1,480
40-44	20,615	10,364	1,486	7,583	56	1,240	10,250	909	7,567	228	1,546
45-49	17,825	8,885	774	6,854	81	1,175	8,940	532	6,507	387	1,514
50-54	14,078	6,955	509	5,507	114	825	7,123	393	5,124	473	1,134
55-59	11,492	5,610	367	4,506	157	581	5,881	308	4,136	612	826
60-64	10,420	4,987	300	4,035	216	436	5,433	254	3,543	1,027	609
65-69	10,203	4,718	264	3,756	339	359	5,485	236	3,209	1,533	507
70-74	9,060	4,004	208	3,066	483	247	5,056	221	2,441	2,028	367
75-79	6,714	2,747	127	1,992	492	136	3,967	181	1,477	2,089	219
80-84	4,534	1,629	62	1,082	425	60	2,905	155	703	1,940	107
85-89	2,488	753	24	427	280	23	1,735	100	261	1,328	46
90-94	1,036	259	7	117	127	8	777	42	95	619	22
95+	327	68	1	21	43	2	260	12	22	216	9
0-19	77,253	39,526	39,382	140	0	3	37,728	37,192	515	0	21
20-64	158,311	79,434	21,180	50,328	678	7,248	78,877	14,264	52,207	3,016	9,390
65+	34,362	14,177	693	10,461	2,188	834	20,185	946	8,208	9,752	1,278
20-65	160,407	80,421	21,236	51,125	732	7,328	79,986	14,312	52,896	3,277	9,501
20-66	162,495	81,395	21,291	51,905	795	7,404	81,100	14,360	53,565	3,566	9,608
20-67	164,550	82,347	21,344	52,661	864	7,477	82,203	14,407	54,212	3,873	9,710
20-68	166,545	83,259	21,395	53,383	938	7,544	83,286	14,454	54,826	4,200	9,806
20-69	168,514	84,152	21,443	54,085	1,016	7,608	84,362	14,500	55,416	4,549	9,897
66+	32,266	13,190	637	9,665	2,134	754	19,076	898	7,520	9,491	1,167
67+	30,178	12,216	582	8,885	2,070	678	17,962	850	6,850	9,202	1,059
68+	28,123	11,264	529	8,128	2,001	606	16,858	803	6,203	8,895	957
69+	26,128	10,352	479	7,407	1,928	539	15,776	757	5,589	8,569	862
70+	24,159	9,459	430	6,705	1,849	475	14,699	710	4,999	8,219	771
Total	269,926	133,137	61,255	60,930	2,866	8,086	136,789	52,402	60,930	12,768	10,688
2000:											
0-4	18,364	9,399	9,399	0	0	0	8,965	8,965	0	0	0
5-9	20,348	10,410	10,410	0	0	0	9,938	9,938	0	0	0
10-14	20,191	10,329	10,329	0	0	0	9,862	9,861	1	0	0
15-19	19,460	9,948	9,775	169	0	4	9,512	8,892	596	0	23
20-24	18,148	9,271	6,926	2,182	1	162	8,876	5,100	3,473	10	293
25-29	18,695	9,535	4,156	4,815	6	558	9,160	2,497	5,925	44	694
30-34	20,010	10,133	2,878	6,366	14	875	9,877	1,693	7,120	99	966
35-39	22,719	11,452	2,565	7,736	29	1,121	11,267	1,440	8,293	181	1,354
40-44	22,833	11,471	1,947	8,228	52	1,244	11,362	1,197	8,308	267	1,589
45-49	20,397	10,176	1,274	7,625	80	1,196	10,221	806	7,439	368	1,608
50-54	17,521	8,657	694	6,789	120	1,054	8,864	499	6,295	558	1,513
55-59	13,694	6,693	454	5,384	159	696	7,000	373	4,850	687	1,091
60-64	10,983	5,285	323	4,283	210	470	5,697	291	3,762	872	773
65-69	9,688	4,541	257	3,627	303	354	5,147	237	3,022	1,322	566
70-74	9,101	4,069	214	3,119	449	286	5,033	214	2,503	1,855	461
75-79	7,584	3,168	150	2,276	557	185	4,416	190	1,681	2,226	320
80-84	5,064	1,884	73	1,251	472	89	3,180	142	851	2,013	173
85-89	2,942	922	26	537	324	35	2,021	102	328	1,515	74
90-94	1,272	329	7	145	166	11	943	49	88	779	27
95+	424	89	1	28	56	3	335	14	24	284	13
0-19	78,363	40,086	39,913	169	0	4	38,277	37,657	597	0	23
20-64	164,998	82,673	21,217	53,408	672	7,377	82,325	13,895	55,466	3,085	9,880
65+	36,076	15,002	729	10,982	2,327	963	21,074	949	8,497	9,994	1,634
20-65	166,993	83,621	21,273	54,173	721	7,455	83,371	13,945	56,120	3,301	10,005
20-66	168,916	84,529	21,325	54,902	777	7,526	84,387	13,993	56,726	3,549	10,119
20-67	170,829	85,425	21,375	55,617	838	7,595	85,404	14,040	57,319	3,815	10,230
20-68	172,758	86,321	21,425	56,329	904	7,663	86,436	14,086	57,909	4,102	10,339
20-69	174,686	87,214	21,474	57,035	975	7,730	87,472	14,132	58,487	4,408	10,446
66+	34,081	14,054	673	10,217	2,278	885	20,028	898	7,842	9,779	1,509
67+	32,158	13,145	621	9,488	2,222	814	19,012	850	7,237	9,530	1,395
68+	30,245	12,250	571	8,773	2,161	745	17,995	804	6,643	9,265	1,284
69+	28,316	11,353	521	8,061	2,095	677	16,963	757	6,053	8,978	1,175
70+	26,388	10,461	472	7,356	2,024	610	15,927	711	5,475	8,672	1,068
Total	279,437	137,761	61,859	64,559	2,999	8,344	141,676	52,500	64,559	13,080	11,537

Table 21.—January 1 Population in the Social Security Area by Alternative, Year, Age Group, Sex, and Marital Status —Continued
[In thousands]

Alternative, year, and age group	Total	Sex and marital status									
		Male					Female				
		Total	Single	Married	Widowed	Divorced	Total	Single	Married	Widowed	Divorced
Alternative III: (Cont.)											
2020:											
0-4	16,019	8,200	8,200	0	0	0	7,819	7,819	0	0	0
5-9	16,686	8,538	8,538	0	0	0	8,148	8,148	0	0	0
10-14	17,218	8,809	8,809	0	0	0	8,409	8,408	1	0	0
15-19	17,887	9,145	8,932	209	0	5	8,741	7,958	757	0	25
20-24	19,292	9,857	6,711	2,953	1	192	9,435	4,371	4,725	9	330
25-29	21,462	10,958	3,680	6,637	5	636	10,504	1,802	7,949	34	720
30-34	21,401	10,909	1,998	8,030	10	870	10,492	895	8,669	70	858
35-39	20,564	10,440	1,386	8,176	18	860	10,125	620	8,493	118	894
40-44	18,917	9,548	1,070	7,650	30	798	9,369	481	7,840	182	866
45-49	18,845	9,423	1,072	7,509	52	789	9,422	496	7,717	302	907
50-54	19,518	9,614	1,139	7,656	92	727	9,903	640	7,791	497	976
55-59	21,515	10,497	1,332	8,289	169	707	11,018	830	8,129	850	1,208
60-64	20,890	10,116	1,144	8,100	264	608	10,774	842	7,401	1,235	1,296
65-69	17,701	8,440	773	6,801	383	484	9,261	615	5,814	1,616	1,216
70-74	14,011	6,500	402	5,175	517	405	7,511	381	4,059	1,998	1,072
75-79	9,629	4,255	219	3,254	540	241	5,374	267	2,327	2,068	712
80-84	6,283	2,545	107	1,808	493	138	3,738	181	1,158	1,959	439
85-89	4,020	1,423	46	888	411	78	2,597	111	507	1,725	254
90-94	2,313	691	16	348	287	40	1,623	58	187	1,234	143
95+	1,115	272	3	89	161	18	843	24	47	697	75
0-19	67,810	34,693	34,479	209	0	5	33,117	32,333	759	0	25
20-64	182,404	91,362	19,533	65,000	642	6,187	91,041	10,977	68,714	3,296	8,055
65+	55,072	24,126	1,566	18,363	2,793	1,404	30,946	1,639	14,100	11,297	3,911
20-65	186,245	93,208	19,720	66,488	704	6,296	93,037	11,126	70,015	3,577	8,319
20-66	189,942	94,978	19,893	67,913	778	6,394	94,964	11,261	71,244	3,901	8,558
20-67	193,484	96,667	20,047	69,274	856	6,489	96,816	11,383	72,406	4,232	8,796
20-68	196,876	98,278	20,184	70,573	939	6,582	98,598	11,491	73,503	4,569	9,035
20-69	200,105	99,803	20,306	71,801	1,024	6,671	100,302	11,592	74,527	4,912	9,271
66+	51,230	22,280	1,379	16,875	2,730	1,296	28,950	1,490	12,798	11,016	3,646
67+	47,534	20,511	1,206	15,450	2,657	1,198	27,023	1,355	11,569	10,691	3,407
68+	43,992	18,821	1,052	14,089	2,578	1,102	25,171	1,233	10,408	10,361	3,169
69+	40,600	17,211	916	12,790	2,496	1,009	23,389	1,124	9,310	10,024	2,931
70+	37,371	15,686	793	11,562	2,410	920	21,685	1,023	8,286	9,681	2,695
Total	305,286	150,181	55,579	83,572	3,435	7,596	155,104	44,949	83,572	14,593	11,991
2040:											
0-4	13,984	7,159	7,159	0	0	0	6,826	6,826	0	0	0
5-9	14,612	7,477	7,477	0	0	0	7,135	7,135	0	0	0
10-14	15,372	7,865	7,865	0	0	0	7,507	7,506	1	0	0
15-19	16,231	8,300	8,107	189	0	4	7,932	7,230	678	0	23
20-24	16,985	8,682	5,926	2,588	1	168	8,303	3,893	4,115	7	288
25-29	17,861	9,129	3,039	5,552	4	534	8,732	1,393	6,717	29	593
30-34	18,493	9,435	1,707	6,931	9	787	9,059	581	7,690	63	725
35-39	19,049	9,678	1,210	7,568	18	883	9,371	341	8,112	111	807
40-44	20,108	10,165	1,031	8,091	33	1,010	9,943	275	8,537	183	948
45-49	21,728	10,927	986	8,749	58	1,135	10,801	301	9,065	302	1,133
50-54	21,190	10,603	834	8,669	93	1,008	10,586	315	8,702	452	1,117
55-59	19,929	9,905	745	8,233	144	783	10,024	337	8,013	679	995
60-64	17,827	8,775	647	7,381	206	541	9,053	325	6,959	969	800
65-69	16,935	8,193	678	6,762	334	419	8,742	375	6,181	1,466	720
70-74	16,313	7,649	688	6,088	527	345	8,664	486	5,326	2,143	708
75-79	16,066	7,227	710	5,402	798	318	8,839	602	4,391	3,017	829
80-84	13,112	5,522	456	3,899	923	243	7,590	552	2,835	3,402	801
85-89	8,506	3,229	185	2,099	794	150	5,277	325	1,357	2,981	613
90-94	4,454	1,484	45	827	530	83	2,970	131	466	1,979	394
95+	2,080	582	9	225	309	40	1,498	50	104	1,114	231
0-19	60,200	30,800	30,607	189	0	4	29,400	28,697	679	0	23
20-64	173,171	87,299	16,125	63,760	564	6,850	85,872	7,761	67,910	2,796	7,406
65+	77,468	33,886	2,772	25,301	4,214	1,599	43,581	2,521	20,661	16,104	4,295
20-65	176,489	88,918	16,246	65,120	616	6,936	87,571	7,822	69,169	3,034	7,546
20-66	179,762	90,509	16,367	66,451	673	7,018	89,253	7,885	70,396	3,291	7,682
20-67	183,098	92,123	16,497	67,788	738	7,100	90,975	7,956	71,620	3,577	7,822
20-68	186,585	93,804	16,647	69,158	813	7,185	92,782	8,041	72,864	3,903	7,973
20-69	190,106	95,492	16,803	70,522	898	7,269	94,615	8,136	74,091	4,262	8,126
66+	74,150	32,267	2,651	23,941	4,162	1,512	41,883	2,459	19,402	15,866	4,156
67+	70,876	30,676	2,530	22,611	4,105	1,430	40,200	2,396	18,175	15,609	4,020
68+	67,540	29,062	2,400	21,274	4,040	1,348	38,478	2,326	16,950	15,323	3,879
69+	64,053	27,381	2,251	19,903	3,965	1,263	36,672	2,240	15,706	14,997	3,729
70+	60,532	25,693	2,094	18,540	3,880	1,179	34,839	2,145	14,480	14,638	3,576
Total	310,838	151,985	49,504	89,250	4,778	8,453	158,853	38,979	89,250	18,900	11,724

Table 21.—January 1 Population in the Social Security Area by Alternative, Year, Age Group, Sex, and Marital Status —Continued
[In thousands]

Alternative, year, and age group	Total	Sex and marital status									
		Male					Female				
		Total	Single	Married	Widowed	Divorced	Total	Single	Married	Widowed	Divorced
Alternative III: (Cont.)											
2060:											
0-4	12,482	6,389	6,389	0	0	0	6,092	6,092	0	0	0
5-9	13,097	6,702	6,702	0	0	0	6,395	6,395	0	0	0
10-14	13,700	7,009	7,009	0	0	0	6,691	6,690	1	0	0
15-19	14,295	7,310	7,141	166	0	4	6,985	6,368	597	0	20
20-24	14,974	7,656	5,226	2,281	1	148	7,317	3,417	3,640	6	254
25-29	15,822	8,092	2,702	4,914	3	474	7,729	1,214	5,968	24	523
30-34	16,694	8,524	1,563	6,239	7	715	8,170	518	6,944	55	653
35-39	17,450	8,873	1,128	6,914	15	816	8,577	326	7,407	98	747
40-44	17,882	9,047	912	7,210	26	899	8,834	251	7,588	155	841
45-49	18,262	9,193	805	7,398	42	948	9,069	216	7,707	235	912
50-54	18,442	9,233	740	7,516	69	907	9,209	199	7,730	355	925
55-59	18,606	9,257	695	7,626	117	819	9,348	190	7,711	556	892
60-64	19,156	9,461	684	7,839	202	737	9,695	200	7,713	894	887
65-69	19,914	9,732	689	7,990	362	691	10,182	248	7,523	1,460	950
70-74	18,314	8,796	559	7,137	550	550	9,518	266	6,293	2,082	877
75-79	15,701	7,301	441	5,726	731	402	8,400	272	4,664	2,708	756
80-84	12,133	5,326	295	3,956	812	262	6,808	238	2,938	3,059	574
85-89	9,100	3,639	195	2,437	833	173	5,461	218	1,655	3,149	440
90-94	6,127	2,172	105	1,231	727	109	3,954	190	766	2,668	330
95+	5,049	1,517	54	573	792	98	3,532	166	309	2,612	445
0-19	53,574	27,411	27,241	166	0	4	26,163	25,545	598	0	20
20-64	157,287	79,337	14,456	57,938	482	6,462	77,950	6,531	62,408	2,377	6,633
65+	86,338	38,483	2,339	29,050	4,807	2,286	47,856	1,598	24,147	17,737	4,373
20-65	161,213	81,266	14,593	59,531	539	6,603	79,947	6,575	63,941	2,615	6,816
20-66	165,172	83,206	14,730	61,130	603	6,743	81,966	6,622	65,464	2,878	7,003
20-67	169,160	85,155	14,868	62,732	674	6,882	84,004	6,671	66,973	3,167	7,193
20-68	173,172	87,112	15,006	64,333	755	7,018	86,061	6,723	68,464	3,487	7,387
20-69	177,201	89,070	15,145	65,928	845	7,153	88,132	6,780	69,931	3,837	7,583
66+	82,412	36,554	2,202	27,457	4,751	2,145	45,858	1,554	22,615	17,499	4,189
67+	78,454	34,614	2,065	25,858	4,687	2,005	43,839	1,508	21,092	17,237	4,002
68+	74,466	32,665	1,927	24,256	4,615	1,866	41,801	1,459	19,583	16,947	3,812
69+	70,453	30,708	1,789	22,655	4,534	1,730	39,745	1,406	18,092	16,628	3,619
70+	66,424	28,750	1,650	21,060	4,445	1,595	37,674	1,350	16,625	16,277	3,422
Total	297,199	145,231	44,036	87,154	5,289	8,751	151,968	33,675	87,154	20,115	11,026
2080:											
0-4	11,233	5,751	5,751	0	0	0	5,483	5,483	0	0	0
5-9	11,749	6,012	6,012	0	0	0	5,737	5,737	0	0	0
10-14	12,245	6,265	6,265	0	0	0	5,980	5,979	1	0	0
15-19	12,789	6,540	6,388	148	0	3	6,249	5,695	536	0	18
20-24	13,488	6,899	4,710	2,054	0	134	6,589	3,071	3,284	5	229
25-29	14,332	7,335	2,456	4,448	2	430	6,997	1,102	5,401	20	473
30-34	15,063	7,699	1,416	5,631	6	646	7,364	471	6,258	47	589
35-39	15,574	7,928	1,008	6,180	12	728	7,646	288	6,613	82	663
40-44	15,945	8,078	822	6,431	21	804	7,867	219	6,776	128	744
45-49	16,317	8,225	729	6,611	33	853	8,091	188	6,907	191	806
50-54	16,762	8,405	691	6,823	54	837	8,357	181	7,049	287	839
55-59	17,182	8,566	661	7,040	90	774	8,616	185	7,147	450	835
60-64	17,253	8,546	617	7,106	149	673	8,708	187	7,021	700	800
65-69	17,081	8,385	578	6,957	256	594	8,696	188	6,639	1,093	776
70-74	16,409	7,933	521	6,471	418	522	8,477	183	5,905	1,647	742
75-79	15,298	7,197	447	5,669	626	456	8,101	171	4,880	2,342	708
80-84	13,867	6,219	355	4,624	852	388	7,648	164	3,693	3,110	681
85-89	11,801	4,920	246	3,339	1,022	313	6,880	164	2,440	3,638	639
90-94	7,974	3,033	114	1,797	926	196	4,941	123	1,174	3,173	470
95+	6,550	2,135	52	864	1,061	158	4,415	103	471	3,343	499
0-19	48,016	24,567	24,415	148	0	3	23,449	22,894	537	0	18
20-64	141,915	71,680	13,110	52,324	367	5,880	70,234	5,892	56,455	1,909	5,978
65+	88,981	39,823	2,313	29,721	5,161	2,628	49,158	1,096	25,202	18,347	4,514
20-65	145,347	73,372	13,228	53,733	407	6,004	71,974	5,929	57,820	2,091	6,135
20-66	148,778	75,061	13,345	55,137	453	6,125	73,717	5,967	59,171	2,289	6,291
20-67	152,201	76,741	13,461	56,532	503	6,244	75,460	6,004	60,503	2,507	6,446
20-68	155,609	78,411	13,576	57,915	560	6,361	77,199	6,042	61,811	2,744	6,601
20-69	158,995	80,065	13,688	59,281	622	6,474	78,930	6,080	63,094	3,003	6,754
66+	85,549	38,131	2,195	28,312	5,120	2,504	47,418	1,059	23,837	18,165	4,357
67+	82,118	36,443	2,078	26,908	5,075	2,383	45,675	1,021	22,486	17,967	4,201
68+	78,694	34,762	1,962	25,513	5,024	2,264	43,933	983	21,154	17,749	4,045
69+	75,286	33,092	1,847	24,130	4,968	2,147	42,194	946	19,846	17,512	3,891
70+	71,900	31,438	1,735	22,764	4,905	2,034	40,462	908	18,563	17,253	3,738
Total	278,911	136,070	39,838	82,194	5,527	8,511	142,841	29,882	82,194	20,256	10,510

Table 22 and Chart 7 illustrate of the change in the median age of the total population throughout the projection period. For alternative I, this median age is projected to increase until the year 2030, deline slighty during the next 20 years, and then to stabilize throughout the remainder of the projection period. For alternatives II and III, the median age of the total population increases throughout the projection period, with the rate of increase diminishing over time. The patterns of increase are mainly due to past and assumed future patterns of fertility. The aging of the "baby boom generation" (those born during the late 1940's through the mid 1960's) is a major reason for the median age increasing until about 2050. Also contributing to this increase through 2050, and beyond, is the assumed decrease in mortality. As people are assumed to live longer, the median age of the population increases. This factor has more effect on the median age under alternative III, where higher mortality reductions are assumed. Sustained higher future fertility rates as assumed for alternative I, tend to hold down the median age.

Table 22.—Median Age of the Population by Calendar Year, and Alternative

Calendar year	Total	65+
1960	29.4	71.9
1965	28.1	72.4
1970	27.8	72.7
1975	28.4	72.8
1980	29.8	72.9
1985	31.2	73.2
1986	31.5	73.2
1987	31.8	73.2
1988	32.1	73.3
1989	32.4	73.3
1990	32.7	73.3

	Alternative I		Alternative II		Alternative III	
	Total Population	Population Age 65+	Total Population	Population Age 65+	Total Population	Population Age 65+
1995	34.1	73.7	34.2	73.7	34.3	73.8
2000	35.4	74.4	35.7	74.5	36.0	74.6
2020	36.9	72.6	38.8	72.9	40.5	73.3
2030	37.5	73.5	40.2	73.9	43.0	74.4
2040	37.3	75.2	41.3	75.9	45.6	76.7
2050	36.9	74.9	41.6	75.9	47.2	77.1
2060	37.0	74.4	42.0	75.3	48.4	76.5
2070	37.0	74.8	42.4	76.1	49.4	77.7
2080	37.1	74.7	42.6	76.4	50.2	78.6

B. Population by Marital Status

In 1989, 43 percent of the population was estimated to be single (never married). The proportion of the population which is projected to be single in 2080 is 50 percent under alternative I, 38 percent under alternative II, and 25 percent under alternative III, reflecting differences in the projected marriage and divorce rates and in the age distribution of the population among the three alternatives. The proportion married is projected to change from 45 percent in 1989 to 36, 47, and 59 percent in 2080, under alternatives I, II, and III, respectively. The proportion widowed in 2080 is projected to increase from 6 percent in 1989 to 7 and 9 percent, under alternatives II and III, respectively, and to decrease to 5 percent under alternative I. The current high incidence of divorce and the future assumptions concerning marriage and divorce result in the proportion divorced to increase from 6 percent in 1989 to 9, 8, and 7 percent under alternatives I, II, and III, respectively. Chart 8 compares the distribution of the population by marital status in 1989 with the projected distribution under alternative II in 2080.

The disunity ratio given in Table 23 is the ratio of the number of divorced persons to the sum of the numbers of married and widowed persons. This ratio is assumed to increase from .121 in 1989 to .218 and .158 in 2080 under alternatives I and II, respectively, and to decrease to .100 in 2080 under Alternative III.

C. Aged Population

A rough estimate of the growth in the number of persons receiving Social Security retirement benefits can be obtained from examining the population ages 65 and older given in Table 23. The projected population at ages 65 and older is also shown graphically in Chart 9. The growth in the number of people aged 65 or older slows down around the year 2000 due to the low fertility experience during the 1930's. This slowing down is not as great under alternatives II and III because assumed mortality reductions are greater than under alternative I. The high fertility of the 1950's and 1960's results in sharp steady growth in the population age 65 and older for the period 2010-2030 under all of the alternatives. By the year 2080, the population age 65 and older increases significantly as a percentage of total population from 12 percent in 1989 to 17 percent under alternative I, 23 percent under alternative II, and 32 percent under alternative III.

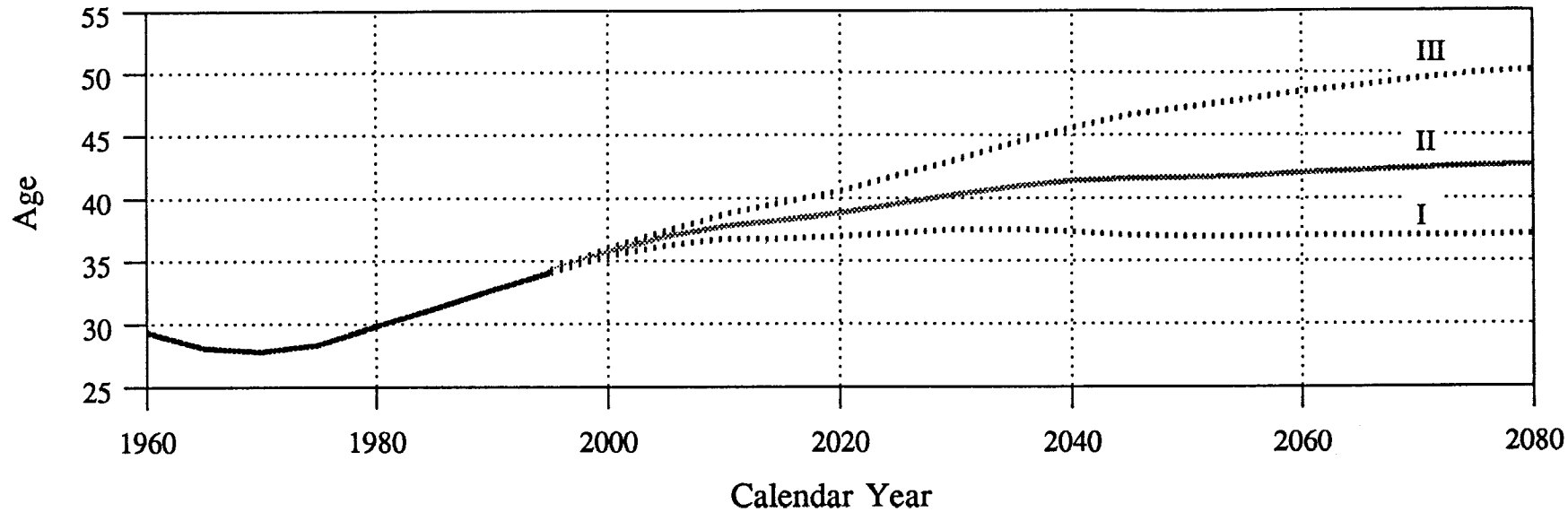
Table 22 and Chart 7 also show the change in the median age of the population ages 65 and older. This median age increases until around 2010, when the "baby boom generation" begins to reach 65. As the "baby boom generation" ages, the median age once again increases. At the same time the "baby boom generation" ages, the low fertility period of the 1970's and early 1980's also contributes to the increase in the median age. In addition to the historical fertility experience, mortality reduction is also a factor in the change in the median age of the population ages 65 and older. In general, with all other factors held constant, reductions in mortality result in longer life and higher median age.

D. Demographic Indicators

The projected population is summarized in Table 23 by broad age group and alternative for selected years. The age groups are under 20 years, 20-64 years, and 65 years or older.

Chart 7 - Median Age of Total Population

Actual and Projected by Alternative



Median Age of Population Ages 65 and Older

Actual and Projected by Alternative

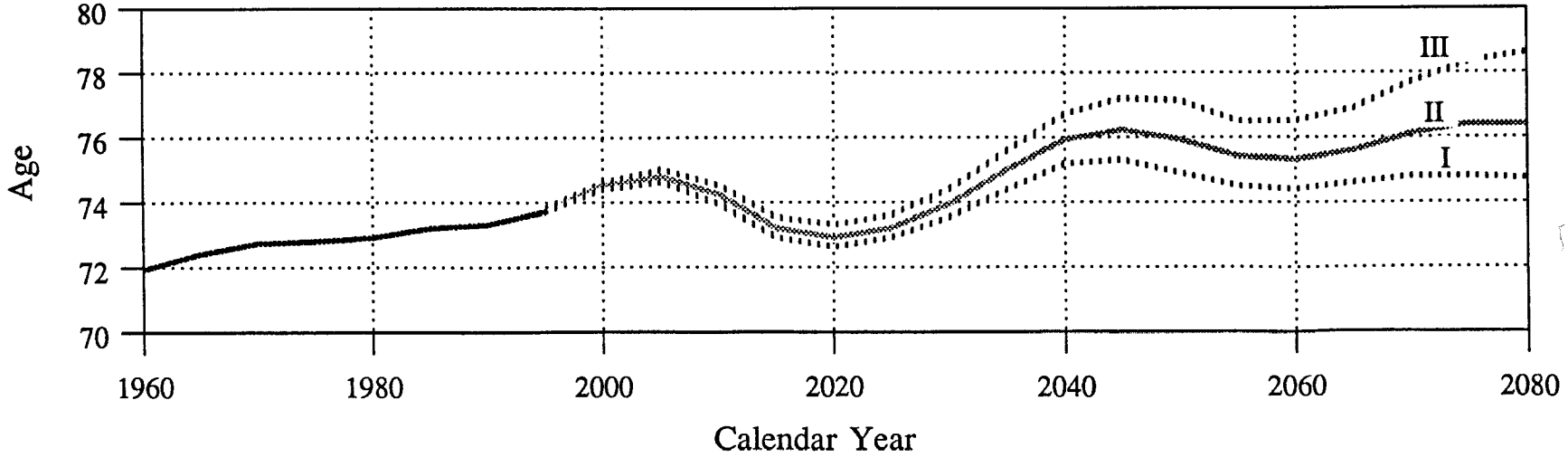


Chart 8 - Distribution of the Population by Marital Status
Ages 0 through 100

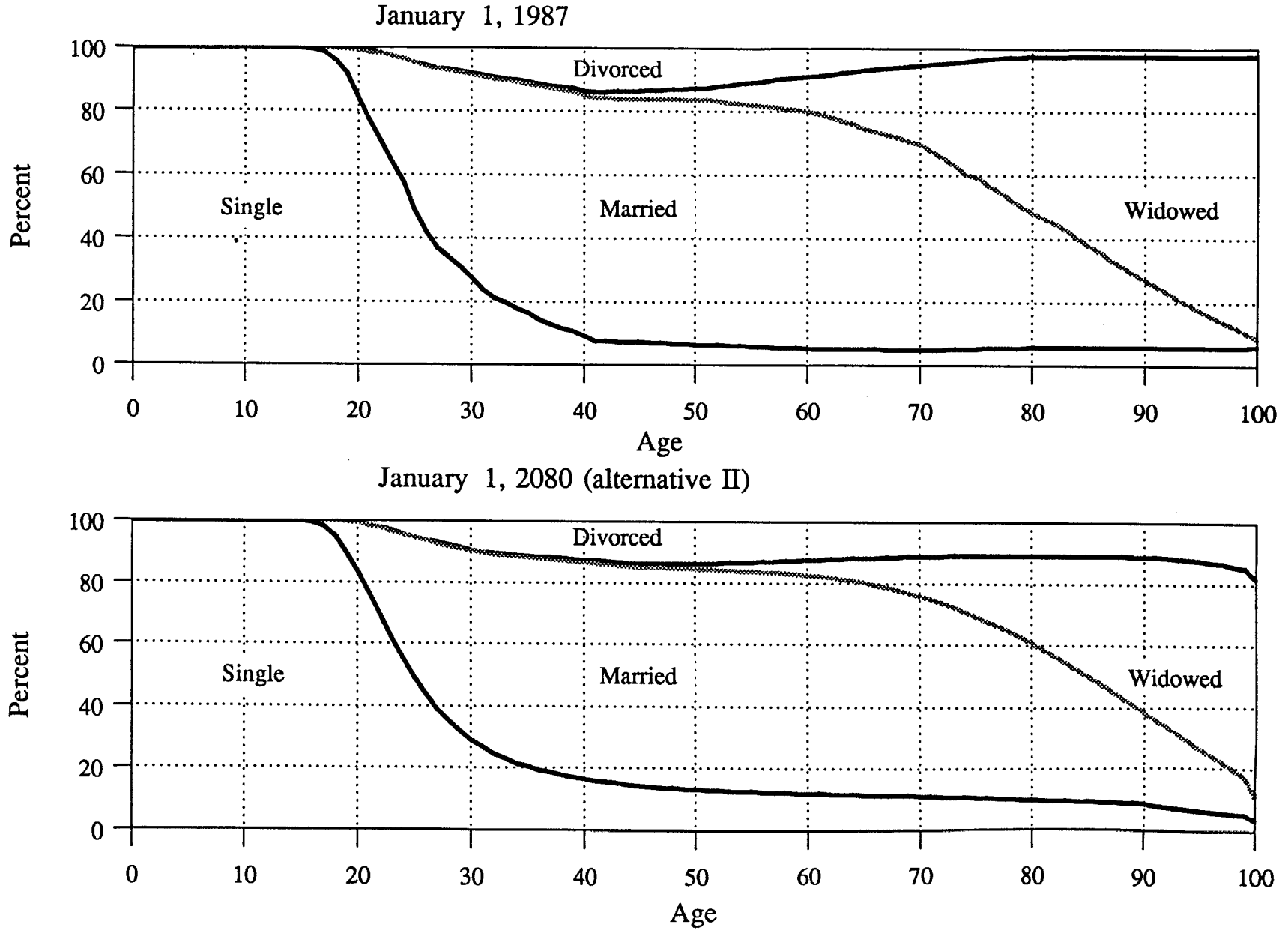


Chart 9 - Social Security Area Population, Aged 65 +

(in millions), 1960 - 2080

Actual and Projected by Alternative

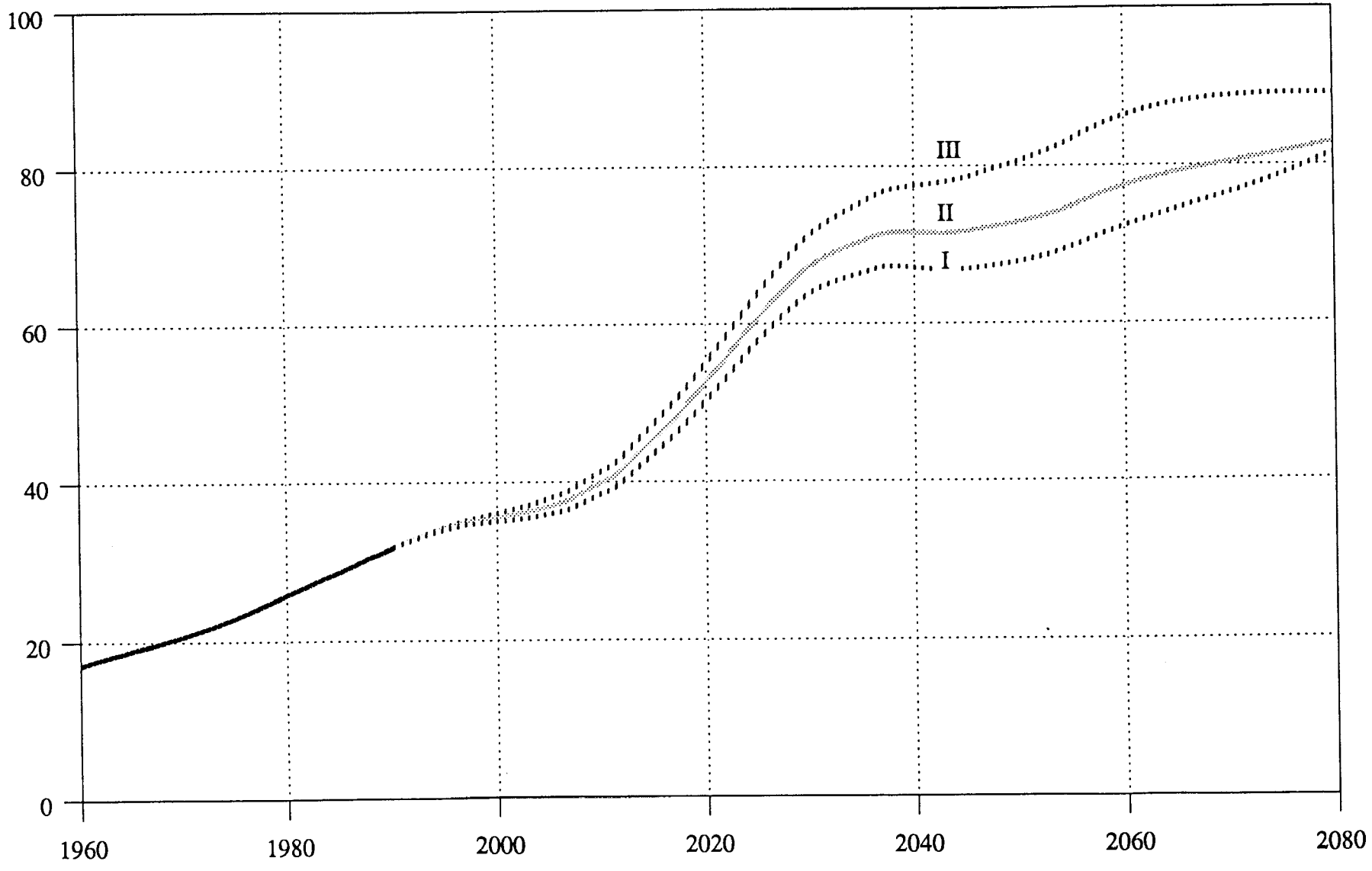


Table 23.—Population in the Social Security Area as of January 1 and Selected Ratios by Year and Alternative

Alternative and year	Population (In thousands)								Dependency ratio		Disunity ratio
	Marital status					Age					
	Single	Married	Widowed	Divorced	Total	0-19	20-64	65+	Aged	Total	
1940	66,162	64,943	8,546	1,636	141,287	48,389	83,212	9,686	.116	.698	.022
1950	67,085	78,566	9,883	2,257	157,791	53,236	92,008	12,547	.136	.715	.026
1960	85,580	88,998	11,085	3,056	188,719	72,158	99,493	17,068	.172	.897	.031
1970	97,106	99,339	12,576	4,669	213,690	80,786	112,244	20,660	.184	.904	.042
1980	101,036	108,435	13,924	10,711	234,107	75,214	133,061	25,832	.194	.759	.088
1981	101,639	108,958	13,988	11,816	236,401	74,637	135,364	26,400	.195	.746	.096
1982	102,540	109,917	13,851	12,508	238,816	74,147	137,681	26,988	.196	.735	.101
1983	104,121	110,439	14,043	12,672	241,274	73,756	139,915	27,603	.197	.724	.102
1984	104,948	110,858	14,465	13,356	243,626	73,395	142,054	28,177	.198	.715	.107
1985	105,468	111,514	14,759	14,236	245,977	73,166	144,112	28,700	.199	.707	.113
1986	106,191	112,680	14,806	14,682	248,359	73,180	145,849	29,329	.201	.703	.115
1987	107,307	114,047	14,551	14,867	250,772	73,386	147,421	29,965	.203	.701	.116
1988	108,114	115,263	14,887	14,975	253,240	73,751	148,920	30,570	.205	.701	.115
1989	109,742	115,084	15,139	15,737	255,702	74,212	150,387	31,104	.207	.700	.121
1990	110,701	115,982	15,222	16,387	258,292	74,646	151,935	31,711	.209	.700	.125
Alternative I:											
1991	111,687	117,045	15,301	17,025	261,057	75,127	153,673	32,257	.210	.699	.129
1992	112,722	118,003	15,378	17,669	263,773	75,698	155,327	32,747	.211	.698	.132
1993	113,903	118,974	15,456	18,303	266,637	76,546	156,861	33,230	.212	.700	.136
1994	115,115	119,881	15,530	18,921	269,448	77,495	158,280	33,674	.213	.702	.140
1995	116,357	120,717	15,601	19,530	272,205	78,413	159,737	34,055	.213	.704	.143
1996	117,625	121,481	15,667	20,138	274,910	79,294	161,236	34,380	.213	.705	.147
1997	118,914	122,180	15,728	20,744	277,567	80,105	162,830	34,631	.213	.705	.150
1998	120,222	122,836	15,786	21,338	280,182	80,814	164,572	34,797	.211	.702	.154
1999	121,542	123,458	15,840	21,921	282,761	81,444	166,403	34,914	.210	.699	.157
2000	122,873	124,051	15,891	22,494	285,309	81,955	168,310	35,044	.208	.695	.161
2010	137,124	129,120	16,412	27,817	310,474	85,833	186,186	38,454	.207	.668	.191
2020	154,097	132,767	17,674	32,234	336,772	91,471	195,088	50,213	.257	.726	.214
2030	169,977	136,191	19,883	34,479	360,530	98,420	198,188	63,922	.323	.819	.221
2040	184,244	139,986	21,357	35,639	381,226	103,757	210,355	67,115	.319	.812	.221
2050	197,886	145,948	21,216	36,713	401,763	110,379	223,547	67,836	.303	.797	.220
2060	211,112	153,963	20,981	38,257	424,312	116,992	235,028	72,292	.308	.805	.219
2070	224,007	163,142	21,764	40,282	449,196	123,391	249,386	76,419	.306	.801	.218
2080	236,789	172,769	22,922	42,576	475,056	130,389	263,201	81,466	.310	.805	.218
Alternative II:											
1991	111,552	116,985	15,305	17,016	260,858	75,057	153,536	32,265	.210	.699	.129
1992	112,383	117,965	15,388	17,614	263,350	75,534	155,040	32,776	.211	.699	.132
1993	113,264	119,004	15,474	18,173	265,915	76,249	156,378	33,289	.213	.700	.135
1994	114,115	120,037	15,559	18,691	268,401	77,038	157,590	33,773	.214	.703	.138
1995	114,937	121,051	15,642	19,181	270,810	77,773	158,833	34,204	.215	.705	.140
1996	115,731	122,041	15,722	19,652	273,146	78,446	160,111	34,588	.216	.706	.143
1997	116,497	123,012	15,799	20,105	275,412	79,025	161,481	34,906	.216	.706	.145
1998	117,231	123,981	15,872	20,534	277,618	79,476	162,995	35,146	.216	.703	.147
1999	117,932	124,955	15,941	20,940	279,767	79,826	164,598	35,343	.215	.700	.149
2000	118,595	125,937	16,008	21,325	281,865	80,032	166,274	35,559	.214	.695	.150
2010	123,592	136,753	16,598	24,460	301,402	79,514	181,984	39,905	.219	.656	.160
2020	127,017	147,586	17,899	26,694	319,196	78,955	187,665	52,576	.280	.701	.161
2030	130,039	154,069	20,448	28,041	332,597	80,021	185,174	67,402	.364	.796	.161
2040	131,657	157,443	22,749	28,721	340,571	79,697	189,304	71,569	.378	.799	.159
2050	132,610	160,176	23,422	29,101	345,309	79,977	192,476	72,856	.379	.794	.159
2060	133,463	162,969	23,416	29,518	349,366	80,357	191,616	77,394	.404	.823	.158
2070	134,199	165,501	23,980	30,006	353,687	80,413	192,942	80,333	.416	.833	.158
2080	134,835	167,445	24,592	30,427	357,299	80,722	193,787	82,790	.427	.844	.158
Alternative III:											
1991	111,457	116,950	15,303	17,010	260,720	75,006	153,440	32,275	.210	.699	.129
1992	112,106	118,012	15,384	17,556	263,058	75,405	154,846	32,806	.212	.699	.132
1993	112,726	119,227	15,467	18,028	265,448	76,015	156,081	33,352	.214	.701	.134
1994	113,241	120,518	15,550	18,429	267,738	76,674	157,186	33,878	.216	.703	.135
1995	113,657	121,860	15,634	18,774	269,926	77,253	158,311	34,362	.217	.705	.137
1996	113,980	123,238	15,719	19,077	272,014	77,745	159,463	34,805	.218	.706	.137
1997	114,212	124,647	15,805	19,340	274,005	78,119	160,696	35,190	.219	.705	.138
1998	114,355	126,097	15,893	19,560	275,904	78,340	162,061	35,503	.219	.702	.138

Table 23.—Population in the Social Security Area as of January 1 and Selected Ratios by Year and Alternative —Continued

Alternative and year	Population (In thousands)								Dependency ratio		Disunity ratio
	Marital status					Age					
	Single	Married	Widowed	Divorced	Total	0-19	20-64	65+	Aged	Total	
Alternative III: (Cont.)											
1999	114,405	127,593	15,981	19,739	277,718	78,435	163,506	35,778	.219	.699	.137
2000	114,359	129,118	16,079	19,881	279,437	78,363	164,998	36,076	.219	.694	.137
2010	109,583	147,321	16,932	20,089	293,924	73,791	178,801	41,332	.231	.644	.122
2020	100,527	167,144	18,028	19,587	305,286	67,810	182,404	55,072	.302	.674	.106
2030	94,469	176,285	20,685	19,957	311,396	64,302	175,688	71,407	.406	.772	.101
2040	88,483	178,500	23,679	20,177	310,838	60,200	173,171	77,468	.447	.795	.100
2050	82,683	177,278	25,179	20,043	305,183	56,586	167,977	80,619	.480	.817	.099
2060	77,711	174,308	25,404	19,777	297,199	53,574	157,287	86,338	.549	.890	.099
2070	73,442	170,008	25,666	19,469	288,585	50,608	149,263	88,714	.594	.933	.099
2080	69,720	164,387	25,784	19,021	278,911	48,016	141,915	88,981	.627	.965	.100

Note: The aged dependency ratio is the ratio of the number of persons aged 65 and older to the number of persons aged 20 to 64. The total dependency ratio is the same as the aged dependency ratio except the number of persons under age 20 are also included in the numerator of the ratio. The disunity ratio is the ratio of the number of divorced persons to the number of married and widowed persons.

The aged dependency ratio shown in Table 23 is the ratio of the number of persons aged 65 or older to the number of persons aged 20-64. The aged dependency ratio is also shown graphically in Chart 10. This ratio is closely related to the ratio of retirees to workers and, thus, provides an index of possible future demographic pressures which may be faced by the OASDI program. Under alternative I, the aged dependency ratio is projected to increase from 0.207 in 1989 to 0.327 in the year 2036 and then to decrease to an ultimate level of 0.31. Under alternatives II and III, the aged dependency ratio is projected to continually increase to 0.427 and 0.627, repectively, in 2080. A sharp increase in the aged dependency ratio shortly after the turn of the century appears certain as the "baby boom generation" attains age 65 while the "baby bust generation" (those born durinng the 1970's and 1980's) attains age 20. The magnitude of the increase, however, will depend upon future mortality reductions among the aged and future fertility rates. Even under optimistic assumptions, however, the aged dependency ratio will increase about 55 percent by the year 2030.

Since not everyone retires at age 65 and since the minimum age at whi ch unreduced benefits are payable is scheduled to increase, it is interesting to observe the aged dependency ratio using cutoff ages other than 65. Table 24 displays these ratios at age 62 when retired worker benefits are first available, at age 67 which will be the normal retirement age (i.e., the minimum age at which unreduced retirement benefits are payable) after 2026, and at age 70 after which delayed retirement credits can no longer be earned. In Table 25 the ages necessary to maintain an aged dependency ratio of .20, .25, and .30 are given. In order to maintain an aged dependency ratio of .20 (the approximate age 65 dependency ratio during the period 1980 - 1990) the aged dependency ratio in 2080 must be calculated at ages 70, 75, and 81 under alternatives I, II, and III, respectively. Under all three alternatives, the age necessary to maintain a selected aged dependency ratio increases rapidly from 2010 to 2040.

Table 24.—Aged Dependency Ratios at Selected Retirement Ages by Calendar Year and Alternative

Alternative and year	Age 62	65	67	70
1940	.158	.116	.093	.065
1950	.185	.136	.110	.077
1960	.226	.172	.140	.100
1970	.241	.184	.153	.113
1980	.251	.194	.162	.120
1981	.251	.195	.163	.121
1982	.252	.196	.164	.123
1983	.254	.197	.165	.124
1984	.255	.198	.166	.125
1985	.257	.199	.167	.126
1986	.258	.201	.169	.127
1987	.260	.203	.170	.129
1988	.261	.205	.172	.130
1989	.262	.207	.174	.131
1990	.263	.209	.176	.132
Alternative I :				
1991	.264	.210	.177	.134
1992	.264	.211	.179	.136
1993	.264	.212	.180	.138
1994	.264	.213	.181	.139
1995	.263	.213	.182	.140
1996	.261	.213	.183	.142
1997	.260	.213	.183	.142
1998	.258	.211	.183	.143
1999	.257	.210	.182	.143
2000	.256	.208	.181	.143
2010	.270	.207	.173	.133
2020	.343	.257	.211	.154

Table 24.—Aged Dependency Ratios at Selected Retirement Ages by Calendar Year and Alternative —Continued

Alternative and year	Age 62	65	67	70
Alternative I : (Cont.)				
2030	.404	.323	.272	.203
2040	.391	.319	.278	.219
2050	.380	.303	.260	.202
2060	.384	.308	.262	.202
2070	.381	.306	.263	.207
2080	.388	.310	.264	.206
Alternative II :				
1991	.264	.210	.178	.134
1992	.265	.211	.179	.136
1993	.265	.213	.181	.138
1994	.265	.214	.183	.140
1995	.265	.215	.184	.142
1996	.264	.216	.185	.144
1997	.264	.216	.186	.145
1998	.263	.216	.187	.146
1999	.263	.215	.187	.147
2000	.262	.214	.186	.147
2010	.285	.219	.185	.143
2020	.370	.280	.231	.171
2030	.452	.364	.308	.233
2040	.459	.378	.331	.265
2050	.470	.379	.326	.258
2060	.499	.404	.347	.271
2070	.510	.416	.362	.290
2080	.524	.427	.371	.297
Alternative III:				
1991	.264	.210	.178	.134
1992	.265	.212	.180	.137
1993	.266	.214	.182	.139
1994	.267	.216	.184	.141
1995	.267	.217	.186	.143
1996	.267	.218	.187	.145
1997	.267	.219	.189	.147
1998	.267	.219	.190	.149
1999	.267	.219	.190	.150
2000	.268	.219	.190	.151
2010	.299	.231	.196	.152
2020	.396	.302	.250	.187
2030	.501	.406	.346	.265
2040	.540	.447	.394	.318
2050	.593	.480	.416	.332
2060	.672	.549	.475	.375
2070	.717	.594	.522	.426
2080	.755	.627	.552	.452

Note: The aged dependency ratio calculated at a selected age is the ratio of the number of people in the population as of January 1 who are as old or older than the selected age to the number of people who are between 19 and the selected age.

Table 25.—Retirement Age at Selected Aged Dependency Ratios by Calendar Year and Alternative

Alternative and year	Dependency ratio .20	.25	.30
1940	59	57	55
1950	61	59	57
1960	63	61	59
1970	64	62	59
1980	65	62	60
1981	65	62	60
1982	65	62	60
1983	65	62	60
1984	65	62	60
1985	65	62	60
1986	65	62	60
1987	65	62	60
1988	65	63	60
1989	65	63	60
1990	66	63	60
Alternative I :			
1991	66	63	60
1992	66	63	60
1993	66	63	60
1994	66	63	60
1995	66	63	60
1996	66	63	60
1997	66	63	60
1998	66	63	60
1999	66	62	60
2000	66	62	60
2010	65	63	61
2020	68	65	63
2030	70	68	66
2040	71	68	66
2050	70	67	65
2060	70	68	65
2070	70	68	65
2080	70	68	65
Alternative II :			
1991	66	63	60
1992	66	63	60
1993	66	63	60
1994	66	63	60
1995	66	63	60
1996	66	63	60
1997	66	63	60
1998	66	63	60
1999	66	63	60
2000	66	63	60
2010	66	63	61
2020	68	66	64
2030	72	69	67
2040	73	71	68
2050	73	70	68

Table 25.—Retirement Age at Selected Aged Dependency Ratios by Calendar Year and Alternative —Continued

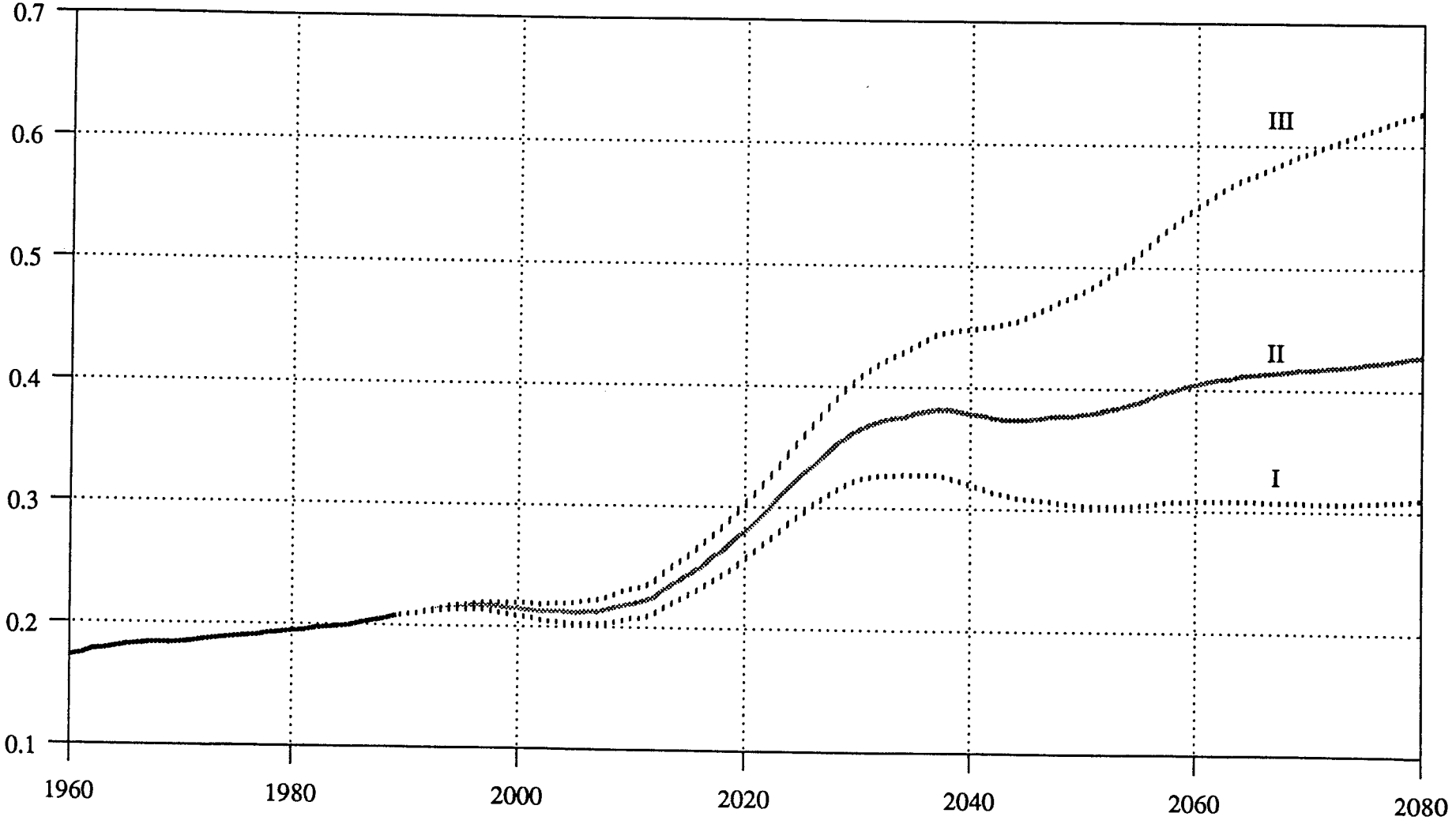
Alternative and year	Dependency ratio .20	.25	.30
Alternative II : (Cont.)			
2060	73	71	69
2070	75	72	70
2080	75	72	70
Alternative III:			
1991	66	63	60
1992	66	63	60
1993	66	63	60
1994	66	63	60
1995	66	63	60
1996	66	63	60
1997	66	63	60
1998	66	63	60
1999	66	63	60
2000	66	63	60
2010	67	64	62
2020	69	67	65
2030	73	71	69
2040	76	73	71
2050	77	74	71
2060	77	75	73
2070	79	77	75
2080	81	78	76

Note: The aged dependency ratio calculated at a selected age is the ratio of the number of people in the population as of January 1 who are as are as old or older than the selected age to the number of 'people in the population as of January 1 who are between age 19 and the selected age.

The total dependency ratio given in Tables 23 is the ratio of the number of persons who are under age 20 or over age 64 to the number of persons aged 20-64. This ratio views the possible future financial burdens to be borne by workers from a somewhat broader perspective. Under all three alternatives, the total dependency ratio is projected to decrease from 0.701 in 1987 until shortly after the turn of the century, reflecting the small number of children resulting from the low fertility rates experienced since 1970 and projected to be experienced in the near future, and the slow growth in the aged population resulting from the low fertility rates experienced during the 1930's. Shortly after 2010, the total dependency ratios begin to rise, largely reflecting the same effects that influence the aged dependency ratios. Projected values of the total dependency ratio in 2080 range from 0.805 under alternative I to 0.965 under alternative III or roughly from 15 to 38 percent higher than the 1987 value.

Chart 10 - Ratio of Population Aged 65 + to Population aged 20 - 64, 1960 - 2080

Actual and Projected by Alternative



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