SOCIAL SECURITY AREA POPULATION PROJECTIONS 1989

ACTUARIAL STUDY NO. 105

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FOREWORD

Actuarial Study No. 105 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 1989 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 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 1989 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 1989 Annual Report of the HI Board of Trustees. The population projections described in this study supersede those published in Actuarial Study Number 102, which were used in the preparation of the 1988 Annual Reports. These new projections start from an estimate of the January 1, 1987 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 alterntives 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 alterntive 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, 1987, 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, 1987 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	19,073	9,757	9,757	0	0	0	9,316	9,316	0	0	0
5-9	18,259	9,340	9,340	0	0	0	8,919	8,919	0	0	0
10-14	17,052	8,726	8,725	1	0	0	8,326	8,320	5	0	0
15-19	18,972	9,685	9,525	156	1	4	9,287	8,766	497	1	24
20-24	21,018	10,695	8,335	2,172	9	178	10,323	6,288	3,679	11	345
25-29	23,032	11,733	5,077	5,990	6	660	11,298	3,260	7,106	43	888
30-34	21,761	11,046	2,665	7,417	14	950	10,715	1,590	7,830	89	1,206
35-39	19,482	9,812	1,337	7,350	20	1,104	9,670	806	7,403	142	1,320
40-44	15,575	7,785	616	6,224	45	899	7,790	508	5,976	196	1,110
45-49	12,673	6,302	432	5,147	65	658	6,371	307	4,900	290	874
50-54	11,262	5,550	360	4,572	99	519	5,712	230	4,361	412	709
55-59	11,469	5,563	358	4,582	136	487	5,906	252	4,266	777	611
60-64	11,137	5,246	328	4,307	197	413	5,891	253	3,965	1,174	500
65-69	9,756	4,462	246	3,601	338	277	5,294	245	3,058	1,647	344
70-74	7,766	3,323	166	2,591	401	166	4,443	230	2,068	1,928	217
75-79	5,745	2,243	105	1,674	395	69	3,501	210	1,103	2,069	120
80-84	3,648	1,253	56	856	302	38	2,395	154	511	1,666	64
85-89	1,960	572	25	302	221	25	1,388	89	222	1,039	37
90-94	801	201	9	71	110	12	600	39	64	481	16
95+	234	52	2	9	37	4	182	12	9	156	5
0-19	73,356	37,507	37,346	157	1	4	35,848	35,321	502	1	24
20-64	147,408	73,730	19,509	47,763	592	5,867	73,678	13,495	49,486	3,134	7,562
65+	29,909	12,107	608	9,104	1,804	591	17,803	978	7,035	8,985	804
20-65	149,552	74,729	19,566	48,573	656	5,934	74,823	13,547	50,185	3,447	7,644
20-66	151,614	75,683	19,620	49,344	723	5,995	75,931	13,598	50,842	3,772	7,720
20-67	153,488	76,539	19,667	50,035	789	6,048	76,949	13,645	51,428	4,090	7,786
20-68	155,370	77,390	19,712	50,720	859	6,099	77,980	13,693	52,005	4,433	7,849
20-69	157,164	78,192	19,754	51,363	930	6,144	78,972	13,741	52,544	4,781	7,906
Total	250,673	123,344	57,464	57,023	2,396	6,461	127,329	49,795	57,023	12,120	8,391

Because the most complete data were available as of July 1, the population as of January 1, 1987 was interpolated from estimates of the Social Security Area population as of July 1, 1986, and July 1, 1987. 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	
	1986	1987
Residents of the fifty States and D.C. and armed forces overseas	241,598	243,918
Adjustment for net census undercount	3,342	3,362
Civilian residents of Puerto Rico	3,270	3,288
Civilian residents of the Virgin Islands	110	106
Civilian residents of Guam	118	121
Civilian residents of American Samoa	37	38
Federal civilian employees overseas	62	66
Dependents of Armed Forces and Federal employees overseas	458	453
Crew members of merchant vessels	13	11
Other citizens overseas	500	525
Total	249,507	251,888

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. 1022, 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. 1022. 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, 1986 and July 1, 1987 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, 1987. 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. 423. 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, 1987 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, 1987 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	157	105	41	4	1	1	1	1	1	1	0	0	0	0	0	0
20-24	2,172	312	1,523	276	39	11	4	2	2	1	1	1	0	0	0	0
25-29	5,990	62	1,654	3,633	520	82	21	8	4	2	2	2	1	1	0	0
30-34	7,417	13	336	2,496	3,923	516	95	24	7	3	2	1	0	0	0	0
35-39	7,350	4	82	507	2,604	3,586	445	85	22	7	3	2	1	1	0	0
40-44	6,224	2	24	126	525	2,432	2,658	352	73	20	7	3	1	1	0	0
45-49	5,147	1	8	37	136	524	2,005	2,032	303	66	21	9	3	1	0	0
50-54	4,572	1	4	14	48	156	512	1,694	1,690	324	87	28	9	3	1	0
55-59	4,582	0	3	7	20	59	156	493	1,588	1,730	390	98	28	7	2	1
60-64	4,307	0	1	3	7	22	53	144	476	1,493	1,619	372	89	20	4	2
65-69	3,601	0	1	2	3	8	18	45	135	448	1,331	1,250	284	59	11	5
70-74	2,591	0	0	1	1	3	7	15	42	124	374	939	866	177	29	15
75-79	1,674	0	0	0	1	1	2	5	14	36	101	279	613	491	86	46
80-84	856	0	0	0	0	0	0	1	3	7	17	47	113	232	270	164
85+	382	0	0	0	0	0	0	1	2	4	10	26	59	109	108	63
Total	57,023	502	3,679	7,106	7,830	7,403	5,976	4,900	4,361	4,266	3,965	3,058	2,068	1,103	511	296

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 1986. 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]

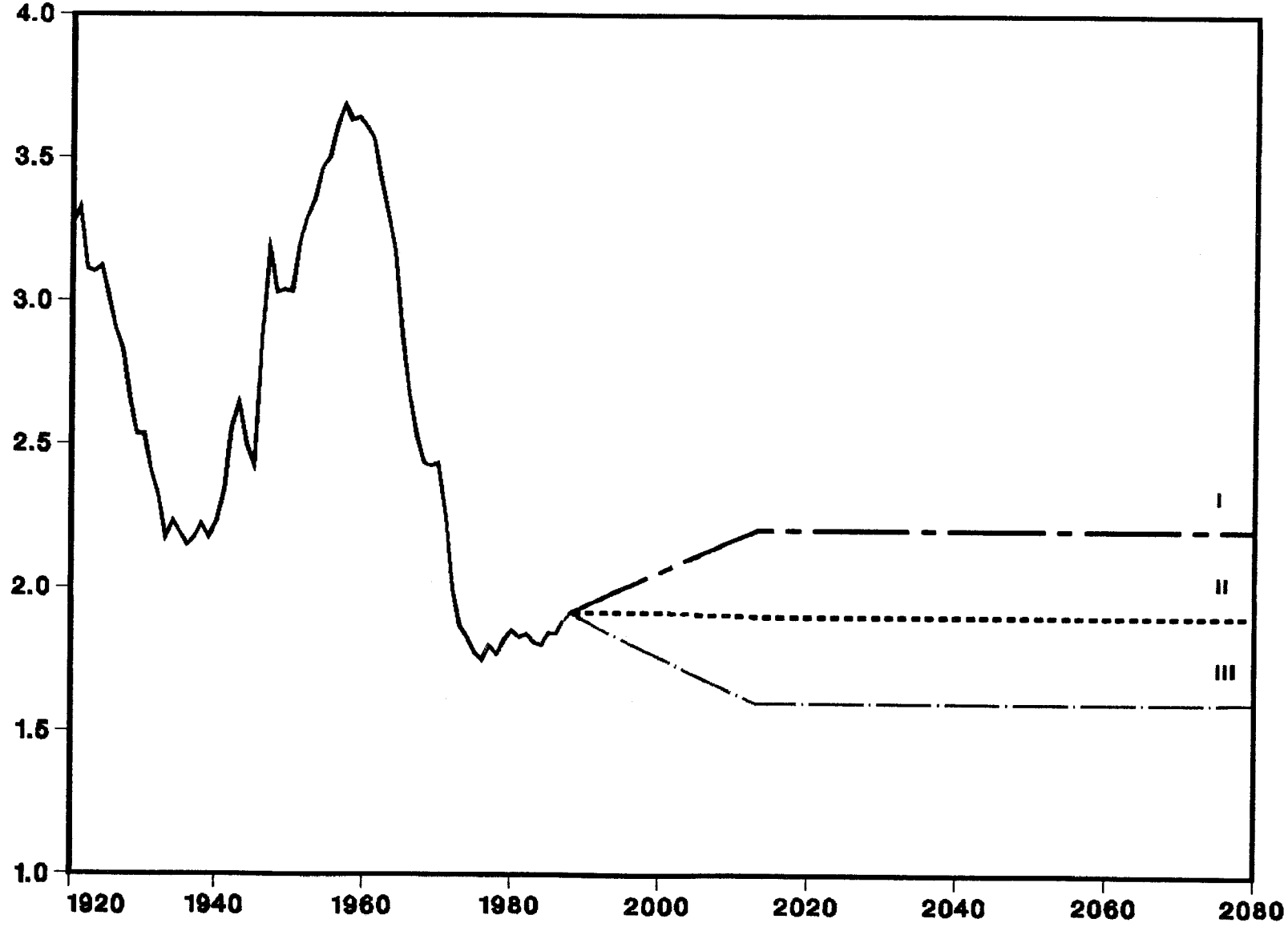
Calendar year	Total fertility rate
1920	3,263.3
1921	3,326.2
1922	3,109.4
1923	3,101.2
1924	3,120.7
1925	3,011.6
1926	2,900.7
1927	2,824.3
1928	2,659.8
1929	2,532.0
1930	2,532.5
1931	2,401.7
1932	2,318.6
1933	2,172.0
1934	2,232.0
1935	2,188.7
1936	2,145.6
1937	2,173.3
1938	2,221.7
1939	2,171.7
1940	2,229.0
1941	2,331.5
1942	2,554.8
1943	2,640.2

Table 3.—Total Fertility Rates by Calendar Year and Alternative —Continued
[Per thousand women]

Calendar year	Total fertility rate		
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	1,882.2		
1988	1,909.9		
	Alternative I	Alternative II	Alternative III
1989	1,922.3	1,909.4	1,895.7
1990	1,934.7	1,909.4	1,881.9
1991	1,946.8	1,909.4	1,868.5
1992	1,958.9	1,909.4	1,855.4
1993	1,970.8	1,909.4	1,842.4
1994	1,982.5	1,909.4	1,829.8
1995	1,994.2	1,909.4	1,817.1
1996	2,006.0	1,909.4	1,804.5
1997	2,017.8	1,909.4	1,792.0
1998	2,029.6	1,909.4	1,779.6
1999	2,041.2	1,909.3	1,767.2
2000	2,052.7	1,909.0	1,754.8
2001	2,064.1	1,908.6	1,742.6
2002	2,075.5	1,908.1	1,730.4
2003	2,086.9	1,907.5	1,718.2
2004	2,098.3	1,906.8	1,706.1
2005	2,109.7	1,906.2	1,694.2
2006	2,121.0	1,905.6	1,682.4
2007	2,132.3	1,904.9	1,670.3
2008	2,143.6	1,904.2	1,658.3
2009	2,154.9	1,903.5	1,646.4
2010	2,166.2	1,902.7	1,634.6
2011	2,177.6	1,902.0	1,622.8
2012	2,188.8	1,901.1	1,611.2
2013	2,200.0	1,900.0	1,600.0

Note: The total fertility rate is the average number of children that would be born to a woman if she were to survive the childbearing period and were to experience the age-specific central birth rates for the tabulated year throughout that period.

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, for the years in which final data are available, the total fertility rate has been about 1.8 children per woman. The estimated total fertility rates for 1987 and 1988 are 1.88 and 1.91, respectively.

On average, the total fertility rate is expected to remain about the same level as the rates estimated for 1987 and 1988. 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. 427, 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 (alterntive II) assumption for the 1989 Report of the Board of Trustees.

To help in selecting ultimate rates for alterntives I and III, an examination of the recent total fertility rates in other nations is useful. A comparison of the most recent total fertility rates listed in the *Demographic Yearbook, 1984,* for the U.S., Canada, and fifteen countries in Western Europe revealed a range of 2.7 in Ireland to 1.4 in West Germany and Denmark. The U.S. and the United Kingdom shared the fifth highest ranking with 1.8. Ireland was the only country to have a total fertility rate equal to or over 2.2 and eight 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 2.7 for any sustained period, and have selected 2.2 as the optimistic (alterntive 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 (alterntive III) assumption. The ultimate total fertility rate for each alternative was assumed to be first reached in calendar year 2013. The ultimate values selected for the 1989 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 1987 and 1988 were estimated from provisional data published by the National Center for Health Statistics in *Monthly Vital Statistics Reports,* Volumes 36 and 37. Between 1988 and 2013, 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	2013
Alternative I :										
14	6.5	6.7	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
15	16.7	17.1	17.3	17.4	17.5	18.0	18.5	19.0	19.5	19.8
16	31.3	32.0	32.5	32.7	32.9	33.9	34.9	35.9	36.9	37.4
17	50.8	52.0	52.8	53.1	53.4	54.9	56.4	57.9	59.4	60.1
18	71.6	73.3	74.4	74.8	75.2	77.2	79.2	81.2	83.2	84.3
19	88.5	90.6	91.9	92.4	92.9	95.4	97.9	100.4	102.9	104.4
20	100.0	102.4	103.9	104.5	105.1	108.1	111.1	114.1	117.1	118.9
21	105.4	107.9	109.5	110.2	110.9	114.1	117.1	120.1	123.1	124.9
22	109.0	111.6	113.2	113.9	114.6	118.1	121.4	124.4	127.9	130.0
23	111.6	114.2	115.9	116.6	117.3	120.8	124.3	127.8	131.3	133.4
24	113.3	116.0	117.7	118.5	119.3	122.8	126.3	129.8	133.3	135.4
25	113.9	116.6	118.3	119.1	119.9	123.6	127.1	130.6	134.1	136.2
26	113.1	115.8	117.5	118.3	119.1	122.9	126.4	129.9	133.4	135.5
27	110.0	112.6	114.2	115.0	115.8	119.6	123.1	126.6	130.1	132.2
28	105.2	107.7	109.3	110.0	110.7	114.2	117.7	121.2	124.2	126.3
29	98.6	100.9	102.4	103.1	103.8	107.3	110.7	113.7	116.7	118.5
30	90.1	92.2	93.6	94.2	94.8	97.8	100.8	103.8	106.8	108.6
31	79.9	81.8	83.0	83.6	84.2	87.0	89.8	92.3	94.8	96.3
32	69.1	70.7	71.8	72.3	72.8	75.3	77.8	80.3	82.3	83.5
33	58.8	60.2	61.1	61.5	61.9	63.9	65.9	67.9	69.9	71.1
34	48.9	50.1	50.8	51.2	51.6	53.3	55.3	56.8	58.3	59.2
35	39.8	40.7	41.3	41.6	41.9	43.4	44.9	46.4	47.9	48.8
36	31.4	32.1	32.6	32.9	33.2	34.2	35.2	36.2	37.2	37.8
37	23.5	24.1	24.4	24.6	24.8	25.8	26.8	27.8	28.8	29.4
38	17.4	17.8	18.1	18.2	18.3	18.8	19.3	19.8	20.3	20.6
39	12.6	12.9	13.1	13.2	13.3	13.8	14.3	14.8	15.3	15.6
40	8.6	8.8	8.9	9.0	9.1	9.6	10.1	10.6	11.1	11.4
41	5.8	5.9	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
42	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
43	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
44	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
45	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7
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	6.7	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
15	16.7	17.1	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.2
16	31.3	32.0	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5
17	50.8	52.0	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.7
18	71.6	73.3	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.3
19	88.5	90.6	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.8
20	100.0	102.4	103.9	103.9	103.9	103.9	103.9	103.9	103.8	103.6
21	105.4	107.9	109.5	109.5	109.5	109.5	109.4	109.0	108.9	108.6
22	109.0	111.6	113.2	113.2	113.2	113.2	113.0	112.5	112.1	111.9
23	111.6	114.2	115.9	115.9	115.9	115.9	115.8	115.3	114.8	114.5
24	113.3	116.0	117.7	117.7	117.7	117.7	117.7	117.2	116.7	116.4
25	113.9	116.6	118.3	118.3	118.3	118.3	118.3	117.9	117.4	117.1
26	113.1	115.8	117.5	117.5	117.5	117.5	117.5	117.2	116.7	116.4
27	110.0	112.6	114.2	114.2	114.2	114.2	114.2	114.0	113.5	113.2
28	105.2	107.7	109.3	109.3	109.3	109.3	109.3	109.3	108.9	108.8
29	98.6	100.9	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4
30	90.1	92.2	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
31	79.9	81.8	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0
32	69.1	70.7	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8
33	58.8	60.2	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
34	48.9	50.1	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8
35	39.8	40.7	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
36	31.4	32.1	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
37	23.5	24.1	24.4	24.3	24.3	24.3	24.3	24.3	24.3	24.3
38	17.4	17.8	18.1	18.0	18.0	18.0	18.0	18.0	18.0	18.0
39	12.6	12.9	13.1	13.0	13.0	13.0	13.0	13.0	13.0	13.0
40	8.6	8.8	8.9	8.8	8.8	8.8	8.8	8.8	8.8	8.8
41	5.8	5.9	6.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9
42	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
43	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
44	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
45	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7
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

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	2013
Alternative III :										
14	6.5	6.7	6.8	6.8	6.8	6.8	6.6	6.5	6.5	6.5
15	16.7	17.1	17.3	17.2	17.1	16.6	16.1	15.6	15.1	14.8
16	31.3	32.0	32.5	32.3	32.1	31.1	30.1	29.1	28.1	27.6
17	50.8	52.0	52.8	52.4	52.0	50.0	48.0	46.0	44.5	43.6
18	71.6	73.3	74.4	73.9	73.4	70.9	68.4	65.9	63.4	62.1
19	88.5	90.6	91.9	91.3	90.7	87.7	84.7	81.7	78.7	77.0
20	100.0	102.4	103.9	103.2	102.5	99.0	95.5	92.0	88.5	86.6
21	105.4	107.9	109.5	108.7	107.9	104.1	100.6	97.1	93.6	91.5
22	109.0	111.6	113.2	112.4	111.6	107.6	103.9	100.4	96.9	94.8
23	111.6	114.2	115.9	115.1	114.3	110.3	106.3	102.7	98.9	96.8
24	113.3	116.0	117.7	116.9	116.1	112.1	108.1	104.2	100.2	97.9
25	113.9	116.6	118.3	117.6	116.8	112.8	108.8	104.8	100.9	98.5
26	113.1	115.8	117.5	116.8	116.1	112.2	108.2	104.4	100.9	98.7
27	110.0	112.6	114.2	113.5	112.8	109.1	105.2	101.7	98.2	96.1
28	105.2	107.7	109.3	108.6	107.9	104.4	100.9	97.4	93.9	91.8
29	98.6	100.9	102.4	101.7	101.0	97.9	94.4	91.1	88.1	86.3
30	90.1	92.2	93.6	92.9	92.3	89.3	86.3	83.3	80.3	78.5
31	79.9	81.8	83.0	82.4	81.8	79.2	76.7	74.2	71.7	70.2
32	69.1	70.7	71.8	71.2	70.7	68.4	66.2	63.7	61.7	60.5
33	58.8	60.2	61.1	60.6	60.1	58.0	56.0	54.0	52.0	50.8
34	48.9	50.1	50.8	50.3	49.9	48.1	46.6	45.1	43.6	42.7
35	39.8	40.7	41.3	40.9	40.5	38.9	37.8	36.4	35.1	34.5
36	31.4	32.1	32.6	32.2	31.9	30.6	29.6	28.6	27.6	27.0
37	23.5	24.1	24.4	24.1	23.8	22.8	22.1	21.6	20.9	20.6
38	17.4	17.8	18.1	17.8	17.6	16.8	16.3	15.8	15.3	15.0
39	12.6	12.9	13.1	12.9	12.7	12.1	11.6	11.1	10.6	10.3
40	8.6	8.8	8.9	8.7	8.5	8.0	7.5	7.5	7.1	7.0
41	5.8	5.9	6.0	5.9	5.8	5.3	5.3	5.3	5.3	5.3
42	3.5	3.6	3.6	3.5	3.4	3.2	3.2	3.2	3.2	3.2
43	1.9	1.9	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8
44	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
45	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7
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 1986. 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	2,198.7
1901	2,379.5	2,133.0
1902	2,240.5	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	1,864.6
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	Alternative I		Alternative II		Alternative III	
			Male	Female	Male	Female	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	1,082.9	633.0						
1987	1,051.6	631.6						
1988	1,043.9	624.4						
1989			1,039.8	622.1	1,035.6	616.8	1,028.3	611.2
1990			1,035.7	620.0	1,028.0	609.7	1,013.4	598.8
1991			1,029.9	617.8	1,020.8	603.0	1,000.5	587.4
1992			1,023.1	615.6	1,013.8	596.6	989.4	576.8
1993			1,017.9	613.6	1,006.9	590.5	979.6	567.0
1994			1,013.5	611.9	999.9	584.7	971.5	558.1
1995			1,009.6	610.3	992.8	579.1	964.6	549.8
1996			1,006.2	608.9	985.5	573.7	958.5	542.3
1997			1,003.0	607.6	978.1	568.6	952.9	535.4
1998			1,000.1	606.3	970.4	563.8	947.1	528.9
1999			997.4	605.2	964.0	559.3	950.3	524.3
2000			994.8	604.0	956.5	555.0	950.6	519.7
2005			981.6	597.2	914.3	536.1	887.4	490.0
2010			968.8	589.5	885.7	521.3	804.4	458.9
2015			956.6	582.0	864.6	508.0	755.7	434.8
2020			944.9	574.6	845.2	495.4	722.6	414.1
2025			933.4	567.5	826.5	483.2	694.4	395.0
2030			922.2	560.5	808.5	471.5	667.8	377.0
2035			911.4	553.7	791.0	460.2	642.1	359.8
2040			900.8	547.1	774.2	449.4	617.2	343.4
2045			890.5	540.7	757.9	438.9	593.2	327.9
2050			880.5	534.4	742.2	428.8	570.2	313.2
2055			870.7	528.4	727.0	419.1	548.2	299.3
2060			861.2	522.4	712.3	409.8	527.2	286.1
2065			851.9	516.7	698.1	400.8	507.2	273.6
2070			842.8	511.1	684.4	392.0	488.1	261.8
2075			834.0	505.6	671.0	383.6	469.9	250.6
2080			825.4	500.3	658.1	375.5	452.6	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 reveals four 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. Since 1982, mortality rates have stabilized. Provisional statistics for 1987 indicated a slight overall reduction in mortality from the 1986 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
1971	1,033.0
1972	1,029.4
1973	1,013.5

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

Calendar year	Age-sex-adjusted death rate		
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	821.8		
1987	808.5		
1988	801.1		
	Alternative I	Alternative II	Alternative III
1989	797.8	801.9	806.9
1990	794.3	794.5	796.3
1991	789.7	786.3	785.8
1992	784.8	777.8	776.0
1993	780.7	770.2	767.7
1994	777.1	763.1	760.8
1995	773.9	756.3	754.6
1996	770.9	749.7	749.0
1997	768.2	743.1	743.5
1998	765.6	736.6	737.9
1999	763.2	731.1	738.1
2000	760.9	725.1	735.9
2005	749.8	694.5	682.6
2010	739.5	673.2	623.2
2015	729.9	656.6	587.6
2020	720.7	641.1	561.8
2025	711.7	626.3	539.2
2030	703.0	611.9	517.8
2035	694.4	598.1	497.3
2040	686.1	584.8	477.6
2045	678.0	571.9	458.7
2050	670.2	559.5	440.7
2055	662.5	547.5	423.5
2060	655.1	536.0	407.2
2065	647.8	524.8	391.7
2070	640.7	514.0	376.9
2075	633.8	503.6	362.9
2080	627.1	493.5	349.6

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 1986 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 1968-1986, 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 1968-1986 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 4.75 percent per year. Diabetes Mellitus averaged about 2.5 percent reduction per year. Averaging 2 to 2.25 percent average reduction per year were Heart Diseases, Cirrhosis of the Liver, and Violence. Digestive Diseases averaged about 1.5 percent reduction per year, while Respiratory Disease averaged under .25 percent reduction per year. Malignant Neoplasms and the residual group of other Causes (excluding AIDS) averaged an increase of about .5 to .75 percent per year.

Table 7.—Average Annual Percentage Reductions in Central Death Rates During 1968-86 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	4.55	-3.97	2.65	1.28	5.72	11.75	5.30	6.76	7.70	3.77	-2.99
1-4	3.04	-2.22	3.82	6.65	2.51	8.65	2.10	1.68	7.14	5.42	2.55
5-9	3.65	-.38	3.87	7.40	3.39	6.99	4.42	4.38	6.23	8.32	3.30
10-14	2.69	.56	2.76	8.23	2.45	4.96	3.08	5.41	5.63	2.46	2.40
15-19	1.94	.32	2.83	7.18	1.55	5.94	2.90	6.26	6.03	7.63	3.48
20-24	1.77	.73	2.84	7.18	1.38	6.11	2.76	6.71	4.58	5.07	3.48
25-29	1.12	1.19	2.09	6.08	.88	4.77	3.83	5.98	4.17	2.76	1.09
30-34	1.22	2.43	1.60	6.01	1.03	3.72	2.88	4.44	3.28	2.26	.39
35-39	2.15	3.45	1.71	5.84	1.72	4.66	2.95	3.90	2.54	3.26	1.31
40-44	2.56	3.44	1.16	5.59	2.11	4.76	2.75	3.87	1.97	3.67	1.68
45-49	2.62	3.47	.65	5.12	2.39	4.47	3.54	3.86	1.84	3.51	1.67
50-54	2.27	3.09	.01	5.03	2.52	3.65	4.09	3.11	2.08	2.95	1.23
55-59	2.21	3.05	-.14	5.24	2.94	2.96	3.06	3.15	2.04	2.75	1.08
60-64	2.09	2.90	-.22	5.22	3.25	2.30	1.70	2.91	2.20	2.51	.71
65-69	1.59	2.36	-.71	4.90	2.85	1.03	.84	2.47	2.22	1.32	-.04
70-74	1.32	2.06	-.96	4.66	2.26	.10	-.31	1.95	2.17	.14	-.93
75-79	1.12	1.82	-1.13	4.43	1.79	-.75	-.19	1.41	1.96	-.13	-1.80
80-84	1.10	1.69	-1.25	4.43	2.03	-1.47	-1.83	.79	1.90	-.28	-2.27
85-89	1.12	1.64	-1.43	4.50	2.14	-2.01	-.10	-.04	1.88	.30	-2.43
90-94	1.12	1.49	-1.72	4.48	2.55	-1.77	-2.06	-1.00	.58	1.02	-2.52
Total	1.60	2.16	-.64	4.68	1.95	.32	4.97	1.89	2.04	2.21	-.66
Female:											
0	4.32	-3.42	3.28	1.70	5.46	12.14	4.84	6.81	8.69	4.89	-2.62
1-4	3.30	-2.60	3.98	6.48	2.77	8.45	2.87	.28	4.44	6.69	3.01
5-9	3.52	-.34	3.89	5.96	3.12	6.65	4.74	3.62	6.45	9.38	2.96
10-14	2.62	.36	2.88	6.14	1.79	5.61	2.43	5.92	6.72	9.23	2.79
15-19	1.81	1.21	2.51	7.33	.77	5.66	3.53	5.77	5.70	11.03	3.22
20-24	1.99	.98	2.27	7.30	.73	5.98	3.11	7.57	5.38	6.48	3.34
25-29	2.25	1.77	1.94	6.95	1.01	5.54	3.33	6.40	4.12	3.82	2.97
30-34	2.89	3.39	1.80	7.73	1.76	5.24	3.60	6.27	3.97	4.16	3.03
35-39	3.42	4.12	1.79	7.30	2.57	5.62	2.55	5.44	3.03	5.93	3.77
40-44	3.11	3.41	1.52	6.18	2.79	5.02	3.11	4.72	2.84	5.77	3.39
45-49	2.62	2.90	1.21	5.54	2.89	3.56	4.20	4.03	3.16	5.18	2.45
50-54	1.89	2.50	.38	5.00	2.98	1.82	2.82	3.02	2.58	3.75	1.79
55-59	1.58	2.56	-.12	5.00	3.05	.31	2.78	2.71	2.96	2.90	1.04
60-64	1.16	2.36	-.89	4.83	3.03	-1.30	1.85	1.93	2.71	1.36	.08
65-69	.90	2.11	-1.45	4.67	2.61	-2.75	1.16	1.18	2.91	-.55	-1.04
70-74	1.35	2.37	-1.20	4.85	2.58	-2.73	-.75	1.02	3.32	-1.34	-1.57
75-79	1.77	2.43	-.60	4.92	3.25	-1.87	-1.55	.73	3.42	-1.54	-2.30
80-84	1.93	2.30	-.38	4.78	3.91	-.91	-1.39	.15	2.91	-1.32	-2.84
85-89	1.78	1.96	-.32	4.41	4.53	-.66	-2.08	-.66	1.83	-.33	-3.22
90-94	1.43	1.41	-.80	3.98	5.03	-.40	-3.14	-1.64	.12	-.07	-3.34
Total	1.74	2.17	-.41	4.70	2.54	-.17	4.56	1.12	2.85	2.32	-.84

*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 improvements 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 2013. The age groups for which specific rates of improvement have been selected are: (1) under age 15, (2) 15-64, and (3) 65 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	0.3	0.2	0.7	0.3	0.3	0.8	0.6	0.5	0.3	0.0
15-64	0.6	0.1	0.9	0.2	0.2	0.6	0.4	0.4	0.2	0.0
65+	0.5	0.0	0.8	0.3	0.0	0.4	0.2	0.3	0.1	0.0
Female:										
<15	0.3	0.2	0.7	0.3	0.3	0.8	0.6	0.5	0.3	0.0
15-64	0.6	0.1	0.9	0.2	0.2	0.6	0.4	0.4	0.2	0.0
65+	0.5	0.0	0.8	0.3	0.0	0.4	0.2	0.3	0.1	0.0
Alternative II:										
Male:										
<15	0.6	0.5	1.2	0.6	0.5	1.5	0.8	0.8	0.5	0.2
15-64	1.0	0.3	1.4	0.3	0.3	1.3	0.6	0.7	0.3	0.2
65+	0.8	0.2	1.3	0.4	0.2	1.1	0.4	0.6	0.2	0.2
Female:										
<15	0.6	0.5	1.2	0.6	0.5	1.5	0.8	0.8	0.5	0.2
15-64	1.0	0.3	1.4	0.4	0.3	1.3	0.6	0.8	0.4	0.2
65+	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	2.0	1.0	1.0	0.8	0.4
15-04	1.3	1.2	1.8	0.6	0.5	1.8	0.9	0.9	0.6	0.4
65+	1.1	1.1	1.7	0.8	0.4	1.6	0.8	0.9	0.6	0.4
Female:										
<15	0.9	1.3	1.4	0.9	0.6	2.0	1.0	1.0	0.8	0.4
15-64	1.3	1.3	1.8	0.8	0.5	1.8	0.9	1.0	0.7	0.4
65+	1.2	1.2	1.7	0.9	0.4	1.6	0.8	0.9	0.6	0.4

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. 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 about 0.55 percent per year during the period 1988-2064. This is about half the average annual reduction observed during 1900-1988. During the period 1988-2064, alternative I mortality is projected to decrease at a rate about one-fourth the average rate observed during 1900-1988, while for alternative III mortality, the projected rate of reduction is about the same as for 1900-1988.

Death rates for 1987 were assumed to change from 1986 by amounts estimated from data published in *Monthly Vital Statistics Reports,* Volume 36. Death rates were projected by age group, sex, and cause of death from their estimated 1987 levels by applying annual percentage reductions (except, as previously explained, for the cause of death category of AIDS). For all three alternatives, the annual reductions that were applied to obtain the 1988 levels were the average annual reductions observed for the 1968-1986[1] period. The annual reductions that were applied to obtain the 1989 levels were 50 percent, 100 percent, and 150 percent of the average annual reductions during 1968-1986 for alternatives I, II, and III, respectively. The annual reductions that were assumed to apply to obtain rates for 1990-2012 were calculated by a logarithmic formula designed to gradually transform the reductions applied to obtain the 1989 levels into the postulated ultimate annual reductions. The ultimate reductions were assumed to apply during 2013-2080. Table 8 gives the resulting death rates by age group, sex, and alternative for selected years.

[1]The average annual reductions for the "All Other" category for age 0 were calculated using the period 1974-1986, rather than 1968-1986. 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	1,037.7	869.1	797.0	758.4	723.3	690.7	660.5	632.6	606.6	582.6
1-4	58.1	55.9	49.2	46.2	44.8	43.5	42.3	41.1	40.0	38.9	37.8
5-9	28.2	25.8	21.7	20.1	19.6	19.1	18.6	18.1	17.6	17.2	16.7
10-14	34.9	34.7	30.5	28.5	27.7	27.0	26.3	25.6	25.0	24.3	23.7
15-19	114.7	119.0	108.5	103.2	101.1	99.1	97.1	95.2	93.3	91.5	89.7
20-24	164.9	173.0	155.8	148.7	145.6	142.8	140.0	137.3	134.7	132.1	129.6
25-29	167.3	177.4	153.9	148.4	145.5	142.8	140.1	137.6	135.1	132.6	130.3
30-34	189.7	215.2	177.4	170.3	167.0	163.9	160.9	158.0	155.2	152.5	149.9
35-39	235.3	260.9	208.1	196.9	192.6	188.6	184.8	181.1	177.5	174.1	170.8
40-44	333.0	333.7	276.0	259.2	252.3	245.8	239.8	233.9	228.4	223.0	218.0
45-49	514.2	484.2	414.2	388.7	377.6	367.1	357.2	347.7	338.7	330.2	322.0
50-54	835.9	774.4	692.2	655.4	635.6	617.1	599.5	582.8	566.9	551.8	537.3
55-59	1,342.5	1,223.1	1,113.2	1,058.9	1,026.7	996.6	968.0	940.6	914.8	890.2	866.7
60-64	2,062.0	1,936.6	1,782.6	1,699.8	1,647.3	1,597.8	1,550.8	1,506.2	1,463.9	1,423.6	1,385.3
65-69	3,199.2	2,874.9	2,746.1	2,668.6	2,610.9	2,556.4	2,504.8	2,455.8	2,409.3	2,365.1	2,323.3
70-74	4,872.9	4,508.2	4,402.3	4,310.4	4,215.5	4,125.8	4,040.7	3,960.1	3,883.7	3,811.2	3,742.5
75-79	7,349.1	6,815.0	6,806.5	6,715.4	6,565.1	6,421.9	6,286.3	6,158.0	6,036.4	5,921.3	5,812.2
80-84	10,974.6	10,620.8	10,758.5	10,646.1	10,397.2	10,160.1	9,935.9	9,723.7	9,523.0	9,333.0	9,153.2
85-89	16,164.3	15,592.1	15,962.0	15,829.6	15,448.5	15,085.3	14,742.0	14,417.2	14,110.0	13,819.4	13,544.3
90-94	23,364.7	22,361.1	22,923.2	22,715.8	22,133.2	21,578.4	21,053.8	20,557.6	20,088.1	19,643.9	19,223.4
Female:											
0	936.3	820.2	687.9	628.0	595.9	566.5	539.4	514.2	490.9	469.3	449.2
1-4	44.5	42.4	37.1	34.8	33.8	32.8	31.8	30.9	30.1	29.3	28.5
5-9	21.2	17.6	14.8	13.8	13.4	13.1	12.7	12.4	12.1	11.8	11.5
10-14	20.5	18.7	16.6	15.6	15.2	14.8	14.4	14.0	13.7	13.3	13.0
15-19	46.5	46.8	43.5	41.8	40.9	40.1	39.3	38.6	37.8	37.1	36.4
20-24	52.8	53.3	48.9	46.9	46.0	45.1	44.2	43.3	42.5	41.7	40.9
25-29	60.0	63.7	55.8	53.1	52.1	51.0	50.0	49.1	48.1	47.2	46.4
30-34	78.5	82.4	69.2	65.3	64.0	62.8	61.6	60.5	59.5	58.4	57.4
35-39	110.2	101.3	85.3	79.9	78.3	76.7	75.2	73.8	72.4	71.1	69.8
40-44	173.7	161.7	139.8	131.0	128.0	125.2	122.6	120.0	117.6	115.3	113.0
45-49	286.2	268.2	238.5	224.6	219.2	214.2	209.4	204.8	200.5	196.3	192.3
50-54	463.7	449.2	414.2	395.0	385.1	375.9	367.1	358.8	350.8	343.2	336.0
55-59	721.2	677.7	639.9	618.2	602.8	588.1	574.1	560.7	548.0	535.8	524.2
60-64	1,120.1	1,112.9	1,103.7	1,085.2	1,057.1	1,030.3	1,004.7	980.3	957.0	934.9	913.7
65-69	1,699.1	1,682.6	1,741.9	1,745.4	1,715.6	1,686.9	1,659.6	1,633.8	1,609.3	1,586.1	1,564.1
70-74	2,608.7	2,526.6	2,561.9	2,545.1	2,494.6	2,446.1	2,400.3	2,356.9	2,315.8	2,276.9	2,240.0
75-79	4,108.0	3,897.8	3,826.4	3,750.0	3,660.6	3,575.7	3,495.5	3,419.5	3,347.7	3,279.7	3,215.4
80-84	6,716.7	6,684.0	6,472.9	6,291.0	6,117.8	5,954.2	5,799.6	5,653.5	5,515.3	5,384.7	5,261.1
85-89	11,264.3	10,919.4	10,669.5	10,366.6	10,055.7	9,762.6	9,485.7	9,224.2	8,977.1	8,743.6	8,522.9
90-94	18,115.7	17,862.0	17,764.8	17,332.0	16,777.6	16,253.9	15,759.4	15,292.2	14,850.9	14,433.9	14,039.6
Alternative II :											
Male:											
0	1,201.3	997.8	725.7	625.2	573.3	528.3	488.7	453.7	422.9	395.6	371.4
1-4	58.1	55.0	45.1	39.3	37.0	34.9	33.0	31.2	29.6	28.1	26.7
5-9	28.2	25.1	19.1	16.4	15.6	14.8	14.0	13.3	12.6	12.0	11.4
10-14	34.9	33.9	26.9	23.7	22.4	21.3	20.1	19.1	18.1	17.2	16.3
15-19	114.7	117.1	99.4	91.2	88.2	85.4	82.7	80.2	77.7	75.3	73.0
20-24	164.9	174.4	159.7	141.3	136.9	132.9	129.1	125.5	121.9	118.5	115.3
25-29	167.3	191.3	212.4	172.9	167.9	163.9	160.1	156.6	153.0	149.6	146.4
30-34	189.7	240.5	289.6	223.6	216.7	212.5	207.9	203.9	199.9	196.1	192.5
35-39	235.3	290.0	349.6	265.0	255.2	250.0	244.6	239.5	234.9	230.4	226.2
40-44	333.0	350.9	365.6	292.1	279.2	269.9	262.0	254.2	246.8	240.2	233.8
45-49	514.2	493.0	466.0	389.2	370.9	356.0	342.5	329.8	317.9	307.0	296.7
50-54	835.9	770.9	684.9	608.9	577.7	551.0	525.6	502.4	480.8	460.5	441.7
55-59	1,342.5	1,206.1	1,041.4	948.4	898.6	854.3	813.0	774.5	738.9	705.5	674.5
60-64	2,062.0	1,905.7	1,645.6	1,511.0	1,430.8	1,357.7	1,290.0	1,227.1	1,168.6	1,114.2	1,063.5
65-69	3,199.2	2,831.7	2,540.1	2,392.9	2,290.8	2,195.8	2,107.1	2,023.8	1,945.5	1,872.0	1,802.7
70-74	4,872.9	4,444.1	4,086.8	3,886.0	3,718.1	3,561.1	3,414.2	3,276.6	3,147.6	3,026.4	2,912.5
75-79	7,349.1	6,716.5	6,304.1	6,029.3	5,762.9	5,513.5	5,280.6	5,062.7	4,858.7	4,667.4	4,487.8
80-84	10,974.6	10,455.4	9,903.6	9,488.3	9,054.5	8,649.5	8,271.7	7,919.1	7,589.5	7,281.0	6,992.0
85-89	16,164.3	15,336.1	14,629.5	14,036.8	13,381.4	12,769.8	12,200.2	11,668.9	11,172.9	10,709.1	10,275.0
90-94	23,364.7	21,994.8	21,010.8	20,129.6	19,148.8	18,235.2	17,385.6	16,594.5	15,857.0	15,168.6	14,525.2
Female:											
0	936.3	791.2	580.1	492.7	449.0	411.3	378.3	349.3	323.8	301.3	281.4
1-4	44.5	41.9	34.3	29.6	27.9	26.4	25.0	23.6	22.4	21.3	20.2
5-9	21.2	17.1	13.4	11.6	10.9	10.3	9.8	9.3	8.9	8.5	8.1
10-14	20.5	18.3	14.7	13.2	12.5	11.8	11.2	10.6	10.0	9.5	9.1
15-19	46.5	46.2	40.7	37.7	36.2	34.7	33.4	32.1	30.8	29.6	28.5
20-24	52.8	52.6	46.0	42.3	40.5	38.9	37.4	35.9	34.5	33.2	31.9
25-29	60.0	65.2	63.2	53.4	51.4	49.6	47.9	46.4	44.9	43.5	42.1

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: (Cont.)											
30-34	78.5	85.7	90.8	72.7	70.2	68.2	66.4	64.6	62.9	61.3	59.8
35-39	110.2	100.7	86.7	74.1	70.9	68.4	66.1	63.8	61.7	59.7	57.8
40-44	173.7	158.8	128.8	113.3	108.2	103.8	99.7	95.8	92.2	88.7	85.5
45-49	286.2	262.4	213.2	191.9	182.9	174.9	167.4	160.4	153.8	147.6	141.7
50-54	463.7	442.4	382.2	352.1	335.6	320.5	306.4	293.2	280.8	269.2	258.2
55-59	721.2	669.0	599.7	564.1	537.9	513.7	490.9	469.6	449.7	430.9	413.3
60-64	1,120.1	1,098.0	1,030.1	983.5	936.8	893.3	852.6	814.6	779.1	745.8	714.5
65-69	1,699.1	1,656.9	1,607.7	1,559.9	1,497.1	1,438.0	1,382.8	1,331.1	1,282.6	1,237.0	1,194.2
70-74	2,608.7	2,481.7	2,337.4	2,246.7	2,148.8	2,057.4	1,972.2	1,892.8	1,818.6	1,749.1	1,684.1
75-79	4,108.0	3,823.1	3,467.0	3,283.1	3,124.2	2,976.8	2,840.3	2,713.7	2,595.8	2,486.3	2,384.2
80-84	6,716.7	6,550.8	5,834.5	5,472.0	5,180.4	4,911.6	4,663.6	4,434.4	4,222.4	4,026.0	3,843.8
85-89	11,264.3	10,710.4	9,637.4	9,016.0	8,501.9	8,029.8	7,595.5	7,195.5	6,826.5	6,485.9	6,170.9
90-94	18,115.7	17,563.5	16,232.0	15,233.0	14,311.7	13,467.2	12,692.0	11,979.5	11,324.0	10,720.1	10,163.2
Alternative III:											
Male:											
0	1,201.3	957.8	673.5	518.7	471.0	431.9	396.4	364.8	337.0	312.9	291.7
1-4	58.1	53.7	42.0	32.4	29.6	27.3	25.0	23.1	21.3	19.7	18.3
5-9	28.2	24.2	18.1	13.8	12.2	11.5	10.7	9.9	9.3	8.6	8.0
10-14	34.9	33.0	24.2	20.6	18.3	16.9	15.6	14.5	13.3	12.3	11.4
15-19	114.7	115.1	91.3	79.5	74.2	69.7	65.6	61.6	57.9	54.4	51.2
20-24	164.9	172.6	166.0	123.7	116.3	111.2	105.8	100.4	95.2	90.2	85.6
25-29	167.3	193.7	284.3	160.6	149.7	149.3	146.0	141.5	136.5	131.7	127.1
30-34	189.7	246.0	439.8	227.2	201.0	207.5	206.6	203.0	198.3	193.1	188.2
35-39	235.3	296.6	583.8	306.0	256.0	270.2	273.2	270.3	265.9	260.5	255.4
40-44	333.0	350.2	532.7	352.5	273.6	277.1	276.2	269.8	261.9	254.1	246.4
45-49	514.2	487.8	584.0	425.6	344.0	332.3	321.4	307.6	292.6	279.0	266.2
50-54	835.9	758.4	724.1	599.8	508.0	468.6	434.8	403.4	373.5	346.2	321.9
55-59	1,342.5	1,183.7	1,002.9	870.1	756.9	684.0	622.1	565.7	515.1	469.2	428.4
60-64	2,062.0	1,871.2	1,555.8	1,344.7	1,194.7	1,075.5	971.5	878.2	795.0	720.4	653.9
65-69	3,199.2	2,787.0	2,376.1	2,124.9	1,920.6	1,744.7	1,588.9	1,448.2	1,321.0	1,206.5	1,102.9
70-74	4,872.9	4,379.7	3,817.5	3,458.4	3,145.5	2,866.3	2,615.7	2,389.9	2,185.8	2,001.6	1,835.1
75-79	7,349.1	6,618.3	5,859.0	5,346.5	4,881.1	4,460.9	4,082.0	3,740.6	3,432.0	3,152.9	2,900.3
80-84	10,974.6	10,291.8	9,139.5	8,373.5	7,658.7	7,013.3	6,430.8	5,905.0	5,429.7	4,999.4	4,609.6
85-89	16,164.3	15,082.8	13,443.0	12,359.2	11,333.6	10,407.0	9,569.5	8,812.1	8,126.2	7,504.4	6,940.0
90-94	23,364.7	21,633.1	19,304.6	17,763.7	16,308.9	14,994.0	13,805.3	12,729.3	11,754.4	10,869.8	10,066.1
Female:											
0	936.3	761.5	553.7	407.7	368.7	337.3	308.5	282.8	260.4	240.9	224.0
1-4	44.5	40.7	32.4	24.1	21.9	20.3	18.8	17.4	16.1	15.0	13.9
5-9	21.2	16.6	13.2	10.1	8.8	8.3	7.8	7.2	6.7	6.3	5.9
10-14	20.5	17.8	13.4	11.9	10.3	9.6	8.8	8.1	7.5	6.9	6.4
15-19	46.5	45.5	38.4	33.9	31.0	28.6	26.4	24.4	22.5	20.8	19.3
20-24	52.8	51.6	42.9	37.3	34.3	31.6	29.1	26.9	24.8	23.0	21.3
25-29	60.0	65.0	76.5	47.6	44.4	42.8	40.8	38.7	36.6	34.7	32.9
30-34	78.5	86.0	150.5	80.6	76.6	80.3	80.0	78.7	76.7	74.5	72.7
35-39	110.2	98.4	106.1	84.7	67.2	67.1	65.7	63.0	60.3	57.7	55.2
40-44	173.7	154.8	126.9	108.3	88.8	82.3	76.8	71.1	65.8	61.0	56.6
45-49	286.2	256.3	196.2	166.2	146.0	131.0	118.7	107.5	97.4	88.4	80.4
50-54	463.7	435.2	356.5	312.0	277.2	247.2	221.4	198.6	178.2	160.2	144.3
55-59	721.2	660.0	566.1	503.7	448.5	400.7	358.6	321.3	288.3	259.0	233.1
60-64	1,120.1	1,082.6	967.0	868.3	776.2	695.6	624.2	560.9	504.8	455.0	410.8
65-69	1,699.1	1,630.9	1,489.0	1,360.6	1,229.7	1,113.8	1,010.3	917.5	834.5	760.1	693.4
70-74	2,608.7	2,437.2	2,142.2	1,949.9	1,766.0	1,602.2	1,455.8	1,324.7	1,207.2	1,102.0	1,007.5
75-79	4,108.0	3,749.0	3,166.4	2,856.7	2,594.7	2,361.0	2,151.5	1,963.8	1,795.3	1,644.0	1,508.1
80-84	6,716.7	6,419.6	5,293.9	4,762.7	4,327.1	3,938.1	3,590.0	3,278.4	2,999.2	2,748.5	2,523.1
85-89	11,264.3	10,504.3	8,750.8	7,868.7	7,153.7	6,515.7	5,945.2	5,434.6	4,976.9	4,566.0	4,196.6
90-94	18,115.7	17,268.9	14,885.7	13,435.1	12,201.2	11,101.1	10,118.7	9,240.2	8,453.4	7,747.9	7,114.2

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.

Tables 9 and 10 give the resulting life expectancies for males and females 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.

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	67.0	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	77.3
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	71.5	78.4
1988	71.6	78.6

	Alternative I		Alternative II		Alternative III	
	Male	Female	Male	Female	Male	Female
1989	71.7	78.6	71.7	78.7	71.8	78.8
1990	71.8	78.7	71.8	78.9	71.9	79.1
1991	71.9	78.7	71.8	79.0	72.1	79.3
1992	72.1	78.8	71.9	79.1	72.2	79.5
1993	72.2	78.8	72.0	79.3	72.2	79.7
1994	72.3	78.9	72.1	79.4	72.3	79.9
1995	72.4	78.9	72.1	79.5	72.3	80.1
1996	72.5	79.0	72.3	79.6	72.3	80.2
1997	72.5	79.0	72.4	79.7	72.3	80.4
1998	72.6	79.1	72.5	79.9	72.3	80.5
1999	72.7	79.1	72.6	80.0	72.1	80.6
2000	72.8	79.1	72.7	80.1	72.0	80.7
2005	73.0	79.3	73.5	80.5	73.2	81.4
2010	73.2	79.5	74.1	80.8	75.0	82.3
2015	73.4	79.6	74.4	81.1	76.0	82.9
2020	73.5	79.7	74.6	81.4	76.5	83.4
2025	73.7	79.9	74.9	81.7	77.0	84.0
2030	73.8	80.0	75.2	82.0	77.4	84.5
2035	74.0	80.2	75.5	82.3	77.9	85.0
2040	74.1	80.3	75.7	82.6	78.4	85.5
2045	74.3	80.4	76.0	82.8	78.8	86.0
2050	74.4	80.6	76.3	83.1	79.3	86.5
2055	74.6	80.7	76.5	83.4	79.8	87.1
2060	74.7	80.8	76.8	83.6	80.3	87.6
2065	74.9	81.0	77.0	83.9	80.8	88.1
2070	75.0	81.1	77.3	84.2	81.3	88.6
2075	75.1	81.2	77.5	84.4	81.8	89.1
2080	75.3	81.3	77.8	84.7	82.3	89.6

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	13.5
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		Alternative II		Alternative III	
			Male	Female	Male	Female	Male	Female
1970	13.1	17.1						
1971	13.1	17.1						
1972	13.1	17.2						
1973	13.2	17.4						
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	14.9	18.7						
1988	14.9	18.8						
1989			14.9	18.8	15.0	18.9	15.1	19.0
1990			15.0	18.8	15.1	19.0	15.2	19.1
1991			15.0	18.8	15.1	19.1	15.3	19.3
1992			15.0	18.8	15.2	19.1	15.4	19.4
1993			15.0	18.9	15.3	19.2	15.6	19.6
1994			15.0	18.9	15.3	19.3	15.7	19.7
1995			15.0	18.9	15.4	19.3	15.8	19.8
1996			15.0	18.9	15.4	19.4	15.9	19.9
1997			15.0	18.9	15.5	19.5	16.0	20.1
1998			15.0	18.9	15.6	19.5	16.1	20.2
1999			15.0	18.9	15.6	19.6	16.2	20.3
2000			15.0	18.9	15.6	19.6	16.2	20.4
2005			15.1	18.9	15.8	19.8	16.6	20.8
2010			15.2	19.0	16.0	20.1	17.0	21.2
2015			15.3	19.1	16.2	20.3	17.4	21.6
2020			15.3	19.2	16.4	20.5	17.8	22.0
2025			15.4	19.3	16.6	20.7	18.2	22.5
2030			15.5	19.4	16.8	20.9	18.6	22.9
2035			15.6	19.5	16.9	21.1	18.9	23.3
2040			15.7	19.6	17.1	21.4	19.3	23.7
2045			15.8	19.7	17.3	21.6	19.7	24.1
2050			15.9	19.8	17.5	21.8	20.1	24.5
2055			15.9	19.9	17.7	22.0	20.5	24.9
2060			16.0	20.0	17.8	22.2	20.9	25.4
2065			16.1	20.1	18.0	22.4	21.3	25.8
2070			16.2	20.2	18.2	22.6	21.7	26.2
2075			16.2	20.3	18.4	22.8	22.1	26.6
2080			16.3	20.3	18.5	23.0	22.5	27.0

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 24.8 years from 46.4 in 1900 to 71.2 years in 1986. During the same period, life expectancy at birth for females increased 29.3 years from 49.0 to 78.3 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 1986. 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 71.6 years in 1988 to 75.3 years, 77.8 years, and 82.3 years in 2080 under alternatives I, II, and III, respectively. This represents an increase ranging from 3.7 years to 10.7 years. For females the increase ranges from 2.7 years to 11.0 years. The female life expectany is projected to increase from 78.6 years in 1988, to 81.3 years, 84.7 years, and 89.6 years in 2080 under alternatives I, II, and III, respectively. The sex gap at birth is projected to change from 7.0 years in 1988 to 6.0 in 2080 under alternative I, to 6.9 under alternative II, and to 7.3 under alternative III.

Life expectancy at age 65 for males increased from 11.3 years in 1900 to 14.5 years in 1986, 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 14.9 years in 1988 to 16.3 years, 18.5 years, and 22.5 years in 2080 under alternatives I, II, and III, respectively. This represents an increase ranging from 1.4 years to 7.6 years. For females the increase ranges from 1.5 years to 8.2 years. The female age 65 life expectancy is projected to increase from 18.8 years in 1988 to 20.3 years, 23.0 years, and 27.0 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 4.2 years in 1986 and, in 2080, is projected to be 4.0 under alternative I and 4.5 under both alternatives II and III.

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 Status Based 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

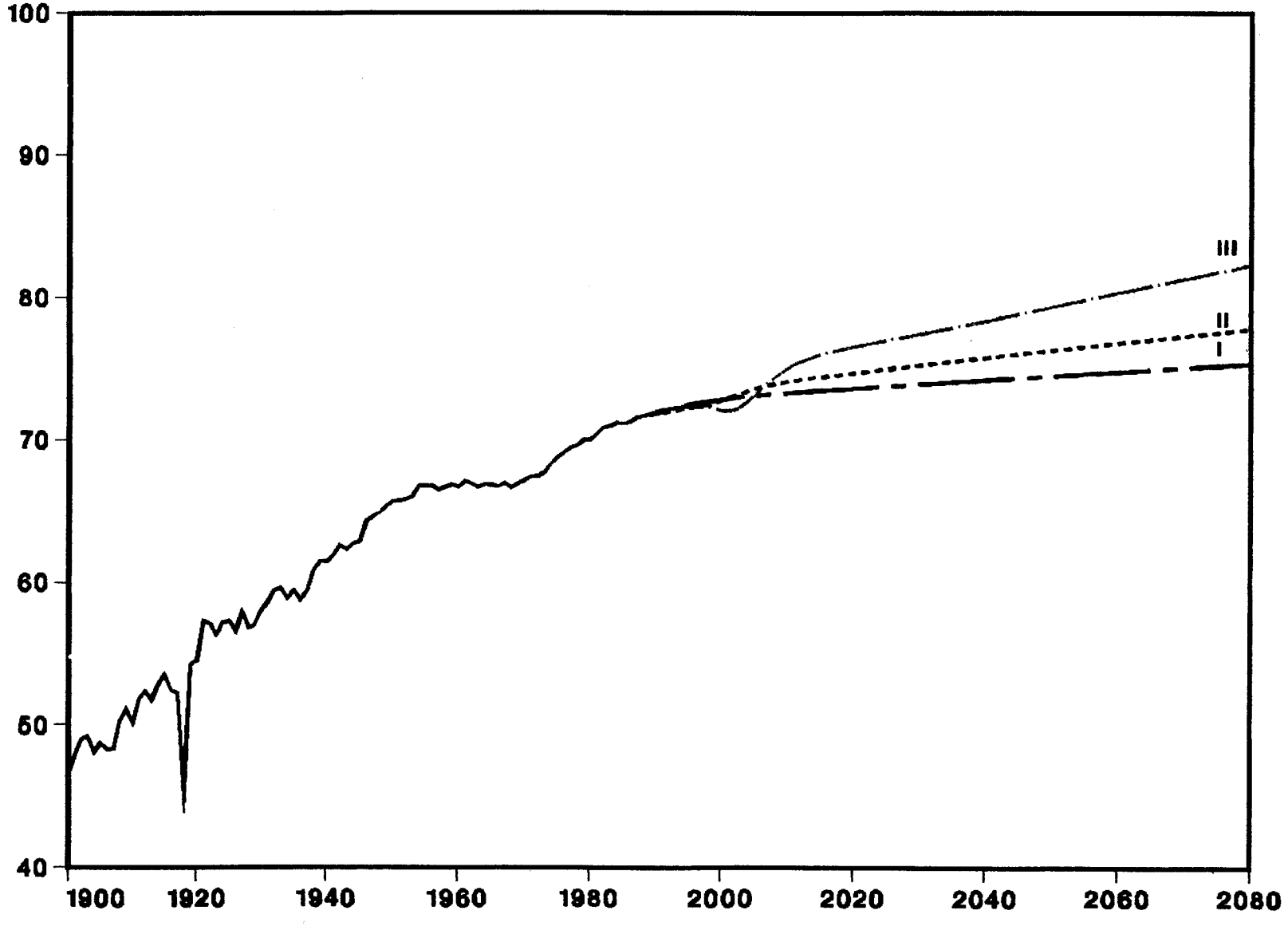
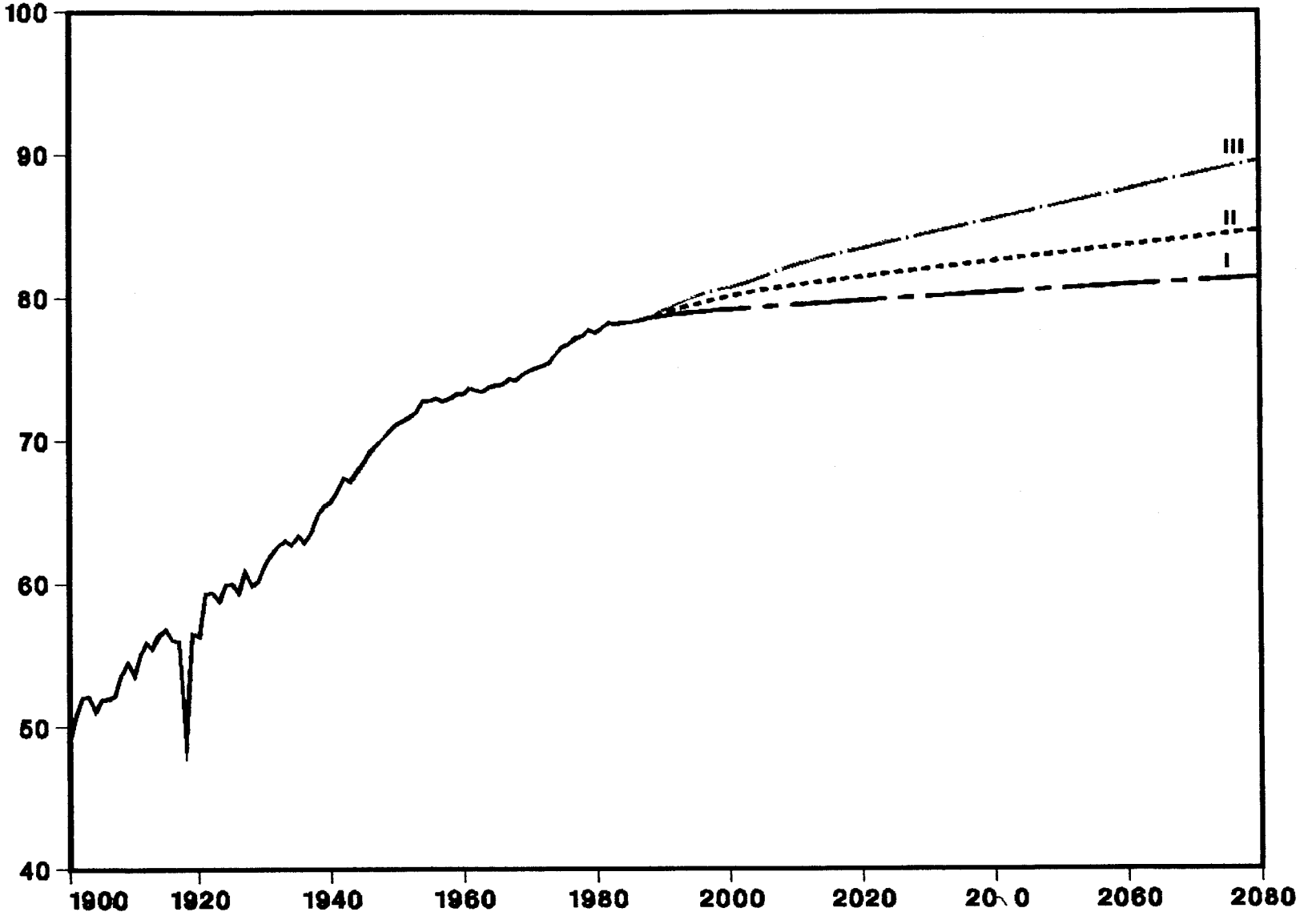


CHART 3. FEMALE LIFE EXPECTANCY
(IN YEARS), 1900-2080
ACTUAL AND PROJECTED BY ALTERNATIVE



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.

During the last ten years of available data (1978-1987), however, legal immigration has averaged approximately 550,000 per year. This increase is mainly due to the large numbers of refugees and political asylees that were admitted based on specific legislation during this period. The current level of refugees and political asylees can not be assumed to continue under current law for a long period of time into the future. We, however, believe that, because of the recent legislation which granted an avenue for possible citizenship to certain illegal aliens, the number of relatives of citizens admitted to the U.S. will increase in future years.

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.

For the 1989 Report of the Board of Trustees, beginning with 1989, legal immigration is assumed to be 600,000, 525,000, and 450,000 persons per year for alternatives I, II and III, respectively. For the same time period, legal emigration is assumed to be 150,000, 125,000, and 100,000 persons per year for alternative I, alternative II, and alternative III, respectively. For calendar years 1987 and 1988, legal immigration was assumed to be 525,000 and legal emigration was assumed to be 125,000 for all three alternatives. 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 1988.

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

Alternative and age group	Total	Male	Female
Alternative I :			
0-4	33,754	16,656	17,098
5-9	25,689	12,848	12,841
10-14	34,316	17,373	16,943
15-19	40,245	20,531	19,714
20-24	65,851	35,960	29,891
25-29	72,109	40,061	32,048
30-34	51,468	27,375	24,093
35-39	32,108	16,726	15,382
40-44	20,777	10,560	10,217
45-49	15,631	7,936	7,695
50-54	13,953	6,375	7,578
55-59	12,891	5,603	7,288
60-64	11,333	4,912	6,421
65-69	8,574	3,763	4,811
70-74	6,235	2,688	3,547
75-79	3,174	1,338	1,836
80-84	1,892	761	1,131
85+	0	0	0
0-19	134,004	67,408	66,596
20-64	296,121	155,508	140,613
65+	19,875	8,550	11,325
Total	450,000	231,466	218,534
Alternative II :			
0-4	29,588	14,598	14,990
5-9	23,231	11,636	11,595
10-14	30,679	15,545	15,134
15-19	36,020	18,360	17,660
20-24	58,279	31,617	26,662
25-29	64,026	35,409	28,617
30-34	45,776	24,303	21,473
35-39	28,590	14,869	13,721
40-44	18,548	9,416	9,132
45-49	13,940	7,054	6,886
50-54	12,388	5,650	6,738
55-59	11,431	4,961	6,470
60-64	10,026	4,342	5,684
65-69	7,581	3,329	4,252
70-74	5,460	2,356	3,104
75-79	2,780	1,174	1,606
80-84	1,657	668	989
85+	0	0	0
0-19	119,518	60,139	59,379
20-64	263,004	137,621	125,383
65+	17,478	7,527	9,951
Total	400,000	205,287	194,713
Alternative III:			
0-4	25,443	12,549	12,894
5-9	20,774	10,427	10,347
10-14	27,043	13,717	13,326
15-19	31,790	16,187	15,603
20-24	50,706	27,272	23,434
25-29	55,945	30,757	25,188
30-34	40,086	21,234	18,852
35-39	25,071	13,010	12,061
40-44	16,311	8,268	8,043
45-49	12,247	6,173	6,074
50-54	10,823	4,928	5,895
55-59	9,971	4,318	5,653
60-64	8,715	3,770	4,945
65-69	6,586	2,893	3,693
70-74	4,683	2,024	2,659
75-79	2,385	1,008	1,377
80-84	1,421	574	847
85+	0	0	0
0-19	105,050	52,880	52,170
20-64	229,875	119,730	110,145
65+	15,075	6,499	8,576
Total	350,000	179,109	170,891

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. Consistent with the Bureau of Census estimates of undocumented immigration since the 1980 Census, for the years 1987 and 1988, net other-than-legal immigration is assumed to be 200,000 persons per year.

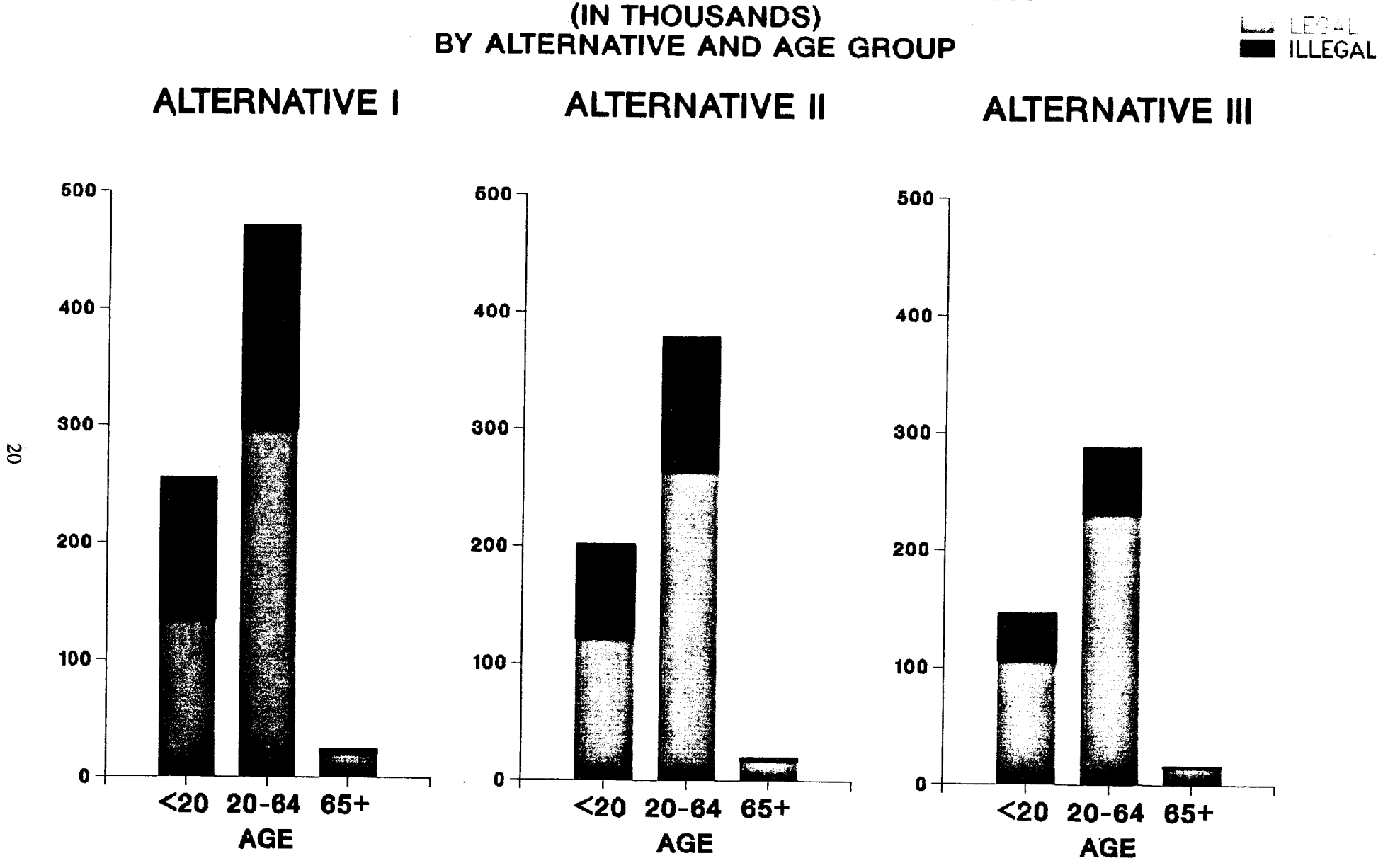
Even after considering recent legislation, annual net other-than-legal immigration is anticipated to continue because of the limited economic opportunity in the native countries of the majority of these aliens. For years after 1988, the alternative II assumption for annual net other-than-legal immigration is 200,000. For alternatives I and III, the corresponding numbers are 300,000 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	27,476	14,058	13,418
5-9	30,671	16,294	14,377
10-14	21,086	10,543	10,543
15-19	42,171	23,961	18,210
20-24	78,913	46,965	31,948
25-29	45,688	25,879	19,809
30-34	19,490	10,225	9,265
35-39	9,585	4,792	4,793
40-44	7,668	4,153	3,515
45-49	5,432	2,875	2,557
50-54	3,833	1,916	1,917
55-59	2,557	1,279	1,278
60-64	1,522	358	1,164
65-69	1,302	306	996
70-74	1,085	255	830
75-79	869	204	665
80-84	652	153	499
85+	0	0	0
0-19	121,404	64,856	56,548
20-64	174,688	98,442	76,246
65+	3,908	918	2,990
Total	300,000	164,216	135,784
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 1988 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 1985 by age of husband crossed with age of wife. In 1985, 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]

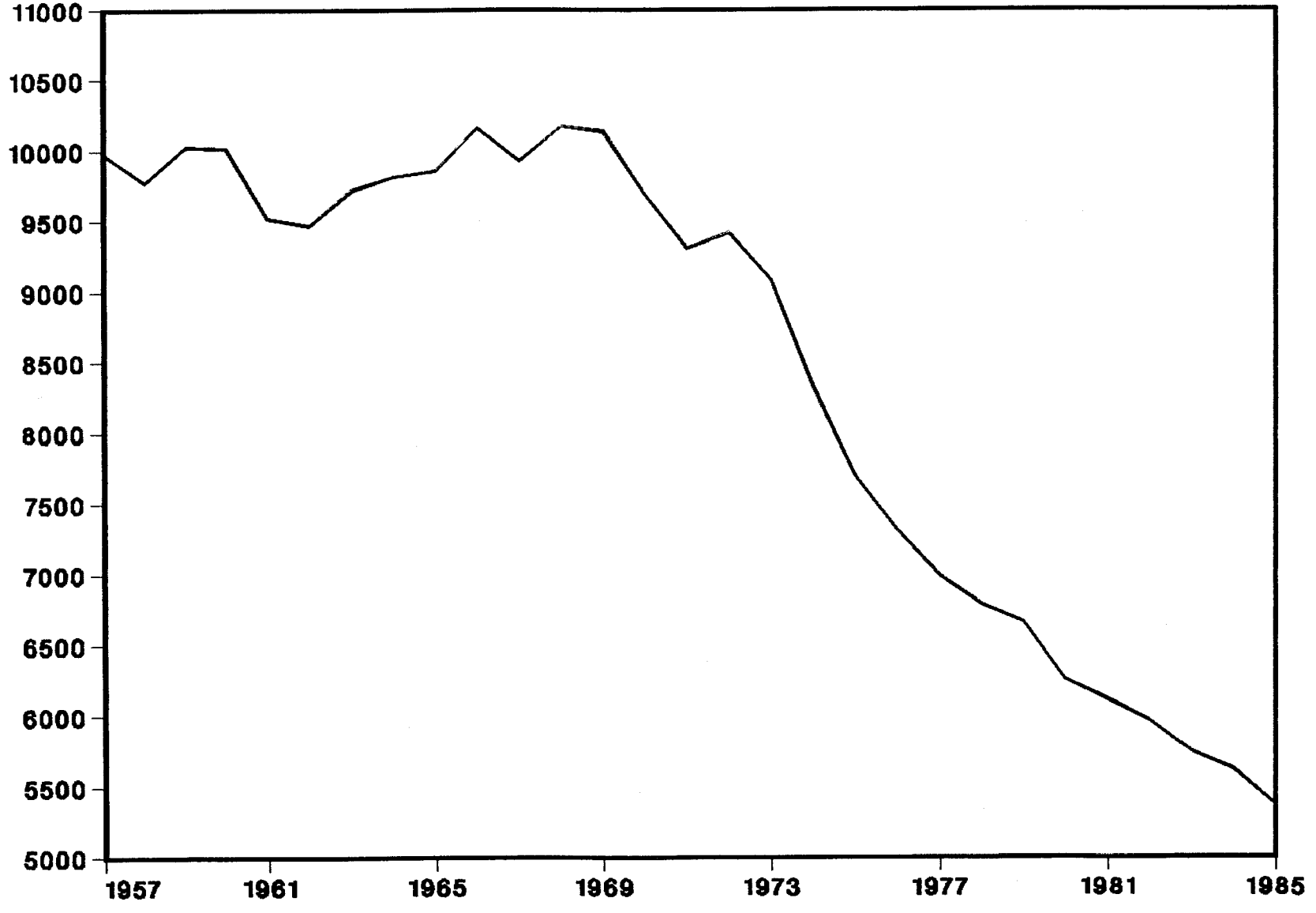
Calendar year	Age-adjusted marriage rate
1957	9,975
1958	9,775
1959	10,024
1960	10,015
1961	9,519
1962	9,465
1963	9,716
1964	9,812
1965	9,851
1966	10,158
1967	9,929
1968	10,168
1969	10,129
1970	9,680
1971	9,302
1972	9,412
1973	9,077
1974	8,332
1975	7,687
1976	7,303
1977	6,982
1978	6,784
1979	6,661
1980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

Note: The first step in calculating the total age-adjusted central marriage rate for a particular year is to determine an expected number of marriages by applying the age-of-husband-age-of-wife-specific central marriage rates for that year to the square root of the product of the corresponding age groupings of unmarried males and unmarried females in the MRA as of July 1, 1982. The total age-adjusted central marriage rate is then obtained by dividing the expected number of marriages by the square root of the product of the number of unmarried males (aged 15 and over) and unmarried females (aged 15 and over) in the MRA as of July 1, 1982.

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		5,797	
1988		5,814	
	Alternative I	Alternative II	Alternative III
1989	5,728	5,814	5,917
1990	5,643	5,814	6,021
1991	5,559	5,814	6,127
1992	5,477	5,814	6,235
1993	5,395	5,814	6,345
1994	5,315	5,814	6,457
1995	5,236	5,814	6,571
1996	5,159	5,814	6,687
1997	5,082	5,814	6,805
1998	5,006	5,814	6,925
1999	4,932	5,814	7,047
2000	4,859	5,814	7,171
2001	4,787	5,814	7,297
2002	4,716	5,814	7,426
2003	4,646	5,814	7,557
2004	4,577	5,814	7,690
2005	4,509	5,814	7,826
2006	4,442	5,814	7,964
2007	4,376	5,814	8,104
2008	4,311	5,814	8,247
2009	4,247	5,814	8,392
2010	4,184	5,814	8,540
2011	4,122	5,814	8,691
2012	4,060	5,814	8,844
2013	4,000	5,814	9,000

CHART 5. AGE - ADJUSTED MARRIAGE RATES
(PER HUNDRED THOUSAND UNMARRIED OF EACH SEX)
IN THE MRA, 1957-1985



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 1985 of 5,364. At first glance the provisional statistics for 1986 and 1987, 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 1986 and 1987 indicate a slight decline.

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 1986 and 1987 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 2013 and stay at this level for the remainder of the projection period. This ultimate rate is 69% of the 1987 rate of 5,797.

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 2013 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 1981-1985 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 1987 for alternative II are shown in Table 16 grouped by 5 year age groups based on Social Security Area population as of January 1, 1988.

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	1,480.4	375.9	67.5	22.8	8.3	2.2	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0
20-24	2,533.3	5,745.5	1,320.4	332.4	104.4	27.6	7.9	2.9	1.5	.3	.0	.0	.0	.0	.0	.0
25-29	630.3	4,305.9	4,446.5	1,380.3	386.5	112.4	29.6	9.0	2.2	.4	.0	.0	.0	.0	.0	.0
30-34	213.3	1,589.1	3,360.1	2,770.2	1,020.9	304.9	92.7	20.4	5.6	1.5	.4	.0	.0	.0	.0	.0
35-39	81.5	662.1	1,707.6	2,388.6	1,912.0	736.8	227.6	57.7	13.5	3.3	1.4	.6	.2	.0	.0	.0
40-44	31.8	237.7	741.0	1,312.9	1,715.7	1,270.0	494.9	131.9	35.7	9.1	3.4	1.1	.1	.2	.0	.0
45-49	17.8	88.9	310.5	670.5	1,083.4	1,286.4	925.1	320.8	89.8	25.7	6.8	2.0	.3	.0	.0	.0
50-54	9.1	35.9	122.0	297.2	566.6	821.2	929.8	633.1	211.3	61.9	17.4	5.4	1.7	.2	.0	.0
55-59	3.8	16.4	52.6	122.0	253.7	443.3	629.2	672.7	456.2	167.6	42.9	12.3	3.5	1.2	.5	.0
60-64	2.2	6.9	20.3	46.1	97.4	188.1	311.3	423.4	463.1	354.9	112.2	28.6	6.3	1.6	.0	.0
65-69	1.5	2.9	8.0	17.0	34.7	64.2	118.9	189.0	272.4	342.1	250.4	71.6	15.2	3.0	.0	.0
70-74	1.1	2.6	3.3	6.6	13.4	27.3	46.2	75.2	120.4	193.4	237.6	155.2	39.2	6.8	1.6	.0
75-79	.1	2.1	1.9	2.9	5.5	10.1	19.1	31.9	51.9	87.6	127.0	136.0	87.1	15.1	2.3	.2
80-84	.0	.3	1.0	.7	2.8	3.2	7.5	13.2	20.1	33.4	50.7	64.4	51.4	28.4	4.2	.0
85-89	.0	.0	.0	.0	.3	.0	2.0	5.1	7.2	8.7	13.1	16.5	19.3	16.7	4.4	.3
90-94	.0	.0	.0	.0	.0	.0	.0	1.4	1.6	1.6	2.3	4.2	4.2	2.2	1.8	6.9

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 1981-1985. Data for 1980 were not available. The marriage rates for the years 1979 and 1981-1985 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 1981-85 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	17.7	17.6	151.9	186.5
20-24	83.3	79.9	263.6	232.5
25-29	120.8	102.4	224.0	229.4
30-34	118.7	74.3	217.7	203.9
35-39	101.9	41.0	114.5	167.4
40-44	102.3	35.4	101.5	158.8
45-49	70.4	15.9	70.0	109.9
50-54	64.9	13.1	66.1	100.9
55-59	41.6	7.8	54.7	62.1
60-64	37.5	6.9	50.2	55.3
65-69	17.1	3.0	20.4	28.5
70-74	15.0	2.5	17.4	25.0
75-79	15.6	2.5	17.5	25.2
80-84	16.3	2.5	17.5	25.2
85-89	17.0	2.5	17.5	25.2
90-94	17.3	2.5	17.5	25.2
Female:				
14-19	39.7	39.0	246.9	219.8
20-24	111.3	102.9	141.2	227.4
25-29	129.5	105.6	89.3	194.4
30-34	100.9	65.2	60.3	138.7
35-39	69.7	33.8	36.3	92.6
40-44	62.4	28.7	33.0	84.3
45-49	33.7	12.2	21.4	47.9
50-54	27.6	9.9	19.1	41.6
55-59	12.3	5.1	10.1	19.1
60-64	9.6	4.2	8.6	15.8
65-69	3.0	1.1	2.6	6.8
70-74	2.2	.8	2.1	5.7
75-79	2.1	.8	2.1	5.7
80-84	2.1	.8	2.1	5.7
85-89	2.1	.8	2.1	5.7
90-94	2.1	.8	2.1	5.7

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 1979-1985 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 1985 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		2,216	
1980		2,223	
1981		2,273	
1982		2,195	
1983		2,171	
1984		2,182	
1985		2,201	
1986		2,135	
1987		2,108	
1988		2,121	
	Alternative I	Alternative II	Alternative III
1989	2,132	2,121	2,107
1990	2,142	2,121	2,093
1991	2,153	2,121	2,080
1992	2,163	2,121	2,066
1993	2,174	2,121	2,052
1994	2,185	2,121	2,039
1995	2,196	2,121	2,026
1996	2,206	2,121	2,012
1997	2,217	2,121	1,999
1998	2,228	2,120	1,986
1999	2,239	2,120	1,973
2000	2,250	2,120	1,960
2001	2,262	2,120	1,947
2002	2,273	2,120	1,935
2003	2,284	2,120	1,922
2004	2,295	2,120	1,909
2005	2,307	2,120	1,897
2006	2,318	2,120	1,884
2007	2,330	2,120	1,872
2008	2,341	2,120	1,860
2009	2,353	2,120	1,847
2010	2,364	2,120	1,835
2011	2,376	2,120	1,823
2012	2,388	2,120	1,811
2013	2,399	2,119	1,799

As shown in the above table, the age-adjusted central divorce rates were quite stable during the period 1979-1985. Age-adjusted central divorce rates for 1986 and 1987 were computed using the age distributions of the DRA data during 1979-1985 and using provisional data estimating the total divorces in the U.S. for 1986 and 1987. The resulting age-adjusted rates are slightly lower than those for 1979-85. For 1988, the age-adjusted central divorce rate was assumed to be equal to the average of the age-adjusted rates for the two 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 the age-adjusted rate would remain at the same level as the 1988 estimated rate throughout the projection period. For alternative I, we assumed that the age-adjusted rate would gradually increase to 113 percent of the 1988 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 85 percent of the 1988 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 1979-1985 were averaged and then graduated. For each alternative and year after 1988, 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 1987 for alternative II are shown in Table 19 grouped by 5 year age groups based on Social Security Area population as of January 1, 1988.

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	4,298.1	3,425.5	1,513.7	3,616.9	5,241.0	5,322.1	3,938.1	1,677.0	838.5	609.3	474.8	537.6	714.8	888.2	1,092.5
20-24	4,870.3	5,223.0	3,629.3	3,641.8	5,413.0	6,208.6	5,817.9	3,844.2	2,189.3	1,428.4	897.9	750.4	795.4	890.9	1,560.6
25-29	3,648.9	4,898.4	4,309.3	3,243.4	4,211.7	5,629.8	6,196.9	5,256.1	3,688.6	2,851.9	2,267.3	1,525.6	1,565.7	1,311.9	1,622.8
30-34	3,422.4	4,081.9	3,825.2	3,223.6	2,925.0	4,097.5	4,898.9	4,713.6	3,767.9	3,256.6	2,615.5	1,774.7	1,598.8	1,198.7	1,235.5
35-39	4,445.5	4,526.3	3,616.9	2,875.2	2,629.1	2,492.0	3,318.3	3,743.4	3,479.2	3,224.0	2,981.0	2,456.4	2,391.9	1,963.4	1,904.4
40-44	5,139.2	5,349.4	4,232.9	2,987.4	2,190.8	1,968.1	1,826.7	2,366.7	2,558.4	2,565.0	2,470.2	2,306.6	2,200.0	1,881.7	1,728.9
45-49	4,814.1	5,447.9	4,548.6	3,279.3	2,212.7	1,549.8	1,273.7	1,206.1	1,456.0	1,514.1	1,533.2	1,447.8	1,441.4	1,308.4	1,219.3
50-54	3,565.4	4,712.2	4,295.0	3,496.0	2,587.4	1,574.6	997.6	766.7	654.0	727.7	768.7	769.1	790.7	790.0	767.9
55-59	2,860.7	4,038.4	3,770.3	3,445.2	2,825.6	1,878.7	1,033.8	539.8	273.9	249.5	299.6	338.8	368.3	385.4	382.0
60-64	2,683.1	3,523.8	3,354.3	3,266.6	2,823.7	1,946.9	1,070.9	504.7	243.2	240.1	235.0	246.5	255.6	275.8	307.8
65-69	2,408.5	2,978.5	3,223.8	3,203.6	2,812.7	1,935.6	1,078.8	532.5	258.2	242.1	247.0	229.7	228.9	233.1	268.8
70-74	2,172.2	2,718.9	3,051.6	3,121.5	2,696.8	1,902.9	1,073.4	548.9	270.0	234.7	243.7	249.2	227.6	224.8	253.2
75-79	2,518.6	2,770.5	3,355.3	3,056.0	2,667.2	1,817.6	1,062.8	563.1	277.7	236.5	236.9	244.6	246.6	225.7	259.7
80-84	2,851.3	3,046.0	3,070.3	2,759.4	2,336.2	1,595.2	984.8	544.9	281.5	229.6	223.8	223.7	232.8	258.5	262.9
85-89	3,016.0	3,557.8	3,676.9	2,989.2	2,540.5	1,698.3	1,084.4	620.3	339.8	279.6	261.3	259.8	259.5	238.2	209.3

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 1985 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 1.05 for females and 1.04 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 intial 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 central 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 marriages 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 :				
1987	3,938	2,193	2,500	1,181
1988	3,978	2,215	2,538	1,202
1989	3,980	2,248	2,529	1,219
1990	3,975	2,281	2,517	1,225
1991	3,963	2,311	2,501	1,227
1992	3,946	2,338	2,481	1,231
1993	3,927	2,367	2,462	1,237
1994	3,909	2,397	2,442	1,244
1995	3,895	2,428	2,424	1,244
1996	3,885	2,459	2,408	1,242
1997	3,882	2,490	2,395	1,239
1998	3,885	2,521	2,386	1,237
1999	3,894	2,552	2,381	1,237
2000	3,909	2,582	2,377	1,234
2005	4,070	2,730	2,375	1,220
2010	4,322	2,883	2,368	1,210
2015	4,496	3,060	2,397	1,193
2020	4,546	3,276	2,476	1,183
2025	4,603	3,541	2,541	1,190
2030	4,729	3,835	2,622	1,208
2035	4,905	4,108	2,713	1,236
2040	5,068	4,310	2,792	1,267
2045	5,189	4,415	2,855	1,298
2050	5,292	4,436	2,918	1,329
2055	5,413	4,418	2,992	1,361
2060	5,563	4,415	3,073	1,395
2065	5,719	4,457	3,155	1,431
2070	5,862	4,539	3,231	1,467
2075	5,994	4,638	3,306	1,503
2080	6,128	4,736	3,383	1,539
Alternative II :				
1987	3,938	2,193	2,500	1,181
1988	3,978	2,215	2,538	1,202
1989	3,951	2,236	2,564	1,213
1990	3,917	2,259	2,582	1,214
1991	3,877	2,282	2,591	1,213
1992	3,833	2,306	2,596	1,214
1993	3,787	2,330	2,597	1,218
1994	3,743	2,355	2,597	1,223
1995	3,703	2,379	2,596	1,223
1996	3,669	2,403	2,597	1,221
1997	3,641	2,427	2,601	1,218
1998	3,619	2,450	2,608	1,217
1999	3,604	2,476	2,619	1,217
2000	3,594	2,500	2,632	1,216
2005	3,624	2,610	2,713	1,213
2010	3,717	2,748	2,783	1,222
2015	3,747	2,911	2,797	1,231
2020	3,703	3,103	2,772	1,236
2025	3,646	3,332	2,755	1,236
2030	3,632	3,590	2,761	1,237
2035	3,655	3,839	2,777	1,238
2040	3,675	4,036	2,781	1,239
2045	3,669	4,147	2,771	1,239
2050	3,647	4,171	2,760	1,238
2055	3,633	4,138	2,756	1,237
2060	3,634	4,091	2,759	1,237
2065	3,641	4,067	2,761	1,238
2070	3,641	4,072	2,758	1,238
2075	3,634	4,090	2,753	1,238
2080	3,626	4,098	2,750	1,238
Alternative III:				
1987	3,938	2,193	2,500	1,181
1988	3,978	2,215	2,538	1,202
1989	3,921	2,219	2,605	1,206
1990	3,855	2,225	2,659	1,201
1991	3,785	2,235	2,703	1,195
1992	3,711	2,249	2,737	1,193
1993	3,637	2,267	2,765	1,195
1994	3,566	2,288	2,789	1,197
1995	3,500	2,313	2,810	1,196
1996	3,440	2,339	2,832	1,193
1997	3,387	2,366	2,855	1,190
1998	3,340	2,394	2,881	1,188
1999	3,300	2,439	2,909	1,188
2000	3,265	2,479	2,940	1,186
2005	3,171	2,561	3,102	1,186
2010	3,123	2,602	3,226	1,200
2015	3,037	2,705	3,131	1,221
2020	2,924	2,852	2,926	1,225
2025	2,783	3,034	2,794	1,206
2030	2,672	3,247	2,708	1,180
2035	2,594	3,466	2,633	1,150
2040	2,526	3,657	2,557	1,118
2045	2,446	3,781	2,470	1,085
2050	2,359	3,823	2,383	1,053
2055	2,276	3,794	2,306	1,022
2060	2,205	3,727	2,239	993
2065	2,142	3,660	2,174	966
2070	2,081	3,614	2,108	939
2075	2,019	3,581	2,043	913
2080	1,958	3,538	1,981	888

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 251 million in 1987 to 431 million in 2080. Under alternative II, the total population increases gradually to 327 million in 2080 as a 1.9 total fertility rate plus 600,000 annual net immigrants are more than enough to replenish the population. Under alternative III, the total population increases to 296 million in 2029 and then decreases to 251 million in 2080. The decline in population size after 2029 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

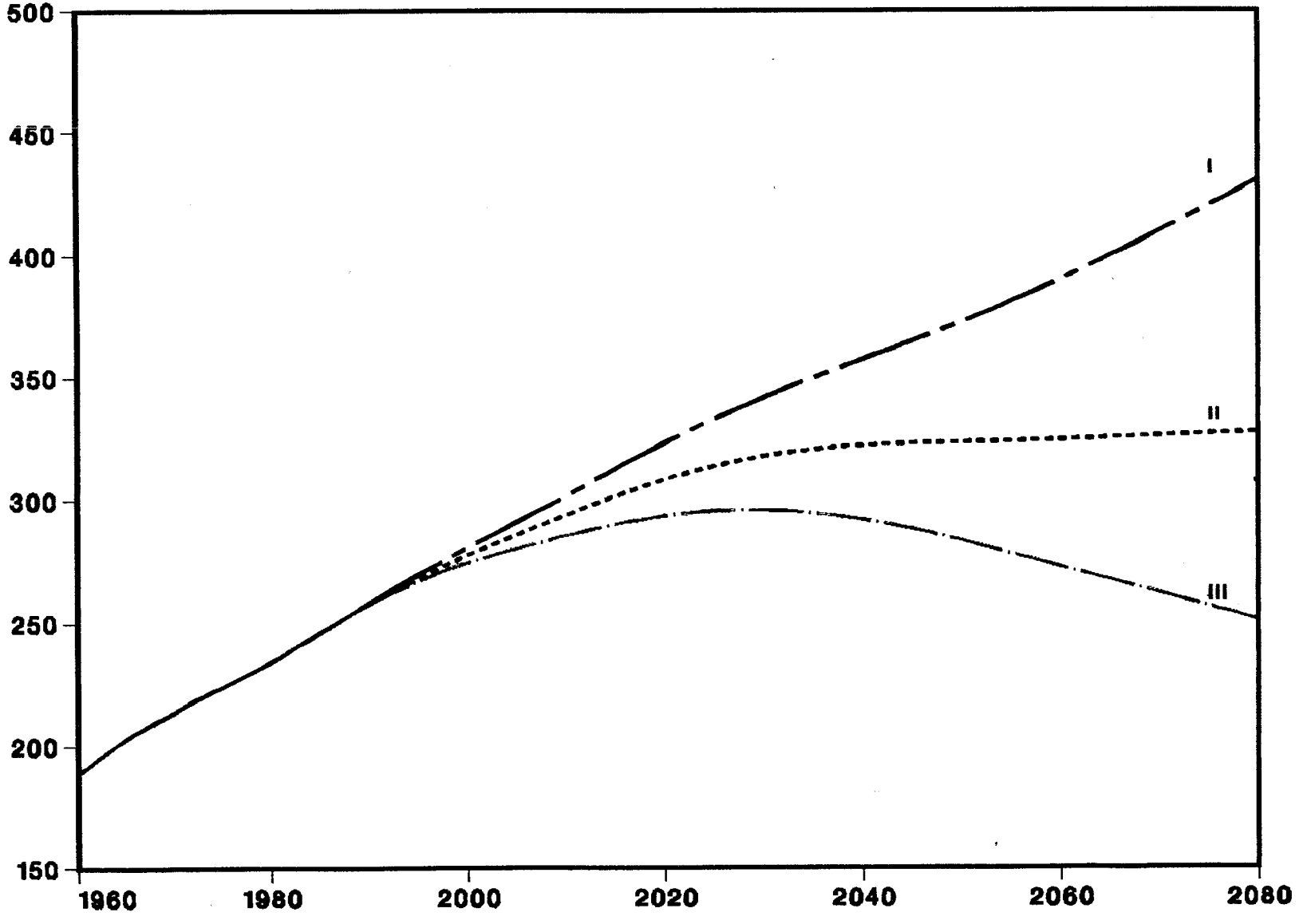


Table 21.—January 1 Population in the Social Security Area by Alternative, Year, Age Group, Sex, and Marital Status

[In thousands]

Alternative, year, and age group	Total	Sex and marital status									
		Male					Female				
		Total	Single	Married	Widowed	Divorced	Total	Single	Married	Widowed	Divorced
1987:											
0-4	19,073	9,757	9,757	0	0	0	9,316	9,316	0	0	0
5-9	18,259	9,340	9,340	0	0	0	8,919	8,919	0	0	0
10-14	17,052	8,726	8,725	1	0	0	8,326	8,320	5	0	0
15-19	18,972	9,685	9,525	156	1	4	9,287	8,766	497	1	24
20-24	21,018	10,695	8,335	2,172	9	178	10,323	6,288	3,679	11	345
25-29	23,032	11,733	5,077	5,990	6	660	11,298	3,260	7,106	43	888
30-34	21,761	11,046	2,665	7,417	14	950	10,715	1,590	7,830	89	1,206
35-39	19,482	9,812	1,337	7,350	20	1,104	9,670	806	7,403	142	1,320
40-44	15,575	7,785	616	6,224	45	899	7,790	508	5,976	196	1,110
45-49	12,673	6,302	432	5,147	65	658	6,371	307	4,900	290	874
50-54	11,262	5,550	360	4,572	99	519	5,712	230	4,361	412	709
55-59	11,469	5,563	358	4,582	136	487	5,906	252	4,266	777	611
60-64	11,137	5,246	328	4,307	197	413	5,891	253	3,965	1,174	500
65-69	9,756	4,462	246	3,601	338	277	5,294	245	3,058	1,647	344
70-74	7,766	3,323	166	2,591	401	166	4,443	230	2,068	1,928	217
75-79	5,745	2,243	105	1,674	395	69	3,501	210	1,103	2,069	120
80-84	3,648	1,253	56	856	302	38	2,395	154	511	1,666	64
85-89	1,960	572	25	302	221	25	1,388	89	222	1,039	37
90-94	801	201	9	71	110	12	600	39	64	481	16
95+	234	52	2	9	37	4	182	12	9	156	5
0-19	73,356	37,507	37,346	157	1	4	35,848	35,321	502	1	24
20-64	147,408	73,730	19,509	47,763	592	5,867	73,678	13,495	49,486	3,134	7,562
65+	29,909	12,107	608	9,104	1,804	591	17,803	978	7,035	8,985	804
20-65	149,552	74,729	19,566	48,573	656	5,934	74,823	13,547	50,185	3,447	7,644
20-66	151,614	75,683	19,620	49,344	723	5,995	75,931	13,598	50,842	3,772	7,720
20-67	153,488	76,539	19,667	50,035	789	6,048	76,949	13,645	51,428	4,090	7,786
20-68	155,370	77,390	19,712	50,720	859	6,099	77,980	13,693	52,005	4,433	7,849
20-69	157,164	78,192	19,754	51,363	930	6,144	78,972	13,741	52,544	4,781	7,906
66+	27,765	11,107	551	8,293	1,739	524	16,657	927	6,337	8,672	722
67+	25,703	10,154	498	7,522	1,672	462	15,549	876	5,680	8,347	646
68+	23,829	9,298	451	6,831	1,606	409	14,531	829	5,093	8,029	581
69+	21,947	8,446	405	6,146	1,536	359	13,501	780	4,517	7,687	517
70+	20,153	7,645	363	5,503	1,465	313	12,509	733	3,978	7,338	460
Total	250,673	123,344	57,464	57,023	2,396	6,461	127,329	49,795	57,023	12,120	8,391
Alternative I:											
1990:											
0-4	19,544	9,998	9,998	0	0	0	9,547	9,547	0	0	0
5-9	19,061	9,747	9,747	0	0	0	9,314	9,314	0	0	0
10-14	17,643	9,027	9,027	0	0	0	8,616	8,615	1	0	0
15-19	18,053	9,227	9,068	155	0	5	8,826	8,239	560	0	26
20-24	19,466	9,916	7,600	2,141	2	172	9,550	5,792	3,428	8	322
25-29	22,569	11,491	5,440	5,362	8	680	11,078	3,515	6,618	34	911
30-34	22,978	11,686	3,138	7,436	13	1,099	11,292	1,908	7,993	81	1,310
35-39	20,737	10,473	1,718	7,570	22	1,162	10,264	1,018	7,666	135	1,445
40-44	17,988	9,008	877	6,933	41	1,157	8,980	618	6,751	207	1,404
45-49	14,314	7,121	480	5,720	68	853	7,193	392	5,402	297	1,102
50-54	11,845	5,848	366	4,790	98	593	5,997	261	4,493	410	834
55-59	10,965	5,331	326	4,391	147	468	5,634	225	4,073	680	655
60-64	11,020	5,222	318	4,284	206	414	5,798	241	3,909	1,090	559
65-69	10,220	4,688	266	3,772	329	320	5,533	242	3,248	1,616	427
70-74	8,122	3,522	176	2,751	401	194	4,600	218	2,218	1,894	271
75-79	6,139	2,426	104	1,792	432	98	3,714	200	1,278	2,076	160
80-84	3,958	1,377	51	944	342	40	2,581	157	547	1,801	75
85-89	2,107	620	21	354	224	21	1,488	90	228	1,129	40
90-94	856	213	7	91	104	11	643	37	75	512	18
95+	277	61	2	16	40	4	216	11	15	184	7
0-19	74,302	38,000	37,840	155	0	5	36,303	35,715	561	0	26
20-64	151,880	76,095	20,263	48,627	606	6,599	75,785	13,969	50,332	2,942	8,542
65+	31,680	12,905	626	9,720	1,872	687	18,775	955	7,609	9,212	998
20-65	154,029	77,092	20,323	49,438	657	6,673	76,937	14,017	51,060	3,220	8,640
20-66	156,111	78,051	20,380	50,215	714	6,742	78,060	14,065	51,746	3,517	8,732
20-67	158,158	78,990	20,433	50,972	778	6,806	79,169	14,114	52,400	3,837	8,818
20-68	160,174	79,911	20,483	51,706	856	6,865	80,263	14,163	53,010	4,194	8,896
20-69	162,101	80,783	20,530	52,399	935	6,919	81,318	14,211	53,580	4,559	8,969
66+	29,531	11,909	567	8,909	1,821	613	17,622	906	6,882	8,934	900
67+	27,449	10,950	510	8,132	1,764	544	16,499	858	6,196	8,637	808
68+	25,402	10,011	457	7,375	1,700	480	15,391	810	5,542	8,317	722
69+	23,386	9,090	407	6,640	1,622	421	14,296	761	4,931	7,961	644
70+	21,459	8,218	360	5,948	1,543	367	13,242	713	4,362	7,596	571
Total	257,862	127,000	58,729	58,502	2,478	7,290	130,862	50,639	58,502	12,155	9,566

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	19,640	10,047	10,047	0	0	0	9,592	9,592	0	0	0
5-9	19,827	10,139	10,139	0	0	0	9,688	9,688	0	0	0
10-14	19,314	9,875	9,875	0	0	0	9,439	9,439	1	0	0
15-19	17,909	9,155	9,025	126	0	3	8,754	8,265	469	0	21
20-24	18,512	9,467	7,364	1,931	1	171	9,046	5,490	3,221	7	328
25-29	20,052	10,229	4,923	4,665	5	636	9,823	3,178	5,792	25	828
30-34	22,916	11,656	3,731	6,765	13	1,146	11,261	2,254	7,607	63	1,336
35-39	23,090	11,709	2,413	7,893	23	1,380	11,381	1,471	8,156	125	1,629
40-44	20,707	10,421	1,439	7,579	41	1,362	10,286	874	7,493	206	1,714
45-49	17,852	8,903	772	6,805	70	1,257	8,949	560	6,496	313	1,581
50-54	14,079	6,960	430	5,569	107	855	7,118	368	5,141	442	1,167
55-59	11,496	5,613	321	4,597	148	547	5,882	248	4,184	618	833
60-64	10,401	4,969	279	4,075	217	397	5,432	212	3,634	958	628
65-69	10,108	4,667	263	3,751	316	337	5,440	222	3,252	1,442	524
70-74	8,938	3,928	205	3,035	439	250	5,010	216	2,465	1,942	387
75-79	6,628	2,677	112	1,978	452	135	3,951	182	1,474	2,063	231
80-84	4,465	1,582	49	1,084	391	58	2,882	149	703	1,911	119
85-89	2,403	719	17	427	253	22	1,684	95	234	1,307	49
90-94	979	242	5	108	120	9	737	38	72	606	22
95+	325	70	1	24	41	4	255	10	19	217	9
0-19	76,690	39,215	39,086	126	0	3	37,474	36,984	469	0	21
20-64	159,105	79,927	21,672	49,880	625	7,750	79,178	14,654	51,724	2,756	10,045
65+	33,845	13,886	652	10,407	2,012	814	19,960	911	8,220	9,488	1,341
20-65	161,181	80,905	21,727	50,674	681	7,823	80,277	14,699	52,412	3,008	10,158
20-66	163,248	81,869	21,782	51,454	740	7,894	81,379	14,743	53,091	3,276	10,268
20-67	165,286	82,810	21,835	52,213	800	7,962	82,475	14,788	53,753	3,560	10,374
20-68	167,263	83,712	21,885	52,932	869	8,026	83,550	14,832	54,375	3,870	10,474
20-69	169,212	84,594	21,935	53,630	941	8,087	84,619	14,875	54,976	4,199	10,569
66+	31,769	12,908	597	9,613	1,957	741	18,861	866	7,532	9,236	1,227
67+	29,702	11,943	542	8,833	1,898	670	17,759	821	6,853	8,968	1,117
68+	27,664	11,002	489	8,074	1,837	601	16,662	777	6,191	8,684	1,011
69+	25,687	10,100	439	7,355	1,768	538	15,587	733	5,569	8,374	912
70+	23,738	9,219	389	6,656	1,696	477	14,519	689	4,968	8,046	817
Total	269,640	133,028	61,410	60,413	2,638	8,567	136,612	52,549	60,413	12,244	11,406
2000:											
0-4	19,377	9,914	9,914	0	0	0	9,463	9,463	0	0	0
5-9	19,925	10,190	10,190	0	0	0	9,735	9,735	0	0	0
10-14	20,081	10,267	10,266	0	0	0	9,814	9,813	1	0	0
15-19	19,577	10,001	9,867	130	0	4	9,576	9,086	469	0	21
20-24	18,373	9,398	7,464	1,775	1	159	8,975	5,754	2,911	6	305
25-29	19,109	9,788	4,958	4,209	4	617	9,321	3,132	5,347	21	821
30-34	20,425	10,412	3,459	5,880	10	1,063	10,012	2,049	6,708	49	1,207
35-39	23,046	11,692	2,950	7,300	22	1,420	11,354	1,750	7,863	104	1,637
40-44	23,058	11,656	2,066	7,940	43	1,608	11,402	1,269	8,022	194	1,917
45-49	20,554	10,305	1,280	7,467	73	1,486	10,249	795	7,237	313	1,904
50-54	17,560	8,708	701	6,644	118	1,245	8,852	527	6,195	474	1,656
55-59	13,672	6,691	382	5,358	166	786	6,980	349	4,806	665	1,161
60-64	10,926	5,250	278	4,288	218	467	5,676	234	3,749	899	794
65-69	9,552	4,457	232	3,582	313	329	5,095	196	3,025	1,291	584
70-74	8,841	3,923	203	3,021	433	265	4,918	198	2,457	1,795	469
75-79	7,289	2,987	132	2,178	504	173	4,302	181	1,635	2,161	325
80-84	4,818	1,743	53	1,192	421	77	3,076	137	805	1,964	170
85-89	2,710	820	16	493	281	30	1,890	90	301	1,423	76
90-94	1,117	278	4	133	132	9	839	40	71	702	26
95+	370	78	1	24	50	3	292	10	16	256	11
0-19	78,959	40,371	40,237	130	0	4	38,589	38,097	470	0	21
20-64	166,724	83,902	23,537	50,861	654	8,851	82,822	15,860	52,836	2,724	11,401
65+	34,698	14,285	641	10,623	2,135	887	20,413	852	8,309	9,591	1,661
20-65	168,698	84,837	23,585	51,622	707	8,923	83,861	15,898	53,494	2,936	11,533
20-66	170,600	85,731	23,631	52,347	762	8,991	84,869	15,936	54,117	3,163	11,653
20-67	172,486	86,611	23,677	53,057	820	9,056	85,876	15,973	54,724	3,412	11,767
20-68	174,385	87,488	23,723	53,756	891	9,119	86,896	16,014	55,299	3,705	11,878
20-69	176,276	88,359	23,769	54,443	967	9,180	87,917	16,056	55,861	4,015	11,985
66+	32,724	13,350	592	9,863	2,081	814	19,374	813	7,651	9,380	1,529
67+	30,822	12,456	546	9,137	2,026	747	18,366	776	7,028	9,153	1,409
68+	28,936	11,577	500	8,427	1,968	681	17,359	739	6,420	8,904	1,295
69+	27,038	10,699	454	7,729	1,897	619	16,339	697	5,846	8,611	1,185
70+	25,146	9,829	409	7,041	1,821	558	15,318	656	5,284	8,300	1,077
Total	280,382	138,558	64,414	61,615	2,788	9,741	141,824	54,809	61,615	12,316	13,084

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	22,533	11,530	11,530	0	0	0	11,003	11,003	0	0	0
5-9	22,277	11,396	11,396	0	0	0	10,882	10,882	0	0	0
10-14	21,330	10,909	10,909	0	0	0	10,421	10,420	1	0	0
15-19	20,562	10,508	10,392	112	0	3	10,054	9,620	413	0	21
20-24	20,647	10,556	8,752	1,641	1	163	10,091	7,046	2,719	5	321
25-29	21,496	11,003	6,426	3,926	3	648	10,493	4,644	4,938	18	893
30-34	21,770	11,134	4,720	5,280	7	1,127	10,636	3,246	6,003	39	1,349
35-39	21,166	10,802	3,561	5,870	14	1,357	10,365	2,372	6,324	70	1,598
40-44	19,545	9,957	2,652	5,849	26	1,430	9,588	1,654	6,143	120	1,670
45-49	19,556	9,925	2,300	6,024	53	1,548	9,631	1,308	6,291	219	1,814
50-54	20,146	10,131	2,034	6,389	108	1,600	10,016	1,190	6,516	398	1,912
55-59	21,856	10,865	1,964	7,051	214	1,636	10,992	1,238	6,896	741	2,117
60-64	20,805	10,196	1,397	7,030	357	1,412	10,609	972	6,402	1,182	2,054
65-69	17,190	8,220	807	5,920	499	995	8,970	612	5,018	1,635	1,704
70-74	13,100	6,014	379	4,376	609	650	7,086	383	3,429	2,011	1,263
75-79	8,600	3,680	146	2,651	576	306	4,921	228	1,878	2,072	743
80-84	5,279	2,014	57	1,377	459	121	3,265	126	873	1,875	391
85-89	3,058	980	19	588	323	50	2,078	70	341	1,467	199
90-94	1,527	397	5	189	182	21	1,130	34	106	893	97
95+	607	128	1	41	80	7	478	10	22	406	40
0-19	86,702	44,343	44,227	112	0	3	42,360	41,925	414	0	21
20-64	186,987	94,568	33,805	49,059	782	10,921	92,420	23,670	52,232	2,791	13,728
65+	49,361	21,433	1,413	15,142	2,729	2,149	27,928	1,464	11,668	10,359	4,437
20-65	190,762	96,393	34,005	50,363	872	11,153	94,369	23,817	53,369	3,080	14,104
20-66	194,374	98,130	34,186	51,611	964	11,369	96,244	23,955	54,444	3,377	14,468
20-67	197,814	99,775	34,348	52,798	1,058	11,571	98,038	24,082	55,451	3,686	14,819
20-68	201,085	101,330	34,491	53,921	1,168	11,750	99,756	24,191	56,380	4,054	15,131
20-69	204,178	102,788	34,612	54,979	1,281	11,915	101,390	24,282	57,250	4,426	15,432
66+	45,587	19,608	1,214	13,839	2,639	1,917	25,979	1,317	10,531	10,071	4,061
67+	41,975	17,871	1,033	12,591	2,547	1,701	24,104	1,179	9,456	9,773	3,696
68+	38,535	16,225	871	11,403	2,453	1,499	22,310	1,051	8,448	9,464	3,346
69+	35,264	14,671	727	10,280	2,343	1,320	20,593	943	7,519	9,096	3,034
70+	32,171	13,213	606	9,222	2,230	1,155	18,958	852	6,649	8,725	2,733
Total	323,051	160,343	79,446	64,313	3,511	13,073	162,708	67,059	64,313	13,150	18,185
2040:											
0-4	24,804	12,693	12,693	0	0	0	12,111	12,111	0	0	0
5-9	24,215	12,388	12,388	0	0	0	11,827	11,827	0	0	0
10-14	23,719	12,132	12,132	0	0	0	11,587	11,586	1	0	0
15-19	23,568	12,046	11,913	129	0	4	11,522	11,024	475	0	24
20-24	23,785	12,160	10,086	1,886	1	187	11,626	8,158	3,095	5	367
25-29	23,831	12,196	7,119	4,361	3	713	11,635	5,230	5,412	18	974
30-34	23,014	11,772	5,024	5,577	7	1,163	11,242	3,519	6,301	38	1,384
35-39	22,149	11,307	3,900	6,045	13	1,349	10,842	2,657	6,531	66	1,588
40-44	21,784	11,091	3,358	6,226	25	1,481	10,694	2,251	6,569	117	1,756
45-49	21,902	11,112	3,105	6,388	48	1,571	10,790	2,101	6,581	206	1,902
50-54	21,483	10,846	2,815	6,430	90	1,512	10,637	1,953	6,397	356	1,931
55-59	20,195	10,112	2,378	6,233	155	1,346	10,083	1,683	5,958	598	1,844
60-64	17,809	8,816	1,817	5,665	243	1,091	8,993	1,260	5,195	924	1,616
65-69	16,492	8,008	1,502	5,161	401	944	8,483	1,002	4,551	1,429	1,501
70-74	15,147	7,086	1,160	4,507	613	806	8,061	858	3,760	2,057	1,385
75-79	13,861	6,076	846	3,757	836	637	7,785	798	2,893	2,778	1,317
80-84	10,241	4,047	348	2,488	845	366	6,194	519	1,720	2,950	1,005
85-89	5,763	1,941	84	1,117	591	149	3,822	231	705	2,295	591
90-94	2,472	685	12	331	291	50	1,787	74	191	1,248	275
95+	828	188	1	64	110	12	640	16	31	494	100
0-19	96,306	49,259	49,126	129	0	4	47,047	46,548	475	0	24
20-64	195,953	99,412	39,601	48,812	586	10,413	96,541	28,812	52,040	2,328	13,361
65+	64,803	28,030	3,954	17,424	3,687	2,965	36,773	3,498	13,850	13,251	6,175
20-65	199,228	101,018	39,906	49,860	649	10,604	98,210	29,014	52,978	2,561	13,656
20-66	202,442	102,588	40,197	50,884	718	10,789	99,855	29,206	53,889	2,814	13,946
20-67	205,697	104,168	40,491	51,907	797	10,974	101,528	29,399	54,793	3,094	14,242
20-68	209,069	105,798	40,800	52,945	886	11,166	103,271	29,606	55,702	3,411	14,552
20-69	212,445	107,420	41,104	53,973	986	11,357	105,024	29,814	56,591	3,757	14,863
66+	61,529	26,424	3,649	16,376	3,624	2,774	35,105	3,295	12,911	13,018	5,879
67+	58,314	24,855	3,358	15,352	3,555	2,590	33,460	3,104	12,000	12,766	5,590
68+	55,060	23,274	3,065	14,329	3,476	2,404	31,786	2,910	11,097	12,485	5,294
69+	51,688	21,644	2,756	13,290	3,386	2,212	30,043	2,703	10,187	12,168	4,984
70+	48,312	20,022	2,452	12,263	3,286	2,021	28,290	2,496	9,299	11,822	4,673
Total	357,063	176,701	92,681	66,365	4,273	13,382	180,361	78,857	66,365	15,580	19,560

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	27,295	13,969	13,969	0	0	0	13,326	13,326	0	0	0
5-9	26,911	13,768	13,768	0	0	0	13,143	13,143	0	0	0
10-14	26,624	13,619	13,619	0	0	0	13,005	13,004	1	0	0
15-19	26,329	13,459	13,311	143	0	4	12,870	12,319	525	0	26
20-24	26,046	13,315	11,046	2,064	1	204	12,731	8,946	3,379	6	400
25-29	25,758	13,180	7,680	4,725	4	772	12,578	5,616	5,887	19	1,056
30-34	25,379	12,977	5,548	6,137	8	1,284	12,402	3,849	6,983	40	1,530
35-39	25,113	12,813	4,449	6,816	14	1,533	12,299	3,032	7,389	72	1,807
40-44	24,872	12,657	3,850	7,084	27	1,696	12,214	2,629	7,444	126	2,015
45-49	24,199	12,279	3,402	7,094	51	1,733	11,920	2,362	7,241	217	2,099
50-54	22,720	11,481	2,960	6,861	90	1,569	11,239	2,090	6,791	360	1,998
55-59	21,184	10,625	2,585	6,538	153	1,349	10,560	1,859	6,271	595	1,836
60-64	19,918	9,872	2,306	6,183	249	1,134	10,046	1,703	5,701	952	1,690
65-69	18,621	9,069	2,049	5,665	400	956	9,552	1,604	4,936	1,441	1,571
70-74	16,352	7,717	1,632	4,754	574	757	8,635	1,415	3,854	1,967	1,400
75-79	13,069	5,814	1,053	3,542	692	527	7,255	1,100	2,617	2,382	1,156
80-84	9,028	3,644	486	2,194	668	296	5,384	691	1,449	2,437	808
85-89	5,707	1,979	178	1,096	549	156	3,729	385	663	2,138	542
90-94	3,016	868	48	401	347	72	2,148	178	226	1,421	323
95+	1,557	367	11	116	209	32	1,190	65	57	849	219
0-19	107,158	54,814	54,667	144	0	4	52,344	51,792	526	0	26
20-64	215,188	109,201	43,827	53,503	596	11,275	105,987	32,085	57,086	2,386	14,430
65+	67,350	29,458	5,456	17,767	3,439	2,795	37,892	5,437	13,803	12,635	6,019
20-65	219,029	111,087	44,259	54,686	663	11,480	107,942	32,413	58,143	2,632	14,755
20-66	222,819	112,941	44,681	55,847	735	11,678	109,878	32,738	59,168	2,898	15,074
20-67	226,551	114,760	45,092	56,984	815	11,869	111,791	33,059	60,158	3,185	15,389
20-68	230,218	116,538	45,491	58,092	902	12,053	113,680	33,377	61,110	3,495	15,698
20-69	233,809	118,270	45,876	59,168	997	12,230	115,539	33,689	62,022	3,827	16,001
66+	63,509	27,571	5,024	16,584	3,373	2,590	35,937	5,108	12,745	12,389	5,695
67+	59,719	25,718	4,602	15,423	3,300	2,392	34,002	4,783	11,720	12,123	5,375
68+	55,987	23,899	4,191	14,287	3,220	2,201	32,088	4,462	10,730	11,836	5,060
69+	52,321	22,121	3,792	13,179	3,133	2,017	30,200	4,145	9,778	11,526	4,751
70+	48,729	20,388	3,407	12,102	3,039	1,840	28,341	3,832	8,867	11,193	4,448
Total	389,697	193,473	103,950	71,414	4,036	14,074	196,223	89,313	71,414	15,021	20,475
2080:											
0-4	30,167	15,439	15,439	0	0	0	14,728	14,728	0	0	0
5-9	29,791	15,243	15,243	0	0	0	14,548	14,548	0	0	0
10-14	29,356	15,018	15,018	0	0	0	14,338	14,337	1	0	0
15-19	28,854	14,751	14,589	157	0	5	14,103	13,499	575	0	29
20-24	28,527	14,584	12,096	2,263	1	224	13,943	9,787	3,711	6	439
25-29	28,435	14,547	8,477	5,214	4	853	13,888	6,192	6,508	21	1,167
30-34	28,253	14,442	6,181	6,823	8	1,430	13,811	4,304	7,759	43	1,705
35-39	27,839	14,201	4,928	7,557	15	1,700	13,638	3,388	8,170	76	2,004
40-44	27,104	13,793	4,173	7,745	29	1,846	13,311	2,863	8,123	132	2,193
45-49	26,100	13,247	3,649	7,679	53	1,866	12,854	2,508	7,863	224	2,258
50-54	25,033	12,653	3,281	7,542	96	1,734	12,379	2,279	7,524	379	2,198
55-59	24,031	12,060	2,977	7,372	167	1,545	11,971	2,126	7,117	640	2,088
60-64	22,813	11,324	2,675	7,060	274	1,315	11,489	1,997	6,510	1,034	1,949
65-69	20,719	10,121	2,276	6,347	428	1,070	10,598	1,814	5,500	1,536	1,749
70-74	17,481	8,290	1,743	5,153	595	800	9,191	1,524	4,161	2,042	1,463
75-79	13,934	6,245	1,175	3,812	713	545	7,688	1,227	2,829	2,463	1,169
80-84	10,323	4,205	648	2,497	734	327	6,118	946	1,668	2,636	869
85-89	6,745	2,379	273	1,309	619	178	4,366	646	796	2,324	600
90-94	3,495	1,032	79	487	385	81	2,462	320	272	1,514	357
95+	1,663	404	17	137	217	33	1,260	106	65	866	223
0-19	118,168	60,451	60,289	157	0	5	57,717	57,112	576	0	29
20-64	238,135	120,850	48,437	59,254	646	12,513	117,285	35,444	63,285	2,556	16,000
65+	74,360	32,677	6,210	19,742	3,691	3,033	41,684	6,581	15,292	13,381	6,429
20-65	242,491	122,994	48,930	60,598	718	12,748	119,498	35,826	64,481	2,821	16,370
20-66	246,760	125,087	49,407	61,910	797	12,973	121,673	36,200	65,634	3,107	16,731
20-67	250,914	127,117	49,863	63,184	883	13,187	123,797	36,564	66,737	3,414	17,082
20-68	254,947	129,079	50,298	64,416	975	13,391	125,868	36,917	67,788	3,742	17,421
20-69	258,854	130,971	50,713	65,601	1,074	13,583	127,883	37,258	68,785	4,092	17,749
66+	70,004	30,533	5,717	18,398	3,619	2,798	39,471	6,200	14,096	13,116	6,059
67+	65,736	28,439	5,241	17,085	3,540	2,573	37,296	5,825	12,943	12,830	5,698
68+	61,581	26,409	4,784	15,812	3,455	2,359	35,172	5,462	11,840	12,523	5,347
69+	57,548	24,447	4,349	14,580	3,362	2,155	33,101	5,109	10,789	12,195	5,008
70+	53,641	22,556	3,935	13,395	3,263	1,964	31,086	4,768	9,792	11,845	4,681
Total	430,663	213,977	114,936	79,153	4,337	15,551	216,686	99,137	79,153	15,937	22,458

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	19,506	9,978	9,978	0	0	0	9,528	9,528	0	0	0
5-9	19,048	9,740	9,740	0	0	0	9,307	9,307	0	0	0
10-14	17,633	9,022	9,022	0	0	0	8,611	8,610	1	0	0
15-19	18,038	9,219	9,058	157	0	5	8,819	8,228	564	0	26
20-24	19,433	9,897	7,576	2,148	2	171	9,536	5,773	3,435	8	321
25-29	22,542	11,475	5,424	5,366	8	677	11,067	3,504	6,622	34	907
30-34	22,962	11,677	3,132	7,437	13	1,094	11,285	1,905	7,994	82	1,305
35-39	20,728	10,467	1,716	7,571	22	1,158	10,260	1,017	7,666	136	1,441
40-44	17,982	9,005	876	6,933	41	1,154	8,977	617	6,751	207	1,402
45-49	14,310	7,119	480	5,720	68	851	7,191	392	5,402	297	1,100
50-54	11,842	5,846	366	4,790	98	592	5,996	260	4,493	410	833
55-59	10,963	5,331	326	4,391	146	467	5,633	225	4,073	680	655
60-64	11,020	5,222	318	4,285	206	413	5,797	240	3,909	1,089	558
65-69	10,221	4,688	267	3,773	329	319	5,533	242	3,249	1,615	427
70-74	8,123	3,522	176	2,752	401	194	4,601	218	2,219	1,893	271
75-79	6,141	2,426	104	1,793	431	98	3,715	200	1,279	2,076	160
80-84	3,960	1,378	51	945	342	40	2,582	157	548	1,802	75
85-89	2,109	620	21	354	224	21	1,489	90	229	1,130	40
90-94	857	213	7	91	104	11	644	37	76	513	18
95+	278	61	2	16	40	4	217	11	15	184	7
0-19	74,225	37,960	37,798	157	0	5	36,265	35,674	564	0	26
20-64	151,782	76,038	20,213	48,642	605	6,579	75,743	13,934	50,345	2,942	8,522
65+	31,689	12,909	627	9,725	1,871	687	18,780	955	7,614	9,213	998
20-65	153,931	77,035	20,273	49,454	656	6,653	76,896	13,982	51,073	3,219	8,621
20-66	156,012	77,994	20,329	50,231	713	6,721	78,018	14,031	51,759	3,516	8,712
20-67	158,060	78,933	20,383	50,988	777	6,786	79,127	14,079	52,414	3,836	8,798
20-68	160,075	79,854	20,433	51,722	854	6,844	80,221	14,128	53,024	4,192	8,877
20-69	162,002	80,726	20,480	52,415	934	6,898	81,276	14,176	53,594	4,557	8,949
66+	29,540	11,913	567	8,913	1,820	613	17,627	906	6,886	8,935	900
67+	27,458	10,954	511	8,136	1,763	544	16,505	858	6,199	8,638	808
68+	25,411	10,015	457	7,379	1,699	480	15,396	810	5,545	8,318	723
69+	23,395	9,094	407	6,644	1,622	421	14,301	761	4,934	7,962	644
70+	21,468	8,221	360	5,952	1,542	367	13,247	713	4,365	7,598	571
Total	257,695	126,907	58,638	58,523	2,476	7,270	130,788	50,563	58,523	12,155	9,547
1995:											
0-4	19,068	9,756	9,756	0	0	0	9,312	9,312	0	0	0
5-9	19,720	10,084	10,084	0	0	0	9,636	9,636	0	0	0
10-14	19,244	9,839	9,839	0	0	0	9,405	9,405	1	0	0
15-19	17,837	9,118	8,978	136	0	3	8,719	8,196	502	0	21
20-24	18,371	9,385	7,182	2,032	1	170	8,985	5,297	3,359	8	322
25-29	19,853	10,109	4,710	4,784	5	610	9,744	3,018	5,907	29	789
30-34	22,764	11,560	3,604	6,854	13	1,089	11,204	2,174	7,684	73	1,273
35-39	22,983	11,634	2,352	7,952	24	1,307	11,349	1,442	8,205	137	1,565
40-44	20,642	10,371	1,414	7,619	40	1,299	10,270	865	7,526	215	1,664
45-49	17,814	8,874	763	6,832	68	1,210	8,941	557	6,519	316	1,549
50-54	14,059	6,946	427	5,588	103	827	7,113	367	5,157	440	1,150
55-59	11,489	5,611	321	4,613	144	533	5,878	247	4,196	610	825
60-64	10,406	4,975	280	4,093	212	391	5,432	211	3,649	947	624
65-69	10,126	4,681	264	3,772	311	334	5,446	221	3,273	1,430	522
70-74	8,970	3,947	206	3,058	433	249	5,023	216	2,487	1,933	387
75-79	6,668	2,697	114	2,000	448	135	3,971	183	1,495	2,062	232
80-84	4,514	1,603	50	1,103	391	59	2,911	150	718	1,922	120
85-89	2,447	735	18	439	256	22	1,713	96	241	1,326	49
90-94	1,007	250	5	113	123	9	756	39	75	620	22
95+	338	73	1	25	42	4	265	11	20	225	9
0-19	75,870	38,797	38,657	136	0	3	37,073	36,549	503	0	21
20-64	158,381	79,465	21,053	50,366	610	7,435	78,916	14,178	52,202	2,776	9,760
65+	34,070	13,985	658	10,511	2,004	812	20,085	916	8,308	9,518	1,343
20-65	160,461	80,445	21,109	51,164	665	7,507	80,015	14,223	52,895	3,025	9,873
20-66	162,530	81,412	21,163	51,949	722	7,578	81,118	14,267	53,577	3,291	9,983
20-67	164,572	82,356	21,217	52,712	782	7,646	82,216	14,311	54,243	3,573	10,088
20-68	166,553	83,261	21,268	53,435	850	7,709	83,292	14,355	54,869	3,880	10,188
20-69	168,508	84,146	21,317	54,138	920	7,770	84,362	14,399	55,475	4,206	10,283
66+	31,991	13,005	603	9,713	1,949	740	18,986	871	7,616	9,268	1,230
67+	29,921	12,038	548	8,929	1,892	670	17,883	826	6,934	9,003	1,121
68+	27,879	11,094	495	8,166	1,832	602	16,785	782	6,267	8,721	1,015
69+	25,898	10,189	444	7,442	1,764	539	15,709	738	5,641	8,413	916
70+	23,944	9,304	394	6,739	1,693	478	14,639	695	5,036	8,088	821
Total	268,321	132,247	60,368	61,014	2,614	8,251	136,074	51,642	61,014	12,294	11,125

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	18,178	9,302	9,302	0	0	0	8,876	8,876	0	0	0
5-9	19,287	9,864	9,864	0	0	0	9,422	9,422	0	0	0
10-14	19,918	10,183	10,183	0	0	0	9,735	9,734	1	0	0
15-19	19,448	9,935	9,781	150	0	4	9,513	8,954	536	0	23
20-24	18,178	9,290	7,143	1,984	1	162	8,888	5,371	3,208	7	302
25-29	18,798	9,602	4,495	4,514	4	588	9,196	2,744	5,662	29	761
30-34	20,086	10,200	3,104	6,119	11	966	9,886	1,804	6,932	66	1,084
35-39	22,768	11,500	2,720	7,494	23	1,263	11,268	1,619	8,038	131	1,479
40-44	22,863	11,504	1,948	8,084	41	1,431	11,359	1,218	8,153	222	1,766
45-49	20,443	10,212	1,231	7,574	68	1,339	10,231	778	7,330	330	1,792
50-54	17,506	8,660	685	6,724	110	1,140	8,846	522	6,262	476	1,586
55-59	13,660	6,682	378	5,419	155	730	6,979	347	4,854	651	1,126
60-64	10,944	5,266	278	4,342	205	441	5,679	232	3,793	874	779
65-69	9,601	4,490	234	3,639	300	318	5,111	195	3,076	1,262	577
70-74	8,927	3,973	206	3,086	419	261	4,954	198	2,518	1,770	468
75-79	7,409	3,048	136	2,245	494	173	4,360	183	1,694	2,155	329
80-84	4,954	1,802	56	1,247	420	79	3,152	140	849	1,988	175
85-89	2,840	867	18	529	289	31	1,973	94	324	1,474	80
90-94	1,201	303	4	148	140	10	898	44	79	748	28
95+	413	88	1	28	55	4	325	12	18	283	12
0-19	76,831	39,285	39,131	150	0	4	37,546	36,986	537	0	23
20-64	165,246	82,916	21,982	52,255	617	8,061	82,330	14,635	54,232	2,787	10,676
65+	35,344	14,571	655	10,922	2,118	877	20,773	865	8,558	9,681	1,669
20-65	167,228	83,856	22,031	53,027	668	8,130	83,372	14,674	54,899	2,993	10,806
20-66	169,137	84,756	22,078	53,763	720	8,195	84,381	14,711	55,532	3,214	10,925
20-67	171,033	85,642	22,124	54,484	776	8,259	85,391	14,748	56,149	3,457	11,037
20-68	172,943	86,527	22,170	55,194	844	8,319	86,416	14,789	56,735	3,745	11,147
20-69	174,847	87,406	22,216	55,894	917	8,378	87,441	14,830	57,308	4,049	11,253
66+	33,363	13,631	606	10,150	2,067	808	19,732	826	7,891	9,475	1,539
67+	31,453	12,731	560	9,414	2,015	743	18,722	789	7,259	9,254	1,421
68+	29,557	11,845	514	8,693	1,959	679	17,712	752	6,641	9,011	1,308
69+	27,648	10,960	467	7,983	1,891	619	16,688	711	6,055	8,723	1,199
70+	25,743	10,081	421	7,283	1,818	559	15,662	670	5,482	8,419	1,092
Total	277,421	136,772	61,768	63,327	2,735	8,942	140,650	52,486	63,327	12,468	12,368
2020:											
0-4	18,646	9,543	9,543	0	0	0	9,103	9,103	0	0	0
5-9	18,873	9,656	9,656	0	0	0	9,217	9,217	0	0	0
10-14	18,708	9,570	9,570	0	0	0	9,138	9,137	1	0	0
15-19	18,579	9,497	9,348	146	0	4	9,082	8,525	534	0	22
20-24	19,162	9,794	7,522	2,099	1	173	9,368	5,598	3,438	6	326
25-29	20,480	10,467	4,929	4,897	4	637	10,013	3,096	6,068	24	824
30-34	21,166	10,794	3,322	6,437	9	1,026	10,372	1,972	7,192	54	1,154
35-39	20,572	10,450	2,386	6,915	15	1,133	10,122	1,403	7,340	94	1,285
40-44	18,956	9,592	1,771	6,673	26	1,122	9,364	996	6,932	147	1,288
45-49	18,984	9,550	1,620	6,711	50	1,170	9,433	855	6,958	248	1,373
50-54	19,669	9,795	1,544	6,990	97	1,164	9,873	885	7,114	423	1,451
55-59	21,584	10,644	1,632	7,645	190	1,176	10,940	1,052	7,464	758	1,666
60-64	20,780	10,139	1,243	7,561	314	1,021	10,641	896	6,874	1,171	1,700
65-69	17,388	8,317	759	6,367	444	747	9,071	592	5,393	1,592	1,494
70-74	13,459	6,212	375	4,754	557	525	7,248	383	3,735	1,960	1,170
75-79	9,026	3,909	153	2,945	543	268	5,117	234	2,106	2,053	724
80-84	5,729	2,235	65	1,596	456	117	3,495	133	1,031	1,925	406
85-89	3,505	1,164	24	734	351	56	2,341	79	436	1,603	223
90-94	1,900	520	7	264	222	26	1,381	42	151	1,069	118
95+	878	197	2	68	117	10	681	16	37	574	55
0-19	74,806	38,266	38,116	146	0	4	36,540	35,982	535	0	22
20-64	181,352	91,226	25,968	55,929	706	8,623	90,126	16,755	59,380	2,925	11,067
65+	51,886	22,554	1,386	16,729	2,690	1,749	29,332	1,478	12,889	10,774	4,190
20-65	185,150	93,060	26,152	57,327	786	8,794	92,090	16,895	60,598	3,208	11,389
20-66	188,795	94,812	26,321	58,668	868	8,955	93,983	17,028	61,751	3,499	11,705
20-67	192,274	96,477	26,474	59,945	951	9,106	95,797	17,152	62,832	3,800	12,013
20-68	195,593	98,056	26,611	61,154	1,049	9,242	97,537	17,257	63,834	4,156	12,290
20-69	198,740	99,544	26,727	62,296	1,151	9,370	99,197	17,347	64,773	4,516	12,560
66+	48,088	20,720	1,202	15,331	2,611	1,577	27,368	1,338	11,671	10,492	3,868
67+	44,444	18,969	1,033	13,990	2,529	1,417	25,475	1,205	10,518	10,201	3,551
68+	40,964	17,303	880	12,713	2,445	1,265	23,661	1,082	9,437	9,899	3,243
69+	37,645	15,724	743	11,504	2,347	1,130	21,921	976	8,435	9,543	2,967
70+	34,498	14,237	627	10,362	2,246	1,002	20,261	886	7,496	9,183	2,696
Total	308,044	152,046	65,471	72,804	3,396	10,375	155,998	54,216	72,804	13,700	15,279

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	18,319	9,376	9,376	0	0	0	8,943	8,943	0	0	0
5-9	18,417	9,424	9,424	0	0	0	8,994	8,994	0	0	0
10-14	18,599	9,515	9,515	0	0	0	9,084	9,083	1	0	0
15-19	19,019	9,724	9,570	150	0	4	9,295	8,725	547	0	23
20-24	19,639	10,041	7,718	2,145	1	177	9,598	5,781	3,480	6	331
25-29	20,087	10,274	4,826	4,820	3	624	9,814	3,065	5,923	23	803
30-34	19,997	10,211	3,120	6,114	8	969	9,787	1,797	6,861	49	1,080
35-39	19,751	10,048	2,310	6,632	14	1,091	9,703	1,256	7,148	85	1,214
40-44	19,954	10,106	1,964	6,908	26	1,207	9,848	1,036	7,308	144	1,360
45-49	20,680	10,425	1,834	7,234	50	1,308	10,255	991	7,502	243	1,518
50-54	20,810	10,433	1,688	7,398	91	1,256	10,377	985	7,425	404	1,564
55-59	19,693	9,799	1,438	7,146	154	1,062	9,893	898	6,898	648	1,449
60-64	17,479	8,612	1,136	6,440	234	801	8,867	716	5,973	965	1,214
65-69	16,406	7,943	1,027	5,869	383	664	8,463	641	5,244	1,470	1,107
70-74	15,422	7,216	885	5,182	586	563	8,206	642	4,401	2,119	1,044
75-79	14,650	6,473	741	4,446	817	470	8,177	703	3,495	2,907	1,073
80-84	11,393	4,601	354	3,082	864	301	6,792	520	2,184	3,175	913
85-89	6,915	2,432	104	1,519	663	146	4,482	260	981	2,628	613
90-94	3,316	983	20	524	379	61	2,333	97	307	1,598	330
95+	1,385	340	3	130	187	20	1,045	27	63	804	151
0-19	74,355	38,039	37,885	150	0	4	36,315	35,744	548	0	23
20-64	178,091	89,949	26,033	54,839	581	8,496	88,142	16,524	58,517	2,567	10,534
65+	69,487	29,989	3,133	20,751	3,879	2,226	39,498	2,892	16,676	14,700	5,231
20-65	181,324	91,529	26,231	56,026	641	8,630	89,795	16,645	59,593	2,807	10,750
20-66	184,506	93,077	26,423	57,186	707	8,760	91,429	16,762	60,639	3,066	10,962
20-67	187,740	94,643	26,623	58,348	782	8,890	93,097	16,885	61,679	3,354	11,179
20-68	191,109	96,267	26,841	59,533	868	9,025	94,842	17,023	62,730	3,681	11,409
20-69	194,497	97,892	27,060	60,708	964	9,160	96,605	17,166	63,761	4,038	11,640
66+	66,254	28,409	2,935	19,564	3,819	2,091	37,845	2,771	15,599	14,461	5,014
67+	63,072	26,861	2,743	18,404	3,753	1,961	36,211	2,654	14,554	14,202	4,803
68+	59,838	25,295	2,543	17,242	3,678	1,831	34,543	2,531	13,514	13,913	4,586
69+	56,469	23,670	2,325	16,057	3,592	1,696	32,798	2,393	12,462	13,587	4,356
70+	53,081	22,046	2,106	14,883	3,496	1,561	31,035	2,250	11,432	13,230	4,124
Total	321,933	157,977	67,052	75,740	4,460	10,725	163,956	55,160	75,740	17,268	15,787
2060:											
0-4	18,167	9,299	9,299	0	0	0	8,868	8,868	0	0	0
5-9	18,433	9,432	9,432	0	0	0	9,001	9,001	0	0	0
10-14	18,736	9,586	9,586	0	0	0	9,149	9,149	1	0	0
15-19	19,022	9,726	9,574	149	0	4	9,295	8,729	542	0	23
20-24	19,326	9,883	7,599	2,110	1	174	9,442	5,690	3,421	6	325
25-29	19,650	10,054	4,721	4,719	3	611	9,596	2,967	5,822	21	785
30-34	19,908	10,170	3,123	6,073	7	967	9,738	1,763	6,855	47	1,074
35-39	20,203	10,282	2,395	6,751	13	1,123	9,921	1,298	7,293	83	1,247
40-44	20,446	10,362	2,028	7,065	25	1,244	10,084	1,098	7,443	139	1,405
45-49	20,339	10,267	1,781	7,158	45	1,283	10,072	979	7,379	224	1,489
50-54	19,750	9,923	1,579	7,079	80	1,185	9,827	884	7,128	359	1,456
55-59	19,015	9,490	1,408	6,911	139	1,032	9,525	798	6,785	583	1,360
60-64	18,533	9,160	1,298	6,743	233	886	9,372	751	6,400	940	1,281
65-69	18,108	8,820	1,207	6,444	393	777	9,288	752	5,818	1,473	1,245
70-74	16,655	7,895	1,009	5,662	586	637	8,761	729	4,781	2,095	1,156
75-79	13,816	6,225	685	4,373	719	448	7,591	619	3,387	2,616	969
80-84	10,074	4,178	352	2,844	721	261	5,897	433	1,990	2,778	695
85-89	6,973	2,539	162	1,574	650	153	4,433	294	1,014	2,627	498
90-94	4,228	1,312	60	686	482	84	2,916	181	411	1,987	337
95+	2,937	753	22	272	408	52	2,184	107	142	1,614	321
0-19	74,357	38,044	37,891	149	0	4	36,313	35,746	543	0	23
20-64	177,169	89,592	25,932	54,609	547	8,504	87,577	16,229	58,525	2,402	10,421
65+	72,791	31,722	3,498	21,855	3,958	2,410	41,069	3,115	17,544	15,190	5,221
20-65	180,834	91,390	26,182	55,930	610	8,668	89,444	16,378	59,746	2,648	10,673
20-66	184,483	93,174	26,428	57,238	681	8,828	91,309	16,527	60,941	2,917	10,923
20-67	188,111	94,942	26,670	58,530	759	8,983	93,169	16,678	62,109	3,210	11,172
20-68	191,712	96,690	26,907	59,803	845	9,134	95,022	16,829	63,244	3,529	11,420
20-69	195,277	98,412	27,139	61,053	939	9,281	96,865	16,981	64,344	3,874	11,666
66+	69,126	29,924	3,249	20,534	3,895	2,247	39,202	2,966	16,324	14,944	4,969
67+	65,477	28,140	3,003	19,226	3,824	2,087	37,337	2,816	15,128	14,675	4,719
68+	61,849	26,371	2,761	17,934	3,746	1,931	35,477	2,666	13,961	14,381	4,469
69+	58,248	24,624	2,523	16,661	3,660	1,780	33,624	2,514	12,826	14,062	4,222
70+	54,683	22,902	2,291	15,411	3,565	1,634	31,781	2,362	11,726	13,717	3,976
Total	324,317	159,358	67,321	76,613	4,505	10,919	164,959	55,090	76,613	17,592	15,665

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	18,168	9,300	9,300	0	0	0	8,868	8,868	0	0	0
5-9	18,439	9,436	9,436	0	0	0	9,003	9,003	0	0	0
10-14	18,657	9,547	9,547	0	0	0	9,110	9,110	1	0	0
15-19	18,850	9,640	9,488	148	0	4	9,210	8,649	538	0	23
20-24	19,184	9,813	7,544	2,096	1	173	9,371	5,637	3,405	5	323
25-29	19,677	10,071	4,735	4,721	3	612	9,606	2,965	5,835	20	787
30-34	20,059	10,250	3,156	6,112	7	975	9,808	1,786	6,895	45	1,083
35-39	20,225	10,299	2,398	6,763	13	1,125	9,926	1,310	7,289	79	1,249
40-44	20,164	10,227	1,993	6,986	23	1,225	9,937	1,076	7,351	129	1,380
45-49	19,947	10,079	1,746	7,034	41	1,258	9,868	939	7,273	206	1,450
50-54	19,714	9,918	1,598	7,054	75	1,191	9,797	867	7,152	333	1,445
55-59	19,526	9,761	1,484	7,068	132	1,077	9,765	830	6,980	553	1,402
60-64	19,125	9,479	1,366	6,959	223	932	9,646	803	6,612	895	1,336
65-69	18,032	8,823	1,198	6,482	362	780	9,209	753	5,850	1,369	1,238
70-74	16,105	7,688	972	5,565	531	620	8,417	666	4,734	1,922	1,094
75-79	13,718	6,250	706	4,406	678	460	7,468	564	3,493	2,475	935
80-84	11,115	4,685	440	3,166	765	313	6,431	470	2,300	2,893	768
85-89	8,253	3,094	226	1,921	745	203	5,159	370	1,284	2,900	606
90-94	5,090	1,650	87	883	568	112	3,440	232	541	2,249	418
95+	3,404	913	28	350	471	64	2,492	120	181	1,845	346
0-19	74,114	37,923	37,771	148	0	4	36,191	35,629	539	0	23
20-64	177,622	89,898	26,019	54,792	517	8,570	87,724	16,212	58,791	2,266	10,454
65+	75,718	33,103	3,657	22,772	4,121	2,553	42,615	3,175	18,383	15,653	5,405
20-65	181,344	91,731	26,274	56,142	577	8,738	89,613	16,368	60,036	2,498	10,711
20-66	185,015	93,533	26,522	57,468	642	8,901	91,482	16,521	61,246	2,750	10,964
20-67	188,628	95,302	26,762	58,768	715	9,057	93,327	16,672	62,419	3,023	11,212
20-68	192,177	97,033	26,994	60,039	793	9,207	95,145	16,820	63,552	3,318	11,455
20-69	195,654	98,721	27,217	61,275	879	9,350	96,932	16,965	64,641	3,635	11,692
66+	71,996	31,270	3,402	21,423	4,061	2,384	40,726	3,019	17,138	15,421	5,148
67+	68,325	29,468	3,154	20,097	3,995	2,222	38,857	2,866	15,927	15,169	4,895
68+	64,712	27,699	2,914	18,796	3,923	2,065	37,012	2,715	14,754	14,896	4,647
69+	61,163	25,969	2,683	17,526	3,844	1,916	35,194	2,567	13,622	14,601	4,405
70+	57,686	24,280	2,459	16,290	3,758	1,772	33,406	2,422	12,533	14,284	4,168
Total	327,454	160,924	67,448	77,712	4,638	11,126	166,530	55,017	77,712	17,919	15,882
Alternative III:											
1990:											
0-4	19,467	9,959	9,959	0	0	0	9,509	9,509	0	0	0
5-9	19,034	9,733	9,733	0	0	0	9,301	9,301	0	0	0
10-14	17,622	9,016	9,016	0	0	0	8,606	8,605	1	0	0
15-19	18,022	9,211	9,048	158	0	4	8,811	8,217	568	0	26
20-24	19,401	9,878	7,549	2,156	2	170	9,523	5,752	3,445	8	319
25-29	22,515	11,460	5,406	5,373	8	673	11,056	3,493	6,627	34	901
30-34	22,948	11,669	3,126	7,441	13	1,089	11,279	1,901	7,997	82	1,300
35-39	20,720	10,463	1,714	7,574	22	1,153	10,257	1,016	7,668	135	1,437
40-44	17,977	9,002	876	6,935	40	1,151	8,975	617	6,752	207	1,399
45-49	14,307	7,117	480	5,721	68	849	7,190	392	5,403	297	1,099
50-54	11,840	5,845	366	4,791	98	591	5,995	260	4,493	409	832
55-59	10,962	5,330	326	4,391	146	467	5,632	225	4,073	679	655
60-64	11,019	5,222	318	4,286	206	413	5,796	240	3,910	1,088	558
65-69	10,221	4,688	267	3,774	329	319	5,532	242	3,250	1,614	427
70-74	8,124	3,523	176	2,753	400	194	4,601	218	2,220	1,892	271
75-79	6,143	2,427	104	1,795	431	98	3,716	200	1,280	2,076	160
80-84	3,962	1,379	51	946	342	40	2,583	157	549	1,802	75
85-89	2,112	621	21	355	224	21	1,491	90	229	1,131	40
90-94	858	213	7	91	105	11	645	37	76	514	18
95+	279	61	2	16	40	4	217	11	15	184	7
0-19	74,146	37,919	37,756	158	0	4	36,227	35,631	569	0	26
20-64	151,688	75,986	20,160	48,667	603	6,555	75,702	13,896	50,368	2,939	8,500
65+	31,698	12,914	627	9,729	1,870	687	18,785	955	7,618	9,214	998
20-65	153,837	76,983	20,220	49,479	654	6,629	76,855	13,944	51,096	3,216	8,598
20-66	155,919	77,942	20,276	50,256	711	6,698	77,977	13,992	51,783	3,513	8,689
20-67	157,966	78,881	20,330	51,014	775	6,762	79,086	14,041	52,437	3,833	8,775
20-68	159,982	79,802	20,380	51,748	853	6,821	80,180	14,089	53,048	4,189	8,854
20-69	161,909	80,675	20,427	52,441	932	6,874	81,235	14,137	53,618	4,553	8,926
66+	29,549	11,917	567	8,918	1,820	612	17,632	906	6,890	8,936	900
67+	27,468	10,958	511	8,140	1,763	544	16,510	858	6,203	8,640	809
68+	25,420	10,019	457	7,383	1,699	479	15,401	810	5,549	8,320	723
69+	23,404	9,098	407	6,648	1,621	421	14,307	761	4,938	7,964	644
70+	21,477	8,225	361	5,955	1,542	367	13,252	713	4,368	7,599	571
Total	257,532	126,819	58,543	58,555	2,474	7,246	130,714	50,482	58,555	12,153	9,524

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	18,458	9,445	9,445	0	0	0	9,013	9,013	0	0	0
5-9	19,612	10,029	10,029	0	0	0	9,583	9,583	0	0	0
10-14	19,174	9,803	9,803	0	0	0	9,372	9,371	1	0	0
15-19	17,765	9,081	8,929	149	0	4	8,684	8,118	544	0	21
20-24	18,230	9,305	6,977	2,159	1	168	8,925	5,071	3,534	8	313
25-29	19,664	9,997	4,475	4,937	5	581	9,667	2,834	6,060	31	742
30-34	22,635	11,485	3,469	6,978	13	1,025	11,150	2,081	7,797	76	1,197
35-39	22,905	11,586	2,294	8,044	23	1,225	11,319	1,407	8,284	140	1,488
40-44	20,600	10,344	1,392	7,685	39	1,228	10,256	855	7,582	215	1,604
45-49	17,791	8,859	757	6,879	65	1,159	8,932	553	6,556	313	1,509
50-54	14,048	6,940	425	5,619	100	796	7,108	365	5,181	433	1,129
55-59	11,486	5,612	320	4,636	140	516	5,874	246	4,213	601	814
60-64	10,413	4,982	280	4,114	206	382	5,431	210	3,667	935	619
65-69	10,145	4,695	265	3,795	305	330	5,451	220	3,294	1,417	520
70-74	9,001	3,965	208	3,083	427	247	5,036	215	2,511	1,923	387
75-79	6,707	2,717	115	2,022	444	135	3,991	183	1,515	2,059	233
80-84	4,561	1,623	51	1,122	390	59	2,938	152	732	1,932	122
85-89	2,490	750	18	451	258	22	1,740	98	248	1,344	50
90-94	1,034	258	5	118	126	9	775	40	78	635	23
95+	351	76	1	26	44	4	275	11	21	233	9
0-19	75,010	38,358	38,205	149	0	4	36,652	36,085	545	0	21
20-64	157,773	79,110	20,389	51,050	591	7,080	78,663	13,623	52,873	2,753	9,414
65+	34,289	14,083	664	10,618	1,994	807	20,206	920	8,399	9,543	1,344
20-65	159,856	80,093	20,444	51,852	645	7,151	79,763	13,668	53,569	3,000	9,527
20-66	161,929	81,063	20,499	52,641	701	7,221	80,866	13,712	54,256	3,263	9,636
20-67	163,974	82,009	20,553	53,409	760	7,288	81,965	13,756	54,926	3,542	9,741
20-68	165,960	82,917	20,604	54,137	826	7,350	83,042	13,799	55,557	3,846	9,840
20-69	167,919	83,805	20,654	54,845	896	7,410	84,114	13,843	56,167	4,169	9,934
66+	32,207	13,100	608	9,816	1,940	736	19,106	875	7,703	9,297	1,232
67+	30,133	12,131	553	9,027	1,884	667	18,003	831	7,016	9,033	1,123
68+	28,088	11,184	500	8,259	1,825	600	16,904	786	6,346	8,754	1,018
69+	26,102	10,276	449	7,531	1,759	538	15,826	743	5,715	8,450	919
70+	24,143	9,388	399	6,823	1,689	477	14,755	700	5,104	8,127	824
Total	267,072	131,551	59,258	61,817	2,585	7,891	135,521	50,628	61,817	12,296	10,780
2000:											
0-4	16,906	8,652	8,652	0	0	0	8,254	8,254	0	0	0
5-9	18,609	9,519	9,519	0	0	0	9,091	9,091	0	0	0
10-14	19,754	10,100	10,100	0	0	0	9,655	9,653	1	0	0
15-19	19,319	9,869	9,687	178	0	4	9,450	8,799	627	0	24
20-24	17,982	9,182	6,761	2,258	1	163	8,800	4,908	3,589	9	294
25-29	18,493	9,421	3,975	4,894	5	548	9,071	2,300	6,051	36	684
30-34	19,763	10,006	2,720	6,421	13	853	9,757	1,523	7,215	81	937
35-39	22,517	11,336	2,472	7,751	24	1,089	11,181	1,464	8,274	153	1,291
40-44	22,701	11,384	1,824	8,285	40	1,235	11,317	1,154	8,339	242	1,583
45-49	20,357	10,144	1,181	7,727	63	1,173	10,213	757	7,464	338	1,654
50-54	17,467	8,627	670	6,838	101	1,018	8,840	516	6,355	471	1,499
55-59	13,655	6,680	374	5,499	144	663	6,976	344	4,915	634	1,082
60-64	10,962	5,281	277	4,405	192	408	5,680	230	3,843	849	758
65-69	9,645	4,521	235	3,700	285	302	5,124	194	3,129	1,233	567
70-74	9,006	4,019	209	3,153	404	254	4,987	197	2,579	1,745	465
75-79	7,519	3,105	140	2,311	482	172	4,413	184	1,752	2,146	331
80-84	5,080	1,859	59	1,301	418	81	3,221	143	892	2,007	179
85-89	2,964	913	19	565	295	33	2,051	98	348	1,521	84
90-94	1,283	328	5	163	149	11	955	47	87	792	30
95+	456	99	1	32	61	4	357	13	21	311	13
0-19	74,588	38,140	37,957	178	0	4	36,448	35,797	628	0	24
20-64	163,897	82,061	20,253	54,077	582	7,150	81,835	13,198	56,044	2,813	9,781
65+	35,953	14,844	668	11,226	2,094	856	21,109	876	8,809	9,755	1,668
20-65	165,885	83,007	20,302	54,861	630	7,215	82,878	13,236	56,721	3,013	9,908
20-66	167,801	83,912	20,348	55,608	679	7,276	83,889	13,273	57,364	3,228	10,025
20-67	169,706	84,804	20,395	56,341	732	7,336	84,902	13,309	57,992	3,466	10,135
20-68	171,626	85,696	20,441	57,064	797	7,394	85,930	13,350	58,589	3,747	10,243
20-69	173,542	86,583	20,488	57,777	867	7,451	86,959	13,391	59,174	4,046	10,348
66+	33,965	13,899	619	10,442	2,046	791	20,066	838	8,132	9,555	1,541
67+	32,048	12,994	572	9,695	1,997	729	19,055	801	7,490	9,339	1,425
68+	30,144	12,102	526	8,962	1,944	669	18,042	765	6,862	9,102	1,314
69+	28,224	11,210	480	8,239	1,880	611	17,014	723	6,265	8,820	1,206
70+	26,308	10,323	433	7,526	1,810	554	15,985	682	5,680	8,522	1,101
Total	274,438	135,045	58,878	65,481	2,676	8,010	139,393	49,870	65,481	12,568	11,473

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	14,977	7,666	7,666	0	0	0	7,311	7,311	0	0	0
5-9	15,566	7,965	7,965	0	0	0	7,601	7,601	0	0	0
10-14	16,062	8,217	8,217	0	0	0	7,845	7,843	1	0	0
15-19	16,514	8,443	8,244	196	0	4	8,071	7,338	710	0	24
20-24	17,600	8,993	6,104	2,714	1	174	8,607	3,939	4,361	7	300
25-29	19,438	9,924	3,312	6,036	4	571	9,514	1,532	7,310	26	645
30-34	20,608	10,497	1,953	7,690	10	845	10,111	822	8,405	58	826
35-39	20,053	10,170	1,323	7,976	17	855	9,883	581	8,328	100	874
40-44	18,420	9,286	992	7,474	26	794	9,134	440	7,688	158	848
45-49	18,389	9,185	986	7,368	46	784	9,205	442	7,606	266	891
50-54	19,093	9,400	1,032	7,562	85	722	9,693	564	7,732	447	950
55-59	21,203	10,326	1,228	8,252	157	690	10,876	827	8,109	783	1,157
60-64	20,690	10,009	1,027	8,145	251	586	10,681	796	7,438	1,168	1,279
65-69	17,567	8,376	676	6,891	360	448	9,191	563	5,854	1,550	1,225
70-74	13,840	6,409	361	5,218	475	356	7,432	380	4,113	1,903	1,036
75-79	9,482	4,156	158	3,308	486	204	5,326	238	2,386	2,020	682
80-84	6,205	2,479	73	1,865	438	103	3,726	139	1,223	1,954	409
85-89	3,981	1,378	31	919	372	57	2,602	87	556	1,719	241
90-94	2,312	672	11	366	264	31	1,640	51	211	1,240	138
95+	1,222	295	3	111	167	14	927	22	59	773	73
0-19	63,120	32,292	32,092	196	0	4	30,828	30,094	711	0	24
20-64	175,494	87,790	17,957	63,217	596	6,021	87,704	9,945	66,976	3,013	7,771
65+	54,608	23,764	1,313	18,676	2,561	1,214	30,844	1,479	14,402	11,159	3,804
20-65	179,308	89,621	18,116	64,725	659	6,121	89,686	10,075	68,294	3,290	8,027
20-66	182,979	91,378	18,265	66,172	725	6,215	91,601	10,201	69,541	3,576	8,283
20-67	186,495	93,056	18,402	67,554	793	6,306	93,439	10,319	70,714	3,871	8,536
20-68	189,860	94,653	18,526	68,866	873	6,389	95,206	10,420	71,805	4,214	8,767
20-69	193,061	96,165	18,633	70,108	956	6,468	96,896	10,507	72,830	4,563	8,996
66+	50,795	21,932	1,153	17,168	2,497	1,114	28,862	1,349	13,084	10,881	3,548
67+	47,123	20,175	1,004	15,720	2,432	1,019	26,948	1,223	11,836	10,596	3,293
68+	43,607	18,498	867	14,339	2,364	929	25,109	1,105	10,664	10,300	3,040
69+	40,242	16,900	743	13,026	2,284	846	23,342	1,004	9,572	9,957	2,809
70+	37,041	15,388	636	11,785	2,200	766	21,653	917	8,548	9,609	2,579
Total	293,222	143,845	51,361	82,088	3,157	7,239	149,377	41,518	82,088	14,172	11,599
2040:											
0-4	12,847	6,576	6,576	0	0	0	6,271	6,271	0	0	0
5-9	13,366	6,840	6,840	0	0	0	6,527	6,527	0	0	0
10-14	13,994	7,160	7,160	0	0	0	6,834	6,833	1	0	0
15-19	14,809	7,573	7,393	176	0	4	7,236	6,580	635	0	21
20-24	15,703	8,028	5,459	2,413	1	155	7,675	3,563	3,841	6	266
25-29	16,445	8,406	2,796	5,122	3	484	8,040	1,282	6,193	22	543
30-34	16,991	8,670	1,585	6,363	8	714	8,321	550	7,059	49	664
35-39	17,330	8,807	1,109	6,887	16	795	8,523	323	7,380	87	733
40-44	18,118	9,158	936	7,286	28	908	8,959	250	7,713	146	851
45-49	19,503	9,806	885	7,853	48	1,020	9,697	253	8,198	244	1,002
50-54	20,244	10,123	825	8,228	84	986	10,122	295	8,355	398	1,075
55-59	19,322	9,596	709	7,971	135	782	9,726	314	7,816	619	977
60-64	17,271	8,495	588	7,178	196	534	8,775	291	6,795	904	785
65-69	16,415	7,935	601	6,609	318	408	8,480	324	6,060	1,393	703
70-74	15,803	7,388	590	5,972	495	331	8,415	414	5,248	2,070	684
75-79	15,640	6,958	590	5,352	728	288	8,682	579	4,365	2,958	779
80-84	12,830	5,319	341	3,934	834	209	7,511	505	2,888	3,361	758
85-89	8,361	3,109	125	2,137	722	124	5,253	287	1,419	2,956	591
90-94	4,419	1,436	31	853	485	66	2,984	124	508	1,982	370
95+	2,247	622	6	268	318	30	1,625	43	130	1,241	212
0-19	55,017	28,148	27,969	176	0	4	26,868	26,211	636	0	21
20-64	160,927	81,089	14,893	59,301	517	6,378	79,839	7,121	63,348	2,473	6,896
65+	75,717	32,767	2,285	25,125	3,900	1,456	42,950	2,276	20,617	15,961	4,096
20-65	164,138	82,655	15,000	60,625	567	6,463	81,483	7,176	64,578	2,697	7,032
20-66	167,306	84,194	15,107	61,923	621	6,542	83,112	7,230	65,778	2,940	7,165
20-67	170,540	85,757	15,223	63,230	683	6,622	84,783	7,291	66,978	3,212	7,302
20-68	173,925	87,387	15,356	64,572	755	6,705	86,538	7,365	68,201	3,523	7,449
20-69	177,343	89,024	15,494	65,910	835	6,786	88,319	7,445	69,408	3,867	7,598
66+	72,506	31,200	2,177	23,800	3,851	1,372	41,306	2,222	19,387	15,737	3,960
67+	69,338	29,661	2,070	22,502	3,797	1,292	39,676	2,167	18,188	15,494	3,827
68+	66,104	28,098	1,954	21,196	3,735	1,213	38,006	2,106	16,988	15,222	3,690
69+	62,719	26,469	1,822	19,853	3,663	1,130	36,251	2,033	15,764	14,911	3,543
70+	59,301	24,831	1,684	18,516	3,583	1,049	34,470	1,952	14,557	14,568	3,394
Total	291,661	142,004	45,146	84,602	4,418	7,838	149,657	35,608	84,602	18,434	11,013

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	11,255	5,761	5,761	0	0	0	5,493	5,493	0	0	0
5-9	11,812	6,045	6,045	0	0	0	5,768	5,768	0	0	0
10-14	12,394	6,342	6,342	0	0	0	6,052	6,052	1	0	0
15-19	12,978	6,637	6,480	154	0	3	6,341	5,769	553	0	18
20-24	13,595	6,953	4,730	2,088	0	134	6,642	3,076	3,331	4	230
25-29	14,279	7,305	2,440	4,441	2	421	6,974	1,094	5,394	18	468
30-34	14,972	7,648	1,417	5,591	7	633	7,324	471	6,232	41	580
35-39	15,679	7,976	1,029	6,206	13	729	7,703	299	6,661	75	668
40-44	16,289	8,243	850	6,547	23	823	8,046	239	6,911	124	772
45-49	16,628	8,372	739	6,731	36	866	8,256	206	7,019	192	839
50-54	16,813	8,421	675	6,860	60	826	8,393	190	7,056	297	850
55-59	16,842	8,385	621	6,928	102	734	8,457	176	7,003	471	808
60-64	17,194	8,496	603	7,071	175	647	8,698	176	6,965	771	786
65-69	17,783	8,691	596	7,183	316	597	9,092	201	6,792	1,278	821
70-74	17,335	8,301	529	6,752	506	514	9,035	238	6,015	1,957	825
75-79	15,031	6,928	385	5,512	662	370	8,102	243	4,543	2,595	722
80-84	11,589	5,017	229	3,839	722	227	6,572	204	2,888	2,941	538
85-89	8,712	3,416	139	2,382	747	148	5,296	180	1,654	3,051	411
90-94	5,943	2,057	72	1,229	663	94	3,886	155	793	2,629	310
95+	5,414	1,605	43	669	813	80	3,809	157	371	2,868	413
0-19	48,438	24,784	24,627	154	0	3	23,654	23,082	554	0	18
20-64	142,292	71,798	13,104	52,464	418	5,812	70,494	5,926	56,572	1,994	6,001
65+	81,808	36,015	1,992	27,565	4,428	2,030	45,793	1,377	23,056	17,320	4,040
20-65	145,804	73,523	13,224	53,897	467	5,934	72,280	5,964	57,955	2,201	6,162
20-66	149,342	75,258	13,344	55,335	523	6,056	74,084	6,002	59,329	2,430	6,324
20-67	152,904	76,999	13,464	56,775	585	6,175	75,905	6,042	60,691	2,683	6,488
20-68	156,484	78,744	13,583	58,214	655	6,293	77,740	6,083	62,038	2,964	6,655
20-69	160,075	80,489	13,700	59,646	733	6,408	79,586	6,127	63,365	3,272	6,823
66+	78,296	34,289	1,872	26,132	4,378	1,908	44,007	1,340	21,674	17,113	3,880
67+	74,758	32,555	1,752	24,694	4,323	1,786	42,203	1,302	20,300	16,883	3,718
68+	71,196	30,814	1,632	23,254	4,260	1,667	40,383	1,262	18,937	16,630	3,554
69+	67,616	29,068	1,514	21,816	4,190	1,549	38,548	1,220	17,590	16,350	3,387
70+	64,025	27,324	1,396	20,383	4,112	1,434	36,701	1,176	16,264	16,041	3,219
Total	272,539	132,597	39,724	80,183	4,845	7,845	139,942	30,385	80,183	19,313	10,060
2080:											
0-4	10,002	5,120	5,120	0	0	0	4,882	4,882	0	0	0
5-9	10,483	5,364	5,364	0	0	0	5,118	5,118	0	0	0
10-14	10,942	5,599	5,599	0	0	0	5,343	5,342	1	0	0
15-19	11,419	5,840	5,702	135	0	3	5,579	5,075	488	0	16
20-24	12,018	6,149	4,184	1,846	0	118	5,869	2,709	2,953	4	203
25-29	12,748	6,527	2,189	3,959	2	377	6,221	973	4,816	15	418
30-34	13,409	6,857	1,278	5,005	5	568	6,552	425	5,572	34	520
35-39	13,904	7,082	915	5,509	11	647	6,821	267	5,901	62	591
40-44	14,257	7,225	745	5,741	18	721	7,032	205	6,057	101	670
45-49	14,557	7,341	656	5,896	27	762	7,216	174	6,164	152	725
50-54	14,917	7,485	616	6,080	45	743	7,432	164	6,289	233	746
55-59	15,359	7,663	592	6,306	78	688	7,696	166	6,412	374	743
60-64	15,647	7,756	562	6,455	132	606	7,891	171	6,386	608	727
65-69	15,464	7,594	514	6,326	227	527	7,870	171	6,028	969	702
70-74	14,831	7,157	455	5,881	367	455	7,674	165	5,359	1,480	670
75-79	13,684	6,396	369	5,119	530	378	7,288	150	4,409	2,103	626
80-84	12,274	5,443	272	4,162	704	305	6,831	137	3,336	2,777	581
85-89	10,402	4,265	177	3,001	846	241	6,137	127	2,227	3,250	533
90-94	7,530	2,802	89	1,724	824	165	4,729	105	1,169	3,024	430
95+	6,904	2,221	45	970	1,075	131	4,683	93	549	3,577	465
0-19	42,846	21,924	21,786	135	0	3	20,923	20,417	489	0	16
20-64	126,816	64,086	11,737	46,798	319	5,232	62,730	5,255	50,550	1,583	5,342
65+	81,088	35,877	1,920	27,183	4,573	2,201	45,211	947	23,077	17,180	4,007
20-65	129,935	65,624	11,843	48,082	355	5,343	64,311	5,289	51,794	1,743	5,485
20-66	133,037	67,151	11,947	49,357	396	5,451	65,885	5,323	53,019	1,918	5,626
20-67	136,132	68,672	12,050	50,624	441	5,557	67,460	5,357	54,227	2,110	5,766
20-68	139,215	70,183	12,151	51,881	491	5,659	69,033	5,391	55,415	2,321	5,906
20-69	142,280	71,680	12,251	53,124	546	5,759	70,600	5,425	56,579	2,552	6,044
66+	77,969	34,338	1,814	25,899	4,536	2,090	43,631	913	21,833	17,020	3,865
67+	74,868	32,812	1,709	24,624	4,496	1,982	42,056	879	20,608	16,845	3,724
68+	71,772	31,291	1,607	23,357	4,451	1,877	40,481	845	19,400	16,653	3,584
69+	68,689	29,780	1,505	22,100	4,401	1,774	38,909	811	18,212	16,442	3,444
70+	65,624	28,283	1,406	20,857	4,346	1,674	37,341	777	17,048	16,211	3,305
Total	250,751	121,887	35,443	74,116	4,892	7,436	128,864	26,619	74,116	18,763	9,366

Table 22 and Chart 7 illustrate 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) makes the median age tend to increase throughout about 2050. Sustained higher future fertility rates as assumed for alternative I, tend to hold down the median age. Another factor which contributes to the increase in the median age 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.

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

Calendar year	Total	65+	Alternative I Total	Alternative I 65+	Alternative II Total	Alternative II 65+	Alternative III Total	Alternative III 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	32.4	73.3	32.4	73.3
1990			32.7	73.3	32.7	73.3	32.7	73.3
1995			34.3	73.7	34.4	73.8	34.6	73.8
2000			35.7	74.4	36.1	74.5	36.5	74.6
2010			37.3	73.9	38.4	74.2	39.4	74.5
2020			37.6	72.6	39.5	72.9	41.5	73.3
2030			38.0	73.5	41.0	73.9	44.1	74.4
2040			37.6	75.3	41.8	76.0	46.6	76.8
2050			37.1	75.0	41.8	76.0	48.0	77.2
2060			37.1	74.6	42.1	75.5	48.9	76.8
2070			37.0	74.9	42.4	76.3	49.9	78.1
2080			37.1	74.7	42.6	76.3	50.6	78.7

B. Population by Marital Status

In 1987, 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 49 percent under alternative I, 37 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 1987 to 37, 48, 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 1987 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 1987 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 1987 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 .116 in 1987 to .213 and .152 in 2080 under alternatives I and II, respectively, and to decrease to .098 in 2080 under Alternative III.

C. Aged Population

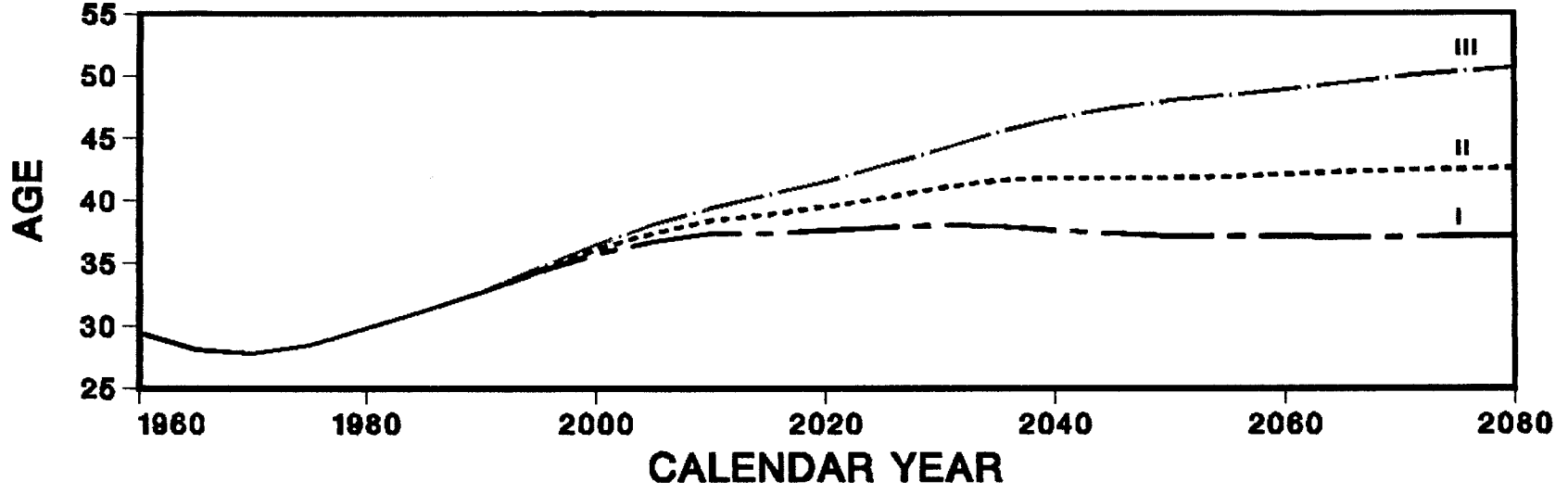
A rough estimate of the growth in the number of persons receiving Social Security retirement benefits can be obtained from examining the population ages 65 and older given in Table 23. The projected population at ages 65 and older is also shown graphically in Chart 9. The growth in the number of people 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 1987 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

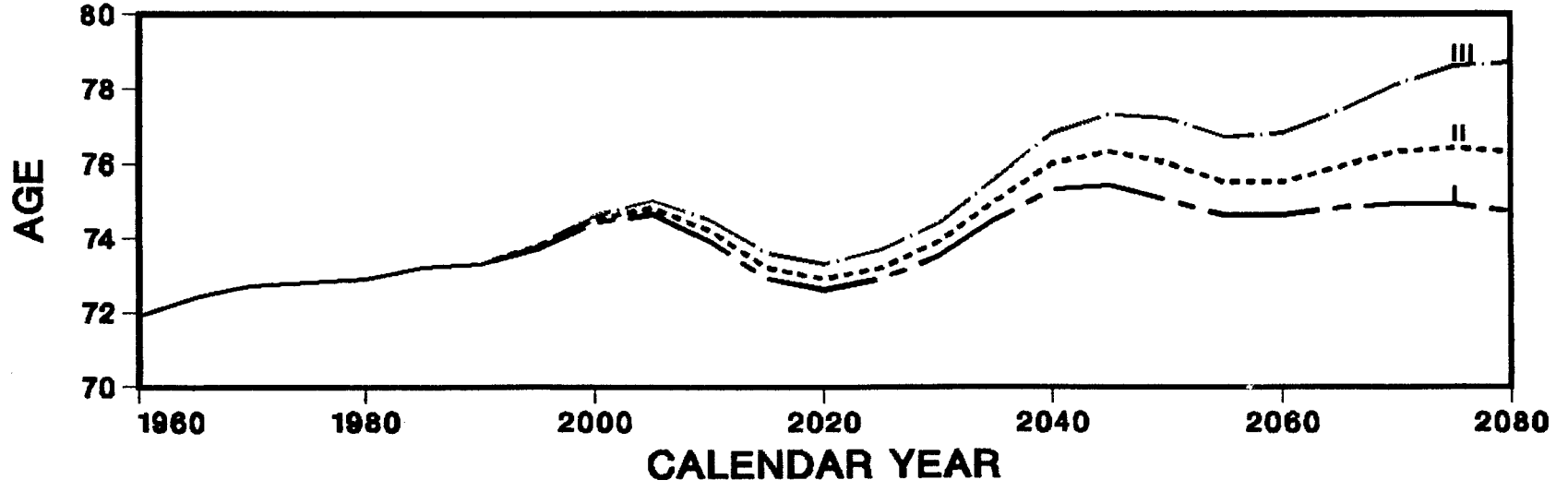
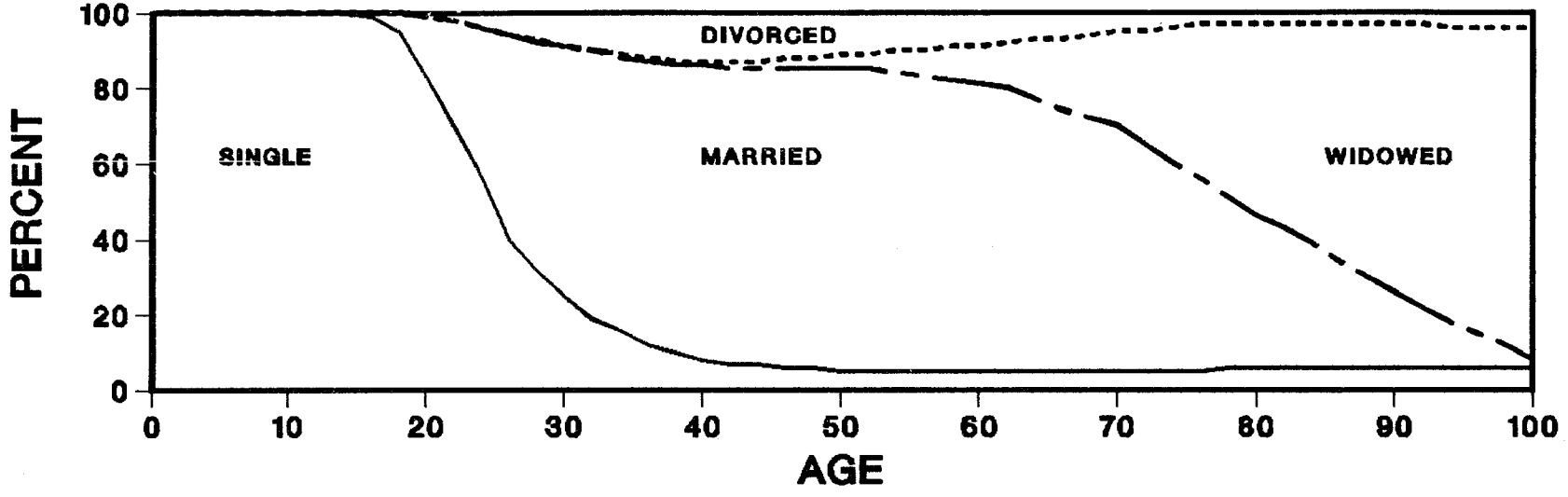


CHART 8.
DISTRIBUTION OF THE POPULATION BY MARITAL STATUS
AGES 0-100
JANUARY 1,1987



JANUARY 1, 2080 (ALTERNATIVE II)

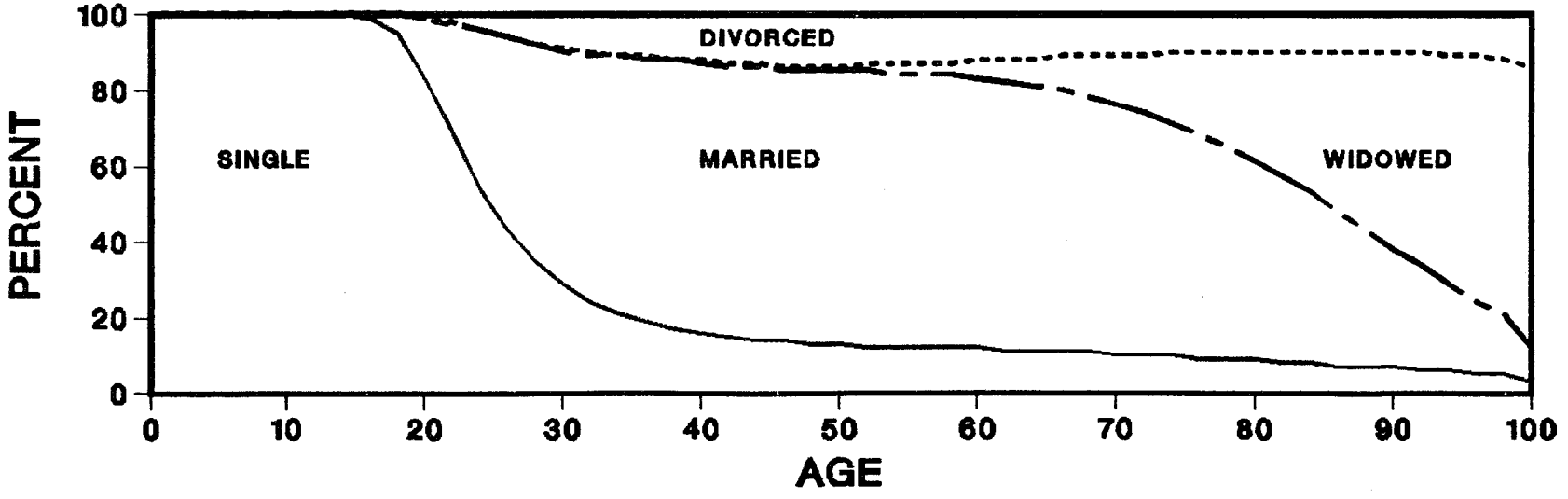


CHART 9. SOCIAL SECURITY AREA POPULATION, AGED 65+
(IN MILLIONS), 1960-2080
ACTUAL AND PROJECTED BY ALTERNATIVE

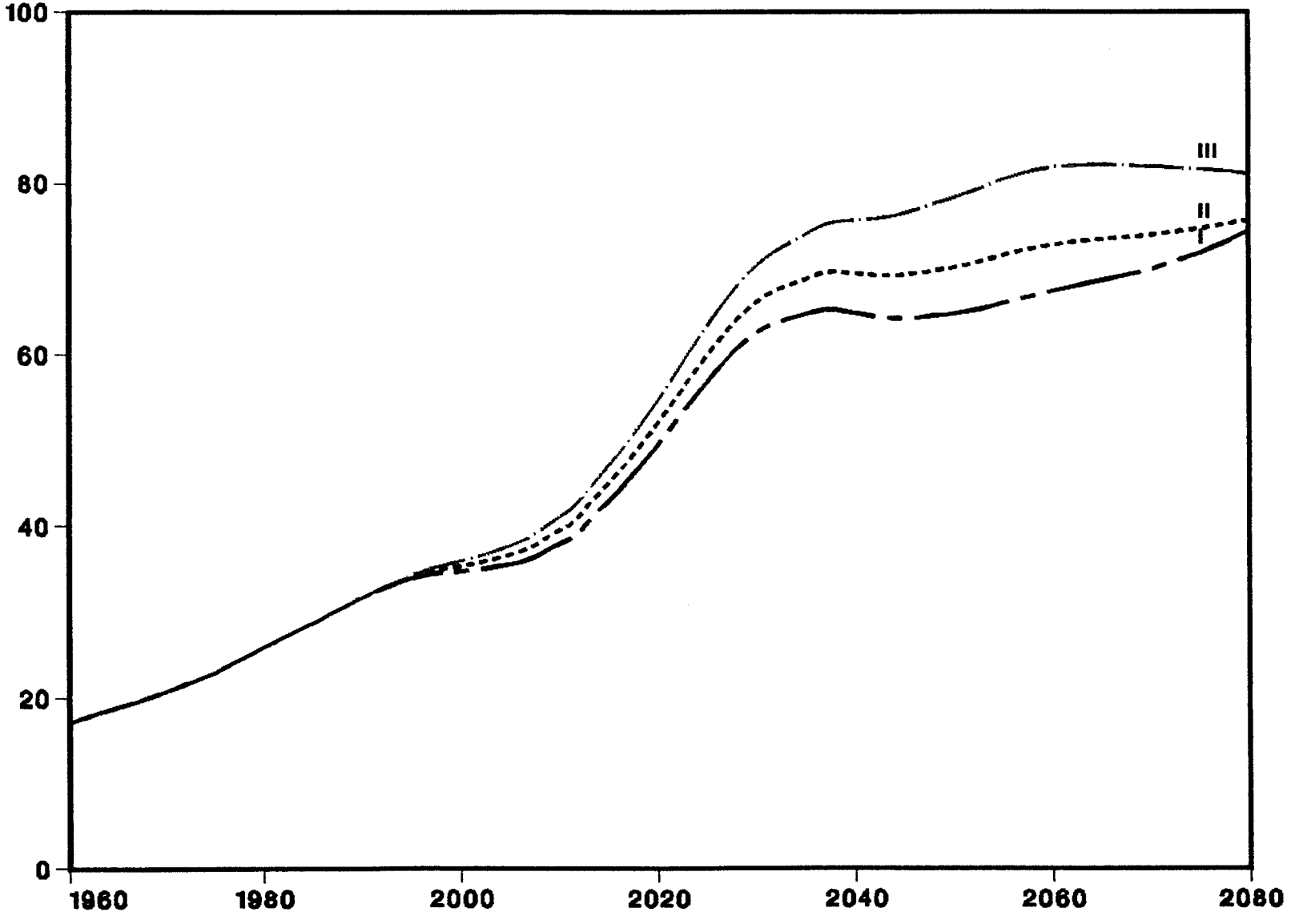


Table 23.—Population in the Social Security Area as of January 1 and Selected Ratios by Year and Alternative

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	66,163	64,943	8,545	1,636	141,287	48,389	83,212	9,686	.116	.698	.022
1950	67,086	78,566	9,882	2,257	157,791	53,236	92,008	12,547	.136	.715	.026
1960	85,581	89,000	11,083	3,056	188,719	72,158	99,493	17,068	.172	.897	.031
1970	97,107	99,340	12,574	4,669	213,690	80,786	112,244	20,660	.184	.904	.042
1980	101,038	108,435	13,922	10,712	234,107	75,214	133,061	25,832	.194	.759	.088
1981	101,632	108,960	13,978	11,813	236,382	74,628	135,371	26,383	.195	.746	.096
1982	102,522	109,924	13,834	12,502	238,781	74,127	137,697	26,957	.196	.734	.101
1983	104,090	110,453	14,019	12,663	241,225	73,726	139,937	27,562	.197	.724	.102
1984	104,905	110,878	14,436	13,345	243,564	73,357	142,076	28,131	.198	.714	.106
1985	105,412	111,539	14,727	14,224	245,902	73,124	144,135	28,643	.199	.706	.113
1986	106,118	112,709	14,770	14,666	248,263	73,137	145,868	29,258	.201	.702	.115
1987	107,258	114,047	14,516	14,852	250,673	73,356	147,408	29,909	.203	.701	.116
1988	107,901	115,038	14,547	15,532	253,018	73,649	148,847	30,522	.205	.700	.120
Alternative I :											
1989	108,565	116,039	14,586	16,190	255,381	73,989	150,289	31,102	.207	.699	.124
1990	109,368	117,004	14,633	16,857	257,862	74,302	151,880	31,680	.209	.698	.128
1991	110,214	117,903	14,683	17,505	260,306	74,525	153,584	32,197	.210	.695	.132
1992	111,100	118,740	14,734	18,134	262,709	74,846	155,204	32,658	.210	.693	.136
1993	112,021	119,510	14,784	18,751	265,067	75,394	156,569	33,104	.211	.693	.140
1994	112,975	120,205	14,834	19,364	267,378	76,052	157,821	33,505	.212	.694	.143
1995	113,958	120,826	14,882	19,973	269,640	76,690	159,105	33,845	.213	.695	.147
1996	114,969	121,389	14,929	20,569	271,857	77,297	160,421	34,139	.213	.695	.151
1997	116,004	121,903	14,975	21,151	274,033	77,842	161,830	34,361	.212	.693	.155
1998	117,060	122,377	15,019	21,719	276,175	78,293	163,382	34,501	.211	.690	.158
1999	118,134	122,818	15,063	22,276	278,290	78,680	165,018	34,592	.210	.686	.162
2000	119,223	123,229	15,105	22,825	280,382	78,959	166,724	34,698	.208	.682	.165
2010	131,494	126,540	15,573	27,768	301,375	81,192	182,277	37,905	.208	.653	.195
2020	146,505	128,627	16,661	31,259	323,051	86,702	186,987	49,361	.264	.728	.215
2030	159,770	130,543	18,591	32,528	341,431	92,099	186,858	62,475	.334	.827	.218
2040	171,539	132,730	19,852	32,942	357,063	96,306	195,953	64,803	.331	.822	.216
2050	182,652	136,700	19,554	33,463	372,368	101,975	205,697	64,696	.315	.810	.214
2060	193,263	142,828	19,057	34,549	389,697	107,158	215,188	67,350	.313	.811	.213
2070	203,681	150,349	19,459	36,146	409,635	112,419	227,281	69,935	.308	.802	.213
2080	214,074	158,306	20,275	38,009	430,663	118,168	238,135	74,360	.312	.808	.213
Alternative II :											
1989	108,565	116,039	14,586	16,190	255,381	73,989	150,289	31,102	.207	.699	.124
1990	109,201	117,047	14,631	16,817	257,695	74,225	151,782	31,689	.209	.698	.128
1991	109,811	118,065	14,681	17,397	259,954	74,346	153,380	32,227	.210	.695	.131
1992	110,396	119,086	14,734	17,933	262,149	74,543	154,885	32,722	.211	.693	.134
1993	110,957	120,093	14,790	18,436	264,276	74,941	156,123	33,212	.213	.693	.137
1994	111,494	121,074	14,848	18,915	266,332	75,426	157,240	33,666	.214	.694	.139
1995	112,010	122,027	14,908	19,376	268,321	75,870	158,381	34,070	.215	.694	.141
1996	112,506	122,962	14,967	19,809	270,245	76,260	159,550	34,435	.216	.694	.144
1997	112,981	123,887	15,027	20,216	272,111	76,565	160,810	34,736	.216	.692	.146
1998	113,432	124,807	15,086	20,599	273,925	76,754	162,210	34,961	.216	.689	.147
1999	113,858	125,729	15,145	20,962	275,694	76,857	163,694	35,143	.215	.684	.149
2000	114,254	126,654	15,203	21,309	277,421	76,831	165,246	35,344	.214	.679	.150
2010	117,152	136,706	15,804	24,020	293,681	74,742	179,419	39,521	.220	.637	.157
2020	119,686	145,607	17,096	25,654	308,044	74,806	181,352	51,886	.286	.699	.158
2030	121,617	149,977	19,537	26,358	317,489	75,132	176,271	66,086	.375	.801	.155
2040	122,212	151,480	21,728	26,512	321,933	74,355	178,091	69,487	.390	.808	.153
2050	122,363	152,192	22,308	26,492	323,354	74,490	178,723	70,141	.392	.809	.152
2060	122,411	153,226	22,097	26,583	324,317	74,357	177,169	72,791	.411	.831	.152
2070	122,425	154,473	22,289	26,795	325,982	74,104	177,926	73,952	.416	.832	.152
2080	122,464	155,425	22,557	27,008	327,454	74,114	177,622	75,718	.426	.844	.152

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:											
1989	108,565	116,039	14,586	16,190	255,381	73,989	150,289	31,102	.207	.699	.124
1990	109,025	117,110	14,627	16,770	257,532	74,146	151,688	31,698	.209	.698	.127
1991	109,382	118,290	14,671	17,270	259,613	74,162	153,192	32,258	.211	.695	.130
1992	109,640	119,557	14,718	17,697	261,612	74,227	154,600	32,785	.212	.692	.132
1993	109,806	120,884	14,769	18,065	263,524	74,469	155,737	33,318	.214	.692	.133
1994	109,886	122,247	14,823	18,388	265,344	74,773	156,747	33,825	.216	.693	.134
1995	109,885	123,634	14,882	18,671	267,072	75,010	157,773	34,289	.217	.693	.135
1996	109,809	125,046	14,944	18,910	268,710	75,170	158,818	34,721	.219	.692	.135
1997	109,659	126,484	15,012	19,106	270,261	75,222	159,943	35,097	.219	.690	.135
1998	109,434	127,951	15,083	19,263	271,731	75,134	161,198	35,400	.220	.686	.135
1999	109,133	129,448	15,159	19,388	273,127	74,937	162,525	35,665	.219	.681	.134
2000	108,749	130,962	15,245	19,483	274,438	74,588	163,897	35,953	.219	.674	.133
2010	101,481	148,373	16,104	19,354	285,312	68,071	176,164	41,077	.233	.620	.118
2020	92,878	164,177	17,329	18,838	293,222	63,120	175,494	54,608	.311	.671	.104
2030	86,901	169,697	19,977	18,961	295,536	59,340	165,803	70,394	.425	.782	.100
2040	80,754	169,203	22,852	18,851	291,661	55,017	160,927	75,717	.471	.812	.098
2050	75,048	165,441	24,197	18,421	283,107	51,580	153,261	78,266	.511	.847	.097
2060	70,109	160,366	24,159	17,906	272,539	48,438	142,292	81,808	.575	.915	.097
2070	65,796	154,661	23,990	17,386	261,832	45,424	134,511	81,897	.609	.947	.097
2080	62,062	148,232	23,655	16,802	250,751	42,846	126,816	81,088	.639	.977	.098

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 given 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 .203 in 1987 to .339 in the year 2036 and then to decrease to an ultimate level of .312. Under alternatives II and III, the aged dependency ratio is projected to continually increase to .426 and .639, 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 65 percent by the year 2030.

Since not everyone retires at age 65 and since the minimum age at which 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 in 1987) 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	.109	.077
1960	.226	.172	.140	.100
1970	.241	.184	.153	.113
1980	.251	.194	.162	.120
1981	.251	.195	.163	.121
1982	.251	.196	.164	.123
1983	.253	.197	.165	.124
1984	.255	.198	.166	.125
1985	.256	199	.167	.126
1986	.258	.201	.168	.127
1987	.259	.203	.170	.128
1988	.261	.205	.172	.130
Alternative I :				
1989	.262	.207	.174	.131
1990	.263	.209	.176	.132
1991	.263	.210	.177	.134
1992	.263	.210	.179	.136
1993	.263	.211	.180	.137
1994	.263	.212	.181	.139
1995	.262	.213	.182	.140
1996	.261	.213	.183	.141
1997	.259	.212	.183	.142
1998	.258	.211	.183	.143
1999	.257	.210	.182	.143
2000	.256	.208	.181	.143
2010	.272	.208	.174	.134
2020	.352	.264	.216	.158
2030	.419	.334	.281	.210
2040	.405	.331	.288	.227

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.)				
2050	.394	.315	.269	.210
2060	.389	.313	.268	.208
2070	.384	.308	.264	.208
2080	.391	.312	.266	.207
Alternative II :				
1989	.262	.207	.174	.131
1990	.263	.209	.176	.133
1991	.264	.210	.178	.134
1992	.264	.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	.287	.220	.186	.143
2020	.379	.286	.235	.174
2030	.466	.375	.317	.239
2040	.474	.390	.342	.273
2050	.489	.392	.338	.267
2060	.505	.411	.355	.280
2070	.510	.416	.361	.290
2080	.524	.426	.369	.295
Alternative III:				
1989	.262	.207	.174	.131
1990	.264	.209	.176	.133
1991	.265	.211	.178	.135
1992	.265	.212	.180	.137
1993	.266	.214	.182	.139
1994	.267	.216	.184	.141
1995	.267	.217	.186	.144
1996	.267	.219	.188	.146
1997	.268	.219	.189	.148
1998	.268	.220	.190	.149
1999	.268	.219	.191	.151
2000	.268	.219	.191	.152
2010	.302	.233	.197	.153
2020	.409	.311	.258	.192
2030	.524	.425	.361	.276
2040	.569	.471	.414	.334
2050	.633	.511	.442	.352
2060	.699	.575	.501	.400
2070	.734	.609	.536	.439
2080	.771	.639	.563	.461

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
Alternative I :			
1989	65	63	60
1990	66	63	60
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	62	60
1999	66	62	60
2000	66	62	60
2010	65	63	61
2020	68	66	64
2030	70	68	66
2040	72	69	66
2050	71	68	66
2060	70	68	66
2070	70	68	65
2080	70	68	66
Alternative II :			
1989	65	63	60
1990	66	63	60
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	62
2020	69	66	65
2030	72	70	68
2040	74	71	69
2050	74	71	69
2060	74	71	69

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.)			
2070	75	72	70
2080	75	72	70
Alternative III:			
1989	65	63	60
1990	66	63	60
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	70	67	65
2030	73	71	69
2040	76	74	71
2050	77	75	72
2060	78	76	73
2070	80	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 .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 .808 under alternative I to .977 under alternative III or roughly from 15 to 40 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