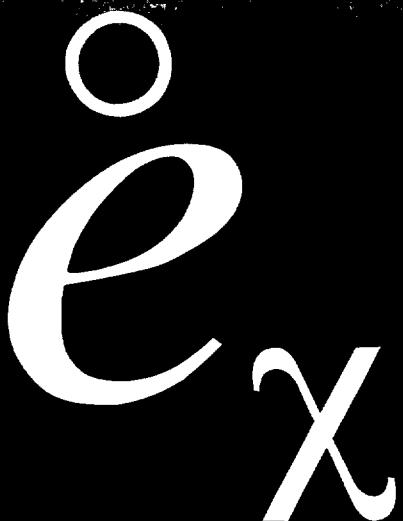

Vital Statistics of the United States, 1989

LIFE · TABLES



Volume II, Section 6

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control and Prevention
National Center for Health Statistics

Hyattsville, Maryland
December 1992
DHHS Publication No. (PHS) 93-1104

COPYRIGHT INFORMATION

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

SUGGESTED CITATION

National Center for Health Statistics. Vital Statistics of the United States, 1989; vol II sec 6 life tables. Washington: Public Health Service. 1992.

NATIONAL CENTER FOR HEALTH STATISTICS

MANNING FEINLEIB, M.D., Dr.P.H., *Director*

JACK R. ANDERSON, *Acting Deputy Director*

JACOB J. FELDMAN, Ph.D., *Associate Director for Analysis and Epidemiology*

GAIL F. FISHER, Ph.D., *Associate Director for Planning and Extramural Programs*

PETER L. HURLEY, *Associate Director for Vital and Health Statistics Systems*

ROBERT A. ISRAEL, *Associate Director for International Statistics*

STEPHEN E. NIEBERDING, *Associate Director for Management*

CHARLES J. ROTHWELL, *Associate Director for Data Processing and Services*

MONROE G. SIRKEN, Ph.D., *Associate Director for Research and Methodology*

DAVID L. LARSON, *Assistant Director, Atlanta*

DIVISION OF VITAL STATISTICS

JOHN E. PATTERSON, *Director*

JAMES A. WEED, Ph.D., *Deputy Director*

ROBERT BILGRAD, *Special Assistant to the Director*

WILLIAM F. PRATT, Ph.D., *Special Assistant to the Director*

ROBERT J. ARMSTRONG, *Actuarial Adviser*

HARRY M. ROSENBERG, Ph.D., *Chief, Mortality Statistics Branch*

ROBERT L. HEUSER, *Chief, Natality, Marriage, and Divorce Statistics Branch*

GEORGE A. GAY, *Chief, Registration Methods Branch*

WILLIAM D. MOSHER, Ph.D., *Chief, Family Growth Survey Branch*

PAUL J. PLACEK, Ph.D., *Chief, Followback Survey Branch*

RONALD CHAMBLEE, *Chief, Technical Services Branch*

MABEL G. SMITH, *Chief, Statistical Resources Branch*

JOSEPH D. FARRELL, *Chief, Systems and Programming Branch*

Section 6. Life Tables

The life table program.....	1
Life table values	2
Trends and comparisons	2
Technical appendix.....	3
Population bases for computing life tables.....	5
Explanation of the columns of the life table	5
References.....	6
Text tables	
A. Expectation of life at selected ages, by race and sex: Death-registration States, 1900–1902, and United States, 1959–61, 1969–71, 1979–81, 1988, and 1989	2
B. Average annual change in life expectancy at birth in years, by race and sex: United States, 1900–1902 to 1969–71, 1969–71 to 1979–81, 1979–81 to 1984, 1984 to 1985, 1985 to 1986, 1986 to 1987, 1987 to 1988, and 1988 to 1989.....	3
C. Differences in life expectancy between males and females, by race; and between white and black persons, by sex: Death-registration States, 1900–1902, and United States, 1959–61, 1969–71, 1979–81, 1984, 1985, 1986, 1987, 1988, and 1989.....	3
D. Percent surviving from birth to selected ages, and median age at death, by race and sex: Death-registration States, 1900–1902, and United States, 1959–61, 1969–71, 1979–81, 1988, and 1989.....	4
Tables	
6-1. Abridged life tables by race and sex: United States, 1989	7
6-2. Number of survivors at single years of age, out of 100,000 born alive, by race and sex: United States, 1989....	11
6-3. Expectation of life at single years of age, by race and sex: United States, 1989	12
6-4. Life table values, by race and sex: Death-registration States, 1900–1902 to 1919–21, and United States, 1929–31 to 1989.....	13
6-5. Estimated average length of life in years, by race and sex: Death-registration States, 1900–28, and United States, 1929–89.....	19

Guide to tables in section 6

	TABLE: 6	-1	-2	-3	-4	-5
	PAGE:	7	11	12	13	19
Years:						
1900-1989-----						15
1989 only -----		1	2	3		
Specified years and 1989-----				24		
Type of entry:						
Proportion dying ($_nq_x$) -----		1				
Number surviving (l_x) -----		1	2		4	
Number dying ($_nd_x$) -----		1				
Stationary population ($_nL_x$ and T_x) -----		1				
Average remaining lifetime (\bar{e}_x) -----		1		3	4	
Average length of life (\bar{e}_o)-----						5
Characteristics:						
Age by:						
Single years-----			2	3		
5-year intervals -----		1			4	
Race-specific-----		1	2	3	4	5
Sex-race specific-----		1	2	3	4	5
Sex-specific-----		1	2	3	4	5
Total population -----		1	2	3	4	5

¹Entire United States for 1929-89; death-registration States for 1900-28.

²Entire United States for specified years from 1929 to 1989; death-registration States for specified years from 1900 to 1921.

Death rates for a specific period may be summarized by the life table method to obtain measures of comparative longevity. There are two types of life tables—the generation or cohort life table and the current life table.

The generation life table provides a "longitudinal" perspective in that it follows the mortality experience of a particular cohort, all persons born in the year 1900, for example, from the moment of birth through consecutive ages in successive calendar years. Based on age-specific death rates observed through consecutive calendar years, the generation life table reflects the mortality experience of an actual cohort from birth until no lives remain in the group. To prepare just a single complete generation life table requires data over many years. It is not feasible to construct generation life tables entirely on the basis of actual data for cohorts born in this century (1). It is necessary to project data for the incomplete period for cohorts whose life spans are not yet complete (2).

The better-known current life table may, in contrast, be characterized as "cross sectional." Unlike the generation life table, the current life table does not represent the mortality experience of an actual cohort. Rather, the current life table considers a hypothetical cohort and assumes that it is subject to the age-specific death rates observed for an actual population during a particular period. Thus, for example, a current life table for 1989 assumes a hypothetical cohort subject throughout its lifetime to the age-specific death rates prevailing for the actual population in 1989. The current life table may thus be characterized as rendering a "snapshot" of current mortality experience, and shows the long-range implications of a set of age-specific death rates that prevailed in a given year. In this section the term "life table" refers only to the current life table and not to the generation life table.

THE LIFE TABLE PROGRAM

Three series of life tables are prepared by the National Center for Health Statistics—complete, provisional abridged, and final abridged. The complete life tables for the U.S. population contain life table values for single years of age. They are based on decennial census data and deaths for a 3-year period around the census year and have been prepared since 1900. The provisional abridged life tables contain values by 5-year age groups and are based on a 10-percent sample of deaths. The final abridged life tables (referred to in this section as "abridged life tables") also contain values by 5-year age groups but are based on a complete count of all reported deaths.

In response to a growing number of requests for postcensal life table values, a series of abridged life tables was initiated in 1945. Available annually since that year, the abridged life tables are based on deaths occurring during the calendar year and on midyear postcensal population estimates provided by the U.S. Bureau of the Census. Refinements in both the techniques for estimating the population and the methods for constructing abridged life tables permit these tables to be prepared in a way that provides reasonably accurate data on current trends in expectation of life and survivorship. Beginning with 1945, abridged life tables have been constructed by reference to a standard table (3). Methodology developed by Greville was used in constructing life tables for 1945–52. Since 1953 a modified method has been employed (4). U.S. life tables for the decennial period 1979–81 are used as the standard table in constructing the 1989 abridged life tables.

The 1945 abridged life tables were prepared for white and all other males and females. Since 1946 abridged life tables for the total population have also been available, and since 1948 abridged life tables have been calculated for total males and total females. Beginning with 1951, additional abridged life tables have been calculated for the total white and total all other populations.

Numerous requests have been received annually for current life table statistics that are more detailed than those available in the abridged life tables. Therefore, tables showing l_x and \bar{e}_x values by single years of age interpolated from the abridged life tables have been published since 1960.

The demand for information regarding up-to-date life table values was responsible for the introduction of a third series, provisional abridged life tables. Beginning with 1958, provisional abridged life tables have been published, for the total population only, in the "Annual Summary of Births, Marriages, Divorces, and Deaths, United States," *Monthly Vital Statistics Report*; unpublished provisional life table data by race and sex are also produced annually. Values in these life tables are based on population estimates provided by the U.S. Bureau of the Census and on the estimated number of deaths derived from the Current Mortality Sample (CMS). The CMS consists of one-tenth of the death certificates filed in the vital statistics registration offices of each State, the District of Columbia, and New York City. The sample is taken by selecting 1 of every 10 death certificates received between two dates a month apart, regardless of the month or year in which the death occurred.

SECTION 6—LIFE TABLES—PAGE 2

Table A. Expectation of life at selected ages, by race and sex: Death-registration States, 1900–1902, and United States, 1959–61, 1969–71, 1979–81, 1988, and 1989

Life table value, period, and age	Total	White		All other			
				Total		Black	
		Male	Female	Male	Female	Male	Female
Expectation of life							
At birth:							
1989.....	75.3	72.7	79.2	67.1	75.2	64.8	73.5
1988.....	74.9	72.3	78.9	67.1	75.1	64.9	73.4
1979–81.....	73.88	70.82	78.22	65.63	74.00	64.10	72.88
1969–71.....	70.75	67.94	75.49	60.98	69.05	60.00	68.32
1959–61.....	69.89	67.55	74.19	61.48	66.47	---	---
1900–1902.....	49.24	48.23	51.08	---	---	32.54	35.04
At age 1 year:							
1989.....	75.0	72.3	78.8	67.3	75.4	65.2	73.8
1988.....	74.7	72.0	78.5	67.3	75.1	65.2	73.6
1979–81.....	73.82	70.70	77.98	66.01	74.31	64.60	73.31
1969–71.....	71.19	68.33	75.66	62.13	70.01	61.24	69.37
1959–61.....	70.75	68.34	74.68	63.50	68.10	---	---
1900–1902.....	55.20	54.61	56.39	---	---	42.46	43.54
At age 20 years:							
1989.....	56.6	54.0	60.2	49.2	56.9	47.1	55.3
1988.....	56.3	53.6	59.9	49.1	56.7	47.0	55.1
1979–81.....	55.46	52.45	59.44	47.87	55.88	46.48	54.90
1969–71.....	53.00	50.22	57.24	44.37	51.85	43.49	51.22
1959–61.....	52.58	50.25	56.29	45.78	50.07	---	---
1900–1902.....	42.79	42.19	43.77	---	---	35.11	36.89
At age 65 years:							
1989.....	17.2	15.2	19.0	14.5	17.9	13.6	17.0
1988.....	16.9	14.9	18.7	14.3	17.8	13.4	16.9
1979–81.....	16.51	14.26	18.55	13.83	17.60	13.29	17.13
1969–71.....	15.00	13.02	16.93	12.87	15.99	12.53	15.67
1959–61.....	14.39	12.97	15.88	12.84	15.12	---	---
1900–1902.....	11.86	11.51	12.23	---	---	10.38	11.38

LIFE TABLE VALUES

The data used to prepare the abridged U.S. life tables for 1989 are the final mortality statistics and the midyear estimates of the population by age, race, and sex prepared by the U.S. Bureau of the Census. Selected life table values for 1900–1902, 1959–61, 1969–71, 1979–81, 1988, and 1989 are shown in tables A and D.

Expectation of life—The most frequently used life table statistic is life expectancy (\bar{e}_x), which is the average number of years of life remaining for persons who have attained a given age (x). Life expectancy and other life table values at specified ages in 1989 are shown for the total population and by race and sex in table 6–1. In addition, life expectancies at single years of age by race and sex are shown in table 6–3.

Life expectancy at birth for 1989 for the total population was 75.3 years. This represents the average number of years that the members of the life table cohort may expect to live at the time of birth (tables A and 6–1).

Survivors to specified ages—Another way of assessing the longevity of the life table cohort is by determining the

proportion who survive to specified ages. The l_x column provides the data for computing the proportion. For instance, for the total population, 79,469 out of the original 1989 life table cohort of 100,000 (or 79.5 percent) were alive at exact age 65 (tables D and 6–2).

Median length of life—In addition to determining the proportion alive at a specified age, one can also compute the median age at death, the age at which exactly half the cohort (50,000 persons) still remain alive and half have died. For example, in 1989 the median age at death for the total population was 79.0 years (table D).

TRENDS AND COMPARISONS

In 1989 life expectancy in the United States reached a new high of 75.3 years. Among the four race-sex groups (white males and females; black males and females), white females had the highest life expectancy at birth, 79.2 years, followed by black females, 73.5 years; white males, 72.7 years; and black males, 64.8 years (table A). The same order in life expectancy was maintained by each of the four race-sex groups at ages 1, 20, and 65 years.

SECTION 6—LIFE TABLES—PAGE 3

Table B. Average annual change in life expectancy at birth in years, by race and sex: United States, 1900–1902 to 1969–71, 1969–71 to 1979–81, 1979–81 to 1984, 1984 to 1985, 1985 to 1986, 1986 to 1987, 1987 to 1988, and 1988 to 1989

Period	White		Black	
	Male	Female	Male	Female
1988 to 1989	+0.4	+0.3	-0.1	+0.1
1987 to 1988	+0.1	—	-0.3	-0.2
1986 to 1987	+0.2	+0.1	—	+0.1
1985 to 1986	+0.1	+0.1	-0.1	—
1984 to 1985	+0.1	—	-0.3	-0.2
1979–81 to 1984	+0.3	+0.1	+0.4	+0.2
1969–71 to 1979–81	+0.3	+0.3	+0.4	+0.5
1900–1902 to 1969–71	+0.3	+0.4	+0.4	+0.5

Table C. Differences in life expectancy between males and females, by race; and between white and black persons, by sex: Death-registration States, 1900–1902, and United States, 1959–61, 1969–71, 1979–81, 1984, 1985, 1986, 1987, 1988, and 1989

Period	Female-Male		White-Black	
	White	Black	Male	Female
1989	6.5	8.7	7.9	5.7
1988	6.6	8.5	7.4	5.5
1987	6.7	8.4	7.0	5.3
1986	6.8	8.3	6.8	5.3
1985	6.8	8.2	6.6	5.2
1984	6.9	8.1	6.2	5.0
1979–81	7.40	8.78	6.72	5.34
1969–71	7.55	8.32	7.94	7.17
1959–61	6.64	---	---	---
1900–1902	2.85	2.50	15.69	16.04

Between 1988 and 1989, life expectancy increased for all of the four race-sex groups except black males (table B). Life expectancy decreased for black males by 0.1 years between 1988 and 1989. For black males, life expectancy has dropped to the lowest levels since 1981 (table 6-5).

Since the beginning of the century through the mid-1980's, the average number of years added annually to life expectancy was greater than the annual changes observed for each of the years from 1984 through 1989 for each of the race-sex groups, except for white males and females between 1988 and 1989 (table B). Since 1984, life expectancy increased each year for white males; for white females, it increased for 3 of the 5 years; for black females, for only 2 of the 5 years; and for black males, life expectancy decreased for 4 of the 5 years, and remained unchanged for one year.

Life expectancy differences between males and females widened for many years after the beginning of the century, but recently the differences have narrowed for the white population and have widened for the black population (table C). For the white population the difference between males and females increased from 2.9 years in 1900–1902 to 7.6 years by 1969–71; the difference narrowed to 6.8 years in 1985, 6.6 years by 1988, and 6.5 years in 1989. For the black population, the difference increased from 2.5 years in 1900–1902 to 8.8 years by

1979–81; it narrowed to 8.1 years by 1984, and has steadily increased to 8.7 years in 1989.

Life expectancy differences between the races have generally narrowed since the beginning of the century (table C), though they began widening in 1985. In 1984 white males had a life expectancy that was 6.2 years greater than that of black males, compared with a difference of 7.9 years in 1989. For women the race difference in life expectancy increased from 5.0 years in 1984 to 5.7 years in 1989 (table C).

In 1989 among the four race-sex groups, the percent surviving from birth to age 65 years for white females was 86.3 percent; white males, 75.9 percent; black females, 75.3 percent; and black males, 57.8 percent. Median age at death in 1989 for white females was 82.6 years; black females, 77.5 years; white males, 76.2 years; and for black males, 68.8 years, unchanged from 1988 (table D).

TECHNICAL APPENDIX

The geographic areas covered in life tables before 1929–31 were limited to the death-registration areas. Life tables for 1900–1902 and 1909–11 were constructed using mortality data from the 1900 death-registration States (10 States and the District of Columbia) and for 1919–21 from

SECTION 6—LIFE TABLES—PAGE 4

Table D. Percent surviving from birth to selected ages, and median age at death, by race and sex: Death-registration States, 1900–1902, and United States, 1959–61, 1969–71, 1979–81, 1988, and 1989

Life table value, period, and age	Total	White		All other			
				Total		Black	
		Male	Female	Male	Female	Male	Female
Percent surviving from birth							
To age 1 year:							
1989	99.0	99.1	99.3	98.2	98.5	98.0	98.3
1988	99.0	99.0	99.3	98.4	98.6	98.1	98.4
1979–81	98.7	98.8	99.0	97.9	98.3	97.7	98.1
1969–71	98.0	98.0	98.5	96.6	97.2	96.4	97.1
1959–61	97.4	97.4	98.0	95.3	96.2	---	---
1900–1902	87.6	86.7	88.9	---	---	74.7	78.5
To age 20 years:							
1989	98.1	98.1	98.7	96.8	97.8	96.4	97.5
1988	98.1	98.0	98.7	97.0	97.8	96.5	97.6
1979–81	97.7	97.5	98.4	96.4	97.4	96.1	97.2
1969–71	96.7	96.5	97.6	94.3	95.9	94.1	95.7
1959–61	96.1	95.9	97.1	93.1	94.7	---	---
1900–1902	77.2	76.4	79.0	---	---	56.7	59.1
To age 65 years:							
1989	79.5	75.9	86.3	62.6	78.3	57.8	75.3
1988	79.1	75.4	85.9	62.6	77.8	57.9	74.9
1979–81	77.1	72.4	84.8	58.5	75.4	55.1	73.3
1969–71	71.9	66.3	81.6	49.6	66.1	47.5	64.7
1959–61	71.1	65.8	80.7	51.4	60.8	---	---
1900–1902	40.9	39.2	43.8	---	---	19.0	22.0
Median age at death:							
1989	78.9	76.2	82.6	71.1	79.2	68.8	77.5
1988	78.6	75.8	82.3	71.0	79.1	68.8	77.4
1979–81	77.6	74.2	81.8	69.0	77.8	67.4	76.6
1969–71	74.9	71.5	79.5	64.8	72.8	63.8	72.2
1959–61	74.3	71.4	78.5	65.6	70.6	---	---
1900–1902	58.4	57.2	60.6	---	---	29.8	34.3

the 1920 death-registration States (34 States and the District of Columbia). The tables for 1929–31 through 1958 cover the conterminous United States. Decennial life table values for the 3-year period 1959–61 were derived from data that include both Alaska and Hawaii for each year (table 6–4). Data for each year shown in table 6–5 include Alaska beginning in 1959 and Hawaii beginning in 1960. However, it is not believed that the inclusion of these two States materially affects life table values.

Revised life table values, 1961–82—Life table values for 1961–69 and 1971–79 are based on revised intercensal estimates of the populations for those years and were constructed using the U.S. decennial life tables for 1959–61 and 1969–71, respectively, as the standard tables. Life table values for 1970–73 have also been revised using the 1969–71 decennial life tables as the standard tables. Previously published abridged life tables for 1970–73 were constructed using the 1959–61 decennial life tables as the standard tables because the 1969–71 decennial life tables were not yet available.

The 1979–81 decennial life tables have been used as the standard life tables for the 1983–89 life tables as well

as for revised life table values for 1980–82 shown in this section.

New Jersey data, 1962–64—The life tables for 1962 and 1963 for the six population groups involving race do not include data from New Jersey. This State omitted the item on race from its certificates of live birth, death, and fetal death in use at the beginning of 1962. The item was restored during the latter part of 1962. However, the certificate revision without this item was used for most of 1962 as well as for 1963. For computing vital rates, populations by age, race, and sex (excluding New Jersey) were estimated to obtain comparable denominators. Approximately 7 percent of the New Jersey death records for 1964 did not contain the race designation. When the records were being electronically processed for this State, the "race not stated" deaths were allocated to white or to black.

Nonresidents—Beginning in 1970 the deaths of nonresidents of the United States have been excluded from the life table statistics.

Estimates for single calendar years—There has been an increasing interest in data on the average length of life

SECTION 6—LIFE TABLES—PAGE 5

(\hat{e}_x) for single calendar years prior to 1945, when the annual abridged life table series was initiated. The figures in table 6-5 for groups by race and sex for the following years were estimated to meet these needs (5).

<i>Years</i>	<i>Race and Sex</i>
1900-45.....	Total
1900-47.....	Male
1900-47.....	Female
1900-50.....	White
1900-44.....	White male
1900-44.....	White female
1900-50.....	All other
1900-44.....	All other male
1900-44.....	All other female

POPULATION BASES FOR COMPUTING LIFE TABLES

The population used for computing life table values shown in this section (furnished by the U.S. Bureau of the Census) represents the resident population of the United States. The populations used for computing the 1989 life table values are estimated as of July 1, 1989, and are based on the 1980 census levels (6). The 1980 census counts by race were modified to be consistent with the Office of Management and Budget categories and historical categories for death data. For a detailed discussion of modification procedures, see U.S. Bureau of the Census (7).

Population estimates used to compute death rates for 1984-89 incorporate new estimation procedures for net migration and net undocumented immigration. Death rates for 1989 are comparable with those for 1984-88 but are not strictly comparable with those for previous years. For additional details, see the Technical Appendix in *Vital Statistics of the United States, 1984* (Vol. II, Mortality, Part A), and U.S. Bureau of the Census (8).

EXPLANATION OF THE COLUMNS OF THE LIFE TABLE

Column 1—Age interval (x to $x + n$)—The age interval shown in column 1 is the interval between the two exact ages indicated. For instance, “20-25” means the 5-year interval between the 20th and 25th birthdays.

Column 2—Proportion dying (${}_nq_x$)—This column shows the proportion of the cohort who are alive at the beginning of an indicated age interval and who will die before reaching the end of that age interval. For example, for males in the age interval 20-25 years, the proportion dying is 0.0085: Out of every 1,000 males alive and exactly 20 years of age at the beginning of the period, about 9 will die before reaching their 25th birthday. In other words, the ${}_nq_x$ values represent probabilities that persons who are alive at the beginning of a specific age interval will die

before reaching the beginning of the next age interval. The “proportion dying” column forms the basis of the life table. The life table is so constructed that all other columns are derived from it.

Column 3—Number surviving (l_x)—This column shows the number of persons, starting with a cohort of 100,000 live births, who survive to the exact age marking the beginning of each age interval. The l_x values are computed from the ${}_nq_x$ values, which are successively applied to the remainder of the original 100,000 persons still alive at the beginning of each age interval. Thus out of 100,000 male babies born alive, 98,914 will complete the first year of life and enter the second; 98,703 will begin the sixth year; 97,800 will reach age 20; and 21,780 will live to age 85.

Column 4—Number dying (${}_nD_x$)—This column shows the number dying in each successive age interval out of 100,000 live births. Out of 100,000 males born alive, 1,086 will die in the first year of life; 211 in the succeeding 4 years; 827 in the 5-year period between exact ages 20 and 25; and 21,780 will die after reaching age 85. Each figure in column 4 is the difference between two successive figures in column 3.

Columns 5 and 6—Stationary population (${}_nL_x$ and T_x)—Suppose that a group of 100,000 individuals like that assumed in columns 3 and 4 is born every year and that the proportions dying in each such group in each age interval throughout the lives of the members are exactly those shown in column 2. If there were no migration and if the births were evenly distributed over the calendar year, the survivors of these births would make up what is called a stationary population—stationary because in such a population the number of persons living in any given age group would never change. When individuals left the group, either by death or by growing older and entering the next higher age group, their places would immediately be taken by persons entering from the next lower age group. Thus a census taken at any time in such a stationary community would always show the same total population and the same numerical distribution of that population among the various age groups. In such a stationary population supported by 100,000 annual births, column 3 shows the number of persons who, each year, reach the birthday that marks the beginning of the age interval indicated in column 1, and column 4 shows the number of persons who die each year in the indicated age interval.

Column 5 shows the number of persons in the stationary population in the indicated age interval. For example, the figure given for males in the age interval 20-25 years is 486,977. This means that in a stationary population of males supported by 100,000 annual births and with proportions dying in each age group always in accordance with column 2, a census taken on any date would show 486,977 persons between exact ages 20 and 25 years.

Column 6 shows the total number of persons in the stationary population (column 5) in the indicated age interval and all subsequent age intervals. For example, in

SECTION 6—LIFE TABLES—PAGE 6

the stationary population of males referred to in the above illustration, column 6 shows that there would be at any given moment a total of 5,211,637 males who have passed their 20th birthday. The male population at all ages 0 and above (the total male population of the stationary community) would be 7,182,240.

Column 7—Average remaining lifetime (\bar{e}_x)—The average remaining lifetime (also called expectation of life) at any given age is the average number of years remaining to be lived by those surviving to that age on the basis of a given set of age-specific rates of dying. To arrive at this value, it is first necessary to observe that the figures in column 5 of the life table can also be interpreted in terms of a single life table cohort without introducing the concept of the stationary population. From this point of view, each figure in column 5 represents the total time (in years) lived between two indicated birthdays by all those reaching the earlier birthday among the survivors of a cohort of 100,000 live births. Thus the figure 486,977 for males in the age interval 20–25 years is the total number of years lived between the 20th and 25th birthdays by the 97,800 (column 3) who reached the 20th birthday out of 100,000 males born alive. The corresponding figure 5,211,637 in column 6 is the total number of years lived after attaining age 20 by the 97,800 reaching that age. This number of years divided by the number of males (5,211,637 divided by 97,800) gives 53.3 years as the average remaining lifetime of males at age 20.

SYMBOLS

Data not available	---
Category not applicable.....	...
Quantity zero.....	—
Quantity more than zero but less than 0.05	0.0
Quantity more than zero but less than 500 where numbers are rounded to thousands.....	Z
Figure does not meet standards of reliability or precision (estimate is based on fewer than 20 events in numerator or denominator)	*

REFERENCES

1. Shryock HS, Siegel JS, et al. The methods and materials of demography, Vol. 2. U.S. Bureau of the Census. Washington: U. S. Government Printing Office. 1971.
2. Moriyama IM, Gustavus SO. Cohort mortality and survivorship, United States death-registration States, 1900–68. National Center for Health Statistics. Vital Health Stat 3(16). 1972.
3. Greville TNE, Carlson GA. Method of constructing the abridged life tables for the United States, 1949. National Office of Vital Statistics, Vital Statistics—Special Reports. Vol. 33, No. 15. Washington: Public Health Service. 1953.
4. Sirken MG. Comparison of two methods of constructing abridged life tables by reference to a “standard” table. National Center for Health Statistics. Vital Health Stat 2(4). 1966.
5. Greville TNE, Carlson GA. Estimated average length of life in the death-registration States. National Center for Health Statistics. Vital Statistics—Special Reports. Vol. 33, No. 9. Washington: Public Health Service. 1951.
6. U.S. Bureau of the Census. United States population estimates, by age, sex, and race: 1989. Current Population Reports; series P-25, no 1057. Washington: U.S. Government Printing Office. 1990.
7. U.S. Bureau of the Census. Preliminary estimates of the population of the United States, by age, sex, and race: 1970 to 1981. Current Population Reports; series P-25, no 917. Washington: U.S. Government Printing Office. 1982.
8. U.S. Bureau of the Census. Estimates of the population of the United States, by age, sex, and race: 1980 to 1984. Current Population Reports; series P-25, no 965. Washington: U.S. Government Printing Office. 1986.

SECTION 6 - LIFE TABLES - PAGE 7

Table 6-1. Abridged Life Tables by Race and Sex: United States, 1989
(Page 1 of 4)

Age interval Period of life between two exact ages stated in years, race, and sex	Proportion dying	Of 100,000 born alive		Stationary population		Average remaining lifetime
	Proportion of persons alive at beginning of age interval dying during interval	Number living at beginning of age interval	Number dying during age interval	In the age interval	In this and all subsequent age intervals	Average number of years of life remaining at beginning of age interval
	(1)	(2)	(3)	(4)	(5)	(7)
<i>x</i> to <i>x + n</i>	<i>nqx</i>	<i>lx</i>	<i>ndx</i>	<i>nLx</i>	<i>Tx</i>	\bar{e}_x
ALL RACES						
0-1	0.0099	100,000	986	99,154	7,525,922	75.3
1-5 .....	.0019	99,014	192	395,606	7,426,768	75.0
5-10 .....	.0012	98,822	117	493,791	7,031,162	71.1
10-15 .....	.0013	98,705	132	493,269	6,537,371	66.2
15-20 .....	.0043	98,573	428	491,894	6,044,102	61.3
20-25 .....	.0056	98,145	548	489,382	5,552,208	56.6
25-30 .....	.0062	97,597	604	486,474	5,062,826	51.9
30-35 .....	.0076	96,993	734	483,173	4,576,352	47.2
35-40 .....	.0097	96,259	932	479,097	4,093,179	42.5
40-45 .....	.0127	95,327	1,213	473,819	3,614,082	37.9
45-50 .....	.0186	94,114	1,753	466,508	3,140,263	33.4
50-55 .....	.0292	92,361	2,694	455,493	2,673,755	28.9
55-60 .....	.0463	89,667	4,154	438,547	2,218,262	24.7
60-65 .....	.0707	85,513	6,044	413,274	1,779,715	20.8
65-70 .....	.1026	79,469	8,156	377,836	1,366,441	17.2
70-75 .....	.1522	71,313	10,851	330,381	988,605	13.9
75-80 .....	.2235	60,462	13,511	269,356	658,224	10.9
80-85 .....	.3348	46,951	15,720	195,668	388,368	8.3
85 and over	1.0000	31,231	31,231	193,200	193,200	6.2
MALE						
0-1 .....	.0109	100,000	1,086	99,065	7,182,240	71.8
1-5 .....	.0021	99,914	211	395,167	7,083,175	71.6
5-10 .....	.0014	98,703	134	493,149	6,688,008	67.8
10-15 .....	.0016	98,569	163	492,548	6,194,859	62.8
15-20 .....	.0062	98,406	606	490,674	5,702,311	57.9
20-25 .....	.0085	97,800	827	486,977	5,211,637	53.3
25-30 .....	.0091	96,973	885	482,628	4,724,660	48.7
30-35 .....	.0109	96,088	1,047	477,853	4,242,032	44.1
35-40 .....	.0138	95,041	1,308	472,100	3,764,179	39.6
40-45 .....	.0172	93,733	1,608	464,923	3,292,079	35.1
45-50 .....	.0245	92,125	2,255	455,407	2,827,156	30.7
50-55 .....	.0375	89,870	3,368	441,466	2,371,749	26.4
55-60 .....	.0598	86,502	5,174	420,303	1,930,283	22.3
60-65 .....	.0912	81,328	7,419	389,050	1,509,980	18.6
65-70 .....	.1316	73,909	9,726	346,142	1,120,930	15.2
70-75 .....	.1947	64,183	12,499	290,381	774,768	12.1
75-80 .....	.2839	51,684	14,675	221,862	484,407	9.4
80-85 .....	.4115	37,009	15,229	146,096	262,545	7.1
85 and over	1.0000	21,780	21,780	116,449	116,449	5.3
FEMALE						
0-1 .....	.0088	100,000	882	99,247	7,860,815	78.6
1-5 .....	.0017	99,118	171	396,063	7,761,568	78.3
5-10 .....	.0010	98,947	101	494,460	7,365,505	74.4
10-15 .....	.0010	98,846	100	494,014	6,871,045	69.5
15-20 .....	.0025	98,746	243	493,161	6,377,031	64.6
20-25 .....	.0027	98,503	264	491,867	5,883,870	59.7
25-30 .....	.0032	98,239	317	490,419	5,392,003	54.9
30-35 .....	.0043	97,922	416	488,618	4,901,584	50.1
35-40 .....	.0056	97,506	551	486,250	4,412,966	45.3
40-45 .....	.0084	96,955	817	482,884	3,926,716	40.5
45-50 .....	.0130	96,138	1,251	477,790	3,443,832	35.8
50-55 .....	.0213	94,887	2,022	469,694	2,966,042	31.3
55-60 .....	.0338	92,855	3,141	456,935	2,496,348	26.9
60-65 .....	.0523	89,724	4,694	437,568	2,039,413	22.7
65-70 .....	.0778	85,030	6,613	409,483	1,601,845	18.8
70-75	1183	78,417	9,280	370,076	1,192,362	15.2
75-80 .....	.1815	69,137	12,547	315,798	822,286	11.9
80-85 .....	.2898	56,590	16,402	243,090	506,488	9.0
85 and over	1.0000	40,188	40,188	263,398	263,398	6.6

SECTION 6 - LIFE TABLES - PAGE 8

Table 6-1. Abridged Life Tables by Race and Sex: United States, 1989—Con.
(Page 2 of 4)

Age interval Period of life between two exact ages stated in years, race, and sex	Proportion dying	Of 100,000 born alive		Stationary population		Average remaining lifetime
		Proportion of persons alive at beginning of age interval dying during interval	Number living at beginning of age interval	Number dying during age interval	In the age interval	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
x to $x + n$	nq_x	l_x	n^d_x	n^L_x	T_x	\bar{e}_x
WHITE						
0-1	.0081	100,000	814	99,299	7,599,881	76.0
1-5	.0017	99,186	170	396,346	7,500,562	75.6
5-10	.0011	99,016	108	494,786	7,104,236	71.7
10-15	.0013	98,908	124	494,304	6,609,450	66.8
15-20	.0041	98,784	409	492,989	6,115,146	61.9
20-25	.0049	98,375	487	490,673	5,622,157	57.2
25-30	.0054	97,888	526	488,111	5,131,484	52.4
30-35	.0064	97,362	625	485,282	4,643,373	47.7
35-40	.0081	96,737	784	481,838	4,158,091	43.0
40-45	.0110	95,953	1,055	477,322	3,676,253	38.3
45-50	.0165	94,898	1,569	470,875	3,198,931	33.7
50-55	.0265	93,329	2,474	460,874	2,728,056	29.2
55-60	.0434	90,855	3,942	445,022	2,267,182	25.0
60-65	.0675	86,913	5,863	420,746	1,822,160	21.0
65-70	.0993	81,050	8,048	386,053	1,401,414	17.3
70-75	.1494	73,002	10,906	338,750	1,015,361	13.9
75-80	.2214	62,096	13,747	277,027	676,611	10.9
80-85	.3331	48,349	20,174	201,747	399,584	8.3
85 and over	1.0000	32,244	32,244	197,837	197,837	6.1
WHITE, MALE						
0-1	.0091	100,000	908	99,216	7,267,465	72.7
1-5	.0019	99,092	187	395,936	7,168,249	72.3
5-10	.0012	98,905	123	494,189	6,772,313	68.5
10-15	.0016	98,782	154	493,635	6,278,124	63.6
15-20	.0057	98,628	565	491,869	5,784,489	58.6
20-25	.0075	98,063	731	488,512	5,292,620	54.0
25-30	.0080	97,332	775	484,685	4,804,108	49.4
30-35	.0093	96,557	898	480,562	4,319,423	44.7
35-40	.0115	95,659	1,104	475,677	3,838,861	40.1
40-45	.0147	94,555	1,394	469,545	3,363,184	35.6
45-50	.0216	93,161	2,013	461,176	2,893,639	31.1
50-55	.0338	91,148	3,080	448,564	2,432,463	26.7
55-60	.0560	88,068	4,933	428,754	1,983,899	22.5
60-65	.0875	83,135	7,275	398,491	1,555,145	18.7
65-70	.1278	75,860	9,694	356,045	1,156,654	15.2
70-75	.1919	66,166	12,696	299,881	800,609	12.1
75-80	.2827	53,470	15,115	229,747	500,728	9.4
80-85	.4108	38,355	15,756	151,476	270,981	7.1
85 and over	1.0000	22,599	22,599	119,505	119,505	5.3
WHITE, FEMALE						
0-1	.0071	100,000	715	99,387	7,923,460	79.2
1-5	.0015	99,285	151	396,777	7,824,073	78.8
5-10	.0009	99,134	93	495,418	7,427,296	74.9
10-15	.0009	99,041	93	495,008	6,931,878	70.0
15-20	.0025	98,948	245	494,166	6,436,870	65.1
20-25	.0024	98,703	237	492,927	5,942,704	60.2
25-30	.0027	98,466	267	491,673	5,449,777	55.3
30-35	.0035	98,199	341	490,181	4,958,104	50.5
35-40	.0046	97,858	454	488,234	4,467,923	45.7
40-45	.0073	97,404	710	485,380	3,979,689	40.9
45-50	.0116	96,694	1,119	480,886	3,494,309	36.1
50-55	.0195	95,575	1,862	473,525	3,013,423	31.5
55-60	.0316	93,713	2,957	461,629	2,539,898	27.1
60-65	.0493	90,756	4,478	443,269	2,078,269	22.9
65-70	.0746	86,278	6,439	416,182	1,635,000	19.0
70-75	.1155	79,839	9,220	377,392	1,218,818	15.3
75-80	.1788	70,619	12,628	323,122	841,426	11.9
80-85	.2877	57,991	16,685	249,482	518,304	8.9
85 and over	1.0000	41,306	41,306	268,822	268,822	6.5

SECTION 6 - LIFE TABLES - PAGE 9

Table 6-1. Abridged Life Tables by Race and Sex: United States, 1989—Con.
(Page 3 of 4)

Age interval Period of life between two exact ages stated in years, race, and sex	Proportion dying Proportion of persons alive at beginning of age interval dying during interval	Of 100,000 born alive		Stationary population		Average remaining lifetime
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
x to x + n	n ^d x	<i>l_x</i>	n ^d x	n ^L x	<i>T_x</i>	\bar{e}_x
ALL OTHER						
0-1	0.0163	100,000	1,630	98,610	7,124,869	71.2
1-5 .....	.0028	98,370	279	392,825	7,026,259	71.4
5-10 .....	.0016	98,091	155	490,026	6,633,434	67.6
10-15 .....	.0017	97,936	163	489,339	6,143,408	62.7
15-20 .....	.0052	97,773	509	487,734	5,654,069	57.8
20-25 .....	.0085	97,264	827	484,369	5,166,335	53.1
25-30 .....	.0103	96,437	992	479,777	4,681,966	48.5
30-35 .....	.0136	95,445	1,298	474,092	4,202,189	44.0
35-40 .....	.0183	94,147	1,722	466,664	3,728,097	39.6
40-45 .....	.0235	92,425	2,167	457,035	3,261,433	35.3
45-50 .....	.0317	90,258	2,863	444,567	2,804,398	31.1
50-55 .....	.0455	87,395	3,975	427,537	2,359,831	27.0
55-60 .....	.0653	83,420	5,450	404,033	1,932,294	23.2
60-65 .....	.0941	77,970	7,340	372,110	1,528,261	19.6
65-70 .....	.1286	70,630	9,085	330,995	1,156,151	16.4
70-75 .....	.1760	61,545	10,832	281,159	825,156	13.4
75-80 .....	.2420	50,713	12,272	223,032	543,997	10.7
80-85 .....	.3530	38,441	13,568	158,038	320,965	8.3
85 and over	1.0000	24,873	24,873	162,927	162,927	6.6
ALL OTHER, MALE						
0-1 .....	.0176	100,000	1,757	98,495	6,712,872	67.1
1-5 .....	.0031	98,243	305	392,266	6,614,377	67.3
5-10 .....	.0018	97,938	175	489,208	6,222,111	63.5
10-15 .....	.0020	97,769	198	488,419	5,732,903	58.6
15-20 .....	.0080	97,565	776	486,126	5,244,484	53.8
20-25 .....	.0132	96,789	1,282	480,934	4,758,358	49.2
25-30 .....	.0153	95,507	1,460	473,976	4,277,424	44.8
30-35 .....	.0197	94,047	1,857	465,716	3,803,448	40.4
35-40 .....	.0269	92,190	2,477	455,040	3,337,732	36.2
40-45 .....	.0335	89,713	3,002	441,477	2,882,692	32.1
45-50 .....	.0439	86,711	3,810	424,590	2,441,215	28.2
50-55 .....	.0617	82,901	5,114	402,316	2,016,625	24.3
55-60 .....	.0860	77,787	6,688	372,780	1,614,309	20.8
60-65 .....	.1194	71,099	8,490	334,833	1,241,529	17.5
65-70 .....	.1620	62,609	10,141	288,041	906,696	14.5
70-75 .....	.2202	52,468	11,555	233,598	618,655	11.8
75-80 .....	.2951	40,913	12,075	174,097	385,057	9.4
80-85 .....	.4182	28,838	12,061	113,306	210,960	7.3
85 and over	1.0000	16,777	16,777	97,654	97,654	5.8
ALL OTHER, FEMALE						
0-1 .....	.0150	100,000	1,499	98,729	7,522,063	75.2
1-5 .....	.0026	98,501	253	393,400	7,423,334	75.4
5-10 .....	.0014	98,248	134	490,870	7,029,934	71.6
10-15 .....	.0013	98,114	126	490,287	6,539,064	66.6
15-20 .....	.0024	97,988	232	489,408	6,048,777	61.7
20-25 .....	.0039	97,756	386	487,869	5,559,369	56.9
25-30 .....	.0057	97,370	552	485,528	5,071,500	52.1
30-35 .....	.0080	96,818	775	482,252	4,585,972	47.4
35-40 .....	.0108	96,043	1,040	477,795	4,103,720	42.7
40-45 .....	.0150	95,003	1,421	471,704	3,625,925	38.2
45-50 .....	.0214	93,582	2,002	463,227	3,154,221	33.7
50-55 .....	.0318	91,580	2,912	451,010	2,690,994	29.4
55-60 .....	.0479	88,668	4,247	433,243	2,239,984	25.3
60-65 .....	.0731	84,421	6,169	407,330	1,806,741	21.4
65-70 .....	.1015	78,252	7,945	372,121	1,399,411	17.9
70-75 .....	.1425	70,307	10,017	327,335	1,027,290	14.6
75-80 .....	.2054	60,290	12,385	271,065	699,955	11.6
80-85 .....	.3138	47,905	15,031	202,207	428,890	9.0
85 and over	1.0000	32,874	32,874	226,683	226,683	6.9

SECTION 6 - LIFE TABLES - PAGE 10

Table 6-1. Abridged Life Tables by Race and Sex: United States, 1989—Con.
(Page 4 of 4)

Age interval Period of life between two exact ages stated in years, race, and sex (1)	Proportion dying Proportion of persons alive at beginning of age interval dying during interval (2)	Of 100,000 born alive		Stationary population		Average remaining lifetime (7)
		Number living at beginning of age interval (3)	Number dying during age interval (4)	In the age interval (5)	In this and all subsequent age intervals (6)	
x to x + n	nq _x	l' _x	n ^d _x	nL _x	T _x	̄e _x
BLACK						
0-1	0.0186	100,000	1,863	98,399	6,923,552	69.2
1-5 .....	.0031	98,137	303	391,837	6,825,153	69.5
5-10 .....	.0017	97,834	167	488,707	6,433,316	65.8
10-15 .....	.0018	97,667	176	487,961	5,944,609	60.9
15-20 .....	.0056	97,491	550	486,237	5,456,648	56.0
20-25 .....	.0095	96,941	921	482,549	4,970,411	51.9
25-30 .....	.0118	96,020	1,134	477,367	4,487,862	46.7
30-35 .....	.0163	94,886	1,544	470,715	4,010,495	42.3
35-40 .....	.0221	93,342	2,067	462,017	3,539,780	37.9
40-45 .....	.0288	91,275	2,625	450,200	3,077,763	33.7
45-50 .....	.0380	88,650	3,366	435,325	2,627,563	29.6
50-55 .....	.0531	85,284	4,529	415,635	2,192,238	25.7
55-60 .....	.0747	80,755	6,031	389,270	1,776,603	22.0
60-65 .....	.1067	74,724	7,971	354,275	1,387,333	18.6
65-70 .....	.1445	66,753	9,648	310,162	1,033,058	15.5
70-75 .....	.1956	57,105	11,171	258,031	722,896	12.7
75-80 .....	.2672	45,934	12,273	199,018	464,865	10.1
80-85 .....	.3847	33,661	12,949	135,555	265,847	7.9
85 and over	1.0000	20,712	20,712	130,292	130,292	6.3
BLACK, MALE						
0-1 .....	.0200	100,000	2,004	98,275	6,484,736	64.8
1-5 .....	.0034	97,996	332	391,215	6,386,481	65.2
5-10 .....	.0020	97,664	192	487,788	5,995,246	61.4
10-15 .....	.0022	97,472	214	486,923	5,507,458	56.5
15-20 .....	.0088	97,258	855	484,424	5,020,535	51.6
20-25 .....	.0150	96,403	1,449	478,636	4,536,111	47.1
25-30 .....	.0177	94,954	1,681	470,701	4,057,475	42.7
30-35 .....	.0239	93,273	2,229	460,963	3,586,774	38.5
35-40 .....	.0332	91,044	3,023	447,995	3,125,811	34.3
40-45 .....	.0414	88,021	3,644	431,479	2,677,816	30.4
45-50 .....	.0534	84,377	4,507	411,229	2,246,337	26.6
50-55 .....	.0737	79,870	5,887	385,264	1,835,108	23.0
55-60 .....	.0980	73,983	7,253	352,333	1,449,844	19.6
60-65 .....	.1336	66,730	8,917	311,848	1,097,511	16.4
65-70 .....	.1816	57,813	10,501	263,083	785,663	13.6
70-75 .....	.2444	47,312	11,563	207,666	522,580	11.0
75-80 .....	.3261	35,749	11,658	149,139	314,914	8.8
80-85 .....	.4524	24,091	10,900	92,358	165,775	6.9
85 and over	1.0000	13,191	13,191	73,417	73,417	5.6
BLACK, FEMALE						
0-1 .....	.0172	100,000	1,717	98,527	7,351,437	73.5
1-5 .....	.0028	98,283	272	392,479	7,252,910	73.8
5-10 .....	.0014	98,011	141	489,661	6,860,431	70.0
10-15 .....	.0014	97,870	135	489,043	6,370,770	65.1
15-20 .....	.0024	97,735	237	488,135	5,881,727	60.2
20-25 .....	.0043	97,498	424	486,497	5,393,592	55.3
25-30 .....	.0065	97,074	626	483,882	4,907,095	50.6
30-35 .....	.0095	96,448	912	480,082	4,423,213	45.9
35-40 .....	.0127	95,536	1,215	474,846	3,943,131	41.3
40-45 .....	.0181	94,321	1,709	467,622	3,468,285	36.8
45-50 .....	.0252	92,612	2,337	457,586	3,000,663	32.4
50-55 .....	.0363	90,275	3,275	443,612	2,543,077	28.2
55-60 .....	.0547	87,000	4,757	423,662	2,099,465	24.1
60-65 .....	.0841	82,243	6,913	394,592	1,675,803	20.4
65-70 .....	.1142	75,330	8,600	355,876	1,281,211	17.0
70-75 .....	.1597	66,730	10,656	307,828	925,335	13.9
75-80 .....	.2280	56,074	12,783	248,925	617,507	11.0
80-85 .....	.3445	43,291	14,913	179,295	368,582	8.5
85 and over	1.0000	28,378	28,378	189,287	189,287	6.7

SECTION 6 - LIFE TABLES - PAGE 11

Table 6-2. Number of Survivors at Single Years of Age, Out of 100,000 Born Alive, by Race and Sex: United States, 1989

Age	All races			White			All other					
	Both sexes	Male	Female	Both sexes	Male	Female	Total			Black		
							Both sexes	Male	Female	Both sexes	Male	Female
0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1	99,014	98,914	99,118	99,186	99,092	99,285	98,370	98,243	98,501	98,137	97,996	98,283
2	98,946	98,838	99,059	99,125	99,024	99,232	98,275	98,136	98,417	97,881	98,193	
3	98,895	98,782	99,013	99,080	98,975	99,192	98,200	98,054	98,349	97,952	97,792	98,119
4	98,855	98,739	98,977	99,045	98,937	99,160	98,140	97,990	98,293	97,887	97,722	98,059
5	98,822	98,703	98,947	99,016	98,905	99,134	98,091	97,938	98,248	97,834	97,664	98,011
6	98,793	98,671	98,922	98,991	98,877	99,111	98,050	97,893	98,212	97,790	97,615	97,972
7	98,767	98,641	98,900	98,967	98,850	99,091	98,015	97,853	98,182	97,752	97,571	97,941
8	98,744	98,614	98,880	98,945	98,825	99,073	97,985	97,818	98,157	97,720	97,532	97,915
9	98,723	98,590	98,862	98,925	98,802	99,056	97,959	97,788	98,135	97,692	97,499	97,892
10	98,705	98,569	98,846	98,908	98,782	99,041	97,936	97,763	98,114	97,667	97,472	97,870
11	98,689	98,551	98,831	98,893	98,765	99,028	97,915	97,742	98,093	97,644	97,449	97,847
12	98,672	98,533	98,816	98,878	98,748	99,015	97,893	97,720	98,071	97,620	97,425	97,823
13	98,651	98,508	98,799	98,858	98,724	99,099	97,865	97,689	98,046	97,590	97,392	97,796
14	98,619	98,468	98,776	98,828	98,686	98,977	97,826	97,640	98,019	97,548	97,339	97,767
15	98,573	98,406	98,746	98,784	98,628	98,948	97,773	97,565	97,988	97,491	97,258	97,735
16	98,511	98,320	98,708	98,723	98,547	98,909	97,703	97,462	97,953	97,415	97,145	97,699
17	98,433	98,212	98,662	98,648	98,445	98,862	97,616	97,331	97,912	97,322	97,002	97,658
18	98,343	98,086	98,610	98,561	98,326	98,809	97,513	97,173	97,866	97,211	96,829	97,612
19	98,246	97,947	98,556	98,469	98,197	98,755	97,395	96,992	97,814	97,084	96,628	97,559
20	98,145	97,800	98,503	98,375	98,063	98,703	97,264	96,789	97,756	96,941	96,403	97,498
21	97,646	98,451	98,280	97,924	98,654	97,120	96,564	97,692	96,782	96,151	97,429	
22	97,934	97,484	98,399	98,184	97,780	98,607	96,962	95,317	97,621	96,607	95,873	97,352
23	97,824	97,316	98,347	98,087	97,633	98,561	96,793	96,054	97,544	96,419	95,575	97,267
24	97,711	97,145	98,294	97,988	97,483	98,514	96,617	95,782	97,460	96,222	95,267	97,174
25	97,597	96,973	98,239	97,888	97,332	98,466	95,437	95,507	97,370	96,020	94,954	97,074
26	97,481	96,801	98,181	97,787	97,181	98,416	96,253	95,230	97,274	95,813	94,639	96,967
27	97,364	96,628	98,121	97,684	97,029	98,365	96,064	94,949	97,172	95,599	94,319	96,852
28	97,245	96,453	98,058	97,580	96,876	98,312	95,868	94,661	97,062	95,376	93,989	96,728
29	97,122	96,274	97,992	97,473	96,719	98,257	95,663	94,362	96,944	95,139	93,642	96,594
30	96,993	96,088	97,922	97,362	96,557	98,199	95,445	94,047	96,818	94,886	93,273	96,448
31	96,859	95,895	97,848	97,247	96,390	98,138	95,214	93,715	96,682	94,615	92,881	96,289
32	96,719	95,695	97,769	97,127	96,217	98,073	94,970	93,367	96,537	94,326	92,466	96,118
33	96,572	95,487	97,666	97,002	96,038	98,005	94,712	92,999	96,382	94,018	92,024	95,934
34	96,419	95,269	97,598	96,872	95,852	97,933	94,438	92,608	96,217	93,690	91,551	95,740
35	96,259	95,041	97,506	95,737	95,659	97,858	94,147	92,190	96,043	93,342	91,044	95,536
36	96,090	94,801	97,410	95,595	95,457	97,779	93,838	91,744	95,859	92,972	90,501	95,321
37	95,912	94,549	97,308	96,446	95,245	97,696	93,510	91,270	95,664	92,580	89,922	95,095
38	95,726	94,286	97,199	96,290	95,024	97,607	93,164	90,770	95,457	92,166	89,312	94,855
39	95,531	94,014	97,082	96,126	94,794	97,510	92,802	90,250	95,237	91,731	88,677	94,598
40	95,327	93,733	96,955	95,555	94,404	97,425	89,713	95,003	91,275	88,021	94,321	
41	95,113	93,443	96,818	95,769	94,307	97,287	92,032	89,159	94,754	90,798	87,344	94,023
42	94,887	93,140	96,668	95,574	94,047	97,158	91,621	88,584	94,489	90,298	86,643	93,703
43	94,647	92,822	96,505	95,365	93,771	97,016	91,190	87,987	94,206	88,774	85,917	93,361
44	94,380	92,485	96,329	95,140	93,477	96,862	90,736	87,364	93,904	89,225	85,163	92,998
45	94,114	92,125	96,138	94,898	93,161	96,694	90,255	86,711	93,582	88,650	84,377	92,612
46	93,817	91,739	95,931	94,636	92,820	95,511	89,753	86,028	93,237	88,047	83,559	92,202
47	93,497	91,323	95,706	94,351	92,450	95,311	89,218	85,311	92,867	87,413	82,707	91,765
48	93,150	90,875	95,459	94,040	92,050	95,091	88,650	84,555	92,469	86,745	81,814	91,300
49	92,772	90,392	95,187	93,700	91,617	95,847	88,044	83,754	92,041	86,037	80,871	90,804
50	92,361	89,870	94,887	93,329	91,148	95,575	87,395	82,901	91,580	85,284	79,870	90,275
51	91,913	89,306	94,555	92,923	90,639	95,273	86,701	81,994	91,082	84,483	78,808	89,709
52	91,425	88,694	94,189	92,478	90,086	94,938	85,959	81,031	90,545	83,631	77,685	89,103
53	90,891	88,028	93,787	91,989	89,480	94,568	85,166	80,009	89,966	82,727	76,503	88,453
54	90,307	87,300	93,347	91,450	88,810	94,161	84,321	78,928	89,341	81,769	75,268	87,754
55	89,667	86,502	92,865	90,855	88,068	93,713	83,420	77,787	88,668	80,755	73,983	87,000
56	88,969	85,630	92,339	90,200	87,250	93,222	82,462	76,584	87,944	79,684	72,649	86,190
57	88,208	84,681	91,766	89,482	86,352	92,684	81,444	75,317	87,166	78,552	71,262	85,321
58	87,381	83,650	91,142	88,696	85,370	92,096	80,360	73,983	86,326	77,353	69,817	84,381
59	86,484	82,534	90,463	87,843	81,955	79,204	72,578	65,413	76,079	68,308	63,358	
60	85,513	81,328	89,724	86,913	83,135	90,756	77,970	71,099	84,421	74,724	66,730	82,243
61	84,464	80,029	88,921	85,904	81,873	89,995	76,655	69,545	83,344	73,284	65,083	81,029
62	83,334	78,635	88,051	84,812	80,511	89,169	75,259	67,917	82,182	71,762	63,368	79,719
63	82,124	77,148	87,113	83,639	79,052	88,275	73,786	66,216	80,941	70,162	61,584	78,323
64	80,836	75,572	86,106	82,385	77,501	87,312	72,242	64,446	79,629	68,490	59,732	76,856
65	79,469	73,909	85,030	81,050	75,860	86,278	70,630	62,609	78,252	66,753	57,813	75,330
66	78,023	72,161	83,881	79,634	74,131	85,169	68,952	60,708	76,809	64,952	55,829	73,748
67	76,493	70,325	82,653	78,131	72,309	83,980	67,206	58,744	75,297	63,087	53,783	72,104
68	74,871	68,391	81,339	76,532	70,368	82,702	65,391	57,717	73,713	61,158	51,679	70,393
69	73,147	66,346	79,930	74,825	68,339	81,324	63,505	54,625	72,051	59,164	49,520	66,604
70	71,313	64,183	78,417	73,002	66,166	79,839	61,545	52,468	70,307	57,105	47,312	66,730
71	69,366	61,901	76,795	71,058	63,865	78,240	59,512	50,248	68,479	54,982	45,058	64,769
72	67,306	59,506	75,081	68,995	61,441	76,522	57,408	47,971	66,566	52,799	42,765	62

SECTION 6 - LIFE TABLES - PAGE 12

Table 6-3. Expectation of Life at Single Years of Age, by Race and Sex: United States, 1989

Age	All races			White			All other					
	Both sexes	Male	Female	Both sexes	Male	Female	Total			Black		
							Both sexes	Male	Female	Both sexes	Male	Female
0	75.3	71.8	78.6	76.0	72.7	79.2	71.2	67.1	75.2	69.2	64.8	73.5
1	75.0	71.6	78.3	75.6	72.3	78.8	71.4	67.3	75.4	69.5	65.2	73.8
2	74.1	70.7	77.4	74.7	71.4	77.8	70.5	66.4	74.4	68.6	64.2	72.9
3	73.1	69.7	76.4	73.7	70.4	76.9	69.5	65.5	73.5	67.7	63.3	71.9
4	72.1	68.7	75.4	72.7	69.5	75.9	68.6	64.5	72.5	66.7	62.3	71.0
5	71.1	67.8	74.4	71.7	68.5	74.9	67.6	63.5	71.6	65.8	61.4	70.0
6	70.2	66.8	73.5	70.8	67.5	73.9	66.7	62.6	70.6	64.8	60.4	69.0
7	69.2	65.8	72.5	69.8	66.5	73.0	65.7	61.6	69.6	63.8	59.4	66.0
8	68.2	64.8	71.5	68.8	65.5	72.0	64.7	60.6	68.6	62.8	58.5	67.1
9	67.2	63.8	70.5	67.8	64.5	71.0	63.7	59.6	67.6	61.9	57.5	66.1
10	66.2	62.8	69.5	66.8	63.6	70.0	62.7	58.6	66.6	60.9	56.5	65.1
11	65.2	61.9	68.5	65.8	62.6	69.0	61.7	57.7	65.7	59.9	55.5	64.1
12	64.3	60.9	67.5	64.8	61.6	68.0	60.8	56.7	64.7	58.9	54.5	63.1
13	63.3	59.9	66.5	63.9	60.6	67.0	59.8	55.7	63.7	57.9	53.5	62.1
14	62.3	58.9	65.6	62.9	59.6	66.0	58.8	54.7	62.7	56.9	52.6	61.2
15	61.3	57.9	64.6	61.9	58.6	65.1	57.8	53.8	61.7	56.0	51.6	60.2
16	60.4	57.0	63.6	60.9	57.7	64.1	56.9	52.8	60.8	55.0	50.7	59.2
17	59.4	56.1	62.6	60.0	56.8	63.1	55.9	51.9	59.8	54.1	49.8	58.2
18	58.5	55.1	61.7	59.0	55.8	62.1	55.0	51.0	58.8	53.1	48.8	57.3
19	57.5	54.2	60.7	58.1	54.9	61.2	54.0	50.1	57.8	52.2	47.9	56.3
20	56.6	53.3	59.7	57.2	54.0	60.2	53.1	49.2	56.9	51.3	47.1	55.3
21	55.6	52.4	58.8	56.2	53.0	59.2	52.2	48.3	55.9	50.4	46.2	54.4
22	54.7	51.5	57.8	55.3	52.1	58.3	51.3	47.4	54.9	49.4	45.3	53.4
23	53.8	50.5	56.8	54.3	51.2	57.3	50.4	46.5	54.0	48.5	44.4	52.4
24	52.8	49.6	55.9	53.4	50.3	56.3	49.5	45.7	53.0	47.6	43.6	51.5
25	51.9	48.7	54.9	52.4	49.4	55.3	48.5	44.8	52.1	46.7	42.7	50.6
26	50.9	47.8	53.9	51.5	48.4	54.4	47.6	43.9	51.1	45.8	41.9	49.6
27	50.0	46.9	53.0	50.5	47.5	53.4	46.7	43.0	50.2	44.9	41.0	48.7
28	49.1	46.0	52.0	49.6	46.6	52.4	45.8	42.2	49.2	44.0	40.2	47.7
29	48.1	45.1	51.0	48.6	45.7	51.5	44.9	41.3	48.3	43.2	39.3	46.8
30	47.2	44.1	50.1	47.7	44.7	50.5	44.0	40.4	47.4	42.3	38.5	45.9
31	46.2	43.2	49.1	46.7	43.8	49.5	43.1	39.6	46.4	41.4	37.6	44.9
32	45.3	42.3	48.1	45.8	42.9	48.6	42.2	38.7	45.5	40.5	36.8	44.0
33	44.4	41.4	47.2	44.9	42.0	47.6	41.4	37.9	44.6	39.6	36.0	43.1
34	43.5	40.5	46.2	43.9	41.0	46.6	40.5	37.0	43.6	38.8	35.1	42.2
35	42.5	39.6	45.3	43.0	40.1	45.7	39.6	36.2	42.7	37.9	34.3	41.3
36	41.6	38.7	44.3	42.0	39.2	44.7	38.7	35.4	41.8	37.1	33.5	40.4
37	40.7	37.8	43.3	41.1	38.3	43.7	37.9	34.6	40.9	36.2	32.7	39.5
38	39.8	36.9	42.4	40.2	37.4	42.8	37.0	33.7	40.0	35.4	32.0	38.6
39	38.8	36.0	41.4	39.2	36.5	41.8	36.1	32.9	39.1	34.6	31.2	37.7
40	37.9	35.1	40.5	38.3	35.6	40.9	35.3	32.1	38.2	33.7	30.4	36.8
41	37.0	34.2	39.6	37.4	34.7	39.9	34.4	31.3	37.3	32.9	29.7	35.9
42	36.1	33.3	38.6	36.5	33.8	39.0	33.6	30.5	36.4	32.1	28.9	35.0
43	35.2	32.5	37.7	35.5	32.9	38.0	32.7	29.7	35.5	31.3	28.1	34.1
44	34.3	31.6	36.7	34.6	32.0	37.1	31.9	28.9	34.6	30.4	27.4	33.3
45	33.4	30.7	35.8	33.7	31.1	36.1	31.1	28.2	33.7	29.6	26.6	32.4
46	32.5	29.8	34.9	32.8	30.2	35.2	30.2	27.4	32.8	28.8	25.9	31.5
47	31.6	28.9	34.0	31.9	29.3	34.3	29.4	26.6	32.0	28.0	25.1	30.7
48	30.7	28.1	33.1	31.0	28.4	33.4	28.6	25.8	31.1	27.3	24.4	29.8
49	29.8	27.2	32.2	30.1	27.5	32.4	27.8	25.1	30.2	26.5	23.7	29.0
50	28.9	26.4	31.3	29.2	26.7	31.5	27.0	24.3	29.4	25.7	23.0	28.2
51	28.1	25.6	30.4	28.4	25.8	30.6	26.2	23.6	28.5	24.9	22.3	27.3
52	27.2	24.7	29.5	27.5	25.0	29.7	25.4	22.9	27.7	24.2	21.6	26.5
53	26.4	23.9	28.6	26.6	24.2	28.8	24.7	22.1	26.9	23.5	20.9	25.7
54	25.6	23.1	27.7	25.8	23.3	28.0	23.9	21.4	26.1	22.7	20.3	24.9
55	24.7	22.3	26.9	25.0	22.5	27.1	23.2	20.8	25.3	22.0	19.6	24.1
56	23.9	21.5	26.0	24.1	21.7	26.2	22.4	20.1	24.5	21.3	18.9	23.4
57	23.1	20.8	25.2	23.3	21.0	25.4	21.7	19.4	23.7	20.6	18.3	22.6
58	22.3	20.0	24.4	22.6	20.2	24.6	21.0	18.7	22.9	19.9	17.7	21.8
59	21.6	19.3	23.5	21.7	19.4	23.7	20.3	18.1	22.1	19.2	17.1	21.1
60	20.8	18.6	22.7	21.0	18.7	22.9	19.6	17.5	21.4	18.6	16.4	20.4
61	20.1	17.9	21.9	20.2	18.0	22.1	18.9	16.8	20.7	17.9	15.9	19.7
62	19.3	17.2	21.1	19.5	17.3	21.3	18.3	16.2	20.0	17.3	15.3	19.0
63	18.6	16.5	20.4	18.7	16.6	20.5	17.6	15.6	19.3	16.7	14.7	18.3
64	17.9	15.8	19.6	18.0	15.9	19.7	17.0	15.1	18.6	16.1	14.1	17.7
65	17.2	15.2	18.8	17.3	15.2	19.0	16.4	14.5	17.9	15.5	13.6	17.0
66	16.5	14.5	18.1	16.6	14.6	18.2	15.8	13.9	17.2	14.9	13.1	16.4
67	15.8	13.9	17.4	15.9	13.9	17.4	15.2	13.4	16.5	14.3	12.5	15.7
68	15.2	13.3	16.6	15.2	13.3	16.7	14.6	12.8	15.9	13.8	12.0	15.1
69	14.5	12.7	15.9	14.6	12.7	16.0	14.0	12.3	15.2	13.2	11.5	14.5
70	13.9	12.1	15.2	13.9	12.1	15.3	13.4	11.8	14.6	12.7	11.0	13.9
71	13.2	11.5	14.5	13.3	11.5	14.6	12.8	11.3	14.0	12.1	10.6	13.3
72	12.6	10.9	13.8	12.7	11.0	13.9	12.3	10.8	13.4	11.6	10.1	12.7
73	12.0	10.4	13.2	12.1	10.4	13.2	11.8	10.3	12.8	11.1	9.7	12.1
74	11.5	9.9	12.5	11.5	9.9	12.6	11.2	9.9	12.2	10.6	9.2	11.6
75	10.9	9.4	11.9	10.9	9.4	11.9	10.7	9.4	11.6	10.1	8.8	11.0
76	10.3	8.9	11.3	10.3	8.9	11.3	10.2	9.0	11.0	9.6	8.4	10.5
77	9.8	8.4	10.7	9.8	8.4	10.7	9.7	8.5	10.5	9.2	8.0	10.0
78	9.3	8.0	10.1	9.3	7.9	10.1	9.3	8.1	10.0	8.7	7.6	9.5
79	8.8	7.5	9.5	8.8	7.5	9.5	8.8	7.7	9.5	8.3	7.2	9.0
80	8.3	7.1	9.0	8.3	7.1	8.9	8.3	7.3	9.0	7.9	6.9	8.5
81	7.8	6.7	8.4	7.8	6.7	8.4	7.9	6.9	8.5	7.5	6.5	8.1
82	7.4	6.3	7.9	7.3	6.3	7.9	7.5	6.6	8.0	7.1	6.2	7.7
83	6.9	6.0	7.4	6.9	5.9	7.4	7.2	6.3	7.6	6.8	6.0	7.3
84	6.5	5.6	7.0	6.5	5.6	6.9	6.8	6.0	7.2	6.5	5.7	7.0
85	6.2	5.3	6.6	6.1	5.3	6.5	6.6	5.8	6.9	6.3	5.6	6.7

SECTION 6 - LIFE TABLES - PAGE 13

Table 6-4. Life Table Values by Race and Sex: Death-Registration States, 1900-1902 to 1919-21, and United States, 1929-31 to 1989

(Page 1 of 6)

[Alaska and Hawaii included beginning in 1959. For decennial periods prior to 1929-31, data are for groups of registration States as follows: 1900-1902 and 1909-11, 10 States and the District of Columbia; 1919-21, 34 States and the District of Columbia. Beginning 1970 excludes deaths of nonresidents of the United States; see Technical Appendix]

Age, race, and sex	Number of survivors out of 100,000 born alive (I_x)									
	1989	1979-81	1969-71	1959-61	1949-51	1939-41	1929-31	1919-21	1909-11	1900-1902
ALL RACES										
0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1	99,014	98,740	97,998	97,407	97,024	95,290	94,028	92,515	88,538	87,552
5	98,822	98,495	97,668	96,998	96,482	94,220	91,978	83,389	83,687	81,804
10	98,705	98,347	97,460	96,765	95,177	93,710	91,106	88,129	82,458	80,052
15	98,573	98,196	97,261	96,551	95,885	93,235	90,385	87,144	81,506	78,963
20	98,145	97,741	96,716	96,111	95,366	92,435	89,089	85,441	80,074	77,239
25	97,597	97,110	96,000	95,517	94,676	91,335	87,269	83,146	78,046	74,768
30	96,993	96,477	95,307	94,905	93,919	90,078	85,302	80,642	75,779	72,043
35	96,259	95,808	94,482	94,144	92,976	88,573	83,118	77,961	73,127	69,798
40	95,327	94,926	93,322	93,064	91,648	86,650	80,557	75,114	70,042	65,890
45	94,114	93,599	91,587	91,378	89,634	84,069	77,343	72,036	66,561	62,436
50	92,361	91,526	88,972	88,756	86,591	80,487	73,321	68,429	62,460	58,514
55	89,667	88,348	85,110	84,711	82,176	75,557	68,182	63,947	57,555	53,852
60	85,513	83,726	79,529	79,067	75,921	68,924	61,563	58,079	51,138	47,946
65	79,469	77,107	71,933	71,147	67,555	60,366	53,195	50,560	43,194	40,911
70	71,313	68,248	61,984	60,857	56,987	49,655	42,768	41,090	33,816	32,390
75	60,462	56,799	49,705	48,170	43,903	36,735	30,789	29,729	23,552	22,960
80	46,951	43,180	35,285	33,576	29,313	22,883	18,580	18,298	13,712	13,529
85	31,231	27,960	20,908	18,542	15,785	11,073	8,542	8,663	6,001	6,053
MALE										
0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1	98,914	98,607	97,755	97,087	96,661	94,762	93,440	91,745	87,505	86,426
5	98,703	98,333	97,395	96,643	96,077	93,624	91,294	88,505	82,718	80,548
10	98,569	98,160	97,151	96,375	95,726	93,054	90,346	87,184	81,249	78,775
15	98,406	97,972	96,904	96,107	95,366	92,508	89,561	86,156	80,261	77,681
20	97,800	97,316	96,126	95,491	94,695	91,617	88,220	84,440	78,792	75,984
25	96,973	96,361	95,040	94,631	93,791	90,385	86,359	82,252	76,675	73,472
30	96,088	95,430	94,072	93,826	92,861	89,009	84,346	79,890	74,378	70,747
35	95,041	94,501	92,997	92,889	91,760	87,371	82,075	77,514	71,614	67,752
40	93,733	93,345	91,541	91,572	90,207	85,246	79,357	74,432	68,297	64,447
45	92,125	91,649	89,369	89,492	87,819	82,336	75,882	71,244	64,518	60,849
50	89,870	89,007	86,070	86,199	84,158	78,254	71,518	67,553	60,118	56,736
55	86,502	84,936	81,139	81,039	78,781	72,627	65,981	62,965	54,970	51,939
60	81,328	79,012	73,958	73,887	71,246	65,142	58,909	56,917	48,343	45,895
65	73,909	70,646	64,318	64,177	61,566	55,776	50,154	49,218	40,264	38,736
70	64,183	59,681	52,296	52,244	49,950	44,588	39,516	39,668	31,023	30,217
75	51,684	46,272	38,797	38,950	36,756	31,864	27,718	28,316	21,213	21,076
80	37,009	31,810	24,921	25,300	25,237	18,995	16,172	17,128	11,942	12,084
85	21,780	18,020	13,168	12,845	11,750	8,693	7,107	7,920	5,059	5,179
FEMALE										
0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1	99,118	98,880	98,254	97,744	97,406	95,848	94,728	93,363	89,623	88,733
5	98,947	98,566	97,955	97,371	96,908	94,848	92,789	90,380	85,117	83,119
10	98,846	98,544	97,784	97,173	96,652	94,402	92,008	89,186	83,728	81,390
15	98,746	98,432	97,636	97,016	96,431	94,000	91,364	88,247	82,813	80,307
20	98,503	98,184	97,331	96,756	95,066	93,293	90,116	86,556	81,418	78,555
25	98,239	97,883	96,966	96,418	95,583	92,322	88,328	84,135	79,481	76,119
30	97,922	97,551	96,544	95,996	94,933	91,182	86,398	81,463	77,247	73,394
35	97,506	97,140	95,966	95,409	94,206	89,810	84,304	78,713	74,719	70,463
40	96,955	96,531	95,097	94,560	93,101	88,092	81,927	75,907	71,894	67,407
45	96,138	95,570	93,793	93,265	91,469	85,856	79,041	72,954	68,755	64,121
50	94,887	94,060	91,852	91,327	89,075	82,828	75,456	69,452	65,001	60,415
55	92,865	91,760	89,066	88,451	85,694	78,708	70,832	65,099	60,392	55,908
60	89,724	88,414	85,139	84,430	80,890	73,093	64,795	59,438	54,226	50,155
65	85,030	83,520	79,698	78,462	74,119	65,523	56,924	52,126	46,438	43,246
70	78,417	76,720	71,955	70,100	64,873	55,449	46,774	42,741	36,916	34,721
75	69,137	67,186	61,107	58,394	52,111	42,425	34,600	31,344	26,155	24,994
80	56,590	54,372	46,445	43,063	36,486	27,524	21,578	19,613	15,682	15,129
85	40,188	37,772	29,538	25,269	20,668	13,972	10,322	9,515	7,051	7,063
WHITE										
0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1	99,186	98,898	98,224	97,714	97,278	95,685	-----	-----	-----	-----
5	99,016	98,675	97,930	97,353	96,790	94,713	-----	-----	-----	-----
10	98,908	98,536	97,733	97,131	96,502	94,228	-----	-----	-----	-----
15	98,784	98,391	97,546	96,928	96,228	93,792	-----	-----	-----	-----
20	98,375	97,939	97,036	96,508	95,763	93,117	-----	-----	-----	-----
25	97,888	97,340	96,406	95,965	95,169	92,213	-----	-----	-----	-----
30	97,352	96,774	95,824	95,440	94,536	91,185	-----	-----	-----	-----
35	96,737	96,192	95,152	94,798	93,750	89,941	-----	-----	-----	-----
40	95,953	95,427	94,190	93,870	92,616	88,318	-----	-----	-----	-----
45	94,898	94,257	92,681	92,374	90,847	86,069	-----	-----	-----	-----
50	93,329	92,384	90,306	89,958	88,110	82,833	-----	-----	-----	-----
55	90,855	89,427	86,688	86,173	84,027	78,218	-----	-----	-----	-----
60	86,913	85,031	81,323	80,811	78,066	71,785	-----	-----	-----	-----
65	81,050	78,585	73,889	73,102	69,850	63,201	-----	-----	-----	-----
70	73,002	69,801	63,991	62,834	59,189	52,165	-----	-----	-----	-----
75	62,096	58,299	51,586	49,895	45,688	38,610	-----	-----	-----	-----
80	48,349	44,409	36,659	34,697	30,438	23,976	-----	-----	-----	-----
85	32,244	28,768	21,578	19,017	16,239	11,483	-----	-----	-----	-----

SECTION 6 - LIFE TABLES - PAGE 14

Table 6-4. Life Table Values by Race and Sex: Death-Registration States, 1900-1902 to 1919-21, and United States, 1929-31 to 1989—Con.

(Page 2 of 6)

[Alaska and Hawaii included beginning in 1959. For decennial periods prior to 1929-31, data are for groups of registration States as follows: 1900-1902 and 1909-11, 10 States and the District of Columbia; 1919-21, 34 States and the District of Columbia. Beginning 1970 excludes deaths of nonresidents of the United States; see Technical Appendix]

Age, race, and sex	Average number of years of life remaining \bar{e}_x									
	1989	1979-81	1969-71	1959-61	1949-51	1939-41	1929-31	1919-21	1909-11	1900-1902
ALL RACES										
0	75.3	73.88	70.75	69.89	68.07	63.62	59.20	56.40	51.49	49.24
1	75.0	73.82	71.19	70.75	69.16	65.76	61.94	59.94	57.11	55.20
5	71.1	70.00	67.43	67.04	65.54	62.49	59.29	57.99	56.21	54.98
10	66.2	65.10	62.57	62.19	60.74	57.82	54.84	53.79	52.15	51.14
15	61.3	60.19	57.69	57.33	55.91	53.10	50.25	49.37	47.73	46.81
20	56.6	55.46	53.00	52.58	51.20	48.54	45.94	45.30	43.53	42.79
25	51.9	50.81	48.37	47.89	46.56	44.09	41.85	41.47	39.60	39.12
30	47.2	46.12	43.71	43.18	41.91	39.67	37.75	37.68	35.70	35.51
35	42.5	41.43	39.07	38.51	37.31	35.30	33.68	33.89	31.90	31.92
40	37.9	36.79	34.52	33.92	32.81	31.03	29.67	30.08	28.20	28.34
45	33.4	32.27	30.12	29.50	28.49	26.90	25.79	26.25	24.54	24.77
50	28.9	27.94	25.93	25.29	24.40	22.98	22.06	22.50	20.98	21.26
55	24.7	23.85	21.99	21.37	20.57	19.31	18.53	18.90	17.55	17.88
60	20.8	20.02	18.34	17.71	17.04	15.91	15.24	15.54	14.42	14.76
65	17.2	16.51	15.00	14.39	13.83	12.80	12.23	12.47	11.60	11.86
70	13.9	13.32	12.00	11.38	10.92	10.00	9.58	9.74	9.11	9.30
75	10.9	10.48	9.32	8.71	8.40	7.62	7.32	7.49	6.99	7.08
80	8.3	7.98	7.10	6.39	6.34	5.73	5.50	5.63	5.25	5.30
85	6.2	5.96	5.28	4.58	4.69	4.31	4.19	4.21	4.00	3.96
MALE										
0	71.8	70.11	67.04	66.80	65.47	61.60	57.71	55.50	49.86	47.88
1	71.6	70.10	67.58	67.80	66.73	64.00	60.75	59.47	55.95	54.95
5	67.8	66.29	63.82	64.10	63.12	60.76	58.14	57.60	55.11	54.22
10	62.8	61.41	58.98	59.27	58.35	56.12	53.75	53.44	51.07	50.39
15	57.9	56.52	54.12	54.43	53.56	51.43	49.18	49.05	46.66	46.06
20	53.3	51.88	49.54	49.77	48.92	46.91	44.88	44.99	42.48	42.03
25	48.7	47.37	45.07	45.19	44.36	42.51	40.79	41.11	38.59	38.38
30	44.1	42.81	40.51	40.56	39.78	38.13	36.71	37.26	34.70	34.76
35	39.6	38.20	35.95	35.94	35.23	33.79	32.65	33.43	30.94	31.19
40	35.1	33.64	31.48	31.42	30.79	29.57	28.68	29.63	27.32	27.65
45	30.7	29.22	27.18	27.09	26.55	25.52	24.87	25.84	23.77	24.14
50	26.4	25.00	23.12	23.02	22.59	21.72	21.25	22.11	20.32	20.70
55	22.3	21.08	19.36	19.32	18.96	18.20	17.79	18.53	16.98	17.38
60	18.6	17.46	15.99	15.94	15.68	14.99	14.62	15.22	13.95	14.33
65	15.2	14.21	12.99	12.95	12.74	12.07	11.72	12.20	11.24	11.50
70	12.1	11.35	10.39	10.33	10.11	9.46	9.18	9.52	8.83	9.02
75	9.4	8.90	8.13	7.99	7.83	7.22	7.02	7.31	6.75	6.84
80	7.1	6.80	6.27	5.95	5.94	5.44	5.27	5.49	5.10	5.11
85	5.3	5.13	4.73	4.39	4.41	4.11	4.02	4.10	3.90	3.82
FEMALE										
0	78.6	77.62	74.64	73.24	70.96	65.89	60.90	57.40	53.24	50.70
1	78.3	77.50	74.97	73.93	71.84	67.73	65.37	60.45	58.37	56.10
5	74.4	73.67	71.19	70.21	68.21	64.43	60.66	58.41	57.39	55.80
10	69.5	68.75	66.31	65.35	63.38	59.73	56.16	54.16	53.31	51.94
15	64.6	63.83	61.41	60.45	58.52	54.97	51.54	49.71	48.87	47.60
20	59.7	58.98	56.59	55.60	53.73	50.37	47.21	45.63	44.66	43.60
25	54.9	54.16	51.80	50.79	48.99	45.87	43.11	41.86	40.69	39.92
30	50.1	49.33	47.01	46.00	44.28	41.41	39.02	38.15	36.79	36.30
35	45.3	44.53	42.28	41.27	39.63	37.01	34.92	34.40	32.95	32.71
40	40.5	39.80	37.64	36.61	35.06	32.68	30.86	30.58	29.15	29.08
45	35.8	35.17	33.13	32.09	30.64	28.46	26.89	26.71	25.36	25.44
50	31.3	30.69	28.77	27.71	26.40	24.40	23.05	22.92	21.67	21.84
55	26.9	26.39	24.59	23.53	22.33	20.54	19.38	19.28	18.13	18.39
60	22.7	22.29	20.60	19.52	18.50	16.92	15.94	15.87	14.90	15.21
65	18.8	18.44	16.83	15.80	14.95	13.57	12.78	12.73	11.96	12.22
70	15.2	14.84	13.35	12.37	11.71	10.56	9.99	9.96	9.38	9.59
75	11.9	11.58	10.26	9.33	8.94	8.01	7.61	7.65	7.20	7.34
80	9.0	8.69	7.68	6.72	6.67	5.99	5.70	5.75	5.37	5.51
85	6.6	6.38	5.63	4.71	4.90	4.47	4.32	4.30	4.08	4.12
WHITE										
0	76.0	74.53	71.62	70.73	69.02	64.92	-----	-----	-----	-----
1	75.6	74.35	71.91	71.38	69.95	66.84	-----	-----	-----	-----
5	71.7	70.52	68.12	67.64	66.29	63.52	-----	-----	-----	-----
10	66.8	65.62	63.26	62.79	61.48	58.83	-----	-----	-----	-----
15	61.9	60.71	58.37	57.92	56.65	54.09	-----	-----	-----	-----
20	57.2	55.98	53.66	53.16	51.91	49.47	-----	-----	-----	-----
25	52.4	51.30	49.00	46.44	47.22	44.92	-----	-----	-----	-----
30	47.7	46.59	44.28	43.69	42.52	40.40	-----	-----	-----	-----
35	43.0	41.86	39.58	38.97	37.86	35.93	-----	-----	-----	-----
40	38.3	37.17	34.95	34.33	33.29	31.54	-----	-----	-----	-----
45	33.7	32.60	30.48	29.84	28.88	27.29	-----	-----	-----	-----
50	29.2	28.21	26.21	25.57	24.70	23.26	-----	-----	-----	-----
55	25.0	24.05	22.19	21.58	20.77	19.47	-----	-----	-----	-----
60	21.0	20.16	18.48	17.84	17.15	15.98	-----	-----	-----	-----
65	17.3	16.59	15.08	14.44	13.86	12.80	-----	-----	-----	-----
70	13.9	13.35	12.01	11.37	10.89	9.96	-----	-----	-----	-----
75	10.9	10.47	9.27	8.65	8.34	7.55	-----	-----	-----	-----
80	8.3	7.95	7.01	6.33	6.27	5.64	-----	-----	-----	-----
85	6.1	5.90	5.19	4.53	4.62	4.20	-----	-----	-----	-----

SECTION 6 - LIFE TABLES - PAGE 15

Table 6-4. Life Table Values by Race and Sex: Death-Registration States, 1900-1902 to 1919-21, and United States, 1929-31 to 1989—Con.

(Page 3 of 6)

[Alaska and Hawaii included beginning in 1959. For decennial periods prior to 1929-31, data are for groups of registration States as follows: 1900-1902 and 1909-11, 10 States and the District of Columbia; 1919-21, 34 States and the District of Columbia. Beginning 1970 excludes deaths of nonresidents of the United States; see Technical Appendix]

Age, race, and sex	Number of survivors out of 100,000 born alive (ℓ_x)									
	1989	1979-81	1969-71	1959-61	1949-51	1939-41	1929-31	1919-21	1909-11	1900-1902
WHITE, MALE										
0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1	99,092	98,769	97,994	97,408	96,931	95,188	93,768	91,975	87,674	86,655
5	98,905	98,519	97,671	97,015	96,403	94,150	91,738	88,842	82,972	80,864
10	98,782	98,357	97,441	96,758	96,069	93,601	90,810	87,530	81,519	79,109
15	98,628	98,176	97,208	96,503	95,728	93,089	90,074	86,546	80,549	78,037
20	98,063	97,525	96,480	95,908	95,104	92,293	88,904	84,997	79,116	76,376
25	97,332	96,616	95,524	95,106	94,294	91,241	87,371	83,061	77,047	73,907
30	96,557	95,783	94,716	94,401	93,489	90,092	85,707	80,888	74,810	71,219
35	95,659	94,980	93,843	93,589	92,543	88,713	83,812	78,441	72,108	68,245
40	94,555	93,984	92,631	92,427	91,173	86,880	81,457	75,733	68,848	64,954
45	93,161	92,494	90,725	90,533	89,002	84,285	78,345	72,696	65,115	61,369
50	91,148	90,105	87,690	87,424	85,601	80,521	74,288	69,107	60,741	57,274
55	88,068	86,303	83,001	82,463	80,496	75,156	68,981	64,574	55,622	52,491
60	83,135	80,625	75,969	75,495	73,172	67,787	61,933	58,498	48,987	46,452
65	75,860	72,393	66,343	65,834	63,541	59,305	52,964	50,663	40,862	39,245
70	66,166	61,384	54,138	53,825	51,735	46,739	41,880	40,873	31,527	30,640
75	53,470	47,712	40,324	40,207	38,104	33,404	29,471	29,205	21,585	21,387
80	38,355	32,788	25,885	25,993	24,005	19,860	17,221	17,655	12,160	12,266
85	22,599	18,538	13,527	13,065	12,015	9,013	7,572	8,154	5,145	5,252
WHITE, FEMALE										
0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1	99,285	99,035	98,468	98,036	97,645	96,211	95,037	93,608	89,774	88,939
5	99,134	98,841	98,203	97,709	97,199	95,309	93,216	90,721	85,349	83,426
10	99,041	98,725	98,042	97,525	96,960	94,890	92,466	89,564	83,979	81,723
15	98,948	98,618	97,902	97,375	96,756	94,534	91,894	88,712	83,093	80,680
20	98,703	98,374	97,618	97,135	96,454	93,984	90,939	87,281	81,750	78,978
25	98,466	98,093	97,299	96,844	96,072	93,228	89,524	85,163	79,865	76,588
30	98,199	97,802	96,945	96,499	95,605	92,320	87,972	82,740	77,676	73,887
35	97,858	97,445	96,474	96,026	94,977	91,211	86,248	80,206	75,200	70,971
40	97,404	96,913	95,762	95,326	94,080	89,805	84,256	77,624	72,425	67,935
45	96,694	96,065	94,649	94,228	92,725	87,920	81,780	74,871	69,341	64,677
50	95,575	94,710	92,924	92,522	90,685	85,267	78,572	71,547	65,629	61,005
55	93,713	92,594	90,383	89,967	87,699	81,520	74,321	67,323	61,053	56,509
60	90,756	89,451	86,726	86,339	83,279	76,200	68,462	61,704	54,900	50,752
65	86,278	84,764	81,579	80,739	76,773	68,701	60,499	54,299	47,086	43,806
70	79,839	78,139	74,101	72,507	67,545	58,363	49,932	44,638	37,482	35,206
75	70,619	68,712	63,290	60,461	54,397	44,685	37,024	32,777	26,569	25,362
80	57,991	55,770	48,182	44,676	38,026	28,882	23,053	20,492	15,929	15,349
85	41,306	38,774	30,490	26,046	21,348	14,487	10,937	9,909	7,152	7,149
ALL OTHER										
0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1	98,370	98,097	96,909	95,732	95,407	95,051	94,482	94,060	93,216	90,721
5	98,091	97,756	96,400	95,051	94,482	93,889	92,738	91,321	89,932	88,939
10	97,936	97,568	96,126	94,745	94,060	93,646	92,321	90,932	88,712	83,093
15	97,773	97,387	95,864	94,460	93,646	92,321	90,932	88,712	83,093	78,978
20	97,264	96,913	95,101	93,889	92,925	91,321	90,932	88,712	83,093	78,978
25	96,437	96,107	93,792	92,267	91,825	90,285	84,055	82,620	79,205	75,362
30	95,445	95,088	92,309	91,699	89,584	88,327	80,865	78,441	74,810	71,219
35	94,147	93,870	90,470	90,046	87,402	86,248	83,812	80,206	75,200	70,971
40	92,425	92,245	87,964	87,766	84,478	84,256	80,507	77,624	72,425	67,935
45	90,258	89,928	84,575	84,501	80,507	80,507	77,624	72,425	67,935	64,677
50	87,395	86,525	80,046	80,172	74,976	74,976	71,547	65,629	61,005	56,509
55	83,420	81,732	74,150	73,893	67,660	67,660	64,233	61,053	56,509	50,752
60	77,970	75,300	66,775	65,795	58,593	58,593	55,363	52,091	47,086	43,806
65	70,630	67,179	57,797	56,038	48,649	48,649	45,434	42,221	39,009	35,206
70	61,545	57,635	47,542	45,434	38,616	38,616	35,531	32,419	29,297	25,362
75	50,713	46,362	35,987	34,531	28,968	28,968	26,003	23,053	20,492	15,929
80	38,441	34,558	25,215	24,815	20,003	20,003	17,221	17,655	12,352	10,937
85	24,873	22,279	16,299	15,337	12,433	12,433	10,937	9,909	7,152	7,149
ALL OTHER, MALE										
0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1	98,243	97,939	96,592	95,301	94,911	91,696	90,920	89,920	88,939	88,939
5	97,938	97,559	96,038	94,570	93,921	90,920	89,920	88,939	88,939	88,939
10	97,763	97,337	95,716	94,234	93,453	92,211	91,211	90,211	89,211	89,211
15	97,565	97,113	95,385	93,874	92,965	91,417	90,417	89,417	88,417	88,417
20	96,789	96,431	94,293	93,108	91,941	86,770	85,770	84,770	83,770	83,770
25	95,507	95,200	92,267	91,825	90,285	84,055	82,620	81,620	79,205	75,362
30	94,047	93,666	90,106	90,270	88,327	80,865	78,441	76,221	72,425	67,935
35	92,190	91,891	87,597	88,331	85,940	77,185	75,185	73,185	70,971	68,245
40	89,713	89,645	84,378	85,744	82,832	72,830	70,830	68,830	64,677	61,369
45	86,711	86,578	80,163	82,075	78,686	67,514	65,514	63,514	61,369	59,205
50	82,901	82,153	74,748	77,239	72,891	60,766	58,766	56,766	54,766	52,491
55	77,787	76,019	67,808	70,351	65,122	52,867	50,867	48,867	46,452	43,806
60	71,099	68,093	59,396	61,669	55,535	44,370	42,370	40,370	38,370	35,206
65	62,609	58,517	49,607	51,392	45,198	35,912	33,912	31,912	29,297	25,362
70	52,468	47,796	39,025	39,914	35,018	27,688	25,688	23,688	21,387	19,274
75	40,913	36,191	27,789	29,054	25,472	19,765	17,765	15,765	13,765	11,765
80	28,838	24,969	17,999	19,994	16,904	12,352	10,352	8,352	6,352	4,352
85	16,777	14,454	10,811	11,620	9,898	6,492	5,492	4,492	3,492	2,492

SECTION 6 - LIFE TABLES - PAGE 16

Table 6-4. Life Table Values by Race and Sex: Death-Registration States, 1900-1902 to 1919-21, and United States, 1929-31 to 1989—Con.

(Page 4 of 6)

[Alaska and Hawaii included beginning in 1959. For decennial periods prior to 1929-31, data are for groups of registration States as follows: 1900-1902 and 1909-11, 10 States and the District of Columbia; 1919-21, 34 States and the District of Columbia. Beginning 1970 excludes deaths of nonresidents of the United States; see Technical Appendix]

Age, race, and sex	Average number of years of life remaining \bar{e}_x									
	1989	1979-81	1969-71	1959-61	1949-51	1939-41	1929-31	1919-21	1909-11	1900-1902
WHITE, MALE										
0	72.7	70.82	67.94	67.55	66.31	62.81	59.12	56.34	50.23	48.23
1	72.3	70.70	68.33	68.34	67.41	64.98	62.04	60.24	56.26	54.61
5	68.5	66.87	64.55	64.61	63.77	61.68	59.38	58.31	55.37	54.43
10	63.6	61.98	59.69	59.78	58.98	57.03	54.96	54.15	51.32	50.59
15	58.6	57.09	54.83	54.93	54.18	52.33	50.39	49.74	46.91	46.25
20	54.0	52.45	50.22	50.25	49.52	47.76	46.02	45.60	42.71	42.19
25	49.4	47.92	45.70	45.65	44.93	43.28	41.78	41.60	38.79	38.52
30	44.7	43.31	41.07	40.97	40.29	38.80	37.54	37.65	34.87	34.88
35	40.1	36.66	36.43	36.31	35.68	34.36	33.33	33.74	31.08	31.29
40	35.6	34.04	31.87	31.73	31.17	30.03	29.22	29.86	27.43	27.74
45	31.1	29.55	27.48	27.34	26.87	25.87	25.28	26.00	23.86	24.21
50	26.7	25.26	23.34	23.22	22.83	21.96	21.51	22.22	20.39	20.76
55	22.6	21.25	19.51	19.45	19.11	18.34	17.97	18.59	17.03	17.42
60	18.7	17.56	16.07	16.01	15.76	15.05	14.72	15.25	13.98	14.35
65	15.2	14.26	13.02	12.97	12.75	12.07	11.77	12.21	11.25	11.51
70	12.1	11.35	10.38	10.29	10.07	9.42	9.20	9.51	8.83	9.03
75	9.4	8.87	8.06	7.92	7.77	7.17	7.02	7.30	6.75	6.84
80	7.1	6.76	6.18	5.89	5.88	5.38	5.26	5.47	5.09	5.10
85	5.3	5.09	4.63	4.34	4.35	4.02	3.99	4.06	3.86	3.81
WHITE, FEMALE										
0	79.2	78.22	75.49	74.19	72.03	67.29	62.67	58.53	53.62	51.08
1	78.8	77.98	75.66	74.68	72.77	68.93	64.93	61.51	58.69	56.39
5	74.9	74.13	71.86	70.92	69.09	65.57	62.17	59.43	57.67	56.03
10	70.0	69.21	66.97	66.05	64.26	60.85	57.65	55.17	53.57	52.15
15	65.1	64.29	62.07	61.15	59.39	56.07	53.00	50.67	49.12	47.79
20	60.2	59.44	57.24	56.29	54.56	51.38	48.52	46.46	44.88	43.77
25	55.3	54.60	52.42	51.45	49.77	46.78	44.25	42.55	40.88	40.05
30	50.5	49.76	47.60	46.63	45.00	42.21	39.99	38.72	36.96	36.42
35	45.7	44.93	42.82	41.84	40.28	37.70	35.73	34.86	33.09	32.82
40	40.9	40.16	38.12	37.13	35.64	33.25	31.52	30.94	29.26	29.17
45	36.1	35.49	33.54	32.53	31.12	28.90	27.39	26.98	25.45	25.51
50	31.5	30.96	29.11	28.08	26.76	24.72	23.41	23.12	21.74	21.89
55	27.1	26.61	24.85	23.81	22.58	20.73	19.60	19.40	18.18	18.43
60	22.9	22.45	20.79	19.69	18.64	17.00	16.05	15.93	14.92	15.23
65	19.0	18.55	16.93	15.88	15.00	13.56	12.81	12.75	11.97	12.23
70	15.3	14.89	13.37	12.38	11.68	10.50	9.98	9.94	9.38	9.59
75	11.9	11.58	10.21	9.28	8.87	7.92	7.56	7.62	7.20	7.33
80	8.9	8.65	7.59	6.67	6.59	5.88	5.63	5.70	5.35	5.50
85	6.5	6.32	5.54	4.66	4.83	4.34	4.24	4.24	4.06	4.10
ALL OTHER										
0	71.2	69.84	64.95	63.91	60.73	-----	-----	-----	-----	-----
1	71.4	70.19	66.02	65.75	62.65	-----	-----	-----	-----	-----
5	67.6	66.43	62.36	62.21	59.25	-----	-----	-----	-----	-----
10	62.7	61.56	57.53	57.41	54.50	-----	-----	-----	-----	-----
15	57.8	56.67	52.68	52.57	49.73	-----	-----	-----	-----	-----
20	53.1	51.93	48.08	47.88	45.19	-----	-----	-----	-----	-----
25	48.5	47.34	43.71	43.35	40.85	-----	-----	-----	-----	-----
30	44.0	42.82	39.37	38.89	36.59	-----	-----	-----	-----	-----
35	39.6	38.34	35.12	34.56	32.44	-----	-----	-----	-----	-----
40	35.3	33.97	31.05	30.39	28.48	-----	-----	-----	-----	-----
45	31.1	29.78	27.19	26.46	24.75	-----	-----	-----	-----	-----
50	27.0	25.85	23.58	22.74	21.38	-----	-----	-----	-----	-----
55	23.2	22.21	20.24	19.45	18.41	-----	-----	-----	-----	-----
60	19.6	18.88	17.19	16.53	15.87	-----	-----	-----	-----	-----
65	16.4	15.86	14.47	13.96	13.59	-----	-----	-----	-----	-----
70	13.4	13.06	12.04	11.63	11.48	-----	-----	-----	-----	-----
75	10.7	10.61	10.09	9.52	9.48	-----	-----	-----	-----	-----
80	8.3	8.38	8.36	7.28	7.62	-----	-----	-----	-----	-----
85	6.6	6.63	6.62	5.27	5.79	-----	-----	-----	-----	-----
ALL OTHER, MALE										
0	67.1	65.63	60.98	61.48	58.91	52.33	-----	-----	-----	-----
1	67.3	66.01	62.13	63.50	61.06	56.05	-----	-----	-----	-----
5	63.5	62.26	58.48	59.98	57.69	53.13	-----	-----	-----	-----
10	58.6	57.40	53.67	55.19	52.96	48.54	-----	-----	-----	-----
15	53.8	52.52	48.84	50.39	48.23	43.95	-----	-----	-----	-----
20	49.2	47.87	44.37	45.78	43.73	39.74	-----	-----	-----	-----
25	44.8	43.46	40.29	41.38	39.49	35.94	-----	-----	-----	-----
30	40.4	39.13	36.20	37.05	35.31	32.25	-----	-----	-----	-----
35	36.2	34.83	32.16	32.81	31.21	28.67	-----	-----	-----	-----
40	32.1	30.64	28.29	28.72	27.29	25.23	-----	-----	-----	-----
45	28.2	26.63	24.64	24.89	23.59	22.02	-----	-----	-----	-----
50	24.3	22.92	21.24	21.28	20.25	19.18	-----	-----	-----	-----
55	20.8	19.56	18.14	18.11	17.36	16.67	-----	-----	-----	-----
60	17.5	16.54	15.35	15.29	14.91	14.38	-----	-----	-----	-----
65	14.5	13.83	12.87	12.84	12.75	12.18	-----	-----	-----	-----
70	11.8	11.36	10.68	10.81	10.74	10.06	-----	-----	-----	-----
75	9.4	9.20	8.99	8.93	8.83	8.09	-----	-----	-----	-----
80	7.3	7.22	7.57	6.87	7.07	6.46	-----	-----	-----	-----
85	5.8	5.69	6.04	5.08	5.38	5.08	-----	-----	-----	-----

SECTION 6 - LIFE TABLES - PAGE 17

Table 6-4. Life Table Values by Race and Sex: Death-Registration States, 1900-1902 to 1919-21, and United States, 1929-31 to 1989—Con.

(Page 5 of 6)

[Alaska and Hawaii included beginning in 1959. For decennial periods prior to 1929-31, data are for groups of registration States as follows: 1900-1902 and 1909-11, 10 States and the District of Columbia; 1919-21, 34 States and the District of Columbia. Beginning 1970 excludes deaths of nonresidents of the United States; see Technical Appendix]

Age, race, and sex	Number of survivors out of 100,000 born alive (t_x)									
	1989	1979-81	1969-71	1959-61	1949-51	1939-41	1929-31	1919-21	1909-11	1900-1902
ALL OTHER, FEMALE										
0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1	98,501	98,261	97,235	96,172	95,913	93,318	.....	.....	.....	.....
5	98,248	97,958	96,772	95,543	95,055	91,710	.....	.....	.....	.....
10	98,114	97,806	96,546	95,265	94,679	91,092	.....	.....	.....	.....
15	97,988	97,669	96,353	95,057	94,343	90,363	.....	.....	.....	.....
20	97,756	97,404	95,917	94,660	93,544	88,505	.....	.....	.....	.....
25	97,370	96,996	95,247	94,005	92,336	85,961	.....	.....	.....	.....
30	96,818	96,441	94,370	93,070	90,799	83,147	.....	.....	.....	.....
35	96,043	95,719	93,123	91,670	88,805	79,879	.....	.....	.....	.....
40	95,003	94,646	91,247	89,676	86,052	75,908	.....	.....	.....	.....
45	93,582	93,009	88,608	86,793	82,257	71,061	.....	.....	.....	.....
50	91,580	90,523	84,964	82,979	77,007	64,886	.....	.....	.....	.....
55	88,668	86,951	80,162	77,362	70,196	57,419	.....	.....	.....	.....
60	84,421	82,000	73,984	69,941	61,758	49,102	.....	.....	.....	.....
65	78,252	75,382	66,064	60,825	52,358	40,718	.....	.....	.....	.....
70	70,307	67,147	56,375	51,274	42,612	32,579	.....	.....	.....	.....
75	60,290	56,499	44,841	40,540	32,981	24,668	.....	.....	.....	.....
80	47,905	44,378	33,373	30,815	23,712	17,157	.....	.....	.....	.....
85	32,874	30,543	22,763	19,744	15,550	10,658	.....	.....	.....	.....
BLACK										
0	100,000	100,000	100,000	.....	.....	100,000	.....	.....	.....	.....
1	98,137	97,885	96,731	.....	.....	92,584	.....	.....	.....	.....
5	97,834	97,522	96,207	.....	.....	90,983	.....	.....	.....	.....
10	97,667	97,322	95,928	.....	.....	90,339	.....	.....	.....	.....
15	97,491	97,134	95,561	.....	.....	89,591	.....	.....	.....	.....
20	96,941	96,652	94,887	.....	.....	87,839	.....	.....	.....	.....
25	96,020	95,804	93,513	.....	.....	85,210	.....	.....	.....	.....
30	94,886	94,680	91,934	.....	.....	82,194	.....	.....	.....	.....
35	93,342	93,288	89,977	.....	.....	76,683	.....	.....	.....	.....
40	91,275	91,439	87,304	.....	.....	74,466	.....	.....	.....	.....
45	88,650	88,894	83,700	.....	.....	69,284	.....	.....	.....	.....
50	85,284	85,044	78,938	.....	.....	62,702	.....	.....	.....	.....
55	80,755	79,816	72,826	.....	.....	54,846	.....	.....	.....	.....
60	74,724	72,913	65,250	.....	.....	46,318	.....	.....	.....	.....
65	66,753	64,391	56,102	.....	.....	37,838	.....	.....	.....	.....
70	57,105	54,617	45,785	.....	.....	29,654	.....	.....	.....	.....
75	45,934	43,274	34,262	.....	.....	21,798	.....	.....	.....	.....
80	33,661	31,711	23,710	.....	.....	14,408	.....	.....	.....	.....
85	20,712	19,939	15,044	.....	.....	8,326	.....	.....	.....	.....
BLACK, MALE										
0	100,000	100,000	100,000	.....	.....	100,000	100,000	100,000	100,000	100,000
1	97,996	97,703	96,394	.....	.....	91,772	91,268	89,499	78,065	74,674
5	97,664	97,300	95,826	.....	.....	90,082	88,412	85,195	68,589	64,385
10	97,472	97,061	95,497	.....	.....	89,393	87,311	83,768	66,377	61,730
15	97,258	96,826	95,161	.....	.....	88,610	85,152	82,332	64,478	59,667
20	96,403	96,132	94,053	.....	.....	86,968	83,621	79,057	61,426	56,733
25	94,954	94,827	91,904	.....	.....	84,227	79,516	74,540	57,736	53,285
30	93,273	93,125	89,584	.....	.....	80,979	75,083	70,344	54,073	49,867
35	91,044	91,080	86,885	.....	.....	77,221	70,049	65,873	49,865	46,541
40	88,021	88,490	83,441	.....	.....	72,780	64,710	61,353	45,414	42,989
45	84,377	84,997	78,976	.....	.....	67,346	58,432	56,589	40,563	39,230
50	79,870	80,065	73,282	.....	.....	60,495	51,748	51,880	35,427	34,766
55	73,983	73,413	66,101	.....	.....	52,426	44,436	46,581	29,754	29,987
60	66,730	64,980	57,457	.....	.....	43,893	36,790	40,506	23,750	24,194
65	57,813	55,061	47,485	.....	.....	35,371	29,314	34,042	17,806	19,015
70	47,312	44,213	36,925	.....	.....	27,236	21,741	26,923	12,295	13,829
75	35,749	32,717	25,921	.....	.....	19,455	14,419	18,854	7,494	8,892
80	24,091	22,017	16,560	.....	.....	12,186	8,239	11,615	3,894	4,831
85	13,191	12,383	9,648	.....	.....	6,444	3,660	5,605	1,747	2,030
BLACK, FEMALE										
0	100,000	100,000	100,000	.....	.....	100,000	100,000	100,000	100,000	100,000
1	98,283	98,073	97,076	.....	.....	93,416	92,796	91,251	81,493	78,525
5	98,011	97,751	96,598	.....	.....	91,906	90,185	87,149	72,768	68,056
10	97,870	97,590	96,369	.....	.....	91,308	89,201	85,607	70,508	65,111
15	97,735	97,450	96,172	.....	.....	90,594	88,098	83,954	68,218	62,384
20	97,498	97,180	95,729	.....	.....	88,736	85,078	80,154	64,764	59,053
25	97,074	96,754	95,035	.....	.....	86,198	81,067	75,359	61,430	55,795
30	96,448	96,150	94,114	.....	.....	83,384	76,816	70,633	58,281	52,773
35	95,536	95,338	92,807	.....	.....	80,092	72,192	65,857	54,595	49,567
40	94,321	94,137	90,817	.....	.....	76,084	67,271	61,130	50,568	46,146
45	92,612	92,322	88,001	.....	.....	71,157	61,365	56,230	45,947	42,279
50	90,275	89,563	84,168	.....	.....	64,885	54,920	50,780	40,886	37,681
55	87,000	85,653	79,177	.....	.....	57,314	47,074	44,742	35,415	33,124
60	82,243	80,293	72,820	.....	.....	48,928	38,761	37,954	28,908	27,524
65	75,330	73,266	64,716	.....	.....	40,504	30,852	31,044	22,302	21,995
70	66,730	64,729	54,873	.....	.....	32,354	23,341	24,107	15,871	16,140
75	56,074	53,831	43,193	.....	.....	24,502	16,576	17,216	10,657	11,066
80	43,291	41,886	31,756	.....	.....	17,039	10,822	11,151	6,324	6,708
85	28,378	28,004	21,358	.....	.....	10,622	6,033	5,972	3,029	3,567

SECTION 6 - LIFE TABLES - PAGE 18

Table 6-4. Life Table Values by Race and Sex: Death-Registration States, 1900-1902 to 1919-21, and United States, 1929-31 to 1989—Con.

(Page 6 of 6)

[Alaska and Hawaii included beginning in 1959. For decennial periods prior to 1929-31, data are for groups of registration States as follows: 1900-1902 and 1909-11, 10 States and the District of Columbia; 1919-21, 34 States and the District of Columbia. Beginning 1970 excludes deaths of nonresidents of the United States; see Technical Appendix]

Age, race, and sex	Average number of years of life remaining (\bar{e}_x)									
	1989	1979-81	1969-71	1959-61	1949-51	1939-41	1929-31	1919-21	1909-11	1900-1902
ALL OTHER, FEMALE										
0	75.2	74.00	69.05	66.47	62.70	55.51	-----	-----	-----	-----
1	75.4	74.31	70.01	68.10	64.37	58.47	-----	-----	-----	-----
5	71.6	70.53	66.34	64.54	60.93	55.47	-----	-----	-----	-----
10	66.6	65.64	61.49	59.72	56.17	50.83	-----	-----	-----	-----
15	61.7	60.73	56.60	54.85	51.36	46.22	-----	-----	-----	-----
20	56.9	55.88	51.85	50.07	46.77	42.14	-----	-----	-----	-----
25	52.1	51.11	47.19	45.40	42.35	38.31	-----	-----	-----	-----
30	47.4	46.39	42.61	40.83	38.02	34.52	-----	-----	-----	-----
35	42.7	41.72	38.14	36.41	33.82	30.83	-----	-----	-----	-----
40	38.2	37.16	33.87	32.16	29.82	27.31	-----	-----	-----	-----
45	33.7	32.77	29.80	28.14	26.07	24.00	-----	-----	-----	-----
50	29.4	28.59	25.97	24.31	22.67	21.04	-----	-----	-----	-----
55	25.3	24.66	22.37	20.89	19.62	18.44	-----	-----	-----	-----
60	21.4	20.99	19.02	17.83	16.95	16.14	-----	-----	-----	-----
65	17.9	17.60	15.99	15.12	14.54	13.95	-----	-----	-----	-----
70	14.6	14.44	13.30	12.46	12.29	11.81	-----	-----	-----	-----
75	11.6	11.68	11.06	10.10	10.15	9.80	-----	-----	-----	-----
80	9.0	9.17	9.01	7.66	8.15	8.00	-----	-----	-----	-----
85	6.9	7.19	7.07	5.44	6.15	6.38	-----	-----	-----	-----
BLACK										
0	69.2	68.52	64.11	-----	-----	53.85	-----	-----	-----	-----
1	69.5	68.99	65.27	-----	-----	57.15	-----	-----	-----	-----
5	65.8	65.25	61.62	-----	-----	54.13	-----	-----	-----	-----
10	60.9	60.38	56.79	-----	-----	49.50	-----	-----	-----	-----
15	56.0	55.49	51.94	-----	-----	44.89	-----	-----	-----	-----
20	51.3	50.75	47.34	-----	-----	40.73	-----	-----	-----	-----
25	46.7	46.18	43.00	-----	-----	36.91	-----	-----	-----	-----
30	42.3	41.69	38.70	-----	-----	33.17	-----	-----	-----	-----
35	37.9	37.28	34.48	-----	-----	29.53	-----	-----	-----	-----
40	33.7	32.98	30.46	-----	-----	26.06	-----	-----	-----	-----
45	29.5	28.87	26.65	-----	-----	22.82	-----	-----	-----	-----
50	25.7	25.03	23.11	-----	-----	19.94	-----	-----	-----	-----
55	22.0	21.50	19.83	-----	-----	17.43	-----	-----	-----	-----
60	18.6	18.29	16.83	-----	-----	15.18	-----	-----	-----	-----
65	15.5	15.37	14.16	-----	-----	13.02	-----	-----	-----	-----
70	12.7	12.67	11.77	-----	-----	10.93	-----	-----	-----	-----
75	10.1	10.32	9.89	-----	-----	8.97	-----	-----	-----	-----
80	7.9	8.17	8.20	-----	-----	7.31	-----	-----	-----	-----
85	6.3	6.54	6.54	-----	-----	5.91	-----	-----	-----	-----
BLACK, MALE										
0	64.8	64.10	60.00	-----	-----	52.26	47.55	47.14	34.05	32.54
1	65.2	64.60	61.24	-----	-----	55.93	51.08	51.63	42.53	42.46
5	61.4	60.86	57.60	-----	-----	52.95	48.69	50.18	44.25	45.06
10	56.5	56.01	52.79	-----	-----	48.34	44.27	45.99	40.65	41.90
15	51.6	51.14	47.96	-----	-----	43.74	39.83	41.75	36.77	38.26
20	47.1	46.48	43.49	-----	-----	39.52	35.95	38.36	33.46	35.11
25	42.7	42.09	39.45	-----	-----	35.72	32.67	35.54	30.44	32.21
30	38.5	37.81	35.40	-----	-----	32.05	29.45	32.51	27.33	29.25
35	34.3	33.60	31.42	-----	-----	28.48	26.39	29.54	24.42	26.16
40	30.4	29.51	27.61	-----	-----	25.06	23.36	26.53	21.57	23.12
45	26.6	25.61	24.03	-----	-----	21.88	20.59	23.55	18.85	20.09
50	23.0	22.03	20.69	-----	-----	19.06	17.92	20.47	16.21	17.34
55	19.6	18.79	17.66	-----	-----	16.60	15.46	17.50	13.82	14.69
60	16.4	15.89	14.93	-----	-----	14.37	13.15	14.74	11.67	12.62
65	13.6	13.29	12.53	-----	-----	12.21	10.87	12.07	9.74	10.38
70	11.0	10.94	10.40	-----	-----	10.11	8.78	9.58	8.00	8.33
75	8.8	8.90	8.76	-----	-----	8.17	6.99	7.61	6.58	6.60
80	6.9	7.03	7.35	-----	-----	6.68	5.42	5.83	5.53	5.12
85	5.6	5.61	5.92	-----	-----	5.34	4.30	4.53	4.48	4.04
BLACK, FEMALE										
0	73.5	72.88	68.32	-----	-----	55.56	49.51	46.92	37.67	35.04
1	73.8	73.31	69.37	-----	-----	58.46	52.33	50.39	45.15	43.54
5	70.0	69.54	65.70	-----	-----	55.40	49.81	48.70	46.42	46.04
10	65.1	64.65	60.85	-----	-----	50.75	45.33	44.54	42.84	43.02
15	60.2	59.74	55.97	-----	-----	46.13	40.87	40.36	39.18	39.79
20	55.3	54.90	51.22	-----	-----	42.04	37.22	37.15	36.14	36.89
25	50.6	50.13	46.57	-----	-----	38.20	33.93	34.35	32.97	33.90
30	45.9	45.43	42.00	-----	-----	34.40	30.67	31.48	29.61	30.70
35	41.3	40.79	37.56	-----	-----	30.83	27.47	28.58	26.44	27.52
40	36.8	36.28	33.32	-----	-----	27.19	24.30	25.60	23.34	24.37
45	32.4	31.94	29.31	-----	-----	23.89	21.39	22.61	20.43	21.36
50	28.2	27.84	25.52	-----	-----	20.95	18.60	19.76	17.65	18.67
55	24.1	24.00	21.97	-----	-----	18.38	16.27	17.09	14.98	15.88
60	20.4	20.42	18.66	-----	-----	16.10	14.22	14.69	12.78	13.60
65	17.0	17.13	15.67	-----	-----	13.95	12.24	12.41	10.82	11.38
70	13.9	14.05	13.02	-----	-----	11.82	10.38	10.25	9.22	9.62
75	11.0	11.37	10.85	-----	-----	9.81	8.62	8.37	7.55	7.90
80	8.5	8.95	8.87	-----	-----	8.02	6.90	6.58	6.05	6.48
85	6.7	7.09	7.00	-----	-----	6.41	5.48	5.22	5.09	5.10

SECTION 6 - LIFE TABLES - PAGE 19

Table 6-5. Estimated Average Length of Life in Years, by Race and Sex: Death-Registration States, 1900-28, and United States,

1929-89

(Page 1 of 2)

[For selected years, life table values shown are estimates; see Technical Appendix. Beginning 1970 excludes deaths of nonresidents of the United States; see Technical Appendix.]

Area and year	All races			White			All other					
	Both sexes	Male	Female	Both sexes	Male	Female	Total			Black		
							Both sexes	Male	Female	Both sexes	Male	Female
UNITED STATES¹												
1989	75.3	71.8	78.6	76.0	72.7	79.2	71.2	67.1	75.2	69.2	64.8	73.5
1988	74.9	71.5	78.3	75.6	72.3	78.9	71.2	67.1	75.1	69.2	64.9	73.4
1987	75.0	71.5	78.4	75.6	72.2	78.9	71.3	67.3	75.2	69.4	65.2	73.6
1986	74.8	71.3	78.3	75.4	72.0	78.8	71.2	67.2	75.1	69.4	65.2	73.5
1985	74.7	71.2	78.2	75.3	71.9	78.7	71.2	67.2	75.0	69.5	65.3	73.5
1984	74.7	71.2	78.2	75.3	71.8	78.7	71.3	67.4	75.0	69.7	65.6	73.7
1983	74.6	71.0	78.1	75.2	71.7	78.7	71.1	67.2	74.9	69.6	65.4	73.6
1982	74.5	70.9	78.1	75.1	71.5	78.7	71.0	66.8	75.0	69.4	65.1	73.7
1981	74.2	70.4	77.8	74.8	71.1	78.4	70.3	66.1	74.4	68.9	64.5	73.2
1980	73.7	70.0	77.4	74.4	70.7	78.1	69.5	65.3	73.6	68.1	63.8	72.5
1979	73.9	70.0	77.8	74.6	70.8	78.4	69.8	65.4	74.1	68.5	64.0	72.9
1978	73.5	69.6	77.3	74.1	70.4	78.0	69.3	65.0	73.5	68.1	63.7	72.4
1977	73.3	69.5	77.2	74.0	70.2	77.9	68.9	64.7	73.2	67.7	63.4	72.0
1976	72.9	69.1	76.8	73.6	69.9	77.5	68.4	64.2	72.7	67.2	62.9	71.6
1975	72.6	68.8	76.6	73.4	69.5	77.3	68.0	63.7	72.4	66.8	62.4	71.3
1974	72.0	68.2	75.9	72.8	69.0	76.7	67.1	62.9	71.3	66.0	61.7	70.3
1973	71.4	67.6	75.3	72.2	68.5	76.1	66.1	62.0	70.3	65.0	60.9	69.3
1972 *	71.2	67.4	75.1	72.0	68.3	75.9	65.7	61.5	70.1	64.7	60.4	69.1
1971	71.1	67.4	75.0	72.0	68.3	75.8	65.6	61.6	69.8	64.6	60.5	68.9
1970	70.8	67.1	74.7	71.7	68.0	75.6	65.3	61.3	69.4	64.1	60.0	68.3
1969	70.5	66.8	74.4	71.4	67.7	75.3	64.5	60.6	68.6	---	---	---
1968	70.2	66.6	74.1	71.1	67.5	75.0	64.1	60.4	67.9	---	---	---
1967	70.5	67.0	74.3	71.4	67.8	75.2	64.9	61.4	68.5	---	---	---
1966	70.2	66.7	73.9	71.1	67.5	74.8	64.2	60.9	67.6	---	---	---
1965	70.2	66.8	73.8	71.1	67.6	74.8	64.3	61.2	67.6	---	---	---
1964	70.2	66.8	73.7	71.0	67.7	74.7	64.2	61.3	67.3	---	---	---
1963 *	69.9	66.6	73.4	70.8	67.4	74.4	63.7	61.0	66.6	---	---	---
1962 *	70.1	66.9	73.5	70.9	67.7	74.5	64.2	61.6	66.9	---	---	---
1961	70.2	67.1	73.6	71.0	67.8	74.6	64.5	62.0	67.1	---	---	---
1960	69.7	66.6	73.1	70.6	67.4	74.1	63.6	61.1	66.3	---	---	---
1959	69.9	66.8	73.2	70.7	67.5	74.2	63.9	61.3	66.5	---	---	---
1958	69.6	66.6	72.9	70.5	67.4	73.9	63.4	61.0	65.8	---	---	---
1957	69.5	66.4	72.7	70.3	67.2	73.7	63.0	60.7	65.5	---	---	---
1956	69.7	66.7	72.9	70.5	67.5	73.9	63.6	61.3	66.1	---	---	---
1955	69.6	66.7	72.8	70.5	67.4	73.7	63.7	61.4	66.1	---	---	---
1954	69.6	66.7	72.8	70.5	67.5	73.7	63.4	61.1	65.9	---	---	---
1953	68.8	66.0	72.0	69.7	66.8	73.0	62.0	59.7	64.5	---	---	---
1952	68.6	65.8	71.6	69.5	66.6	72.6	61.4	59.1	63.8	---	---	---
1951	68.4	65.6	71.4	69.3	66.5	72.4	61.2	59.2	63.4	---	---	---
1950	68.2	65.6	71.1	69.1	66.5	72.2	60.8	59.1	62.9	---	---	---
1949	68.0	65.2	70.7	68.8	66.2	71.9	60.6	58.9	62.7	---	---	---
1948	67.2	64.6	69.9	68.0	65.5	71.0	60.0	58.1	62.5	---	---	---
1947	66.8	64.4	69.7	67.6	65.2	70.5	59.7	57.9	61.9	---	---	---
1946	66.7	64.4	69.4	67.5	65.1	70.3	59.1	57.5	61.0	---	---	---
1945	65.9	63.6	67.9	66.8	64.4	69.5	57.7	56.1	59.6	---	---	---
1944	65.2	63.6	66.8	66.2	64.5	68.4	56.6	55.8	57.7	---	---	---
1943	63.3	62.4	64.4	64.2	63.2	65.7	55.6	55.4	58.1	---	---	---
1942	66.2	64.7	67.9	67.3	65.9	69.4	56.6	55.4	58.2	---	---	---
1941	64.8	63.1	66.8	66.2	64.4	68.5	53.8	52.5	55.3	---	---	---
1940	62.9	60.8	65.2	64.2	62.1	66.6	53.1	51.5	54.9	---	---	---
1939	63.7	62.1	65.4	64.9	63.3	66.6	54.5	53.2	56.0	---	---	---
1938	63.5	61.9	65.3	65.0	63.2	66.8	52.9	51.7	54.3	---	---	---
1937	60.0	58.0	62.4	61.4	59.3	63.8	50.3	48.3	52.5	---	---	---
1936	58.5	56.6	60.6	59.8	58.0	61.9	49.0	47.0	51.4	---	---	---
1935	61.7	59.9	63.9	62.9	61.0	65.0	53.1	51.3	55.2	---	---	---
1934	61.1	59.3	63.3	62.4	60.5	64.6	51.8	50.2	53.7	---	---	---
1933	63.3	61.7	65.1	64.3	62.7	66.3	54.7	53.5	56.0	---	---	---
1932	62.1	61.0	63.5	63.2	62.0	64.5	53.7	52.8	54.6	---	---	---
1931	61.1	59.4	63.1	62.6	60.8	64.7	50.4	49.5	51.5	---	---	---
1930	59.7	58.1	61.6	61.4	59.7	63.5	48.1	47.3	49.2	---	---	---
1929	57.1	55.8	58.7	58.6	57.2	60.3	46.7	45.7	47.8	---	---	---

SECTION 6 - LIFE TABLES - PAGE 20

Table 6-5. Estimated Average Length of Life in Years, by Race and Sex: Death-Registration States, 1900-28, and United States, 1929-89—Con.
(Page 2 of 2)

[For selected years, life table values shown are estimates; see Technical Appendix. Beginning 1970 excludes deaths of nonresidents of the United States; see Technical Appendix]

Area and year	All races			White			All other					
	Both sexes	Male	Female	Both sexes	Male	Female	Total			Black		
							Both sexes	Male	Female	Both sexes	Male	Female
DEATH-REGISTRATION STATES												
1928	56.8	55.6	58.3	58.4	57.0	60.0	46.3	45.6	47.0	.....	.....	.....
1927	60.4	59.0	62.1	62.0	60.5	63.9	48.2	47.6	48.9	.....	.....	.....
1926	56.7	55.5	58.0	58.2	57.0	59.6	44.6	43.7	45.6	.....	.....	.....
1925	59.0	57.6	60.6	60.7	59.3	62.4	45.7	44.9	46.7	.....	.....	.....
1924	59.7	58.1	61.5	61.4	59.8	63.4	46.6	45.5	47.8	.....	.....	.....
1923	57.2	56.1	58.5	58.3	57.1	59.6	48.3	47.7	48.9	.....	.....	.....
1922	59.6	58.4	61.0	60.4	59.1	61.9	52.4	51.8	53.0	.....	.....	.....
1921	60.8	60.0	61.8	61.8	60.8	62.9	51.5	51.6	51.3	.....	.....	.....
1920	54.1	53.6	54.6	54.9	54.4	55.6	45.3	45.5	45.2	.....	.....	.....
1919	54.7	53.5	56.0	55.8	54.5	57.4	44.5	44.5	44.4	.....	.....	.....
1918	39.1	36.6	42.2	39.8	37.1	43.2	31.1	29.9	32.5	.....	.....	.....
1917	50.9	48.4	54.0	52.0	49.3	55.3	38.8	37.0	40.8	.....	.....	.....
1916	51.7	49.6	54.3	52.5	50.2	55.2	41.3	39.6	43.1	.....	.....	.....
1915	54.5	52.5	56.8	55.1	53.1	57.5	38.9	37.5	40.5	.....	.....	.....
1914	54.2	52.0	56.8	54.9	52.7	57.5	38.9	37.1	40.8	.....	.....	.....
1913	52.5	50.3	55.0	53.0	50.8	55.7	38.4	36.7	40.3	.....	.....	.....
1912	53.5	51.6	55.9	53.9	51.9	56.2	37.9	35.9	40.0	.....	.....	.....
1911	52.6	50.9	54.4	53.0	51.3	54.9	36.4	34.6	38.2	.....	.....	.....
1910	50.0	48.4	51.8	50.3	48.6	52.0	35.6	33.8	37.5	.....	.....	.....
1909	52.1	50.5	53.8	52.5	50.9	54.2	35.7	34.2	37.3	.....	.....	.....
1908	51.1	49.5	52.8	51.5	49.9	53.3	34.9	33.8	36.0	.....	.....	.....
1907	47.6	45.6	49.9	48.1	46.0	50.4	32.5	31.1	34.0	.....	.....	.....
1906	48.7	46.9	50.8	49.3	47.3	51.4	32.9	31.8	33.9	.....	.....	.....
1905	48.7	47.3	50.2	49.1	47.6	50.6	31.3	29.6	33.1	.....	.....	.....
1904	47.6	46.2	49.1	48.0	46.6	49.5	30.8	29.1	32.7	.....	.....	.....
1903	50.5	49.1	52.0	50.9	49.5	52.5	33.1	31.7	34.6	.....	.....	.....
1902	51.5	49.8	53.4	51.9	50.2	53.8	34.6	32.9	36.4	.....	.....	.....
1901	49.1	47.6	50.6	49.4	48.0	51.0	33.7	32.2	35.3	.....	.....	.....
1900	47.3	46.3	48.3	47.6	46.6	48.7	33.0	32.5	33.5	.....	.....	.....

¹ Alaska included in 1959 and Hawaii in 1960.

² Deaths based on a 50-percent sample.

³ Figures by race exclude data for residents of New Jersey; see Technical Appendix.

ISBN 0-16-038278-5

9 0000



9 780160 382789

United States of America
Department of Health and Human Services
CERTIFICATION OF TRUE COPY

Pursuant to the provision of 42, U.S.C. 3505 and the authority vested in me by the Secretary (43 FR 58871), I hereby certify that this publication is a true copy of the document on file in the Department of Health and Human Services.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the Department of Health and Human Services to be affixed on this _____ day of _____ 19 _____.

Chief, Scientific and Technical Information Branch
Division of Data Services
National Center for Health Statistics
Centers for Disease Control and Prevention
Public Health Service