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### **United States Life Tables, 2005**

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#### **Abstract**

Objectives—This report presents period life tables by age, race, and sex for the United States based on age-specific death rates in 2005. The tables presented are based on a newly revised methodology. For comparability, all life tables from the year 2000 forward have been re-estimated using the revised methodology and are presented in the "Technical Notes" section.

Methods—Data used to prepare the 2005 life tables are 2005 final mortality statistics, July 1, 2005 population estimates based on the 2000 decennial census, and 2005 Medicare data for ages 66–100. The methods used to estimate mortality for ages 0–65 were the same as those used in annual life tables from 1997 through 2004 (1). The methodology to estimate mortality for the population aged 66 and over was revised in three ways: Medicare data were used to supplement vital statistics and census data starting at age 66 rather than 85, as was done from 1997 through 2004; probabilities of death based on current Medicare data rather than rates of change of probabilities of death based on noncurrent Medicare data were used; and the smoothing and extrapolation of the probabilities of death for ages 66 and over were performed using a nonlinear least squares model rather than a linear model of the rate of change of the probabilities of death for ages 85 and over (1–3).

Results—In 2005, the overall expectation of life at birth was 77.4 years, representing a decline of 0.1 years from life expectancy in 2004. From 2004 to 2005, life expectancy at birth remained the same for males (74.9), females (79.9), the white population (77.9), white males (75.4), white females (80.4), the black population (72.8), and black males (69.3). Life expectancy at birth increased for black females (from 76.0 to 76.1). Life expectancy estimates based on the revised methodology are slightly lower than those based on the previous methodology. For 2005, life expectancy at birth based on the revised methodology was lower by 0.4 years for the total population.

Keywords: life expectancy • survival • death rates • race

#### Introduction

There are two types of life tables—the cohort (or generation) and the period (or current). The cohort life table presents the mortality experience of a particular birth 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 cohort 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 cohort life table requires data over many years. It is usually not feasible to construct cohort life tables entirely on the basis of observed data for real cohorts due to data unavailability or incompleteness (4). For example, a life table representation of the mortality experience of a cohort of persons born in 1970 would require the use of data projection techniques to estimate deaths into the future (5,6).

Unlike the cohort life table, the period life table does not represent the mortality experience of an actual birth cohort. Rather, the period life table presents what would happen to a hypothetical (or synthetic) cohort if it experienced throughout its entire life the mortality conditions of a particular time period. Thus, for example, a period life table for 2005 assumes a hypothetical cohort subject throughout its lifetime to the age-specific death rates prevailing for the actual population in 2005. The period 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 report the term "life table" refers only to the period life table and not to the cohort life table.

#### **Data and Methods**

The data used to prepare the U.S. life tables for 2005 are final numbers of deaths for the year 2005; postcensal population estimates for the year 2005; and, age-specific death and population counts for Medicare beneficiaries aged 66–100 for the year 2005 from the Centers for Medicare & Medicaid Services (CMS).

The populations used to estimate the life tables shown in this report were produced under a collaborative agreement with the U.S.





Census Bureau and are consistent with the postcensal estimates of the 2000 census. Reflecting the new guidelines issued in 1997 by the Office of Management and Budget (OMB), the 2000 census included an option for individuals to report more than one race as appropriate for themselves and household members (7). The 1997 OMB guidelines also provided for the reporting of Asian persons separately from Native Hawaiian or other Pacific Islander persons. Under the prior OMB standards (issued in 1977), data for Asian or Pacific Islander persons were collected as a single group (8). Beginning with deaths occurring in 2003, some states implemented multiple-race categories on the death certificate. Approximately one-half of the states continue to collect only one race for the decedent in the same categories as specified in the 1977 OMB guidelines (death certificate data do not report Asian persons separately from Native Hawaiian or other Pacific Islander persons). Death certificate data by race for these states (the numerators for death rates) are thus currently incompatible with the population data collected in the 2000 census (the denominators for the rates). To produce death rates for the years 2000-2005 it was necessary to "bridge" the reported population data for multiple-race persons back to single-race categories. In addition, the 2000 census counts were modified to be consistent with the 1977 OMB race categories, that is, to report the data for Asian persons and Native Hawaiian or other Pacific Islander persons as a combined category, Asian or Pacific Islander, and to reflect age as of the census reference date (9). The procedures used to produce the bridged populations are described in a separate publication (10). It is anticipated that bridged population data will be used over the next few years for computing population-based rates. Multiple-race data for those states that implemented the 1997 OMB guidelines are bridged back to single-race categories. Once all states are collecting data on race according to the 1997 OMB guidelines, it is expected that use of the bridged populations will be discontinued.

Readers should keep in mind that the population data used to compile death rates by race are based on special estimation procedures. They are not true counts. This is the case even for the 2000 populations that are based on the 2000 census. The estimation procedures used to develop these populations contain some errors (10). Over the next several years, additional information will be incorporated in the estimation procedures, possibly resulting in further revisions of the population estimates (see "Technical Notes").

Data from the Medicare program are used to supplement vital statistics and census data for ages 66 years and over. Death rates based on Medicare data for the oldest ages are considered to be more accurate than death rates based solely on vital and census data because beneficiaries must prove their date of birth in order to qualify for benefits while there is no such requirement in the census form question about a respondent's age. The prevalence of age misreporting at the oldest ages in census data has been found to be significant enough to lead to underestimated death rates at the oldest ages (see the "Technical Notes" section).

Life tables can be classified in two ways according to the length of the age interval in which data are presented. A complete life table contains data for every year of age. An abridged life table typically contains data by 5- or 10-year age intervals. A complete life table, of course, can be easily aggregated into 5- or 10-year age groups (see "Technical Notes" section for instructions on how to do this). Other than the decennial life tables, U.S. life tables based on data prior to 1997

are abridged life tables constructed by reference to a standard table (11). The 2005 U.S. life tables are complete life tables calculated using a newly revised method similar to that used to estimate the 1999–2001 U.S. Decennial Life Tables (3). See the "Technical Notes" section for more information on the method used to construct the life tables in this report.

Expectation of life—The most frequently used life table statistic is life expectancy  $(e_x)$ , 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 for each age in 2005 are shown for the total population and by race and sex in Tables 1–9. Life expectancy is summarized by age, race, and sex in Table A.

Life expectancy at birth  $(e_0)$  for 2005 for the total population was 77.4 years. This represents the average number of years that the members of the hypothetical life table cohort may expect to live at the time of birth (Table A).

Survivors to specified ages—Another way of assessing the longevity of the synthetic life table cohort is by determining the proportion who survive to specified ages. The  $I_{\rm x}$  column of the life table provides the data for computing the proportion. Table B summarizes the number of survivors by age, race, and sex. To illustrate, 53,338 persons out of the original 2005 synthetic life table cohort of 100,000 (or 53.3 percent) were alive at exact age 80. In other words, the probability that a person will survive from birth to age 80, given 2005 age-specific mortality, is 53 percent. Probabilities of survival can be calculated at any age by simply dividing the number of survivors at the terminal age by the number at the beginning age. For example, to calculate the probability of surviving from age 20 to age 85, one would divide the number of survivors at age 85 (36,753) by the number of survivors at age 20 (98,713), which results in a 37.2 percent probability of survival.

#### Explanation of the columns of the life table

Column 1—Age (x to x+1)—Shows the age interval between the two exact ages indicated. For instance, "20–21" means the 1-year interval between the 20th and 21st birthdays.

Column 2—Probability of dying  $(q_x)$ —Shows the probability of dying between ages x to x+1. For example, for males in the age interval 20–21 years, the probability of dying is 0.001308 (Table 2). The "probability of dying" column forms the basis of the life table; all subsequent columns are derived from it.

Column 3—Number surviving  $(l_x)$ —Shows the number of persons from the original synthetic cohort of 100,000 live births, who survive to the beginning of each age interval. The  $l_x$  values are computed from the  $q_x$  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 female babies born alive, 99,384 will complete the first year of life and enter the second; 99,218 will reach age 10; 98,962 will reach age 20; and 43,649 will live to age 85 (Table 3).

Column 4—Number dying  $(d_x)$ —Shows the number dying in each successive age interval out of the original 100,000 live births. For example, out of 100,000 males born alive, 757 will die in the first year of life; 129 will die between ages 20 and 21; and 725 will die after reaching age 100 (Table 2). Each figure in column 4 is the difference between two successive figures in column 3.

Column 5—Person-years lived  $(L_x)$ —Shows the number of person-years lived by the synthetic life table cohort within an age

interval x to x+1. Each figure in column 5 represents the total time (in years) lived between two indicated birthdays by all those reaching the earlier birthday. Thus, the figure 98,411 for males in the age interval 20–21 is the total number of years lived between the 20th and 21st birthdays by the 98,476 (column 3) males who reached their 20th birthday out of 100,000 males born alive (Table 2).

Column 6—Total number of person-years lived  $(T_x)$ —Shows the total number of person-years that would be lived after the beginning of the age interval x to x+1 by the synthetic life table cohort. For

example, the figure 5,505,739 is the total number of years lived after attaining age 20 by the 98,476 males reaching that age (Table 2).

Column 7—Expectation of life  $(e_x)$ —Shows, at any given age, 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. It is derived by dividing the total person-years that would be lived above age x by the number of persons who survived to that age interval  $T_x/I_x$ . Thus, the average remaining lifetime for males who reach age 20 is 55.9 years (5,505,739) divided by (5,505,739)

Table A. Expectation of life, by age, race, and sex: United States, 2005

		All races			White			Black		
Age	Total	Male	Female	Total	Male	Female	Total	Male	Female	
0	77.4	74.9	79.9	77.9	75.4	80.4	72.8	69.3	76.1	
1	77.0	74.4	79.4	77.4	74.9	79.8	72.9	69.4	76.0	
5	73.1	70.5	75.5	73.4	71.0	75.8	69.0	65.5	72.2	
10	68.1	65.6	70.6	68.5	66.0	70.9	64.0	60.6	67.2	
15	63.2	60.6	65.6	63.5	61.1	65.9	59.1	55.7	62.3	
20	58.4	55.9	60.7	58.7	56.3	61.0	54.4	51.0	57.4	
25	53.6	51.3	55.9	54.0	51.7	56.2	49.7	46.5	52.6	
30	48.9	46.6	51.0	49.2	47.0	51.3	45.1	42.1	47.8	
35	44.2	42.0	46.2	44.5	42.3	46.5	40.5	37.6	43.1	
40	39.5	37.3	41.4	39.8	37.7	41.7	36.0	33.2	38.5	
45	34.9	32.8	36.8	35.2	33.2	37.0	31.7	28.9	34.0	
50	30.5	28.5	32.2	30.7	28.8	32.4	27.5	24.9	29.8	
55	26.2	24.4	27.8	26.4	24.6	27.9	23.7	21.3	25.7	
60	22.1	20.4	23.5	22.2	20.6	23.6	20.1	17.9	21.8	
65	18.2	16.8	19.5	18.3	16.9	19.5	16.8	14.9	18.2	
70	14.6	13.3	15.6	14.7	13.4	15.7	13.6	12.0	14.8	
75	11.3	10.2	12.1	11.4	10.3	12.1	10.8	9.5	11.7	
80	8.5	7.7	9.1	8.5	7.6	9.1	8.5	7.5	9.1	
85	6.2	5.6	6.6	6.2	5.5	6.6	6.5	5.7	6.9	
90	4.5	4.0	4.7	4.4	3.9	4.6	4.9	4.4	5.1	
95	3.1	2.8	3.2	3.1	2.7	3.2	3.6	3.3	3.7	
100	2.2	2.0	2.2	2.1	1.9	2.2	2.7	2.5	2.7	

Table B. Number of survivors by age, out of 100,000 born alive, by race and sex: United States, 2005

		All races			White			Black	
Age	Total	Male	Female	Total	Male	Female	Total	Male	Female
0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1	99,312	99,243	99,384	99,426	99,367	99,489	98,622	98,480	98,768
5	99,196	99,111	99,284	99,319	99,244	99,398	98,457	98,296	98,622
10	99,124	99,034	99,218	99,253	99,174	99,337	98,353	98,185	98,526
15	99,035	98,928	99,147	99,171	99,076	99,270	98,229	98,034	98,431
20	98,713	98,476	98,962	98,861	98,649	99,086	97,818	97,410	98,239
25	98,232	97,770	98,724	98,410	97,991	98,859	97,119	96,340	97,922
30	97,754	97,094	98,456	97,972	97,373	98,615	96,334	95,194	97,487
35	97,211	96,376	98,093	97,474	96,717	98,288	95,385	93,908	96,849
40	96,488	95,470	97,561	96,805	95,871	97,804	94,183	92,401	95,928
45	95,370	94,084	96,713	95,758	94,557	97,034	92,414	90,283	94,477
50	93,697	92,014	95,440	94,204	92,618	95,875	89,658	86,916	92,279
55	91,280	88,988	93,630	91,959	89,796	94,218	85,623	81,879	89,148
60	87,966	84,937	91,053	88,822	85,975	91,776	80,376	75,275	85,134
65	83,056	79,094	87,059	84,081	80,337	87,929	73,348	66,745	79,447
70	76,315	71,253	81,362	77,453	72,630	82,347	64,807	56,832	72,093
75	66,733	60,351	72,938	67,904	61,765	73,983	54,081	44,935	62,310
80	53,338	45,892	60,392	54,412	47,132	61,395	41,123	31,753	49,539
85	36,753	29,292	43,649	37,518	30,100	44,411	27,291	19,167	34,679
90	19,906	14,144	25,106	20,229	14,429	25,451	14,834	9,248	19,994
95	7,363	4,428	9,928	7,364	4,412	9,924	6,043	3,261	8,617
100	1,519	725	2,172	1,464	685	2,097	1,637	748	2,425

#### **Results**

#### Life expectancy in the United States

Tables 1–9 show complete life tables by race (white and black) and sex for 2005. Tables A and B summarize life expectancy and survival by age, race, and sex. Life expectancy at birth for 2005 represents the average number of years that a group of infants would live if the infants were to experience throughout life the age-specific death rates prevailing in 2005. In 2005, life expectancy at birth was 77.4 years, decreasing by 0.1 years from 77.5 years in 2004. This decrease is not typical of the average annual changes that have occurred during the last 30 years, but it is not uncommon either and is mainly due to random variation from one year to the next. Throughout the past century, the trend in U.S. life expectancy was one of gradual improvement and this trend has continued into the new century (12).

Changes in mortality levels by age and cause of death have an important effect on changes in life expectancy. Life expectancy at birth for males and females did not change from 2004 to 2005, remaining at 74.9 years (males) and 79.9 years (females). Despite reductions in heart disease, cancer, stroke, and HIV disease, life expectancy did not change for males and females because of offsetting increases in mortality from unintentional injuries, chronic lower respiratory diseases, Alzheimer's disease, homicide, and influenza and pneumonia (13). Technically, life expectancy did decline for males and females from 2004 to 2005 as it did for the total population, but not enough to affect the figure to one-tenth of one year as in the case of the change observed for the total population.

The difference in life expectancy between the sexes was 5.0 years in 2005, which is the same as that in 2004. From 1900 to 1975, the difference in life expectancy between the sexes increased from 2.0 years to 7.8 years. The increasing gap during these years is attributed to increases in male mortality due to ischemic heart disease and lung cancer, both of which increased largely as the result of men's early and widespread adoption of cigarette smoking (14,15). Since 1979, the difference in life expectancy between the sexes has narrowed from 7.8 years to 5.0 years, reflecting proportionately greater increases in lung cancer mortality for women than for men and proportionately larger decreases in heart disease mortality among men (14,15).

From 2004 to 2005, life expectancy for the black population remained at 72.8 years. Similarly, for the white population life expectancy did not change from 2004 to 2005, remaining at 77.9 years. As in the case of life expectancy by sex, technically, life expectancy did change for both the white and black populations from 2004 to 2005, but not enough to affect the figure to one-tenth of one year as in the case of the change observed for the total population.

The difference in life expectancy between the white and black populations was 5.1 years in 2005, a historical low. The white-black difference in life expectancy narrowed from 14.6 years in 1900 to 5.7 years in 1982, but increased to 7.1 years in 1993 before beginning to decline again in 1994 (7.0 years). The increase in the gap from 1983 to 1993 was largely the result of increases in mortality among the black male population due to HIV infection and homicide (14,16).

Among the four race-sex groups (Figure 1), white females continued to have the highest life expectancy at birth (80.4 years), followed by black females (76.1 years), white males (75.4 years), and black

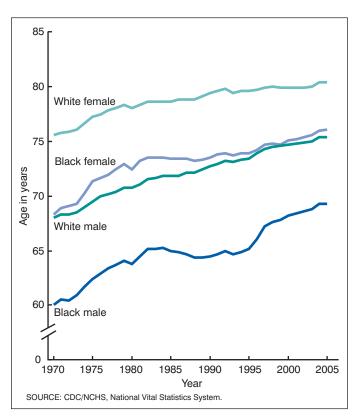


Figure 1. Life expectancy at birth, by race and sex: United States, 1970–2005

males (69.3 years). From 2004 to 2005, life expectancy increased 0.1 years for black females (from 76.0 in 2004 to 76.1 in 2005). Life expectancy remained at 69.3 years for black males. Black males experienced an unprecedented decline in life expectancy every year for the period 1984–1989 (16), but annual increases in the years 1990–1992 and 1994–2004. Life expectancy in 2005 for white males (75.4 years) and white females (80.4 years) did not change from 2004. Overall, gains in life expectancy between 1980 and 2005 were 5.5 years for black males, 4.7 years for white males, 3.6 years for black females, and 2.3 years for white females (Table 12).

The 2005 life table may be used to compare life expectancy at any age from birth onward. On the basis of mortality experienced in 2005, a person aged 65 could expect to live an average of 18.2 more years for a total of 83.2 years, and a person aged 100 could expect to live an additional 2.2 years on average (Table A). Life expectancy at age 100, particularly for the black population, should be interpreted with caution as these figures may be affected somewhat by age misreporting (1,17,18).

#### Survivorship in the United States

Table B summarizes the number of survivors out of 100,000 persons born alive  $(I_x)$  by age, race, and sex. Table 10 shows trends in survivorship from 1900 through 2005. In 2005, 99.3 percent of all infants born in the United States survived the first year of life. In contrast, only 87.6 percent of infants born in 1900 survived the first year. Fifty-three percent of the 2005 synthetic life table cohort survived to age 80 and about 1.5 percent survived to age 100. In 1900, the median age at death was 58 and only 0.03 percent survived to age 100.

Among the four race-sex groups (Figure 2, Table B), white females have the highest median age at death with about 48.1 percent surviving to age 84. Of the original hypothetical cohort of 100,000 infant white females, 99.1 percent survive to age 20, 87.9 percent survive to age 65, and 44.4 percent survive to age 85. For white males and black females, the pattern of survival by age is similar. White males have slightly higher survival rates than black females at the younger ages with 98.6 percent surviving to age 20 and 80.3 percent surviving to age 65, compared with 98.2 percent and 79.4 percent, respectively, for black females. At the older ages, in contrast, black female survival surpasses white male survival. At age 85, white male survival is 30.1 percent compared with 34.7 percent for black females. This crossover, which occurs at about age 75, is clearly shown in Figure 2. The median age at death for black males is 73 years, which is 11 years less than that of white females. For black males, 97.4 percent survive to age 20, 66.7 percent to age 65, and 19.1 percent to age 85. By age 100, there is very little difference between the white and black populations in terms of survival. Less than 1 percent of white and black males and slightly over 2 percent of white and black females, survive to age 100.

Plotting the percentage surviving by age for the periods 1900–1902, 1949–1951, and 2005 shows an increasingly rectangular survival curve (Figure 3). That is, the survival curve has become increasingly flat in response to progressively lower mortality, particularly at the younger ages, and increasingly vertical at the older ages. The survival curve for the period 1900–1902 shows a rapid decline in survival in the first few years of life and a relatively steady decline thereafter. In contrast, the survival curve for 2005 is nearly flat until about age 50 after which the decline in survival becomes more rapid. Improvements in survival between the periods 1900–1902 and 1949–1951 occurred at all ages, although the largest improvements were among the younger population. Between 1949–1951 and 2005, improvements occurred primarily for the older population.

## Effects of revision of life table methodology on life expectancy

The revised methodology employed to estimate the 2005 life tables presented in this report resulted in lower estimates of life expectancy at birth and all other ages for all groups in comparison to life expectancy estimates based on the previous methodology used by the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS) (1). Table C presents a comparison of life expectancy based on both the previous and newly revised methodology for selected ages. Life expectancy at birth based on the revised methodology was lower by 0.4 years for the total population, 0.3 years for males, 0.5 years for females, 0.4 years for the white population, 0.3 years for white males, 0.4 years for white females, 0.4 years for the black population, 0.2 years for black males, and 0.4 years for black females. Similarly, life expectancy based on the revised methodology was lower in absolute terms and by similar magnitudes at ages 65, 85, and 100 and over. In relative terms, the percentage change in life expectancy between the previous and revised methods was greatest for the oldest age groups, especially ages 100 and over. For example, for the total population the percentage change in life expectancy at age 100 and over was 15 percent in comparison to 0.5 percent at birth. Similar differences were seen for all other groups (Table C). The same patterns were observed in all years for which the life tables were revised (see Appendix).

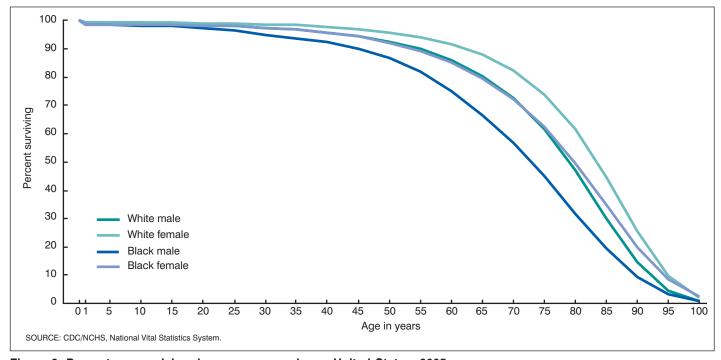


Figure 2. Percentage surviving, by age, race, and sex: United States, 2005

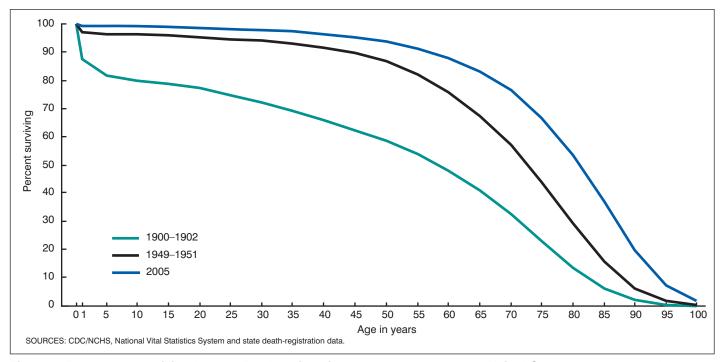


Figure 3. Percentage surviving by age: Death-registration states, 1900-1902, and United States, 1949-1951 and 2005

Table C. Comparison of life expectancy at selected ages between previous and revised life table methodology: United States, 2005

		Total			Males			Females	
Age, race, sex	PM	RM	PM-RM	PM	RM	PM-RM	PM	RM	PM-RM
All races									
0	77.8 18.7 6.8 2.6	77.4 18.2 6.2 2.2	0.4 0.5 0.6 0.4	75.2 17.2 6.1 2.3	74.9 16.8 5.6 2.0	0.3 0.4 0.5 0.3	80.4 20.0 7.2 2.6	79.9 19.5 6.6 2.2	0.5 0.5 0.6 0.4
White									
0	78.3 18.8 6.7 2.5	77.9 18.3 6.2 2.1	0.4 0.5 0.5 0.4	75.7 17.2 6.0 2.3	75.4 16.9 5.5 1.9	0.3 0.3 0.5 0.4	80.8 20.0 7.1 2.5	80.4 19.5 6.6 2.2	0.4 0.5 0.5 0.3
Black									
0	73.2 17.2 7.1 3.2	72.8 16.8 6.5 2.7	0.4 0.4 0.6 0.5	69.5 15.2 6.2 2.9	69.3 14.9 5.7 2.5	0.2 0.3 0.5 0.4	76.5 18.7 7.5 3.2	76.1 18.2 6.9 2.7	0.4 0.5 0.6 0.5

NOTE: PM is previous life table methodology; RM is revised life table methodology.

#### References

- Anderson RN. A method for constructing complete annual U.S. life tables. National Center for Health Statistics. Vital Health Stat 2(129). 1999.
- Heligman L, Pollard JH. The age pattern of mortality. J Inst Actuar 107(1):49–80. 1980.
- Wei R, Curtin LR, Arias E, Anderson RN. U.S. decennial life tables for 1999–2001, methodology of the United States life tables. National vital
- statistics reports; vol 57, no 4. Hyattsville, MD: National Center for Health Statistics. 2008.
- Shryock HS, Siegel JS, et al. The methods and materials of demography, vol 2. U.S. Bureau of the Census. Washington, DC: U.S. Government Printing Office. 1971.
- 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.
- Preston SM, Heuveline P, Guillot M. Demography, Measuring and Modeling Population Processes. Oxford: Blackwell Publishers. 2001.

- Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. Federal Register 62FR58782–58790. 1997. Available from: http://www.whitehouse.gov/omb/fedreg/ombdir15.html.
  - Office of Management and Budget. Race and ethnic standards for federal statistics and administrative reporting. Statistical policy directive
- 15. 1977.U.S. Census Bureau. Age, sex, race, and Hispanic origin information
- U.S. Census Bureau. Age, sex, race, and Hispanic origin information from the 1990 census: A comparison of census results with results where age and race have been modified, 1990. CPH-L-74. Washington, DC: U.S. Department of Commerce. 1991.
- Ingram DD, Weed JA, Parker JD, et al. U.S. Census 2000 with bridged race categories. National Center for Health Statistics. Vital Health Stat 2(135). 2003.
- 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.
- Arias E, Curtin LR, Wei R, Anderson RN. U.S. decennial life tables for 1999–2001, United States life tables. National vital statistics reports; vol 57 no 1. Hyattsville, MD: National Center for Health Statistics. 2008.
- Kung HC, Hoyert DL, Xu J, Murphy SL. Deaths: Final data for 2005. National vital statistics reports; vol 56 no 10. Hyattsville, MD: National Center for Health Statistics. 2008.
- Anderson RN. Some trends and comparisons of United States life table data: 1900–1991. U.S. Decennial Life Tables for 1989–91 vol 1 no 3. Hyattsville, Maryland: National Center for Health Statistics. 1999.
- Waldron I. Recent trends in sex mortality ratios for adults in developed countries. Soc Sci Med 36(4):451–62. 1993.
- Kochanek KD, Maurer JD, Rosenberg HM. Causes of death contributing to changes in life expectancy: United States, 1984–89. National Center for Health Statistics. Vital Health Stat 20(23), 1994.
- 17. Kestenbaum B. A description of the extreme aged population based on improved Medicare enrollment data. Demography 29(4):565–80. 1992.
- Coale AJ, Kisker EE. Defects in data on old-age mortality in the United States: New procedures for calculating mortality schedules and life tables at the highest ages. Asian and Pacific Population Forum 4:1–31. 1990.
- Anderson RN, Arias E. The effect of revised populations on mortality statistics for the United States, 2000. National vital statistics reports; vol 51 no 9. Hyattsville, MD: National Center for Health Statistics. 2003.
- 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, DC: Public Health Service. 1951.
- Bell FC, Miller ML. Life tables for the United States Social Security area 1900–2100. Baltimore, MD: Social Security Administration, Office of the Chief Actuary. SSA Pub. No. 11–11536. 2005.
- Research Data Assistance Center. Introduction to the use of Medicare data for research. Minneapolis, MN: University of Minnesota School of Public Health. 2004.
- Hartman M. Past and recent attempts to model mortality at all ages. J Off Stat 3(1):19–36. 1987.

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Table 1. Life table for the total population: United States, 2005

					Total	
	Probability		Number	Porcon voore	number of	
	,	l		Person-years		
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
					_	
Age	$q_x$	$l_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_x$
0–1	0.006879	100,000	688	99,398	7,744,259	77.4
		· ·		i i	· ' '	
1–2	0.000463	99,312	46	99,289	7,644,861	77.0
2–3	0.000307	99,266	30	99,251	7,545,572	76.0
3–4	0.000220	99,236	22	99,225	7,446,321	75.0
4–5	0.000184	99,214	18	99,205	7,347,096	74.1
5–6	0.000172	99,196	17	99,187	7,247,891	73.1
6–7	0.000160	99,179	16	99,171	7,148,704	72.1
7–8	0.000149	99,163	15	99,155	7,049,534	71.1
		· ·		i i		
8–9	0.000133	99,148	13	99,141	6,950,378	70.1
9–10	0.000114	99,135	11	99,129	6,851,237	69.1
10–11	0.000100	99,124	10	99,119	6,752,108	68.1
		· ·	10			
11–12	0.000105	99,114		99,108	6,652,989	67.1
12–13	0.000143	99,103	14	99,096	6,553,881	66.1
13–14	0.000221	99,089	22	99,078	6,454,785	65.1
14–15	0.000329	99,067	33	99,051	6,355,707	64.2
		· ·		i i		
15–16	0.000449	99,035	44	99,012	6,256,656	63.2
16–17	0.000563	98,990	56	98,962	6,157,643	62.2
17–18	0.000667	98,934	66	98,901	6,058,681	61.2
		· ·		i i		
18–19	0.000753	98,868	74	98,831	5,959,780	60.3
19–20	0.000823	98,794	81	98,753	5,860,949	59.3
20–21	0.000894	98,713	88	98,668	5,762,196	58.4
21–22	0.000962	· '	95	i i		57.4
		98,624		98,577	5,663,527	
22–23	0.001005	98,530	99	98,480	5,564,950	56.5
23–24	0.001016	98,431	100	98,381	5,466,470	55.5
24–25	0.001003	98,331	99	98,281	5,368,090	54.6
				i i	· ' '	
25–26	0.000983	98,232	97	98,184	5,269,808	53.6
26–27	0.000967	98,135	95	98,088	5,171,625	52.7
27–28	0.000960	98,040	94	97,993	5,073,537	51.7
28–29	0.000970	97,946	95	· ·		50.8
		· ·		97,899	4,975,543	
29–30	0.000994	97,851	97	97,803	4,877,645	49.8
30–31	0.001027	97,754	100	97,704	4,779,842	48.9
31–32	0.001065	97,654	104	97,602	4,682,138	47.9
		· ·		· ·		
32–33	0.001115	97,550	109	97,495	4,584,537	47.0
33–34	0.001154	97,441	112	97,385	4,487,041	46.0
34–35	0.001209	97,328	118	97,270	4,389,657	45.1
35–36	0.001271	97,211	124	97,149	4,292,387	44.2
		· ·		· ·		
36–37	0.001351	97,087	131	97,022	4,195,238	43.2
37–38	0.001460	96,956	142	96,885	4,098,217	42.3
38–39	0.001603	96,814	155	96,737	4,001,331	41.3
		· ·		· ·		
39–40	0.001769	96,659	171	96,574	3,904,595	40.4
40–41	0.001943	96,488	187	96,394	3,808,021	39.5
41–42	0.002120	96,301	204	96,199	3,711,627	38.5
42–43	0.002311	96,096	222	95,985	3,615,428	37.6
		· ·		i i		
43–44	0.002520	95,874	242	95,754	3,519,443	36.7
44–45	0.002747	95,633	263	95,501	3,423,689	35.8
45–46	0.002989	95,370	285	95,228	3,328,188	34.9
46–47	0.003242	95,085	308	94,931	3,232,960	34.0
		· ·	333	i i		
47–48	0.003512	94,777		94,610	3,138,029	33.1
48–49	0.003803	94,444	359	94,264	3,043,419	32.2
49–50	0.004118	94,085	387	93,891	2,949,155	31.3
50–51	0.004464	93,697	418	93,488	2,855,264	30.5
		· ·		i i		
51–52	0.004837	93,279	451	93,053	2,761,776	29.6
52–53	0.005217	92,828	484	92,586	2,668,722	28.7
53–54	0.005591	92,344	516	92,085	2,576,137	27.9
54–55	0.005963	91,827	548	91,553	2,484,051	27.1
		· ·		i i		
55–56	0.006346	91,280	579	90,990	2,392,498	26.2
56–57	0.006768	90,700	614	90,394	2,301,508	25.4
57–58	0.007261	90,087	654	89,760	2,211,114	24.5
		· ·			1 1	
58–59	0.007866	89,432	703	89,081	2,121,355	23.7
59–60	0.008596	88,729	763	88,348	2,032,274	22.9
60–61	0.009473	87,966	833	87,550	1,943,926	22.1
61–62			910			21.3
	0.010450	87,133		86,678	1,856,377	
62–63	0.011456	86,223	988	85,729	1,769,699	20.5
63–64	0.012407	85,235	1,057	84,706	1,683,970	19.8
64–65	0.013320	84,177	1,121	83,617	1,599,264	19.0
		· ·	· ·	,		
65–66	0.014299	83,056	1,188	82,462	1,515,647	18.2
66–67	0.015323	81,868	1,254	81,241	1,433,185	17.5
	I	1	I	I	I	I

Table 1. Life table for the total population: United States, 2005—Con.

	Probability of dying between ages x to x+1	Number surviving to age x	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
7–68	0.016558	80,614	1,335	79,947	1,351,944	16.8
⊢69	0.018029	79,279	1,429	78,565	1,271,997	16.0
–70	0.019723	77,850	1,535	77,082	1,193,433	15.3
-71	0.021607	76,315	1,649	75,490	1,116,350	14.6
-72	0.023723	74,666	1,771	73,780	1,040,860	13.9
-73	0.026143	72,894	1,906	71,942	967.080	13.3
-74	0.028892	70,989	2,051	69,963	895,139	12.6
-75	0.031988	68,938	2,205	67,835	825,175	12.0
-76	0.035476	66,733	2,367	65,549	757,340	11.3
-77	0.039238	64,365	2,526	63,102	691,792	10.7
-78	0.043382	61,840	2,683	60,498	628,689	10.2
_79	0.047941	59,157	2,836	57,739	568,191	9.6
-80	0.052953	56,321	2,982	54,830	510,452	9.1
_81	0.058457	53,338	3,118	51,779	455,623	8.5
–82	0.064494	50,220	3,239	48,601	403,843	8.0
–83	0.071107	46,982	3,341	45,311	355,242	7.6
–84	0.078342	43,641	3,419	41,931	309,931	7.0 7.1
–85 · · · · · · · · · · · · · · · · · · ·	0.086244	40,222	3,469	38,487	267,999	6.7
–86	0.094861	36,753	3,486	35,010	229,512	6.2
–87	0.104242	· '	3,468	31,533	194,502	5.8
	0.114432	33,267 29,799	· '	28,094	162,969	5.6 5.5
-88			3,410			5.5 5.1
-89	0.125479	26,389	3,311	24,733	134,876	
9–90	0.137427	23,078	3,171	21,492	110,142	4.8
⊢91	0.150317	19,906	2,992	18,410	88,650	4.5
-92	0.164187	16,914	2,777	15,525	70,240	4.2
-93	0.179066	14,137	2,531	12,871	54,715	3.9
-94	0.194979	11,605	2,263	10,474	41,844	3.6
-95	0.211941	9,343	1,980	8,353	31,370	3.4
-96	0.229957	7,363	1,693	6,516	23,017	3.1
-97	0.249020	5,669	1,412	4,964	16,501	2.9
-98	0.269112	4,258	1,146	3,685	11,538	2.7
–99	0.290198	3,112	903	2,660	7,853	2.5
9–100	0.312231	2,209	690	1,864	5,193	2.4
0 and over	1.000000	1,519	1,519	3,329	3,329	2.2

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Table 2. Life table for males: United States, 2005

	Probability of dying between	Number surviving to	Number dying between	Person-years lived between	Total number of person-years lived above	Expectation of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	$e_{x}$
-1	0.007567	100,000	757	99,338	7,485,717	74.9
-2	0.000515	99,243	51	99,218	7,386,379	74.4
-3	0.000356	99,192	35	99,175	7,287,162	73.5
-4	0.000256	99,157	25	99,144	7,187,987	72.5
-5	0.000208	99,132	21	99,121	7,088,843	71.5
6	0.000189	99,111	19	99,101	6,989,722	70.5
-7	0.000175	99,092	17	99,083	6,890,620	69.5
-8	0.000161	99,075	16	99,067	6,791,537	68.5
9	0.000140	99,059	14	99,052	6,692,470	67.6
-10	0.000114	99,045	11	99,039	6,593,418	66.6
-11	0.000096	99,034	9	99,029	6,494,379	65.6
-12	0.000104	99,024	10	99,019	6,395,350	64.6
-13	0.000160	99,014	16	99,006	6,296,331	63.6
-14	0.00075	98,998	27	98,984	6,197,325	62.6
-15	0.000275	98,971	43	98,949	6,098,341	61.6
-16	0.000433	98,928	60	98,898	5,999,391	60.6
	0.000609	·	77	· ·		59.7
-17	0.000775	98,868 98.701	92	98,829	5,900,494 5,801,664	
-18		98,791		98,745	5,801,664	58.7
-19	0.001071	98,699	106	98,646	5,702,920	57.8
-20	0.001188	98,593	117	98,534	5,604,274	56.8
-21	0.001308	98,476	129	98,411	5,505,739	55.9
-22	0.001420	98,347	140	98,277	5,407,328	55.0
-23	0.001488	98,207	146	98,134	5,309,051	54.1
–24	0.001502	98,061	147	97,988	5,210,917	53.1
-25	0.001474	97,914	144	97,842	5,112,929	52.2
-26	0.001430	97,770	140	97,700	5,015,087	51.3
-27	0.001393	97,630	136	97,562	4,917,387	50.4
-28	0.001366	97,494	133	97,427	4,819,826	49.4
–29	0.001362	97,361	133	97,294	4,722,398	48.5
-30	0.001379	97,228	134	97,161	4,625,104	47.6
-31	0.001406	97,094	136	97,026	4,527,943	46.6
-32	0.001436	96,957	139	96,888	4,430,917	45.7
-33	0.001485	96,818	144	96,746	4,334,030	44.8
-34	0.001516	96,674	147	96,601	4,237,283	43.8
-35	0.001571	96,528	152	96,452	4,140,682	42.9
-36	0.001635	96,376	158	96,297	4,044,230	42.0
-37	0.001721	96,219	166	96,136	3,947,932	41.0
-38	0.001847	96,053	177	95,964	3,851,797	40.1
-39	0.002018	95,876	193	95,779	3,755,832	39.2
-40	0.002222	95,682	213	95,576	3,660,053	38.3
-41	0.002438	95,470	233	95,353	3,564,477	37.3
-42	0.002460	95,237	253	95,110	3,469,124	36.4
-43	0.002899	94,983	275	94,846	3,374,014	35.5
-44	0.002033	94,708	299	94,559	3,279,168	34.6
-45	0.003441	94,409	325	94,247	3,184,610	33.7
-46	0.003740	94,084	352	93,908	3,090,363	32.8
-47	0.004055	93,732	380	93,542	2,996,455	32.0
-48	0.004401	93,352	411	93,147	2,902,913	31.1
-49	0.004788	92,941	445	92,719	2,809,766	30.2
-50			482	92,255		29.4
	0.005215	92,496			2,717,047	
-51	0.005688	92,014	523	91,752	2,624,792	28.5
-52	0.006190	91,491	566	91,208	2,533,039	27.7
-53	0.006689	90,924	608	90,620	2,441,832	26.9
-54	0.007157	90,316	646	89,993	2,351,212	26.0
-55	0.007605	89,670	682	89,329	2,261,219	25.2
-56	0.008057	88,988	717	88,629	2,171,890	24.4
-57	0.008558	88,271	755	87,893	2,083,260	23.6
-58	0.009144	87,516	800	87,115	1,995,367	22.8
-59	0.009869	86,715	856	86,287	1,908,252	22.0
-60	0.010750	85,860	923	85,398	1,821,964	21.2
-61	0.011808	84,937	1,003	84,435	1,736,566	20.4
-62	0.012984	83,934	1,090	83,389	1,652,131	19.7
-63	0.014197	82,844	1,176	82,256	1,568,742	18.9
-64	0.015338	81,668	1,253	81,041	1,486,486	18.2
-65	0.016425	80,415	1,321	79,755	1,405,445	17.5
-66	0.017574	79,094	1,390	78,399	1,325,690	16.8
				,	.,,	

Table 2. Life table for males: United States, 2005—Con.

	Probability of dying between ages x to x+1	Number surviving to age x	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
7–68	0.020359	76,242	1,552	75,465	1,170,318	15.4
8–69	0.022200	74,689	1,658	73,860	1,094,852	14.7
9–70	0.024345	73,031	1,778	72,142	1,020,992	14.0
)–71	0.026724	71,253	1,904	70,301	948,850	13.3
1–72	0.029349	69,349	2,035	68,331	878,549	12.7
2–73	0.032289	67,314	2,173	66,227	810,217	12.0
3–74	0.035604	65,140	2,319	63,981	743,990	11.4
I–75	0.039313	62,821	2,470	61,586	680,010	10.8
5–76	0.043446	60,351	2,622	59,040	618,424	10.2
5–77	0.047910	57,729	2,766	56,346	559,383	9.7
/-78	0.052806	54,963	2,902	53,512	503,037	9.2
3–79	0.058172	52,061	3,029	50,547	449,525	8.6
) <del>-</del> 80	0.064047	49,033	3,140	47,462	398,978	8.1
)–81	0.070471	45,892	3,234	44,275	351,516	7.7
-82	0.077486	42,658	3,305	41,005	307,240	7.2
2–83	0.085135	39,353	3,350	37,678	266,235	6.8
3–84	0.093463	36,002	3,365	34,320	228,558	6.3
I–85	0.102514	32,638	3,346	30,965	194,238	6.0
5–86	0.112333	29,292	3,290	27,647	163,273	5.6
	0.112333	26,001	3,197	24,403	135,626	5.2
5–87			3,066			4.9
7–88	0.134447	22,804		21,271	111,224	4.9 4.6
3–89	0.146824	19,738	2,898	18,289	89,953	
9-90	0.160130	16,840	2,697	15,492	71,663	4.3
)–91	0.174395	14,144	2,467	12,910	56,172	4.0
1–92	0.189644	11,677	2,214	10,570	43,261	3.7
2–93	0.205894	9,462	1,948	8,488	32,692	3.5
<del>-</del> 94	0.223153	7,514	1,677	6,676	24,203	3.2
-95	0.241418	5,837	1,409	5,133	17,528	3.0
5–96	0.260677	4,428	1,154	3,851	12,395	2.8
5–97	0.280904	3,274	920	2,814	8,544	2.6
7–98	0.302059	2,354	711	1,999	5,730	2.4
3–99	0.324088	1,643	533	1,377	3,731	2.3
9–100	0.346926	1,111	385	918	2,354	2.1
00 and over	1.000000	725	725	1,436	1,436	2.0

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Table 3. Life table for females: United States, 2005

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
-1	0.006156	100,000	616	99,460	7,993,932	79.9
-2	0.000410	99,384	41	99,364	7,894,472	79.4
-3	0.000256	99,344	25	99,331	7,795,108	78.5
-4	0.000182	99,318	18	99,309	7,695,777	77.5
-5	0.000159	99,300	16	99,292	7,596,468	76.5
-6	0.000154	99,284	15	99,277	7,497,175	75.5
-7	0.000134	99,269	14	99,262	7,397,899	74.5
-8	0.000144	99,255	13	99,248	7,298,636	73.5
-9	0.000135	99,242	12	99,235	7,199,388	72.5
-10	0.000123	99,229	11	99,223	7,199,366	72.5
			10	99,213	1 ' '	70.6
-11	0.000105	99,218	11		7,000,929	
-12	0.000106	99,207		99,202	6,901,717	69.6
-13	0.000125	99,197	12	99,191	6,802,515	68.6
-14	0.000164	99,184	16	99,176	6,703,324	67.6
-15	0.000219	99,168	22	99,157	6,604,148	66.6
-16	0.000281	99,147	28	99,133	6,504,990	65.6
-17	0.000340	99,119	34	99,102	6,405,858	64.6
/-18	0.000387	99,085	38	99,066	6,306,756	63.6
-19	0.000418	99,047	41	99,026	6,207,690	62.7
-20	0.000436	99,005	43	98,984	6,108,664	61.7
-21	0.000453	98,962	45	98,940	6,009,681	60.7
-22	0.000472	98,917	47	98,894	5,910,741	59.8
2–23	0.000487	98,871	48	98,846	5,811,847	58.8
–24	0.000496	98,822	49	98,798	5,713,001	57.8
.–25	0.000503	98,773	50	98,749	5,614,203	56.8
-26	0.000509	98,724	50	98,699	5,515,455	55.9
-27	0.000519	98,673	51	98,648	5,416,756	54.9
/-28	0.000535	98,622	53	98,596	5,318,108	53.9
H-29	0.000561	98,570	55	98,542	5,219,512	53.0
-30	0.000595	98,514	59	98,485	5,120,970	52.0
<u>-31</u>	0.000637	98,456	63	98,424	5,022,485	51.0
-32	0.000684	98,393	67	98,359	4,924,061	50.0
2–33	0.000738	98,326	73	98,289	4,825,702	49.1
⊢34	0.000785	98,253	77	98,214	4,727,412	48.1
-35	0.000841	98,176	83	98,135	4,629,198	47.2
i–36	0.000902	98,093	88	98,049	4,531,063	46.2
-37	0.000975	98,005	96	97,957	4,433,014	45.2
7–38	0.001068	97,909	105	97,857	4,335,057	44.3
-39	0.001184	97,805	116	97,747	4,237,200 4.139.453	43.3
-40	0.001315	97,689	128	97,625	,,	42.4
H41	0.001448	97,561	141	97,490	4,041,829 3,944,339	41.4
–42	0.001583	97,419	154 168	97,342	1 ' '	40.5 39.6
	0.001729	97,265		97,181	3,846,997	
3–44	0.001889 0.002064	97,097 96,913	183 200	97,005 96,813	3,749,816 3,652,811	38.6 37.7
i–46	0.002004	96,713	218	96,604	3,555,997	36.8
i–47	0.002232	96,496	236	96,378	3,459,393	35.9
'-48	0.002440	96,260	254	96,132	3,363,015	34.9
i–49	0.002844	96,005	273	95,869	3,266,883	34.0
i–50	0.003053	95,732	292	95,586	3,171,015	33.1
<u>–51</u>	0.003281	95,440	313	95,283	3,075,429	32.2
-52	0.003534	95,127	336	94,959	2,980,145	31.3
-53	0.003806	94,791	361	94,610	2,885,187	30.4
-54	0.004093	94,430	386	94,237	2,790,577	29.6
-55	0.004397	94,043	413	93,837	2,696,340	28.7
-56	0.004717	93,630	442	93,409	2,602,504	27.8
-57	0.005069	93,188	472	92,952	2,509,095	26.9
-58	0.005480	92,716	508	92,462	2,416,143	26.1
–59	0.005980	92,208	551	91,932	2,323,681	25.2
-60	0.006581	91,656	603	91,355	2,231,749	24.3
–60	0.006361	91,053	665	90,721	2,231,749	23.5
_62	0.007303	90,388	734	90,021	2,049,673	22.7
-63	0.008116	90,366 89,654	803	89,253	1,959,652	21.9
3–64	0.008954	88,852	866	88,418	1,870,399	21.9
_65	0.010525	87,985	926	87,522	1,781,981	20.3
–66	0.010323	87,059	990	86,564	1,694,458	19.5
-67	0.012244	86,069	1,054	85,542	1,607,894	18.7

Table 3. Life table for females: United States, 2005—Con.

	Probability of dying between ages x to x+1	Number surviving to age x	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
7–68	0.013271	85,015	1,128	84,451	1,522,352	17.9
8–69	0.014473	83,887	1,214	83,280	1,437,901	17.1
9–70	0.015859	82,673	1,311	82,017	1,354,621	16.4
)–71	0.017427	81,362	1,418	80,653	1,272,604	15.6
-72	0.019225	79,944	1,537	79,175	1,191,951	14.9
2–73	0.021307	78,407	1,671	77,572	1,112,776	14.2
3–74	0.023699	76,736	1,819	75,827	1,035,204	13.5
4–75	0.026426	74,918	1,980	73,928	959,377	12.8
5–76	0.029534	72,938	2,154	71,861	885,449	12.1
5–77	0.032896	70,784	2,328	69,620	813,589	11.5
7–78	0.036626	68,455	2,507	67,202	743,969	10.9
3–79	0.040761	65,948	2,688	64,604	676,767	10.3
9–80	0.045341	63,260	2,868	61,826	612,163	9.7
)–81	0.050409	60,392	3,044	58,870	550,338	9.1
I–82	0.056010	57,347	3,212	55,741	491,468	8.6
2–83	0.062193	54,135	3,367	52.452	435.727	8.0
3–84	0.069008	50,769	3,503	49,017	383,275	7.5
I–85	0.076509	47,265	3,616	45,457	334,258	7.5 7.1
5–86	0.070303	43,649	3,699	41,799	288,801	6.6
6–87	0.093791	39,950	3,747	38,076	247,001	6.2
7–88	0.103686	36,203	3,754	34,326	208.925	5.8
	0.114492	32,449	3,715	30,591	174,599	5.4
	0.126267	28,734	3,628	26,920	144,008	5.0
9–90	0.120207	25,106	3,491	23,360	117,088	4.7
	0.152927	25,100	3,305	19,962	93,728	4.7
1–92	0.167905	18,309	3,074	16,772	73,766	4.0
	0.184031	15,235	2,804	13,833	56,994	3.7
	0.201331	12,431	2,503	11,180	43,161	3.5
	0.219819	9,928	2,182	8,837	31,981	3.2
		1	· '	1 '	,	3.2 3.0
5–97	0.239496	7,746	1,855	6,818	23,144	3.0 2.8
7–98	0.260347	5,891	1,534	5,124	16,326	
3–99	0.282339	4,357	1,230	3,742	11,202	2.6
9–100	0.305421	3,127	955	2,649	7,460	2.4
00 and over	1.000000	2,172	2,172	4,810	4,810	2.2

Table 4. Life table for the white population: United States, 2005

	Probability of dying between ages x to x+1	Number surviving to age x	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age x
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
0–1	0.005735	100,000	574	99,498	7,791,420	77.9
1–2	0.000425	99,426	42	99,405	7,691,922	77.4
2–3	0.000293	99,384	29	99,370	7,592,516	76.4
3–4	0.000193	99,355	19	99,345	7,493,147	75.4
4–5	0.000169	99,336	17	99,328	7,393,801	74.4
5–6	0.000157	99,319	16	99,311	7,294,474	73.4
6–7	0.000147	99,303	15	99,296	7,195,162	72.5
7–8	0.000137	99,289	14	99,282	7,095,866	71.5
8–9	0.000121	99,275	12	99,269	6,996,584	70.5
9–10	0.000102	99,263	10	99,258	6,897,315	69.5
0–11	0.000088	99,253	9	99,249	6,798,056	68.5
1–12	0.000092	99,244	9	99,240	6,698,808	67.5
2–13	0.000129	99,235	13	99,229	6,599,568	66.5
3–14	0.000206	99,223	20	99,212	6,500,339	65.5
4–15	0.000314	99,202	31	99,187	6,401,126	64.5
5–16	0.000432	99,171	43	99,150	6,301,940	63.5
6–17	0.000543	99,128	54	99,101	6,202,790	62.6
7–18	0.000643	99,074	64	99,042	6,103,689	61.6
8–19	0.000723	99,011	72 70	98,975	6,004,647	60.6
9–20	0.000784	98,939	78	98,900	5,905,672	59.7
0–21	0.000846	98,861	84	98,820	5,806,772	58.7
1–22	0.000906	98,778	89	98,733	5,707,952	57.8
2–23	0.000941	98,688	93	98,642	5,609,219	56.8
3–24	0.000947	98,595	93 92	98,549	5,510,577	55.9 54.9
4–25	0.000932 0.000908	98,502 98,410	92 89	98,456 98,366	5,412,028 5,313,572	54.9 54.0
5–27	0.000908	98,321	87	98,277	5,215,206	53.0
7–28	0.000879	98,234	86	98,190	5,116,929	52.1
8–29	0.000875	98,147	87	98,104	5,018,739	51.1
9–30	0.000905	98,060	89	98,016	4,920,635	50.2
0–31	0.000936	97,972	92	97,926	4,822,619	49.2
1–32	0.000971	97,880	95	97,833	4,724,693	48.3
2–33	0.001018	97,785	100	97,735	4,626,861	47.3
3–34	0.001055	97,685	103	97,634	4,529,125	46.4
4–35	0.001107	97,582	108	97,528	4,431,491	45.4
5–36	0.001166	97,474	114	97,418	4,333,963	44.5
6–37	0.001242	97,361	121	97,300	4,236,545	43.5
7–38	0.001347	97,240	131	97,174	4,139,245	42.6
8–39	0.001484	97,109	144	97,037	4,042,071	41.6
9–40	0.001645	96,965	159	96,885	3,945,034	40.7
0–41	0.001813	96,805	175	96,717	3,848,149	39.8
1–42	0.001982	96,630	191	96,534	3,751,432	38.8
2–43	0.002160	96,438	208	96,334	3,654,898	37.9
3–44	0.002350	96,230	226	96,117	3,558,564	37.0
4–45	0.002555	96,004	245	95,881	3,462,447	36.1
5–46	0.002774	95,758	266	95,626	3,366,566	35.2
6–47	0.003004	95,493	287	95,349	3,270,940	34.3
7–48	0.003249	95,206	309	95,051	3,175,591	33.4
8–49	0.003512	94,897	333	94,730	3,080,540	32.5
9–50	0.003796	94,563	359	94,384	2,985,809	31.6
0–51	0.004110	94,204	387	94,011	2,891,425	30.7
1–52	0.004450	93,817	418 449	93,609	2,797,415	29.8 28.9
3–54	0.004806 0.005165	93,400 92,951	480	93,175 92,711	2,703,806 2,610,631	28.1
1–55	0.005105	92,471	511	92,215	2,517,920	27.2
5–56	0.005910	91,959	544	91,688	2,425,705	26.4
6–57	0.005910	91,416	578	91,127	2,334,017	25.5
7–58	0.006814	90,838	619	90,528	2,242,890	24.7
3–59	0.007409	90,219	668	89,884	2,152,362	23.9
9–60	0.007409	89,550	728	89,186	2,062,478	23.0
0–61	0.008992	88,822	799	88,423	1,973,292	22.2
1–62	0.009954	88,024	876	87,585	1,884,869	21.4
2–63	0.010942	87,147	954	86,671	1,797,283	20.6
3–64	0.011878	86,194	1,024	85,682	1,710,613	19.8
4–65	0.012782	85,170	1,089	84,626	1,624,931	19.1
5–66	0.013766	84,081	1,157	83,503	1,540,305	18.3
6–67	0.014811	82,924	1,228	82,310	1,456,803	17.6
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Table 4. Life table for the white population: United States, 2005—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
-68	0.016066	81,696	1,313	81,039	1,374,493	16.8
-69	0.017547	80,383	1,410	79,678	1,293,453	16.1
-70	0.017347	78,973	1,519	78,213	1,213,775	15.4
-70	0.019241	76,973 77,453	1,636	76,635	1,135,563	14.7
	0.021116		· ·		1,058,927	14.7
-72	0.025639	75,818	1,761 1.899	74,937 73,107	983.990	13.3
-73		74,056	,	-, -	/	12.6
-74	0.028377	72,158	2,048	71,134	910,883	
-75	0.031461	70,110	2,206	69,007	839,749	12.0
-76	0.034937	67,904	2,372	66,718	770,742	11.4
-77	0.038717	65,532	2,537	64,263	704,024	10.7
-78	0.042887	62,995	2,702	61,644	639,760	10.2
-79	0.047485	60,293	2,863	58,862	578,116	9.6
-80	0.052549	57,430	3,018	55,921	519,255	9.0
-81	0.058119	54,412	3,162	52,831	463,334	8.5
-82	0.064240	51,250	3,292	49,604	410,502	8.0
-83	0.070957	47,958	3,403	46,256	360,899	7.5
-84	0.078318	44,555	3,489	42,810	314,643	7.1
-85	0.086371	41,065	3,547	39,292	271,833	6.6
-86	0.095166	37,518	3,570	35,733	232,541	6.2
-87	0.104755	33,948	3,556	32,170	196,808	5.8
-88	0.115187	30,392	3,501	28,641	164,638	5.4
–89	0.126511	26,891	3,402	25,190	135,997	5.1
-90	0.138774	23,489	3,260	21,859	110,807	4.7
–91	0.152018	20,229	3,075	18,692	88,947	4.4
-92	0.166282	17,154	2,852	15,728	70.256	4.1
-93	0.181598	14,302	2,597	13,003	54,528	3.8
–94	0.197990	11,705	2,317	10,546	41,525	3.5
-95	0.215472	9,387	2,023	8,376	30,979	3.3
-96	0.234047	7,364	1,724	6,503	22,603	3.1
	0.253705	5,641	1,724	4,925	16,100	2.9
-97	0.274423	5,641 4,210				2.9
			1,155	3,632	11,175	
-99	0.296162	3,054	905	2,602	7,543	2.5
-100	0.318866	2,150	686	1,807	4,941	2.3
0 and over	1.000000	1,464	1,464	3,134	3,134	2.1

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Table 5. Life table for white males: United States, 2005

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectatior of life at age <i>x</i>
Age	$q_x$	I <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	$T_x$	$e_x$
)–1	0.006327	100,000	633	99,447	7,541,348	75.4
I–2				99,344	7,441,901	74.9
2–3	0.000342	99,320	47 34	99,303	7,342,558	73.9
3–4	0.000219	99,286	22	99,275	7,243,255	73.0
-5	0.000199	99,264	20	99,254	7,143,980	72.0
i–6	0.000174	99,244	17	99,236	7,140,300	71.0
5–7	0.000174	99,227	16	99,219	6,945,490	70.0
·-8	0.000148	99,211	15	99,204	6,846,270	69.0
3–9	0.000117	99,197	13	99,190	6,747,066	68.0
-10	0.000127	99,184	10	99,179	6,647,876	67.0
⊢11	0.000102	99,174	8	99,170	6,548,697	66.0
_12	0.000004	99,166	9	99,161	6,449,528	65.0
<u>-12</u>	0.000091	99,157	14	99,149	6,350,367	64.0
J-14	0.000144	99,142	25	99,130	6,251,217	63.1
I–15	0.000233	·	41	99,097	1 ' '	62.1
-		99,117		· '	6,152,088	
5–16	0.000576	99,076	57	99,048	6,052,991	61.1
5–17	0.000734	99,019	73	98,983	5,953,943	60.1
7–18	0.000882	98,947	87	98,903	5,854,960	59.2
3–19	0.001010	98,859	100	98,810	5,756,057	58.2
9–20	0.001117	98,760	110	98,705	5,657,247	57.3
)–21	0.001225	98,649	121	98,589	5,558,543	56.3
I–22	0.001326	98,528	131	98,463	5,459,954	55.4
2–23	0.001385	98,398	136	98,330	5,361,491	54.5
3–24	0.001392	98,262	137	98,193	5,263,161	53.6
1–25	0.001361	98,125	134	98,058	5,164,968	52.6
5–26	0.001314	97,991	129	97,927	5,066,910	51.7
6–27	0.001274	97,863	125	97,800	4,968,983	50.8
7–28	0.001245	97,738	122	97,677	4,871,183	49.8
3–29	0.001239	97,616	121	97,556	4,773,506	48.9
9–30	0.001252	97,495	122	97,434	4,675,950	48.0
)–31	0.001277	97,373	124	97,311	4,578,515	47.0
I–32	0.001306	97,249	127	97,185	4,481,204	46.1
2–33	0.001353	97,122	131	97,056	4,384,019	45.1
3–34	0.001386	96,991	134	96,923	4,286,963	44.2
1–35	0.001440	96,856	139	96,786	4,190,039	43.3
5–36	0.001503	96,717	145	96,644	4,093,253	42.3
5–37	0.001588	96,571	153	96,495	3,996,609	41.4
7–38	0.001713	96,418	165	96,335	3,900,114	40.5
3–39	0.001883	96,253	181	96,162	3,803,779	39.5
9–40	0.002086	96,071	200	95,971	3,707,617	38.6
)–41	0.002301	95,871	221	95,761	3,611,645	37.7
I–42	0.002518	95,650	241	95,530	3,515,885	36.8
2–43	0.002744	95,410	262	95,279	3,420,355	35.8
3–44	0.002744	95,148	284	95,006	3,325,076	34.9
1–45	0.002962	94,864	307	94,711	3,230,070	34.0
5–46	0.003236	94,557	331	94,711	3,135,359	33.2
				i i	1 1	32.3
5–47	0.003787	94,226	357	94,048	3,040,967	
7–48	0.004100	93,869	385	93,677	2,946,920	31.4
3–49	0.004450	93,484	416	93,276	2,853,243	30.5
9–50	0.004838	93,068	450	92,843	2,759,967	29.7
)–51	0.005268	92,618	488	92,374	2,667,124	28.8
-52	0.005726	92,130	527	91,866	2,574,750	27.9
-53	0.006185	91,603	567	91,319	2,482,883	27.1
-54	0.006622	91,036	603	90,735	2,391,564	26.3
-55	0.007047	90,433	637	90,115	2,300,829	25.4
-56	0.007477	89,796	671	89,460	2,210,715	24.6
–57	0.007955	89,125	709	88,770	2,121,254	23.8
-58	0.008522	88,416	753	88,039	2,032,484	23.0
3–59	0.009234	87,662	809	87,257	1,944,445	22.2
)–60	0.010105	86,853	878	86,414	1,857,188	21.4
)–61	0.011156	85,975	959	85,495	1,770,774	20.6
-62	0.012322	85,016	1,048	84,492	1,685,279	19.8
2–63			1,135	83,401	1,600,786	19.1
		82,833	1,213	82,227	1,517,386	18.3
-64	U.U14b4a					
	0.014645 0.015720		1			
3–64	0.014645 0.015720 0.016873	81,620 80,337	1,283 1,356	80,978 79,659	1,435,159 1,354,181	17.6 16.9

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Table 5. Life table for white males: United States, 2005—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectatior of life at age x	
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>	
7–68	0.019669	77,549	1,525	76,787	1,196,256	15.4	
-69	0.021518	76,024	1,636	75,206	1,119,469	14.7	
–70	0.023642	74,388	1,759	73,509	1,044,263	14.0	
-71	0.025970	72,630	1,886	71,686	970,754	13.4	
-72	0.028556	70,743	2,020	69,733	899,068	12.7	
-73	0.031499	68.723	2.165	67.641	829.334	12.1	
-74	0.034824	66,558	2,318	65,400	761,694	11.4	
-75	0.038537	64,241	2,476	63,003	696,294	10.8	
<del>-</del> 76	0.042683	61,765	2,636	60,447	633,291	10.3	
–77    .	0.047179	59,129	2,790	57,734	572,844	9.7	
-78	0.052124	56,339	2,937	54,871	515,110	9.1	
–79	0.057555	53,402	3,074	51,866	460,240	8.6	
-80	0.063514	50,329	3,197	48,731	408,374	8.1	
–81	0.070044	47,132	3,301	45,482	359,643	7.6	
–82	0.077191	43,831	3,383	42,139	314,162	7.2	
<u>1</u> –83	0.085000	40,448	3,438	38,729	272,022	6.7	
-84	0.093518	37,010	3,461	35,279	233,294	6.3	
–85	0.102795	33,549	3,449	31,824	198,015	5.9	
-86	0.102733	30,100	3,398	28,401	166,191	5.5	
–87	0.123812	26,702	3,306	25,049	137,789	5.2	
	0.135644	23,396	3,174	21,809	112,740	4.8	
B–89	0.148415	20,223	3,001	18,722	90,931	4.5	
) <del>-</del> 99	0.162163	17,221	2,793	15,825	72,209	4.2	
) <del>-90</del>	0.176920	14,429	2,793	13,152	56,384	3.9	
–91	0.170920	11,876	2,289	10.732	43,231	3.6	
–92	0.192711	9,587	2,209	8,583	32,500	3.4	
••	0.209333	7,578	1,724	6,716	23,917	3.2	
–94	0.246403	5,855	1,724	5,133	17,201	2.9	
–96	0.266388	4,412	1,443	3,824	12,067	2.9	
–90	0.287377	3,237	930	2,772	8,243	2.7	
	0.309321		713			2.5 2.4	
		2,307		1,950	5,471	2.4	
-99	0.332161	1,593	529	1,328	3,522		
)–100	0.355818	1,064	379	875	2,193	2.1	
0 and over	1.000000	685	685	1,318	1,318	1.9	

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Table 6. Life table for white females: United States, 2005

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>	
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	$e_x$	
0–1	0.005112	100,000	511	99,552	8,035,137	80.4	
1–2	0.000372	99,489	37	99,470	7,935,586	79.8	
2–3	0.000242	99,452	24	99,440	7,836,116	78.8	
3–4	0.000167	99,428	17	99,419	7,736,676	77.8	
	0.000107		14	1		76.8	
-5		99,411		99,404	7,637,256		
-6	0.000140	99,398	14	99,391	7,537,852	75.8	
-7	0.000132	99,384	13	99,377	7,438,461	74.8	
-8	0.000125	99,371	12	99,364	7,339,084	73.9	
-9	0.000115	99,358	11	99,353	7,239,720	72.9	
-10	0.000102	99,347	10	99,342	7,140,367	71.9	
-11	0.000093	99,337	9	99,332	7,041,025	70.9	
-12	0.000093	99,327	9	99,323	6,941,693	69.9	
–13	0.000112	99,318	11	99,313	6,842,371	68.9	
–14	0.000155	99,307	15	99,299	6,743,058	67.9	
-15	0.000214	99,292	21	99,281	6,643,759	66.9	
-16	0.000281	99,270	28	99,257	6,544,478	65.9	
_17	0.000342	99,243	34	99,226	6,445,221	64.9	
-18	0.000390	99,209	39	99,189	6,345,995	64.0	
_19	0.000418	99,170	41	99,149	6,246,806	63.0	
-20	0.000410	99,129	43	99,107	6.147.657	62.0	
-21	0.000440	99,086	44	99,064	6,048,550	61.0	
–22	0.000440	99,042	45	99,020	5,949,486	60.1	
			-				
-23	0.000462	98,997	46	98,975	5,850,466	59.1	
-24	0.000466	98,952	46	98,929	5,751,491	58.1	
-25	0.000468	98,905	46	98,882	5,652,563	57.2	
-26	0.000469	98,859	46	98,836	5,553,680	56.2	
-27	0.000474	98,813	47	98,789	5,454,844	55.2	
-28	0.000485	98,766	48	98,742	5,356,055	54.2	
-29	0.000506	98,718	50	98,693	5,257,313	53.3	
-30	0.000536	98,668	53	98,642	5,158,620	52.3	
-31	0.000574	98,615	57	98,587	5,059,978	51.3	
–32	0.000617	98,559	61	98,528	4,961,391	50.3	
-33	0.000667	98,498	66	98,465	4,862,863	49.4	
-34	0.000709	98,432	70	98,397	4,764,398	48.4	
-35	0.000760	98,362	75	98,325	4,666,001	47.4	
-36	0.000815	98,288	80	98,247	4,567,676	46.5	
-37	0.000881	98,207	87	98,164	4,469,429	45.5	
-38	0.000966	98,121	95	98,074	4,371,265	44.5	
-39	0.001072	98,026	105	97,974	4,273,191	43.6	
-40	0.001072	97,921	117	97,863	4,175,217	42.6	
-41	0.001132	97,804	128	97,740	4,077,355	41.7	
I		,	-	1			
-42	0.001437	97,676	140	97,606	3,979,614	40.7	
-43	0.001569	97,536	153	97,459	3,882,009	39.8	
-44	0.001713	97,383	167	97,299	3,784,550	38.9	
-45	0.001871	97,216	182	97,125	3,687,251	37.9	
-46	0.002042	97,034	198	96,935	3,590,126	37.0	
-47	0.002219	96,836	215	96,728	3,493,191	36.1	
-48	0.002398	96,621	232	96,505	3,396,463	35.2	
-49	0.002577	96,389	248	96,265	3,299,958	34.2	
-50	0.002763	96,141	266	96,008	3,203,693	33.3	
-51	0.002965	95,875	284	95,733	3,107,685	32.4	
-52	0.003194	95,591	305	95,438	3,011,952	31.5	
-53	0.003452	95,285	329	95,121	2,916,514	30.6	
54	0.003739	94,957	355	94,779	2,821,393	29.7	
55	0.004053	94,601	383	94,410	2,726,614	28.8	
-56	0.004386	94,218	413	94,011	2,632,205	27.9	
-57	0.004749	93,805	445	93,582	2,538,193	27.1	
-58	0.005164	93,359	482	93,118	2,444,611	26.2	
-59	0.005657	92,877	525	92,615	2,351,493	25.3	
-60	0.006241	92,352	576	92,064	2,258,878	24.5	
–61	0.006241	91,776	637	91,457	2,166,814	23.6	
-62				1	1 1	23.6	
	0.007731	91,138	705	90,786	2,075,357		
-63			773	90,047	1,984,571	21.9	
-64			836	89,243	1,894,524	21.1	
-65	0.010088	88,825	896	88,377	1,805,280	20.3	
-66	0.010938	87,929	962	87,448	1,716,903	19.5	
i–67	0.011824	86,968	1,028	86,453	1,629,455	18.7	

Table 6. Life table for white females: United States, 2005—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>	
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	$e_{x}$	
7–68	0.012866	85,939	1,106	85,386	1,543,001	18.0	
-69	0.014073	84,834	1,194	84,237	1,457,615	17.2	
-70	0.015456	83,640	1,293	82,993	1,373,378	16.4	
-71	0.017020	82,347	1,402	81,646	1,290,385	15.7	
-72	0.018813	80,945	1,523	80,184	1,208,739	14.9	
-73	0.020883	79,423	1.659	78,593	1.128.555	14.2	
-74	0.023259	77,764	1,809	76,860	1,049,962	13.5	
-75	0.025969	75,955	1,972	74,969	973,102	12.8	
-76	0.029065	73,983	2,150	72,908	898,133	12.1	
-77	0.032435	71,832	2,330	70,668	825,226	11.5	
–78	0.036182	69,503	2,515	68,245	754,558	10.9	
_79	0.040343	66,988	2,703	65,637	686,313	10.2	
-80	0.044961	64,285	2,890	62,840	620.676	9.7	
-81	0.050080	61,395	3,075	59,858	557,836	9.1	
-82	0.055748	58,320	3,251	56,695	497,978	8.5	
–83	0.062015	55,069	3,415	53,362	441,284	8.0	
-84	0.068936	51,654	3,561	49,874	387,922	7.5	
–85	0.076565	48,093	3,682	46,252	338,049	7.0	
	0.076565	44,411	3,002	42.524	291.797	7.0 6.6	
-86	0.094186	40,638	3,828	38,724	249,272	6.1	
-	0.104298					5.7	
		36,810	3,839	34,891	210,548		
-89	0.115356	32,971	3,803	31,069	175,658	5.3	
-90	0.127420	29,168	3,717	27,309	144,589	5.0	
-91	0.140546	25,451	3,577	23,663	117,279	4.6	
-92	0.154783	21,874	3,386	20,181	93,617	4.3	
-93	0.170178	18,488	3,146	16,915	73,436	4.0	
-94	0.186765	15,342	2,865	13,909	56,521	3.7	
-95	0.204570	12,477	2,552	11,200	42,611	3.4	
-96	0.223607	9,924	2,219	8,815	31,411	3.2	
-97	0.243871	7,705	1,879	6,766	22,596	2.9	
-98	0.265344	5,826	1,546	5,053	15,830	2.7	
–99	0.287988	4,280	1,233	3,664	10,777	2.5	
)–100	0.311744	3,048	950	2,573	7,113	2.3	
00 and over	1.000000	2,097	2,097	4,541	4,541	2.2	

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Table 7. Life table for the black population: United States, 2005

	<u> </u>		<u> </u>			
					Total	
	D. 1 120			D.		
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
	4x	·x	-X	-x	· x	- X
0.4	0.040700	400.000	4.070	00.700	7 000 000	70.0
0–1	0.013782	100,000	1,378	98,790	7,283,632	72.8
1–2	0.000660	98,622	65	98,589	7,184,842	72.9
2–3	0.000384	98,557	38	98,538	7,086,252	71.9
3–4	0.000354	98,519	35	98,501	6,987,715	70.9
4–5	0.000276	98,484	27	98,470	6,889,213	70.0
5–6	0.000251	98,457	25	98,444	6,790,743	69.0
					· ' '	
6–7	0.000231	98,432	23	98,421	6,692,298	68.0
7–8	0.000213	98,409	21	98,399	6,593,878	67.0
8–9	0.000192	98,388	19	98,379	6,495,479	66.0
			17			
9–10	0.000171	98,369		98,361	6,397,100	65.0
10–11	0.000158	98,353	15	98,345	6,298,739	64.0
11–12	0.000166	98,337	16	98,329	6,200,394	63.1
12–13	0.000210	98,321	21	98,311	6,102,065	62.1
13–14	0.000299	98,300	29	98,286	6,003,755	61.1
14–15	0.000424	98,271	42	98,250	5,905,469	60.1
15–16			56			59.1
	0.000565	98,229		98,201	5,807,219	
16–17	0.000704	98,174	69	98,139	5,709,018	58.2
17–18	0.000844	98,105	83	98,063	5,610,879	57.2
18–19	0.000978	98,022	96	97,974	5,512,816	56.2
19–20	0.001103	97,926	108	97,872	5,414,842	55.3
20–21	0.001239	97,818	121	97,757	5,316,970	54.4
21–22	0.001374	97,697	134	97,630	5,219,213	53.4
22–23	0.001475	97,562	144	97,490	5,121,583	52.5
23–24	0.001530	97,419	149	97,344	5,024,093	51.6
24–25	0.001550	97,269	151	97,194	4,926,749	50.7
					· ' '	
25–26	0.001556	97,119	151	97,043	4,829,555	49.7
26–27	0.001572	96,968	152	96,891	4,732,511	48.8
27–28	0.001600	96,815	155	96,738	4,635,620	47.9
			160			47.0
	0.001651	96,660		96,580	4,538,882	
29–30	0.001722	96,501	166	96,418	4,442,302	46.0
30–31	0.001806	96,334	174	96,248	4,345,884	45.1
31–32	0.001892	96,161	182	96,070	4,249,637	44.2
32–33	0.002007	95,979	193	95,882	4,153,567	43.3
33–34	0.002054	95,786	197	95,688	4,057,685	42.4
34–35	0.002133	95,589	204	95,487	3,961,997	41.4
					1 1	
35–36	0.002223	95,385	212	95,279	3,866,510	40.5
36–37	0.002340	95,173	223	95,062	3,771,230	39.6
37–38	0.002494	94,951	237	94,832	3,676,168	38.7
	0.002691	94,714	255	94,586	3,581,336	37.8
					1 1	
39–40	0.002922	94,459	276	94,321	3,486,750	36.9
40–41	0.003161	94,183	298	94,034	3,392,429	36.0
41–42	0.003414	93,885	321	93,725	3,298,394	35.1
42–43	0.003720	93,565	348	93,391	3,204,669	34.3
43–44	0.004095	93,217	382	93,026	3,111,278	33.4
44–45	0.004533	92,835	421	92,625	3,018,252	32.5
45–46	0.005002	92,414	462	92,183	2,925,628	31.7
46–47	0.005483	91,952	504	91,700	2,833,445	30.8
47–48	0.005997	91,448	548	91,174	2,741,745	30.0
48–49	0.006551	90,899	596	90,602	2,650,571	29.2
49–50	0.007148	90,304	646	89,981	2,559,969	28.3
50–51	0.007812	89,658	700	89,308	2,469,988	27.5
51–52	0.008520	88,958	758	88,579	2,380,680	26.8
52–53	0.009214	88,200	813	87,794	2,292,101	26.0
53–54	0.009849	87,387	861	86,957	2,204,307	25.2
54–55	0.010439	86,527	903	86,075	2,117,350	24.5
55–56	0.011040	85,623	945	85,151	2,031,275	23.7
56–57	0.011706	84,678	991	84,183	1,946,125	23.0
57–58	0.012448	83,687	1,042	83,166	1,861,942	22.2
58–59	0.013317	82,645	1,101	82,095	1,778,776	21.5
			1			
59–60	0.014336	81,545	1,169	80,960	1,696,681	20.8
60–61	0.015530	80,376	1,248	79,751	1,615,721	20.1
61–62	0.016857	79,127	1,334	78,460	1,535,969	19.4
62–63		· ·	1			18.7
	0.018219	77,793	1,417	77,085	1,457,509	
63–64	0.019468	76,376	1,487	75,633	1,380,424	18.1
64–65	0.020586	74,889	1,542	74,118	1,304,791	17.4
65–66	0.021667	73,348	1,589	72,553	1,230,673	16.8
		· ·	1			
66–67	0.022764	71,758	1,633	70,942	1,158,120	16.1
l		I	I	I	I	I

Table 7. Life table for the black population: United States, 2005—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>	
Age	$q_x$	l <sub>x</sub>	$d_{_{X}}$	L <sub>x</sub>	T <sub>x</sub>	$e_x$	
'–68	0.024128	70,125	1,692	69,279	1,087,178	15.5	
-69	0.025838	68,433	1,768	67,549	1,017,899	14.9	
–70	0.027861	66,665	1,857	65,736	950,350	14.3	
-71	0.030081	64,807	1,950	63,833	884,614	13.6	
-72	0.032503	62,858	2,043	61,836	820,781	13.1	
73	0.035228	60,815	2,142	59,744	758.945	12.5	
74	0.038262	58,673	2,245	57,550	699,201	11.9	
-75	0.041588	56,428	2,347	55,254	641,651	11.4	
-76	0.045204	54,081	2,445	52,859	586,397	10.8	
-77	0.048946	51,636	2,527	50,373	533,538	10.3	
78	0.052980	49,109	2,602	47,808	483,166	9.8	
-79	0.057326	46,507	2,666	45,174	435,358	9.4	
-80	0.062006	43,841	2,718	42,482	390,184	8.9	
-81	0.067040	41,123	2,757	39,744	347,702	8.5	
-82	0.072452	38,366	2,780	36,976	307,958	8.0	
-83	0.078264	35,586	2,785	34,193	270,982	7.6	
-84	0.084500	32,801	2,772	31,415	236,789	7.2	
-85	0.091183	30,029	2,738	28,660	205,373	6.8	
-86	0.098339	27,291	2,684	25,949	176,713	6.5	
-87	0.105990	24,607	2,608	23,303	150,764	6.1	
-88	0.103990	21,999	2,511	20,743	127,461	5.8	
–89	0.114161	19,488	2,395	18,290	106,717	5.5	
-89	0.132156					5.5 5.2	
		17,093	2,259	15,964	88,427		
–91	0.142024	14,834	2,107	13,781	72,463	4.9 4.6	
–92	0.152500	12,727	1,941	11,757	58,682	4.6 4.4	
	0.163600	10,786	1,765	9,904	46,925	4.4 4.1	
-94	0.175342	9,022	1,582	8,231	37,021		
-95	0.187737	7,440	1,397	6,742	28,790	3.9	
-96	0.200795	6,043	1,213	5,436	22,049	3.6	
-97	0.214521	4,830	1,036	4,312	16,612	3.4	
-98	0.228917	3,794	868	3,359	12,301	3.2	
-99	0.243979	2,925	714	2,568	8,941	3.1	
_100	0.259698	2,212	574	1,924	6,373	2.9	
0 and over	1.000000	1,637	1,637	4,449	4,449	2.7	

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Table 8. Life table for black males: United States, 2005

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectatior of life at age <i>x</i>	
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	$e_{x}$	
)–1	0.015197	100,000	1,520	98,667	6,930,938	69.3	
-2	0.000721	98,480	71	98,445	6,832,270	69.4	
-3	0.000449	98,409	44	98,387	6,733,826	68.4	
-4	0.000445	98,365	44	98,343	6,635,438	67.5	
-5	0.000254	98,321	25	98,309	6,537,095	66.5	
-6	0.000272	98,296	27	98,283	6,438,786	65.5	
-7	0.000252	98,270	25	98,257	6,340,503	64.5	
-8	0.000233	98,245	23	98,234	6,242,246	63.5	
-9	0.000205	98,222	20	98,212	6,144,012	62.6	
<b>⊢</b> 10	0.000173	98,202	17	98,193	6,045,800	61.6	
-11	0.000152	98,185	15	98,178	5,947,607	60.6	
-12	0.000165	98,170	16	98,162	5,849,429	59.6	
–13	0.000238	98,154	23	98,142	5,751,267	58.6	
3–14	0.000387	98,131	38	98,112	5,653,125	57.6	
–15	0.000597	98,093	59	98,063	5,555,013	56.6	
i–16	0.000830	98,034	81	97,993	5,456,950	55.7	
6–17	0.001059	97,953	104	97,901	5,358,957	54.7	
7–18	0.001288	97,849	126	97,786	5,261,056	53.8	
3–19	0.001503	97,723	147	97,650	5,163,270	52.8	
9–20	0.001703	97,576	166	97,493	5,065,620	51.9	
)–21	0.001916	97,410	187	97,317	4,968,127	51.0	
1–22	0.002124	97,223	207	97,120	4,870,811	50.1	
2–23	0.002277	97,017	221	96,906	4,773,691	49.2	
3–24	0.002352	96,796	228	96,682	4,676,784	48.3	
I–25	0.002366	96,568	228	96,454	4,580,102	47.4	
5–26	0.002355	96,340	227	96,226	4,483,648	46.5	
6–27	0.002352	96,113	226	96,000	4,387,422	45.6	
7–28	0.002363	95,887	227	95,774	4,291,422	44.8	
3–29	0.002406	95,660	230	95,545	4,195,649	43.9	
9–30	0.002475	95,430	236	95,312	4,100,103	43.0	
0–31	0.002557	95,194	243	95,072	4,004,791	42.1	
I–32	0.002637	94,950	250	94,825	3,909,719	41.2	
2–33	0.002772	94,700	263	94,569	3,814,894	40.3	
3–34	0.002776	94,438	262	94,306	3,720,325	39.4	
I–35	0.002840	94,175	267	94,042	3,626,019	38.5	
5–36	0.002921	93,908	274	93,771	3,531,977	37.6	
6–37	0.003034	93,634	284	93,492	3,438,206	36.7	
7–38	0.003186	93,350	297	93,201	3,344,715	35.8	
3–39	0.003386	93,052	315	92,895	3,251,514	34.9	
9–40	0.003627	92,737	336	92,569	3,158,619	34.1	
)–41	0.003879	92,401	358	92,222	3,066,050	33.2	
-42	0.004159	92,042	383	91,851	2,973,829	32.3	
2–43	0.004524	91,660	415	91,452	2,881,978	31.4	
3–44	0.005001	91,245	456	91,017	2,790,526	30.6	
1–45	0.005573	90,789	506	90,536	2,699,509	29.7	
5–46	0.006191	90,283	559	90,003	2,608,974	28.9	
6–47	0.006828 0.007513	89,724	613 669	89,417	2,518,970 2,429,553	28.1 27.3	
3–49		89,111	730	88,776	1 ' '		
-	0.008257	88,442		88,076	2,340,777 2,252,700	26.5	
)–50	0.009067	87,711	795 867	87,314 86,483	1 ' '	25.7	
<i>–</i> 51	0.009971	86,916 86,049	942	85,579	2,165,387 2,078,904	24.9 24.2	
<u>-52</u>	0.010942 0.011913	85,108	1,014	84,601	1,993,325	23.4	
_54	0.012826	84,094	1,079	83,555	1,908,724	22.7	
-55	0.013688	83,015	1,136	82,447	1,825,170	22.0	
-56	0.014575	81,879	1,193	81,282	1,742,722	21.3	
_57	0.014575	80,686	1,254	80,059	1,661,440	20.6	
–58	0.016567	79,432	1,316	78,774	1,581,381	19.9	
i–59	0.017709	78,116	1,383	77,424	1,502,607	19.2	
P-60	0.017709	76,733	1,458	76,004	1,425,183	18.6	
) <del>-</del> 61	0.020505	75,275	1,544	74,503	1,349,180	17.9	
-62	0.022185	73,731	1,636	72,913	1,274,677	17.3	
2–63			1,723	71,234	1,201,763	16.7	
3–64			1,791	69,477	1,130,530	16.1	
H-65	0.026791	68,582	1,837	67,663	1,061,052	15.5	
				65,809			
i–66	0.028037	66,745	1,871	กว.สมห	993,389	14.9	

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Table 8. Life table for black males: United States, 2005—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>	
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	T <sub>x</sub>	$e_x$	
37–68	0.031173	62,965	1,963	61,984	863,661	13.7	
8–69	0.033439	61,002	2,040	59,983	801,677	13.1	
9–70	0.036130	58,963	2,130	57,897	741,695	12.6	
)–71	0.039048	56,832	2,219	55,723	683,797	12.0	
-72	0.042151	54,613	2,302	53,462	628,074	11.5	
2–73	0.045564	52,311	2,384	51,119	574,612	11.0	
3–74	0.049294	49,928	2,461	48,697	523,493	10.5	
I–75	0.053324	47,466	2,531	46,201	474,796	10.0	
5–76	0.057646	44,935	2,590	43,640	428,595	9.5	
5–77	0.062036	42,345	2,627	41,032	384,955	9.1	
7–78	0.066736	39,718	2,651	38,393	343,923	8.7	
3–79	0.000730	37,068	2,660	35,737	305,530	8.2	
)–79	0.077143	34,407	2,654	33,080	269,793	7.8	
)–81	0.082888	31,753	2,632	30,437	236,713	7.6 7.5	
-	0.089018	29,121	2,592	27.825	206,276	7.5 7.1	
–82		· '		/	· '	6.7	
	0.095555	26,529	2,535	25,261	178,451	6.4	
	0.102518	23,994	2,460	22,764	153,189		
I–85	0.109927	21,534	2,367	20,350	130,426	6.1	
i–86	0.117801	19,167	2,258	18,038	110,075	5.7	
5–87	0.126159	16,909	2,133	15,842	92,037	5.4	
7–88	0.135019	14,776	1,995	13,778	76,195	5.2	
3–89	0.144398	12,781	1,846	11,858	62,416	4.9	
9–90	0.154313	10,935	1,687	10,092	50,558	4.6	
)–91	0.164778	9,248	1,524	8,486	40,467	4.4	
I-92	0.175804	7,724	1,358	7,045	31,981	4.1	
2–93	0.187403	6,366	1,193	5,770	24,936	3.9	
3–94	0.199582	5,173	1,032	4,657	19,167	3.7	
–95	0.212346	4,141	879	3,701	14,510	3.5	
i–96	0.225696	3,261	736	2,893	10,809	3.3	
i–97	0.239629	2,525	605	2,223	7,915	3.1	
7–98	0.254141	1,920	488	1,676	5,693	3.0	
3–99	0.269220	1,432	386	1,239	4,017	2.8	
9–100	0.284852	1,047	298	898	2,777	2.7	
00 and over	1.000000	748	748	1.880	1.880	2.5	

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Table 9. Life table for black females: United States, 2005

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age x
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	$T_x$	e <sub>x</sub>
0-1	0.012323	100,000	1,232	98,916	7,609,762	76.1
	0.000598	98,768	59	98,738	7,510,846	76.0
	0.000316	98,709	31	98,693	7,412,108	75.1
	0.000260	98,677	26	98,665	7,313,415	74.1
4-5	0.000298	98,652	29	98,637	7,214,750	73.1
	0.000230	98,622	23	98,611	7,116,113	72.2
	0.000209	98,600	21	98,589	7,017,502	71.2
	0.000193	98,579	19	98,570	6,918,913	70.2
8–9	0.000179	98,560	18	98,551	6,820,343	69.2
	0.000169	98,542	17	98,534	6,721,792	68.2
	0.000164	98,526	16	98,518	6,623,258	67.2
11–12	0.000167	98,510	16	98,501	6,524,741	66.2
	0.000181	98,493	18	98,484	6,426,239	65.2
	0.000208	98,475	20	98,465	6,327,755	64.3
	0.000247	98,455	24	98,443	6,229,290	63.3
15–16	0.000292	98,431	29	98,416	6,130,847	62.3
	0.000340	98,402	33	98,385	6,032,431	61.3
	0.000389	98,368	38	98,349	5,934,045	60.3
	0.000438	98,330	43	98,309	5,835,696	59.3
19–20	0.000487	98,287	48	98,263	5,737,387	58.4
	0.000542	98,239	53	98,213	5,639,124	57.4
	0.000601	98,186	59	98,157	5,540,911	56.4
	0.000654	98,127	64	98,095	5,442,755	55.5
23–24	0.000698	98,063	68	98,029	5,344,660	54.5
	0.000737	97,994	72	97,958	5,246,631	53.5
	0.000777	97,922	76	97,884	5,148,673	52.6
26–27	0.000825	97,846	81	97,806	5,050,789	51.6
27–28	0.000881	97,765	86	97,722	4,952,983	50.7
28–29	0.000949	97,679	93	97,633	4,855,260	49.7
29–30	0.001027	97,587	100	97,537	4,757,627	48.8
30–31	0.001118	97,487	109	97,432	4,660,091	47.8
	0.001216	97,378	118	97,318	4,562,659	46.9
	0.001325	97,259	129	97,195	4,465,340	45.9
	0.001404	97,130	136	97,062	4,368,146	45.0
34–35	0.001498	96,994	145	96,921	4,271,083	44.0
	0.001596	96,849	155	96,771	4,174,162	43.1
	0.001716	96,694	166	96,611	4,077,391	42.2
	0.001871	96,528	181	96,438	3,980,780	41.2
38–39	0.002068	96,347	199	96,248	3,884,342	40.3
	0.002294	96,148	221	96,038	3,788,094	39.4
	0.002523	95,928	242	95,807	3,692,056	38.5
41–42	0.002756	95,686	264	95,554	3,596,250	37.6
	0.003011	95,422	287	95,278	3,500,696	36.7
	0.003300	95,135	314	94,978	3,405,417	35.8
	0.003620	94,821	343	94,649	3,310,440	34.9
45–46	0.003957	94,477	374	94,291	3,215,791	34.0
	0.004304	94,104	405	93,901	3,121,500	33.2
	0.004672	93,699	438	93,480	3,027,599	32.3
	0.005066	93,261	472	93,025	2,934,119	31.5
49–50	0.005489	92,788	509	92,534	2,841,095	30.6
	0.005960	92,279	550	92,004	2,748,561	29.8
	0.006458	91,729	592	91,433	2,656,557	29.0
52–53	0.006930	91,137	632	90,821	2,565,124	28.1
	0.007341	90,505	664	90,173	2,474,303	27.3
	0.007711	89,841	693	89,494	2,384,130	26.5
	0.008079	89,148	720	88,788	2,294,635	25.7
56–57	0.008506	88,428	752	88,052	2,205,847	24.9
57–58	0.009028	87,676	792	87,280	2,117,796	24.2
58–59	0.009702	86,884	843	86,463	2,030,516	23.4
59–60	0.010538	86,041	907	85,588	1,944,053	22.6
60-61	0.011536	85,134	982	84,643	1,858,466	21.8
61-62	0.012643	84,152	1,064	83,620	1,773,822	21.1
62-63	0.013789	83,088	1,146	82,516	1,690,202	20.3
63-64	0.014857	81,943	1,217	81,334	1,607,686	19.6
64–65	0.015835	80,725	1,278	80,086	1,526,352	18.9
	0.016822	79,447	1,336	78,779	1,446,266	18.2
	0.017818	78,111	1,392	77,415	1,367,488	17.5

Table 9. Life table for black females: United States, 2005—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>	
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>	
7–68	0.019002	76,719	1.458	75,990	1,290,073	16.8	
–69	0.020432	75,261	1,538	74,492	1,214,083	16.1	
– <del>7</del> 0	0.022109	73,723	1,630	72,908	1,139,591	15.5	
-71	0.023968	72,093	1,728	71,229	1,066,683	14.8	
-72	0.026046	70,365	1,833	69,449	995,454	14.1	
-73	0.028435	68,533	1.949	67,558	926.005	13.5	
_74	0.031136	66,584	2,073	65,547	858,447	12.9	
_75	0.034118	64,511	2,201	63,410	792,900	12.3	
–76	0.037379	62,310	2,329	61.145	729,489	11.7	
<del>-</del> 77	0.040791	59,981	2,447	58,757	668,344	11.1	
–78	0.044499	57,534	2,560	56,254	609,587	10.6	
_79	0.048528	54,974	2,668	53,640	553,333	10.1	
-80	0.052901	52,306	2,767	50,922	499,693	9.6	
–81	0.057645	49,539	2,856	48,111	448,771	9.1	
–82	0.062786	46,683	2,931	45,218	400,660	8.6	
–83	0.068352	43,752	2,991	42,257	355,442	8.1	
–84	0.074372	40,762	3,032	39,246	313,185	7.7	
–85	0.080876	37,730	3,051	36,204	273,939	7.7	
	0.087895	34,679	3,048	33,155	273,939	7.3 6.9	
–86	0.087895		3,046	30,121		6.5	
-	0.103602	31,631			204,580	6.1	
		28,611	2,964	27,129	174,459		
-89	0.112353	25,647	2,882	24,206	147,330	5.7	
-90	0.121742	22,765	2,772	21,380	123,124	5.4	
-91	0.131799	19,994	2,635	18,676	101,745	5.1	
-92	0.142553	17,359	2,475	16,121	83,068	4.8	
-93	0.154028	14,884	2,293	13,738	66,947	4.5	
-94	0.166247	12,592	2,093	11,545	53,209	4.2	
-95	0.179231	10,498	1,882	9,558	41,664	4.0	
-96	0.192994	8,617	1,663	7,785	32,106	3.7	
-97	0.207546	6,954	1,443	6,232	24,321	3.5	
-98	0.222893	5,511	1,228	4,896	18,089	3.3	
-99	0.239032	4,282	1,024	3,770	13,193	3.1	
9–100	0.255955	3,259	834	2,842	9,422	2.9	
00 and over	1.000000	2,425	2,425	6,580	6,580	2.7	

Table 10. Survivorship by age, race, and sex: Death-registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 2005

section]												
Age, race,					Number o	f survivors ou	t of 100,000	born alive $(I_x)$	1			
and sex	2005	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	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	100,000	100,000
1	99,312	99,305	99,064	98,740	97,998	97,407	97,024	95,290	94,028	92,515	88,538	87,552
5	99,196	99,176	98,877	98,495	97,668	96,998	96,482	94,220	91,978	83,389	83,887	81,804
10	99,124 99,035	99,097 98,998	98,766 98,635	98,347 98,196	97,460 97,261	96,765 96,551	96,177 95,885	93,710 93,235	91,106 90,385	88,129 87,144	82,458 81,506	80,052 78,963
20	98,713	98,664	98,215	97,741	96,716	96,111	95,366	92,435	89,089	85,441	80,074	77,239
25	98,232	98,202	97,671	97,110	96,000	95,517	94,676	91,335	87,269	83,146	78,046	74,768
30	97,754	97,750	97,070	96,477	95,307	94,905	93,919	90,078	85,302	80,642	75,779	72,043
35	97,211	97,199	96,322	95,808	94,482	94,144	92,976	88,573	83,118	77,961	73,127	69,078
40	96,488 95,370	96,419 95,268	95,373 94,154	94,926 93,599	93,322 91,587	93,064 91,378	91,648 89,634	86,650 84,069	80,557 77,343	75,114 72,036	70,042 66,561	65,890 62,436
50	93,697	93,591	92,370	91,526	88,972	88,756	86,591	80,487	73,321	68,429	62,460	58,514
55	91,280	91,211	89,658	88,348	85,110	84,711	82,176	75,557	68,182	63,947	57,555	53,852
60	87,966	87,595	85,537	83,726	79,529	79,067	75,921	68,924	61,563	58,079	51,138	47,946
65	83,056	82,224	79,519	77,107	71,933	71,147	67,555	60,366	53,195	50,560	43,194	40,911
70	76,315	74,794	71,357	68,248	61,984	60,857	56,987	49,655	42,768	41,090	33,816	32,390
75	66,733 53,338	64,561 50,819	60,449 47,084	56,799 43,180	49,705 35,285	48,170 33,576	43,903 29,313	36,735 22,883	30,789 18,580	29,729 18,298	23,552	22,960 13,529
85	36,753	34,471	31,770	27,960	20,908	18,542	15,785	11,073	8,542	8,683	13,712 6,001	6,053
90	19,906	18,472	17,046	14,154	9,297	7,080	6,144	3,796	2,998	2,941	1,868	1,867
95	7,363	6,871	6,282	5,043	2,786	1,524	1,511	857	636	646	361	344
100	1,519	1,477	1,424	1,150	542	183	199	123	62	67	40	31
Male		ı	I	ı	ı	ı	l	ı	1	ı	I	I
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	99,243	99,239	98,961	98,607	97,755	97,087	96,661	94,762	93,440	91,745	87,505	86,426
5	99,111	99,095	98,754	98,333	97,395	96,643	96,077	93,624	91,294	88,505	82,718	80,548
10	99,034	99,008	98,627	98,160	97,151	96,375	95,726	93,054	90,346	87,184	81,249	78,775
15	98,928 98,476	98,890 98,426	98,464 97,854	97,972 97,316	96,904 96,126	96,107 95,491	95,366 94,695	92,508 91,617	89,561 88,220	86,156 84,440	80,261 78,792	77,681 75,984
25	97,770	97,746	97,034	96,361	95,040	94,631	93,791	90,385	86,359	82,252	76,675	73,472
30	97,094	97,112	96,166	95,430	94,072	93,826	92,861	89,009	84,346	79,890	74,378	70,747
35	96,376	96,382	95,091	94,501	92,997	92,889	91,760	87,371	82,075	77,514	71,614	67,752
40	95,470	95,384	93,761	93,345	91,541	91,572	90,207	85,246	79,357	74,432	68,297	64,447
45	94,084 92,014	93,931 91,800	92,139 89,865	91,649 89,007	89,369 86,070	89,492 86,199	87,819 84,158	82,336 78,254	75,882 71,518	71,244 67,553	64,518 60,118	60,849 56,736
55	88,988	88,862	86,492	84,936	81,139	81,039	78,781	70,234	65,981	62,965	54,970	51,939
60	84,937	84,478	81,378	79,012	73,958	73,887	71,246	65,142	58,909	56,917	48,343	45,895
65	79,094	78,083	73,971	70,646	64,318	64,177	61,566	55,776	50,154	49,218	40,264	38,736
70	71,253	69,350	64,107	59,681	52,296	52,244	49,950	44,588	39,516	39,668	31,023	30,217
75	60,351	57,572	51,385	46,272	38,797	38,950	36,756	31,864	27,718	28,316	21,213	21,076
80	45,892 29,292	42,683 26,473	36,749 21,815	31,810 18,020	24,921 13,168	25,300 12,845	25,237 11,750	18,995 8,693	16,172 7,107	17,128 7,920	11,942 5,059	12,084 5,179
90	14,144	12,447	9,878	7,732	5,107	4,609	4,197	2,787	2,283	2,527	1,502	1,508
95	4,428	3,847	2,927	2,279	1,326	970	955	586	451	556	289	262
100	725	643	529	423	222	117	121	78	40	62	33	22
Female		ı	l	1	ı	1		1	1	1	1	ı
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	99,384	99,375	99,172	98,880	98,254	97,744	97,406	95,848	94,728	93,383	89,623	88,733
5	99,284	99,261	99,006	98,666	97,955	97,371	96,908	94,848	92,789	90,380	85,117	83,119
10	99,218	99,190	98,911	98,544	97,784	97,173	96,652	94,402	92,008	89,186	83,728	81,390
15	99,147	99,111	98,814	98,432	97,636	97,016	96,431	94,000	91,364	88,247	82,813	80,307
20	98,962 98,724	98,915 98,682	98,597 98,325	98,184 97,883	97,331 96,966	96,756 96,418	96,066 95,583	93,293 92,322	90,116 88,328	86,556 84,135	81,418 79,481	78,555 76,119
30	98,456	98,418	98,013	97,563	96,544	95,996	95,583	92,322	86,398	81,463	79,461	76,119
35	98,093	98,052	97,596	97,140	95,966	95,409	94,206	89,810	84,304	78,713	74,719	70,463
40	97,561	97,492	97,033	96,531	95,097	94,560	93,101	88,092	81,927	75,907	71,894	67,407
45	96,713	96,645	96,222	95,570	93,793	93,265	91,469	85,856	79,041	72,954	68,755	64,121
50	95,440	95,420	94,932	94,060	91,852	91,327	89,075	82,828	75,456	69,452	65,001	60,415
55	93,630	93,597	92,881	91,760	89,066	88,451	85,694	78,708	70,832	65,099	60,392	55,908
'		•	•	•			•	•	•	•	•	•

Table 10. Survivorship by age, race, and sex: Death-registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 2005—Con.

Section	T				Normaliana	fi	+ -4 100 000	hamadha (I)				
Age, race,		I	I	I		f survivors ou	I	1	I	1		<u> </u>
and sex	2005	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
Female—Con.												
60	91,053 87,059 81,362 72,938 60,392 43,649 25,106 9,928 2,172	90,739 86,367 80,158 71,257 58,411 41,798 23,918 9,553 2,181	89,742 85,075 78,522 69,287 56,986 41,115 23,666 9,346 2,251	88,414 83,520 76,720 67,186 54,372 37,772 20,578 7,862 1,927	85,139 79,698 71,955 61,107 46,445 29,538 14,160 4,565 954	84,430 78,462 70,100 58,394 43,063 25,269 10,056 2,193 264	80,890 74,119 64,873 52,111 36,486 20,668 8,548 2,207 298	73,093 65,523 55,449 42,425 27,524 13,972 5,044 1,195 179	64,795 56,924 46,774 34,600 21,578 10,322 3,656 807 82	59,438 52,126 42,741 31,344 19,613 9,515 3,314 728 72	54,226 46,438 36,916 26,155 15,682 7,051 2,269 441 49	50,155 43,246 34,721 24,994 15,129 7,063 2,306 452 43
White												
0.	100,000 99,426 99,319 99,253 99,171 98,861 98,410 97,972 97,474 96,805 95,758 94,204 91,959 88,822 84,081 77,453 67,904 54,412 37,518 20,229 7,364 1,464	100,000 99,429 99,312 99,239 99,146 98,826 98,405 98,000 97,504 96,796 95,755 94,233 92,032 88,614 83,423 76,132 65,946 52,100 35,421 18,943 6,963 1,453	100,000 99,233 99,068 98,966 98,843 98,455 97,972 97,451 96,000 94,932 93,326 90,833 86,943 81,123 73,106 62,175 48,583 32,850 17,571 6,416 1,423	100,000 98,898 98,675 98,536 98,391 97,340 96,774 96,192 95,427 94,257 92,384 89,427 85,031 78,585 69,801 58,299 44,409 28,768 14,471 5,067 1,105	100,000 98,224 97,930 97,733 97,546 97,036 96,406 95,824 95,152 94,190 92,681 90,306 86,688 81,323 73,889 63,991 51,586 36,659 21,578 9,433 2,743 487	100,000 97,714 97,353 97,131 96,928 96,508 95,965 95,440 94,798 93,870 92,374 89,958 86,173 80,811 73,102 62,834 49,895 34,697 19,017 7,149 1,521 183	100,000 97,278 96,790 96,502 96,228 95,763 95,169 94,536 93,750 92,616 90,847 88,110 84,027 78,066 69,850 59,189 45,688 30,438 16,239 6,201 1,500 196	100,000 95,685 94,713 94,228 93,792 93,117 92,213 91,185 89,941 88,318 86,069 82,833 78,218 71,785 63,201 52,165 38,610 23,976 11,483 3,819 801 98	100,000 94,392 92,466 91,627 90,982 89,933 88,454 86,836 85,004 82,803 79,989 76,340 71,551 65,100 56,655 45,841 33,406 20,260 9,325 3,066 636 58	100,000 92,780 89,771 88,536 87,633 86,159 84,106 81,787 79,277 76,642 73,705 70,250 65,875 60,013 52,411 42,736 31,086 19,149 9,078 2,991 643 62	100,000 88,709 84,147 82,734 81,816 80,407 78,392 76,167 73,568 70,525 67,090 62,994 58,163 51,822 43,904 34,484 24,151 14,100 6,178 1,918 364 38	100,000 87,762 82,071 80,371 79,344 77,998 75,202 72,317 69,522 66,082 62,920 58,647 54,450 48,288 41,505 32,902 23,356 13,794 6,192 1,919 355 31
White male												
0.	100,000 99,367 99,244 99,076 98,649 97,991 97,373 96,717 95,871 94,557 92,618 89,796 85,975 80,337 72,630 61,765 47,132 30,100 14,429 4,412 685	100,000 99,373 99,243 99,163 99,052 98,615 98,002 97,434 96,772 95,855 94,522 92,573 89,854 85,710 79,515 70,912 59,139 44,043 27,376 12,817 3,892 624	100,000 99,138 98,956 98,839 98,686 98,134 97,430 96,662 95,731 94,588 93,167 91,124 88,022 83,182 75,962 66,181 53,308 38,245 22,720 10,214 2,988 523	100,000 98,769 98,519 98,357 98,176 97,525 96,616 95,783 94,980 93,984 92,494 90,105 86,303 80,625 72,393 61,384 47,712 32,788 18,538 7,891 2,279 404	100,000 97,994 97,671 97,441 97,208 96,480 95,524 94,716 93,843 92,631 90,725 87,690 83,001 75,969 66,343 54,138 40,324 25,885 13,527 5,125 1,274 189	100,000 97,408 97,015 96,758 96,503 95,908 95,106 94,401 93,589 92,427 90,533 87,424 82,463 75,485 65,834 53,825 40,207 25,993 13,065 4,600 956 115	100,000 96,931 96,403 96,069 95,728 95,104 94,294 93,489 92,543 91,173 89,002 85,601 80,496 73,172 63,541 51,735 38,104 24,005 12,015 4,209 942 118	100,000 95,188 94,150 93,601 93,601 93,089 92,293 91,241 90,092 88,713 86,880 84,285 80,521 75,156 67,787 58,305 46,739 33,404 19,860 9,013 2,812 552 65	100,000 93,768 91,738 90,810 90,074 88,904 87,371 85,707 83,812 81,457 78,345 74,288 68,981 61,933 52,964 41,880 29,471 17,221 7,572 2,356 461 40	100,000 91,975 88,842 87,530 86,546 84,997 83,061 80,888 78,441 75,733 72,696 69,107 64,574 58,498 50,663 40,873 29,205 17,655 8,154 2,568 556 61	100,000 87,674 82,972 81,519 80,549 79,116 77,047 74,810 72,108 68,848 65,115 60,741 55,622 48,987 40,862 31,527 21,585 12,160 5,145 1,523 289 31	100,000 86,655 80,864 79,109 78,037 76,376 73,907 71,219 68,245 64,954 61,369 57,274 52,491 46,452 39,245 30,640 21,387 12,266 5,252 1,523 263 22

Table 10. Survivorship by age, race, and sex: Death-registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 2005—Con.

section]												
Age, race,		Г	ı	1	Number o	f survivors ou	it of 100,000	born alive $(I_x)$	1		1	
and sex	2005	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
White 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	99,489 99,398	99,488 99,385	99,333 99,187	99,035 98,841	98,468 98,203	98,036 97,709	97,645 97,199	96,211 95,309	95,037 93,216	93,608 90,721	89,774 85,349	88,939 83,426
10	99,337	99,319	99,099	98,725	98,042	97,525	96,960	94,890	92,466	89,564	83,979	81,723
15	99,270	99,245	99,007	98,618	97,902	97,375	96,756	94,534	91,894	88,712	83,093	80,680
20	99,086	99,049	98,795	98,374	97,618	97,135	96,454	93,984	90,939	87,281	81,750	78,978
30	98,859 98,615	98,835 98,601	98,547 98,283	98,093 97,802	97,299 96,945	96,844 96,499	96,072 95,605	93,228 92,320	89,524 87,972	85,163 82,740	79,865 77,676	76,588 73,887
35	98,288	98,282	97,939	97,445	96,474	96,026	94,977	91,211	86,248	80,206	75,200	70,971
40	97,804	97,789	97,472	96,913	95,762	95,326	94,080	89,805	84,256	77,624	72,425	67,935
45	97,034 95,875	97,047 95,958	96,768 95,608	96,065 94,710	94,649 92,924	94,228 92,522	92,725 90,685	87,920 85,267	81,780 78,572	74,871 71,547	69,341 65,629	64,677 61,005
55	94,218	94,284	93,730	92,594	90,383	89,967	87,699	81,520	74,321	67,323	61,053	56,509
60	91,776	91,591	90,789	89,451	86,726	86,339	83,279	76,200	68,462	61,704	54,900	50,752
65	87,929	87,391	86,339	84,764	81,579	80,739	76,773	68,701	60,499	54,299	47,086	43,806
70	82,347 73,983	81,346 72,546	79,984 70,834	78,139 68,712	74,101 63,290	72,507 60,461	67,545 54,397	58,363 44,685	49,932 37,024	44,638 32,777	37,482 26,569	35,206 25,362
80	61,395	59,681	58,454	55,770	48,182	44,676	38,026	28,882	23,053	20,492	15,929	15,349
85	44,411	42,820	42,274	38,774	30,490	26,046	21,348	14,487	10,937	9,909	7,152	7,149
90	25,451	24,475	24,270	20,996	14,406	10,219	8,662	5,061	3,719	3,372	2,291	2,322
95	9,924 2,097	9,673 2,145	9,495 2,239	7,900 1,858	4,526 872	2,203 265	2,200 294	1,109 139	797 74	721 63	434 44	448 41
Black <sup>1</sup>	2,007	2,140	2,200	1,000	072	200	204	100	"			1
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	98,622	98,578	98,187	97,885	96,731	95,732	95,407	92,584	92,035	90,379	79,784	76,609
5	98,457	98,382	97,884	97,522	96,207	95,051	94,482	90,983	89,303	86,174	70,691	66,222
10	98,353	98,271	97,720	97,322	95,928	94,745	94,060	90,339	88,258	84,690	68,437	63,410
15	98,229 97,818	98,139 97,701	97,539 96,925	97,134 96,652	95,661 94,887	94,460 93,880	93,646 92,738	89,591 87,839	87,156 84,386	83,180 79,641	66,410 63,165	61,060 57,931
25	97,119	96,944	95,972	95,804	93,513	92,925	91,321	85,210	80,320	74,973	59,608	54,512
30	96,334	96,140	94,809	94,680	91,934	91,699	89,584	82,194	75,962	70,492	56,112	51,287
35	95,385 94,183	95,160 93,801	93,260 91,239	93,288 91,439	89,977 87,304	90,046 87,766	87,402 84,478	78,683 74,466	71,141 65,974	65,865 61,244	52,125 47,866	48,007 44,518
45	92,414	91,754	88,689	88,834	83,700	84,501	80,507	69,284	59,827	56,442	43,054	40,628
50	89,658	88,726	85,285	85,044	78,938	80,172	74,976	62,702	53,141	51,422	37,800	36,103
55	85,623	84,588	80,635	79,816	72,826	73,893	67,660	54,846	45,558	45,803	32,233	31,404
60	80,376 73,348	78,869 71,448	74,335 66,154	72,913 64,391	65,250 56,102	65,795 56,038	58,593 48,649	46,318 37,838	37,654 30,015	39,418 32,738	26,046 19,806	25,698 20,474
70	64,807	62,126	56,192	54,617	45,785	45,434	38,616	29,654	22,505	25,585	14,021	14,960
75	54,081	50,804	44,872	43,274	34,262	34,531	28,968	21,798	15,546	18,011	9,139	9,956
80	41,123	37,828	33,149	31,711	23,710	24,815	20,003	14,408	9,589	11,376	5,158	5,750
85	27,291 14,834	24,589 13,157	21,352 11,646	19,939 10,713	15,044 8,087	15,337 7,195	12,433 6,394	8,326 4,077	4,900 2,044	5,794 2,317	2,414 913	2,782 1,054
95	6,043	5,349	4,729	4,463	3,252	1,777	2,010	1,557	638	689	324	296
100	1,637	1,485	1,376	1,360	1,036	214	301	399	120	129	77	57
Black male <sup>1</sup>												
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	98,480	98,437	98,023	97,703	96,394	95,301	94,911	91,772	91,268	89,499	78,065	74,674
5	98,296 98,185	98,219 98,093	97,688 97,501	97,300 97,061	95,826 95,497	94,570 94,234	93,921 93,453	90,082 89,393	88,412 87,311	85,195 83,768	68,589 66,377	64,385 61,730
15	98,034	97,930	97,268	96,826	95,161	93,874	92,965	88,610	86,152	82,332	64,478	59,667
20	97,410	97,274	96,301	96,132	94,053	93,108	91,941	86,968	83,621	79,057	61,426	56,733
25	96,340	96,099	94,809	94,827	91,904	91,825	90,285	84,227	79,516	74,540	57,736	53,285
30	95,194 93,908	94,934 93,631	93,070 90,827	93,125 91,080	89,584 86,885	90,270 88,331	88,327 85,940	80,979 77,221	75,083 70,049	70,344 65,873	54,073 49,865	49,867 46,541
40	92,401	91,930	87,948	88,490	83,441	85,744	82,832	72,780	64,710	61,353	45,414	42,989
45	90,283	89,411	84,467	84,997	78,976	82,075	78,686	67,346	58,432	56,589	40,563	39,230
50	86,916	85,596	79,984	80,065	73,282	77,239	72,891	60,495	51,748	51,880	35,427	34,766
55	81,879	80,417	74,095	73,413	66,101	70,351	65,122	52,426	44,436	46,581	29,754	29,987

Table 10. Survivorship by age, race, and sex: Death-registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 2005—Con.

Age, race,					Number o	f survivors ou	t of 100,000	born alive $(I_x)$				
and sex	2005	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
Black male <sup>1</sup> —Con.												
60	75,275	73,369	66,334	64,980	57,457	61,669	55,535	43,833	36,790	40,506	23,750	24,194
65	66,745	64,588	56,795	55,061	47,485	51,392	45,198	35,371	29,314	34,042	17,806	19,015
70	56,832	53,926	45,690	44,213	36,925	39,914	35,018	27,236	21,741	26,923	12,295	13,829
75	44,935	41,441	33,755	32,717	25,921	29,064	25,472	19,456	14,419	18,854	7,494	8,892
80	31,753	28,326	22,549	22,017	16,560	19,994	16,904	12,186	8,239	11,615	3,894	4,831
85	19,167	16,433	12,709	12,383	9,648	11,620	9,898	6,444	3,660	5,605	1,747	2,030
90	9,248	7,579	5,972	5,708	4,696	5,174	4,642	2,836	1,246	2,040	595	634
95	3,261	2,549	1,971	2,009	1,721	1,240	1,342	961	307	552	189	137
100	748	560	466	513	489	149	192	209	41	77	40	18
Black female <sup>1</sup>			'	'	'	'	'		'			'
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	98,768	98,723	98,356	98,073	97,076	96,172	95,913	93,416	92,796	91,251	81,493	78,525
5	98,622	98,550	98,087	97,751	96,598	95,543	95,055	91,906	90,185	87,149	72,768	68,056
10	98,526	98,455	97,946	97,590	96,369	95,265	94,679	91,308	89,201	85,607	70,508	65,111
15	98,431	98,354	97,818	97,450	96,172	95,057	94,343	90,594	88,088	83,954	68,218	62,384
20	98,239	98,141	97,566	97,180	95,729	94,660	93,544	88,736	85,078	80,154	64,764	59,053
25	97,922	97,784	97,140	96,754	95,035	94,005	92,336	86,198	81,067	75,359	61,430	55,795
30	97,487	97,313	96,514	96,150	94,114	93,070	90,799	83,384	76,816	70,633	58,281	52,773
35	96,849	96,630	95,599	95,338	92,807	91,670	88,805	80,092	72,192	65,857	54,595	49,567
40	95,928	95,585	94,364	94,137	90,817	89,676	86,052	76,084	67,271	61,130	50,568	46,146
45	94,477	93,970	92,676	92,322	88,001	86,793	82,257	71,157	61,365	56,230	45,947	42,279
50	92,279	91,661	90,277	89,563	84,168	82,979	77,007	64,885	54,920	50,780	40,886	37,681
55	89,148	88,478	86,793	85,653	79,177	77,362	70,196	57,314	47,074	44,742	35,415	33,124
60	85,134	83,963	81,886	80,293	72,820	69,941	61,758	48,928	38,761	37,954	28,908	27,524
65	79,447	77,781	75,031	73,266	64,716	60,825	52,358	40,504	30,852	31,044	22,302	21,995
70	72,093	69,634	66,278	64,729	54,873	51,274	42,612	32,354	23,341	24,107	15,871	16,140
75	62,310	59,239	55,684	53,831	43,193	40,540	32,981	24,502	16,576	17,216	10,657	11,066
80	49,539	46,358	43,622	41,686	31,756	30,315	23,712	17,039	10,822	11,151	6,324	6,708
85	34,679	31,987	30,089	28,004	21,358	19,744	15,550	10,622	6,033	5,972	3,029	3,567
90	19,994	18,309	17,536	16,260	12,210	9,675	8,590	5,652	2,774	2,579	1,206	1,492
95	8,617	7,972	7,687	7,312	5,217	2,438	2,875	2,345	941	818	448	462
100	2,425	2,346	2,364	2,398	1,803	293	445	659	193	179	112	97

<sup>&</sup>lt;sup>1</sup>For 1939–1941 and 1949–1951, data shown are for the entire nonwhite population. During these periods, life tables were not constructed for the black population. See "Technical Notes" section.

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Table 11. Life expectancy by age, race, and sex: Death-registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 2005

Section]	Average number of years of life remaining $(e_{x})$											
Age, race, and sex	2005	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
All races												
0	77.4 77.0 73.1 68.1 63.2 58.4 53.6 48.9 44.2 39.5 34.9 30.5 26.2 22.1 18.2 14.6 11.3 8.5 6.2	76.83 76.37 72.47 67.52 62.59 57.79 53.05 48.28 43.54 38.87 34.31 29.88 25.59 21.54 17.77 14.27 11.12 8.42 6.22	75.37 75.08 71.22 66.29 61.38 56.63 51.93 47.23 42.58 37.98 33.44 29.03 24.83 20.90 17.28 13.96 11.00 8.40 6.23	73.88 73.82 70.00 65.10 60.19 55.46 50.81 46.12 41.43 36.79 32.27 27.94 23.85 20.02 16.51 13.32 10.48 7.98 5.96	70.75 71.19 67.43 62.57 57.69 53.00 48.37 43.71 39.07 34.52 30.12 25.93 21.99 18.34 15.00 12.00 9.32 7.10 5.28	69.89 70.75 67.04 62.19 57.33 52.58 47.89 43.18 38.51 33.92 29.50 25.29 21.37 17.71 14.39 11.38 8.71 6.39 4.58	68.07 69.16 65.54 60.74 55.91 51.20 46.56 41.91 37.31 32.81 28.49 24.40 20.57 17.04 13.83 10.92 8.40 6.34 4.69	63.62 65.76 62.49 57.82 53.10 48.54 44.09 39.67 35.30 31.03 26.90 22.98 19.31 15.91 12.80 10.00 7.62 5.73 4.31	59.20 61.94 59.29 54.84 50.25 45.94 41.85 37.75 33.68 29.67 25.79 22.06 18.53 15.24 12.23 9.58 7.32 5.50 4.19	56.40 59.94 57.99 53.79 49.37 45.30 41.47 37.68 33.89 30.08 26.25 22.50 18.90 15.54 12.47 9.74 7.49 5.63 4.21	51.49 57.11 56.21 52.15 47.73 43.53 39.60 35.70 31.90 28.20 24.54 20.98 17.55 14.42 11.60 9.11 6.99 5.25 4.00	49.24 55.20 54.98 51.14 46.81 42.79 39.12 35.51 31.92 28.34 24.77 21.26 17.88 14.76 11.86 9.30 7.08 5.30 3.96
90 95 100	4.5 3.1 2.2	4.49 3.19 2.27	4.50 3.29 2.46	4.43 3.34 2.73	3.94 3.06 2.62	3.22 2.43 1.91	3.44 2.54 1.92	3.30 2.61 2.13	3.15 2.26 1.51	3.22 2.32 1.53	3.03 2.35 1.85	2.95 2.18 1.58
Male	2.2	2.21	2.40	2.75	2.02	1.91	1.52	2.13	1.51	1.55	1.05	1.50
0	74.9 74.4 70.5 65.6 60.6 55.9 51.3 46.6 42.0 37.3 32.8 28.5 24.4 20.4 16.8 13.3 10.2 7.7 5.6 4.0 2.8 2.0	74.10 73.66 69.77 64.83 59.90 55.17 50.54 45.85 41.18 36.58 32.10 27.79 23.62 19.71 16.11 12.80 9.89 7.44 5.47 3.95 2.82 2.03	71.83 71.58 67.73 62.81 57.91 53.25 48.67 44.10 39.57 35.09 30.66 26.37 22.30 18.53 15.12 12.05 9.39 7.12 5.31 3.89 2.92 2.25	70.11 70.10 66.29 61.41 56.52 51.88 47.37 42.81 38.20 33.64 29.22 25.00 21.08 17.46 14.21 11.35 8.90 6.80 5.13 3.89 2.98 2.49	67.04 67.58 63.82 58.98 54.12 49.54 45.07 40.51 35.95 31.48 27.18 23.12 19.36 15.99 12.99 10.39 8.13 6.27 4.73 3.60 2.82 2.43	66.80 67.80 64.10 59.27 54.43 49.77 45.19 40.56 35.94 31.42 27.09 23.02 19.32 15.94 12.95 10.33 7.99 5.95 4.39 3.18 2.43 1.91	65.47 66.73 63.12 58.35 53.56 48.92 44.36 39.78 35.23 30.79 26.55 22.59 18.96 15.68 12.74 10.11 7.83 5.94 4.41 3.30 2.49 1.92	61.60 64.00 60.76 56.12 51.43 46.91 42.51 38.13 33.79 29.57 25.52 21.72 18.20 14.99 12.07 9.46 7.22 5.44 4.11 3.17 2.52 2.05	57.71 60.75 58.14 53.75 49.18 44.88 40.79 36.71 32.65 28.68 24.87 21.25 17.79 14.62 11.72 9.18 7.02 5.27 4.02 3.06 2.21 1.50	55.50 59.47 57.60 53.44 49.05 44.99 41.11 37.26 33.43 29.63 25.84 22.11 18.53 15.22 12.20 9.52 7.31 5.49 4.10 3.21 2.38 1.58	49.86 55.95 55.11 51.07 46.66 42.48 38.59 34.70 30.94 27.32 23.77 20.32 16.98 13.95 11.24 8.83 6.75 5.10 3.90 3.01 2.36 1.81	47.88 54.35 54.22 50.39 46.06 42.03 38.38 34.76 31.19 27.65 24.14 20.70 17.38 14.33 11.50 9.02 6.84 5.11 3.82 2.86 2.13 1.55
Female  0	79.9 79.4 75.5 70.6 65.6 60.7 55.9 51.0 46.2 41.4 36.8 32.2 27.8	79.45 78.95 75.04 70.09 65.15 60.27 55.41 50.55 45.73 40.98 36.31 31.74 27.31	78.81 78.47 74.60 69.67 64.73 59.87 55.03 50.19 45.40 40.65 35.97 31.42 27.05	77.62 77.50 73.67 68.75 63.83 58.98 54.16 49.33 44.53 39.80 35.17 30.69 26.39	74.64 74.97 71.19 66.31 61.41 56.59 51.80 47.01 42.28 37.64 33.13 28.77 24.59	73.24 73.93 70.21 65.35 60.45 55.60 50.79 46.00 41.27 36.61 32.09 27.71 23.53	70.96 71.84 68.21 63.38 58.52 53.73 48.99 44.28 39.63 35.06 30.64 26.40 22.33	65.89 67.73 64.43 59.73 54.97 50.37 45.87 41.41 37.01 32.68 28.46 24.40 20.54	60.90 65.37 60.66 56.16 51.54 47.21 43.11 39.02 34.92 30.86 26.89 23.05 19.38	57.40 60.45 58.41 54.16 49.71 45.63 41.86 38.15 34.40 30.58 26.71 22.92 19.28	53.24 58.37 57.39 53.31 48.87 44.66 40.69 36.79 32.95 29.15 25.36 21.67 18.13	50.70 56.10 55.80 51.94 47.60 43.60 39.92 36.30 32.71 29.08 25.44 21.84 18.39

Table 11. Life expectancy by age, race, and sex: Death-registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 2005—Con.

					Averag	e number of	years of life r	emaining $(e_x)$				
Age, race, and sex	2005	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
Female—Con.			1							•		
60. 65. 70. 75. 80. 85. 90. 95.	23.5 19.5 15.6 12.1 9.1 6.6 4.7 3.2 2.2	23.09 19.12 15.40 11.99 9.05 6.62 4.71 3.29 2.29	22.90 19.02 15.38 12.08 9.13 6.66 4.73 3.40 2.52	22.29 18.44 14.84 11.58 8.69 6.38 4.66 3.48 2.81	20.60 16.83 13.35 10.26 7.68 5.63 4.14 3.18 2.69	19.52 15.80 12.37 9.33 6.72 4.71 3.25 2.43 1.91	18.50 14.95 11.71 8.94 6.67 4.90 3.54 2.57 1.93	16.92 13.57 10.56 8.01 5.99 4.47 3.39 2.67 2.17	15.94 12.78 9.99 7.61 5.70 4.32 3.24 2.30 1.52	15.87 12.73 9.96 7.65 5.75 4.30 3.23 2.27 1.48	14.90 11.96 9.38 7.20 5.37 4.08 3.05 2.34 1.91	15.21 12.22 9.59 7.34 5.51 4.12 3.04 2.24 1.61
White												
0.	77.9 77.4 73.4 68.5 63.5 58.7 54.0 49.2 44.5 39.8 35.2 30.7 26.4 22.2 18.3 14.7 11.4 8.5 6.2 4.4 3.1	77.41 76.85 72.94 67.99 63.05 58.25 53.48 48.70 43.93 39.23 34.63 30.15 25.80 21.70 17.88 14.34 11.15 8.42 6.19 4.44 3.14 2.22	76.13 75.72 71.84 66.92 61.99 57.23 52.50 47.76 43.06 38.41 33.81 29.34 25.08 21.08 17.40 14.02 11.03 8.39 6.20 4.46 3.25 2.43	74.53 74.35 70.52 65.62 60.71 55.98 51.30 46.59 41.86 37.17 32.60 28.21 24.05 20.16 16.59 13.35 10.47 7.95 5.90 4.36 3.25 2.62	71.62 71.91 68.12 63.26 58.37 53.66 49.00 44.28 39.58 34.95 30.48 26.21 22.19 18.48 15.08 12.01 9.27 7.01 5.19 3.84 2.92 2.41	70.73 71.38 67.64 62.79 57.92 53.16 48.44 43.69 38.97 34.33 29.84 25.57 21.58 17.84 11.37 8.65 6.33 4.53 3.20 2.43 1.91	69.02 69.95 66.29 61.48 56.65 51.91 47.22 42.52 37.86 33.29 28.88 24.70 20.77 17.15 13.86 10.89 8.34 6.27 4.62 3.41 2.53 1.92	64.92 66.84 63.52 58.83 54.09 49.47 44.92 40.40 35.93 31.54 27.29 23.26 19.47 15.98 12.80 9.96 7.55 5.64 4.20 3.16 2.45 1.95	60.86 63.46 60.75 56.29 51.69 47.28 43.02 38.76 34.50 30.33 26.29 22.42 18.75 15.37 12.28 9.58 7.30 5.45 4.12 3.10 2.22 1.48	57.42 60.87 58.86 54.65 50.21 46.04 42.07 38.17 34.27 30.38 26.45 22.64 18.97 15.57 12.47 9.72 7.47 5.59 4.15 3.17 2.28 1.50	51.90 57.46 56.51 52.43 48.01 43.77 39.79 35.86 32.03 28.29 24.60 21.01 17.57 14.43 11.60 9.10 6.98 5.22 3.97 3.00 2.29 1.71	49.64 55.47 55.18 51.34 47.01 43.17 39.26 35.51 32.01 28.28 24.82 21.18 17.91 14.73 11.87 9.31 7.08 5.30 3.95 2.93 2.16 1.56
White male												
0	75.4 74.9 71.0 66.0 61.1 56.3 51.7 47.0 42.3 37.7 33.2 28.8 24.6 20.6 16.9 13.4 10.3 7.6 5.5 3.9 2.7	74.74 74.21 70.31 65.36 60.43 55.69 51.02 46.30 41.60 36.98 32.46 28.09 23.86 19.88 16.22 12.87 9.92 7.43 5.43 3.90 2.77 1.98	72.72 72.35 68.48 63.55 58.65 53.96 49.33 44.71 40.12 35.57 31.07 26.71 22.56 18.71 15.24 12.11 9.40 7.11 5.28 3.85 2.88 2.21	70.82 70.70 66.87 61.98 57.09 52.45 47.92 43.31 38.66 34.04 29.55 25.26 21.25 17.56 14.26 11.35 8.87 6.76 5.09 3.83 2.91 2.41	67.94 68.33 64.55 59.69 54.83 50.22 45.70 41.07 36.43 31.87 27.48 23.34 19.51 16.07 13.02 10.38 8.06 6.18 4.63 3.49 2.67 2.20	67.55 68.34 64.61 59.78 54.93 50.25 45.65 40.97 36.31 31.73 27.34 23.22 19.45 16.01 12.97 10.29 7.92 5.89 4.34 3.16 2.43 1.91	66.31 67.41 63.77 58.98 54.18 49.52 44.93 40.29 35.68 31.17 26.87 22.83 19.11 15.76 12.75 10.07 7.77 5.88 4.35 3.27 2.48 1.92	62.81 64.98 61.68 57.03 52.33 47.76 43.28 38.80 34.36 30.03 25.87 21.96 18.34 15.05 12.07 9.42 7.17 5.38 4.02 3.06 2.40 1.96	59.12 62.04 59.38 54.96 50.39 46.02 41.78 37.54 33.33 29.22 25.28 21.51 17.97 14.72 11.77 9.20 7.02 5.26 3.99 3.03 2.19 1.49	56.34 60.24 58.31 54.15 49.74 45.60 41.60 37.65 33.74 29.86 26.00 22.22 18.59 15.25 12.21 9.51 7.30 5.47 4.06 3.18 2.36 1.58	50.23 56.26 55.37 51.32 46.91 42.71 38.79 34.87 31.08 27.43 23.86 20.39 17.03 13.98 11.25 8.83 6.75 5.09 3.88 2.99 2.31 1.68	48.23 54.61 54.43 50.59 46.25 42.19 38.52 34.88 31.29 27.74 24.21 20.76 17.42 14.35 11.51 9.03 6.84 5.10 3.81 2.85 2.12 1.55

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Table 11. Life expectancy by age, race, and sex: Death-registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 2005—Con.

section]		Average number of years of life remaining $(e_x)$										
Age, race, and sex	2005	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
White female			1	1			1	1	1	'		
White female  0	80.4 79.8 75.8 70.9 61.0 56.2 51.3 46.5 41.7 37.0 32.4 27.9 23.6 19.5 15.7 12.1 9.1 6.6 4.6 3.2	79.97 79.38 75.46 70.51 65.56 60.69 55.81 50.94 46.10 41.31 36.61 31.99 27.52 23.25 19.23 15.47 12.02 9.04 6.59 4.67 3.24	79.45 78.99 75.10 70.16 65.23 60.36 55.51 50.65 45.82 41.03 36.30 31.71 27.29 23.09 19.14 15.46 12.11 9.12 6.62 4.69 3.36	78.22 77.98 74.13 69.21 64.29 59.44 54.60 49.76 44.93 40.16 35.49 30.96 26.61 22.45 18.55 14.89 11.58 8.65 6.32 4.59 3.39	75.49 75.66 71.86 66.97 62.07 57.24 52.42 47.60 42.82 38.12 33.54 29.11 24.85 20.79 16.93 13.37 10.21 7.59 5.54 4.05 3.04	74.19 74.68 70.92 66.05 61.15 56.29 51.45 46.63 41.84 37.13 32.53 28.08 23.81 19.69 15.88 12.38 9.28 6.67 4.66 3.23 2.43	72.03 72.77 69.09 64.26 59.39 54.56 49.77 45.00 40.28 35.64 31.12 26.76 22.58 18.64 15.00 11.68 8.87 6.59 4.83 3.51 2.56	67.29 68.93 65.57 60.85 56.07 51.38 46.78 42.21 37.70 33.25 28.90 24.72 20.73 17.00 13.56 10.50 7.92 5.88 4.34 3.24 2.47	62.67 64.93 62.17 57.65 53.00 48.52 44.25 39.99 35.73 31.52 27.39 23.41 19.60 16.05 12.81 9.98 7.56 5.63 4.24 3.17 2.24	58.53 61.51 59.43 55.17 50.67 46.46 42.55 38.72 34.86 30.94 26.98 23.12 19.40 15.93 12.75 9.94 7.62 5.70 4.24 3.16 2.20	53.62 58.69 57.67 53.57 49.12 44.88 40.88 36.96 33.09 29.26 25.45 21.74 18.18 14.92 11.97 9.38 7.20 5.35 4.06 3.00 2.27	51.08 56.39 56.03 52.15 47.79 43.77 40.05 36.42 32.82 29.17 25.51 21.89 18.43 15.23 12.23 9.59 7.33 5.50 4.10 3.02 2.21
100	2.2	2.24	2.49	2.70	2.49	1.91	1.92	1.95	1.48	1.42	1.74	1.58
Black <sup>1</sup>			I	I	ı	I	I	I	I	ı	I	l
0	72.8 72.9 69.0 64.0 59.1 54.4 49.7 45.1 40.5 36.0 31.7 27.5 23.7 20.1 16.8 13.6 10.8 8.5 6.5 4.9 3.6 2.7	71.74 71.78 67.92 62.99 58.07 53.32 48.71 44.10 39.53 35.06 30.79 26.75 22.93 19.40 16.14 13.18 10.54 8.29 6.41 4.90 3.71 2.81	69.16 69.43 65.64 60.75 55.86 51.19 46.67 42.22 37.87 33.65 29.55 25.62 21.95 18.59 15.56 12.87 10.48 8.30 6.51 4.94 3.82 2.91	68.52 68.99 65.25 60.38 55.49 50.75 46.18 41.69 37.28 32.98 28.87 25.03 21.50 18.29 15.37 12.67 10.32 8.17 6.54 5.13 4.08 3.58	64.11 65.27 61.62 56.79 51.94 47.34 43.00 38.70 34.48 30.46 26.65 23.11 19.83 14.16 11.77 9.89 8.20 6.54 5.09 4.28 3.93	63.91 65.75 62.21 57.41 52.57 47.88 43.35 38.89 34.56 30.39 26.46 22.74 19.45 16.53 13.96 11.63 9.52 7.28 5.27 3.48 2.43	60.73 62.65 59.25 54.50 49.73 45.19 40.85 36.59 32.44 28.48 24.75 21.38 18.41 15.87 13.59 11.48 9.48 7.62 5.79 3.97 2.70 1.94	53.85 57.15 54.13 49.50 44.89 40.73 36.91 33.17 29.53 26.06 22.82 19.94 17.43 15.18 13.02 10.93 8.97 7.31 5.91 4.64 3.51 2.57	48.53 51.71 49.25 44.80 40.37 36.62 33.32 30.07 26.94 23.82 20.97 18.22 15.80 13.62 11.49 9.54 7.84 6.19 4.92 3.83 2.83 1.87	47.03 51.01 49.44 45.26 41.02 37.72 34.91 31.98 29.07 26.07 23.17 20.17 17.33 14.72 12.22 9.90 8.00 6.22 4.88 3.84 2.90 1.94	35.87 43.84 45.34 41.74 38.02 34.86 31.72 28.43 25.39 22.41 19.58 16.84 14.33 12.16 10.22 8.59 7.08 5.80 4.80 4.26 3.31 2.27	33.80 43.00 45.55 42.46 39.04 36.03 33.04 29.96 26.82 23.73 20.67 17.95 15.23 13.06 10.87 8.96 7.24 5.79 4.56 3.60 2.82 2.18
Black male <sup>1</sup> 0	69.3 69.4 65.5 60.6 55.7 51.0 46.5 42.1 37.6 33.2 28.9 24.9 21.3	68.08 68.16 64.31 59.39 54.48 49.83 45.41 40.94 36.47 32.10 27.92 24.05 20.43	64.47 64.76 60.98 56.09 51.22 46.71 42.40 38.14 34.02 30.05 26.18 22.50 19.08	64.10 64.60 60.86 56.01 51.14 46.48 42.09 37.81 33.60 29.51 25.61 22.03 18.79	60.00 61.24 57.60 52.79 47.96 43.49 39.45 35.40 31.42 27.61 24.03 20.69 17.66	61.48 63.50 59.98 55.19 50.39 45.78 41.38 37.05 32.81 28.72 24.89 21.28 18.11	58.91 61.06 57.69 52.96 48.23 43.73 39.49 35.31 31.21 27.29 23.59 20.25 17.36	52.26 55.93 52.95 48.34 43.74 39.52 35.72 32.05 28.48 25.06 21.88 19.06 16.60	47.55 51.08 48.69 44.27 39.83 35.95 32.67 29.45 26.39 23.36 20.59 17.92 15.46	47.14 51.63 50.18 45.99 41.75 38.36 35.54 32.51 29.54 26.53 23.55 20.47 17.50	34.05 42.53 44.25 40.65 36.77 33.46 30.44 27.33 24.42 21.57 18.85 16.21 13.82	32.54 42.46 45.06 41.90 38.26 35.11 32.21 29.25 26.16 23.12 20.09 17.34 14.69

Table 11. Life expectancy by age, race, and sex: Death-registration states, 1900–1902 to 1919–1921, and United States, 1929–1931 to 2005—Con.

Age, race,					Averag	e number of	years of life r	remaining $(e_x)$				
and sex	2005	1999–2001	1989–1991	1979–1981	1969–1971	1959–1961	1949–1951	1939–1941	1929–1931	1919–1921	1909–1911	1900–1902
Black male <sup>1</sup> —Con.												
60	17.9	17.14	16.01	15.89	14.93	15.29	14.91	14.37	13.15	14.74	11.67	12.62
65	14.9	14.12	13.27	13.29	12.53	12.84	12.75	12.21	10.87	12.07	9.74	10.38
70	12.0	11.40	10.88	10.94	10.40	10.81	10.74	10.11	8.78	9.58	8.00	8.33
75	9.5	9.07	8.84	8.90	8.76	8.93	8.83	8.17	6.99	7.61	6.58	6.60
80	7.5	7.12	7.01	7.03	7.35	6.87	7.07	6.58	5.42	5.83	5.53	5.12
85	5.7	5.52	5.58	5.61	5.92	5.08	5.38	5.34	4.30	4.53	4.48	4.04
90	4.4	4.23	4.24	4.47	4.68	3.42	3.78	4.23	3.42	3.60	4.01	3.21
95	3.3	3.24	3.37	3.62	3.92	2.43	2.64	3.20	2.54	2.61	3.15	2.50
100	2.5	2.48	2.63	3.24	3.61	1.91	1.93	2.29	1.68	1.64	2.14	1.89
Black female <sup>1</sup>												
0	76.1	75.12	73.73	72.88	68.32	66.47	62.70	55.56	49.51	46.92	37.67	35.04
1	76.0	75.09	73.96	73.31	69.37	68.10	64.37	58.46	52.33	50.39	45.15	43.54
5	72.2	71.22	70.16	69.54	65.70	64.54	60.93	55.40	49.81	48.70	46.42	46.04
10	67.2	66.28	65.26	64.65	60.85	59.72	56.17	50.75	45.33	44.54	42.84	43.02
15	62.3	61.35	60.34	59.74	55.97	54.85	51.36	46.13	40.87	40.36	39.18	39.79
20	57.4	56.48	55.49	54.90	51.22	50.07	46.77	42.04	37.22	37.15	36.14	36.89
25	52.6	51.67	50.72	50.13	46.57	45.40	42.35	38.20	33.93	34.35	32.97	33.90
30	47.8	46.91	46.03	45.43	42.00	40.83	38.02	34.40	30.67	31.48	29.61	30.70
35	43.1	42.22	41.45	40.79	37.56	36.41	33.82	30.83	27.47	28.58	26.44	27.52
40	38.5	37.65	36.96	36.28	33.32	32.16	29.82	27.19	24.30	25.60	23.34	24.37
45	34.0	33.26	32.58	31.94	29.31	28.14	26.07	23.89	21.39	22.61	20.43	21.36
50	29.8	29.03	28.38	27.84	25.52	24.31	22.67	20.95	18.60	19.76	17.65	18.67
55	25.7	24.98	24.41	24.00	21.97	20.89	19.62	18.38	16.27	17.09	14.98	15.88
60	21.8	21.18	20.71	20.42	18.66	17.83	16.95	16.10	14.22	14.69	12.78	13.60
65	18.2	17.65	17.37	17.13	15.67	15.12	14.54	13.95	12.24	12.41	10.82	11.38
70	14.8	14.41	14.32	14.05	13.02	12.46	12.29	11.82	10.38	10.25	9.22	9.62
75	11.7	11.49	11.56	11.37	10.85	10.10	10.15	9.81	8.62	8.37	7.55	7.90
80	9.1	8.96	9.05	8.95	8.87	7.66	8.15	8.02	6.90	6.58	6.05	6.48
85	6.9	6.86	6.99	7.09	7.00	5.44	6.15	6.41	5.48	5.22	5.09	5.10
90	5.1	5.16	5.24	5.47	5.41	3.52	4.13	4.96	4.20	4.07	4.50	4.01
95	3.7	3.84	3.97	4.30	4.58	2.43	2.74	3.71	3.09	3.18	3.45	3.15
100	2.7	2.84	2.97	3.69	4.20	1.91	1.94	2.70	2.04	2.23	2.39	2.49

<sup>&</sup>lt;sup>1</sup>For 1939–1941 and 1949–1951, data shown are for the entire non-white population. During these periods, life tables were not constructed for the black population. See "Technical Notes" section.

Table 12. Estimated life expectancy at birth in years, by race and sex: Death-registration states, 1900–1928, and United States, 1929–2005

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

		All races			White		Black <sup>1</sup>		
Area and year	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
United States <sup>2</sup>									
2005 <sup>3</sup>	77.4	74.9	79.9	77.9	75.4	80.4	72.8	69.3	76.1
2004 <sup>3</sup>	77.5	74.9	79.9	77.9	75.4	80.4	72.8	69.3	76.0
2003 <sup>3</sup>	77.1	74.5	79.6	77.6	75.0	80.0	72.3	68.8	75.6
2002 <sup>3</sup>	76.9	74.3	79.5	77.4	74.9	79.9	72.1	68.6	75.4
2001 <sup>3</sup>	76.9	74.2	79.4	77.4	74.8	79.9	72.0	68.4	75.2
2000 <sup>3</sup>	76.8	74.1	79.3	77.3	74.7	79.9	71.8	68.2	75.2 75.1
	76.7	73.9	79.4	77.3	74.7	79.9	71.6	67.8	74.7
1999									
1998	76.7	73.8	79.5	77.3	74.5	80.0	71.3	67.6	74.8
1997	76.5	73.6	79.4	77.2	74.3	79.9	71.1	67.2	74.7
1996	76.1	73.1	79.1	76.8	73.9	79.7	70.2	66.1	74.2
1995	75.8	72.5	78.9	76.5	73.4	79.6	69.6	65.2	73.9
1994	75.7	72.4	79.0	76.5	73.3	79.6	69.5	64.9	73.9
1993	75.5	72.2	78.8	76.3	73.1	79.5	69.2	64.6	73.7
1992	75.8	72.3	79.1	76.5	73.2	79.8	69.6	65.0	73.9
1991	75.5	72.0	78.9	76.3	72.9	79.6	69.3	64.6	73.8
1990	75.4	71.8	78.8	76.1	72.7	79.4	69.1	64.5	73.6
1989	75. <del>1</del>	71.7	78.5	75.9	72.5	79.2	68.8	64.3	73.3
1988	74.9	71.7	78.3	75.6	72.3	78.9	68.9	64.4	73.2
1987	74.9	71.4	78.3	75.6	72.1	78.9	69.1	64.7	73.4
1986	74.7	71.2	78.2	75.4	71.9	78.8	69.1	64.8	73.4
1985	74.7	71.1	78.2	75.3	71.8	78.7	69.3	65.0	73.4
1984	74.7	71.1	78.2	75.3	71.8	78.7	69.5	65.3	73.6
1983	74.6	71.0	78.1	75.2	71.6	78.7	69.4	65.2	73.5
1982	74.5	70.8	78.1	75.1	71.5	78.7	69.4	65.1	73.6
1981	74.1	70.4	77.8	74.8	71.1	78.4	68.9	64.5	73.2
1980	73.7	70.0	77.4	74.4	70.7	78.1	68.1	63.8	72.5
1979	73.9	70.0	77.8	74.6	70.8	78.4	68.5	64.0	72.9
1978	73.5	69.6	77.3	74.1	70.4	78.0	68.1	63.7	72.4
1977	73.3	69.5	77.2	74.0	70.2	77.9	67.7	63.4	72.0
1976	72.9	69.1	76.8	73.6	69.9	77.5	67.2	62.9	71.6
1975	72.6	68.8	76.6	73.4	69.5	77.3	66.8	62.4	71.3
1974	72.0	68.2	75.9	72.8	69.0	76.7	66.0	61.7	70.3
1973	71.4	67.6	75.3	72.2	68.5	76.1	65.0	60.9	69.3
19724	71.2	67.4	75.1	72.0	68.3	75.9	64.7	60.4	69.1
1971	71.1	67.4	75.0	72.0	68.3	75.8	64.6	60.5	68.9
1970	70.8	67.1	74.7	71.7	68.0	75.6	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 <sup>5</sup>	69.9	66.6	73.4	70.8	67.4	74.4	63.7	61.0	66.6
19625	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		66.7	72.8	70.5		73.7			66.1
	69.6				67.4		63.7	61.4	
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		67.9	66.8		69.5	57.7	56.1	59.6
		63.6			64.4				
1944	65.2	63.6	66.8 64.4	66.2 64.2	64.5 63.2	68.4 65.7	56.6 55.6	55.8 55.4	57.7 56.1
1943	63.3	62.4							

Table 12. Estimated life expectancy at birth in years, by race and sex: Death-registration states, 1900–1928, and United States, 1929–2005—Con.

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

		All races			White		Black <sup>1</sup>			
Area and year	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	
United States <sup>2</sup> —Con.			ı				-			
942	66.2	64.7	67.9	67.3	65.9	69.4	56.6	55.4	58.2	
941	64.8	63.1	66.8	66.2	64.4	68.5	53.8	52.5	55.3	
940	62.9	60.8	65.2	64.2	62.1	66.6	53.1	51.5	54.9	
39	63.7	62.1	65.4	64.9	63.3	66.6	54.5	53.2	56.0	
38	63.5	61.9	65.3	65.0	63.2	66.8	52.9	51.7	54.3	
37	60.0	58.0	62.4	61.4	59.3	63.8	50.3	48.3	52.5	
36	58.5	56.6	60.6	59.8	58.0	61.9	49.0	47.0	51.4	
35	61.7	59.9	63.9	62.9	61.0	65.0	53.1	51.3	55.2	
034	61.1	59.3	63.3	62.4	60.5	64.6	51.8	50.2	53.7	
033	63.3	61.7	65.1	64.3	62.7	66.3	54.7	53.5	56.0	
032	62.1	61.0	63.5	63.2	62.0	64.5	53.7	52.8	54.6	
931	61.1	59.4	63.1	62.6	60.8	64.7	50.4	49.5	51.5	
930	59.7	58.1	61.6	61.4	59.7	63.5	48.1	47.3	49.2	
929	57.1	55.8	58.7	58.6	57.2	60.3	46.7	45.7	47.8	
929	37.1	33.0	30.7	30.0	37.2	00.3	40.7	45.7	47.0	
Death-registration states										
28	56.8	55.6	58.3	58.4	57.0	60.0	46.3	45.6	47.0	
27	60.4	59.0	62.1	62.0	60.5	63.9	48.2	47.6	48.9	
26	56.7	55.5	58.0	58.2	57.0	59.6	44.6	43.7	45.6	
925	59.0	57.6	60.6	60.7	59.3	62.4	45.7	44.9	46.7	
024	59.7	58.1	61.5	61.4	59.8	63.4	46.6	45.5	47.8	
923	57.2	56.1	58.5	58.3	57.1	59.6	48.3	47.7	48.9	
922	59.6	58.4	61.0	60.4	59.1	61.9	52.4	51.8	53.0	
921	60.8	60.0	61.8	61.8	60.8	62.9	51.5	51.6	51.3	
920	54.1	53.6	54.6	54.9	54.4	55.6	45.3	45.5	45.2	
919	54.7	53.5	56.0	55.8	54.5	57.4	44.5	44.5	44.4	
918	39.1	36.6	42.2	39.8	37.1	43.2	31.1	29.9	32.5	
917	50.9	48.4	54.0	52.0	49.3	55.3	38.8	37.0	40.8	
916	51.7	49.6	54.3	52.5	50.2	55.2	41.3	39.6	43.1	
915	54.5	52.5	56.8	55.1	53.1	57.5	38.9	37.5	40.5	
914	54.2	52.0	56.8	54.9	52.7	57.5	38.9	37.1	40.8	
913	52.5	50.3	55.0	53.0	50.8	55.7	38.4	36.7	40.3	
912	53.5	51.5	55.9	53.9	51.9	56.2	37.9	35.9	40.0	
911	52.6	50.9	54.4	53.0	51.3	54.9	36.4	34.6	38.2	
910	50.0	48.4	51.8	50.3	48.6	52.0	35.6	33.8	37.5	
	52.1	50.5		52.5			35.7	34.2		
909		I .	53.8 52.8		50.9	54.2			37.3	
008	51.1	49.5		51.5	49.9	53.3	34.9	33.8	36.0	
007	47.6	45.6	49.9	48.1	46.0	50.4	32.5	31.1	34.0	
006	48.7	46.9	50.8	49.3	47.3	51.4	32.9	31.8	33.9	
005	48.7	47.3	50.2	49.1	47.6	50.6	31.3	29.6	33.1	
904	47.6	46.2	49.1	48.0	46.6	49.5	30.8	29.1	32.7	
903	50.5	49.1	52.0	50.9	49.5	52.5	33.1	31.7	34.6	
902	51.5	49.8	53.4	51.9	50.2	53.8	34.6	32.9	36.4	
901	49.1	47.6	50.6	49.4	48.0	51.0	33.7	32.2	35.3	
900	47.3	46.3	48.3	47.6	46.6	48.7	33.0	32.5	33.5	

<sup>1</sup> Prior to 1970, data for the black population are not available. Data shown for 1900-1969 are for the nonwhite population. See "Technical Notes" section.

<sup>&</sup>lt;sup>2</sup>Alaska included in 1959 and Hawaii in 1960.

<sup>&</sup>lt;sup>3</sup>Life expectancies for 2000-2005 were calculated using a revised methodology and may differ from those previously published; see "Technical Notes" section.

<sup>&</sup>lt;sup>4</sup>Deaths based on a 50-percent sample.

 $<sup>^5\</sup>mbox{Figures}$  by race exclude data for residents of New Jersey; see "Technical Notes" section.

#### **Technical Notes**

The life table program—Three series of complete life tables are prepared by NCHS for the U.S. population: decennial, annual preliminary, and annual final. The U.S. decennial life tables are based on decennial census data and deaths for a 3-year period around the census year. Preliminary life tables are based on a substantial sample (approximately 90 percent) of death records. Estimates of life expectancy from the preliminary series are published annually. The annual final life tables (referred to in this section as annual life tables) are based on a complete count of all reported deaths.

Available since 1945, the annual life tables are based on deaths occurring during the calendar year and on midyear postcensal population estimates provided by the U.S. Census Bureau. From 1945 through 1996, the annual life tables were abridged life tables and were constructed by reference to a standard table (11). Beginning with 1997 mortality data, a new methodology was employed to estimate complete life tables to age 100, with combined life table values presented for ages 100 and over (1). Prior to 1997, the annual life tables were closed at age 85, with ages 85 and over combined. Extension of the oldest age interval was implemented by NCHS for several reasons: survival in the United States is such that over one-third of the population survives beyond age 85, improvements have occurred in age reporting at older ages, and high quality old-age mortality data are available from the Medicare program.

The annual life tables presented in this report are based on a newly revised methodology that improves upon the methodology developed in 1997 through the use of more precise techniques for the estimation of old age mortality. This methodology was developed to estimate the U.S.1999–2001 decennial life tables (3).

Geographic coverage—The geographic areas covered in life tables before the years 1929–1931 were limited to the death-registration areas. Life tables for 1900–1902 and 1909–1911 were constructed using mortality data from the 1900 death-registration states [10 states and the District of Columbia (D.C.)] and for 1919–1921 from the 1920 death-registration states (34 states and D.C.). The tables for the years 1929–1931 through 1958 cover the coterminous United States. Decennial life table values for the 3-year period 1959–1961 were derived from data that include both Alaska and Hawaii for each year (Tables 10 and 11). Data for each year shown in Table 12 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 intercensal life table values—Life table values for 1960–1969, 1970–1979, and 1980–1989 were constructed using the U.S. decennial life tables for 1959–1961, 1969–1971, and 1979–1981, respectively, as the standard tables. The life table values for years prior to 1989 appearing in this publication are based on revised intercensal estimates of the populations for those years. As a result, the life table values for these years may differ from the life table values for those years published in *Vital Statistics of the United States* for 1989 and earlier years. Life table values for 1991–1999 are based on postcensal population estimates of the population enumerated in the 1990 decennial census while life table values for 2000–2005 are based on population estimates of the population enumerated in the 2000 decennial census. As a result, life expectancy values across the 1990s are not comparable to those estimated for 2000–2005. A comparison of life expectancy values for 2000 estimated alternately with 1990-based

postcensal estimates of the 2000 population and population estimates based on the 2000 census revealed that life expectancy values estimated using the 2000 census population estimates were slightly higher throughout the entire age range (19). Revised life table values for 1991–1999 using new intercensal population estimates based on the 2000 census will be estimated by NCHS in the upcoming year.

New Jersey data, 1962–1964—The life tables for 1962 and 1963 for the six race population groups do not include data from New Jersey, which omitted the item on race from its certificates of live birth, death, and fetal death that were 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 proportionally allocated to white or to black.

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

Estimation of life table functions—For some years, it was necessary to estimate life table functions for some race-sex groups. In Tables 10 and 11, figures for the black population during the periods 1949–1951 and 1959–1961 were estimated using figures for the non-white population. Life table functions were also missing in Tables 10 and 11 for race-sex groups for the periods from 1900–1902 to 1939–1941. Figures were missing for the following groups:

Years	Race and sex
1900–1902	Total white, total black Total white, total black Total, male, female, total white, total black Total, male, female, total white, total black

These figures were estimated by weighted averages using population distributions as the weights. For example, life expectancy at age 20 for the total black population was estimated by a weighted average of black male and black female life expectancies at age 20, using as weights the population distribution by sex of the black population aged 20 years.

Annual life tables were initiated in 1945 for white males, white females, all other males, and all other females. The figures in Table 12 by race and sex for the following years were estimated using a procedure other than the abridged life table methodology (20).

Years	Race and sex
1900–1945	Total
1900–1947	Male
1900–1947	Female
1900–1950	White
1900–1944	White male
1900–1944	White female

Annual life table functions were not calculated for the black population prior to 1970. In Table 12, life expectancy for the black population for years prior to 1970 is estimated using figures for the total nonwhite population.

### Data used for computing life table functions

Population data—Populations used for computing life tables shown in this report represent the population residing in the United States, enumerated as of April 1 for census years and estimated as of July 1 for all other years. Life tables for the United States for 2000-2005 are estimated using postcensal estimates published in each of these years based on the 2000 census and estimated as of July 1 of each year during the period 2000-2005. These estimates were produced under a collaborative arrangement with the U.S. Census Bureau and are based on the 2000 census counts by age, race, and sex, modified to be consistent with U.S. Office of Management and Budget racial categories as of 1977 and historical categories for death data (8). The modified procedures are described in detail elsewhere (10). Life tables previously published in annual reports of final data for 1991 through 1999 were based on postcensal population estimates derived from the 1990 census. The 1991-1999 life tables will be re-estimated using 2000 census-based intercensal population estimates.

Medicare data—Death rates at the oldest ages based on Medicare data are considered to be more accurate than those based on vital statistics and census data. As a result, Medicare data are employed in the estimation of  $q_x$  for ages 66 and over. The prevalence of age misreporting at the oldest ages in census data has been found to be significant enough to produce underestimated death rates, especially for the African American population (18). On the other hand, Medicare data are judged to be superior because beneficiaries must prove their date of birth in order to enroll and coverage is extensive (21). Approximately 98 percent of the American population aged 65 and over is enrolled in Medicare Part A, and 96 percent of this is enrolled in Part B. Further, 99 percent of deaths of those aged 65 and over in the United States are accounted for in the Medicare program (22).

Compared with data from other sources, Medicare data are negatively affected by greater numbers of people in the oldest age groups. For instance, the number of people aged 90 and over is greater in Medicare data than in census data (22). This is the result of "phantom records" that arise due to some beneficiaries being registered more than once or because a person's death was not reported (21). To address this problem, the Medicare data used are restricted to the records of Medicare beneficiaries who are also eligible for Social Security or Railroad Retirement income benefits. This eliminates approximately 3 percent of records from the full Medicare file (21).

To estimate the probability of death for the Medicare population for each of the years 2000–2005, age-specific number of deaths and population counts by sex and race for the population aged 66 years and over from each of the 2000–2005 Medicare files were used. These files are created by the Centers for Medicare & Medicaid (CMS) for the Social Security Administration, which, under a special agreement, shares the files with NCHS.

Vital statistics data—Death counts used for computing the life tables presented in this report are final number of deaths for each year during the period 2000–2005 collected from death certificates filed in state vital statistics offices and reported to NCHS as part of the National Vital Statistics System (NVSS). An adjustment must be made to account for the small proportion of deaths each year for which age is not reported. The number of deaths in each age category is adjusted proportionally to account for those with not-stated ages. The following

factor is used to make the adjustment. This factor (F) is calculated for each race-sex group for which life tables are constructed:

$$F = \frac{D}{D^a},$$
 [1]

where D is the total number of deaths and  $D^a$  is the total number of deaths for which age is stated. F is then applied by multiplying it times the number of deaths in each age group. Table I shows values for F by race and sex used to adjust mortality data for 2005.

### Calculation of the probability of dying $(q_x)$

Calculation of the complete life table is derived from the probability of death  $(q_x)$ , which depends on the number of deaths  $(D_x)$  and the midyear population  $(P_x)$  for each single year of age (x) observed during the calendar year of interest.

Interpolation of  $P_x$  and  $D_x$ —Anomalies, both random and those associated with reporting age at death, can be problematic when using vital statistics and census data by single years of age to estimate the probability of death (4). Graduation techniques are often used to eliminate these anomalies and to derive a smooth curve by age. Beer's ordinary minimized fifth difference formula is used to obtain smoothed values of  $P_x$  and  $D_x$  (see reference 4 for details on the application of Beer's method).

Calculation of  $q_0$ —Calculated by using a birth cohort method employing a separation factor (f) defined as the proportion of infant deaths in year t occurring to infants born in the previous year (t-1). The value f can be calculated by categorizing infant deaths by date of birth. The probability of death in the first year is calculated as

$$q_0 = \frac{D_0 (1-f)}{B^t} + \frac{D_0 (f)}{B^{t-1}},$$
 [2]

where  $D_0$  is the number of infant deaths adjusted for not-reported age, and  $B^t$  and  $B^{t-1}$  are the numbers of births in years t and t-1, respectively. Table II shows separation factors and numbers of births by race and sex for 2004–2005.

Calculation of  $q_x$  for ages 1–100—Calculated assuming that  $l_x$  (number of survivors at exact age x in the life table population) declines linearly between x and x+1 (i.e., that deaths between exact age x and x+1 occur on average at age  $x+\frac{1}{2}$ ). This simplification is generally considered acceptable when age intervals are 1 year in length (4). Under this assumption,  $l_x = L_x + \frac{1}{2} d_x$ , where  $L_x$  is the average life table

Table I. Values for F used to adjust for not-stated age based on 2005 mortality data

Race and sex	Total deaths	Total deaths for which age was not stated	F
Total	2,448,017	255	1.00010418
	1,207,675	199	1.00016481
	1,240,342	56	1.00004515
White	2,098,097	205	1.00009772
	1,028,152	166	1.00016148
	1,069,945	39	1.00003645
Black	292,808	47	1.00016054
	149,108	31	1.00020795
	143,700	16	1.00011136

		Total			White		Black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Births									
2004	4,112,052 4,138,349	2,104,661 2,118,982	2,007,391 2,019,367	3,222,928 3,229,294	1,650,697 1,655,812	1,572,231 1,573,482	616,074 633,134	313,896 321,259	302,178 311,875
Deaths in 2005 of infants born in									
2004	3,550 24,890	2,007 14,011	1,543 10,879	2,310 16,204	1,320 9,151	990 7,053	1,058 7,637	600 4,267	458 3,370
Separation factor (f)	0.125	0.125	0.124	0.125	0.126	0.123	0.122	0.123	0.120

Table II. Births in 2004 and 2005, deaths in 2005 of infants born in 2004 and 2005, and separation factors by race and sex: United States

population at risk of dying between ages x and x+1 and  $d_x$  is the number of deaths occurring between age x and x+1. The value  $q_x$  is then

$$q_x = \frac{d_x}{l_x} = \frac{d_x}{L_x + \frac{1}{2} d_x}$$

One can make the same assumption for the observed population (i.e., that the observed population aged x at risk of dying at the beginning of the year  $(N_x)$  declines linearly between ages x and x+1). Under this assumption,  $N_x = P_x + \frac{1}{2}D_x$ , where  $P_x$  is the midyear population or average observed population at risk of dying between ages x and x+1 and  $D_x$  is the observed number of deaths occurring between ages x and x+1. The value,  $q_x$  is calculated as

$$q_x = \frac{D_x}{N_x} = \frac{D_x}{P_x + \frac{1}{2}D_x},$$
 [3]

where  $D_x$  is the observed number of deaths adjusted for not-stated age and  $P_x$  is the observed population at risk of dying between ages x and x + 1.

Use of Medicare data at ages 66 to 100—For ages 66–94, the probability of dying was obtained by blending vital statistics  $(q_x^V)$  with Medicare  $(q_x^M)$  through a weighting process that gives gradually declining weight to vital statistics data and gradually increasing weight to Medicare data. For ages 95 to 100, Medicare  $(q_x^M)$  is used exclusively. For ages 66–100,  $q_x$  is then estimated as

$$q_x = \frac{1}{30} [(95 - x) \ q_x^V + (x - 65) q_x^M], \text{ when } x = 66,...,94$$

and

$$q_x = q_x^M$$
, when  $x = 95,...,100$ , [4]

where  $q_x$  is a combination of  $q_x^V$  and  $q_x^M$ ,  $q_x^V$  is the probability of dying, calculated with formula 3, and  $q_x^M$  is the probability of dying based on Medicare data [see Figures I and II for a comparison of Medicare  $(q_x^M)$  and vital statistics  $(q_x^V)$  for white and black males and females in 2005].

Smoothing combined probabilities of death  $(q_x)$  at ages 66–100— The third component of the Heligman-Pollard model is used to smooth the probabilities of death at ages 66–100. The Heligman-Pollard model is a nonlinear model consisting of three components and eight parameters:

$$q_x/1 - q_x = A^{(x+B)^c} + D \exp[-E(\log x - \log F)^2] + GH^x$$
, where, in the

first component, parameter A measures mortality in the first year of life, parameter B measures the rate of change in mortality from birth to the first year of life, and parameter C measures the rate of mortality decline in childhood. The second component of the model describes mortality from ages 10 through 40, where an "accident hump" appears, and parameters D, E, and F measure the location, width, and height of the "accident hump." Parameters G and H in the third component of the model measure mortality levels and changes for ages approximately 40 years and over (2,23).

The methodology used to estimate the U.S. annual life tables since 1997 used a linear index of mortality change,  $k_x$ , to model mortality for ages 85–100 (1). The third component of the Heligman-Pollard model has been found to provide a better estimate of mortality patterns at the older ages than the former method. Further, in comparison with a straight line, the Heligman-Pollard nonlinear smoothing procedure provides a more robust fit of the observed data and the predicted probabilities of death appear more reasonable (3).

Using STATA's nonlinear weighted least squares procedure, with weights defined as  $w_x = 1/q_x^2$ ,  $q_x$  was fitted with the third component of the Heligman-Pollard model for ages 65–100 years, where  $q_x^V$  was

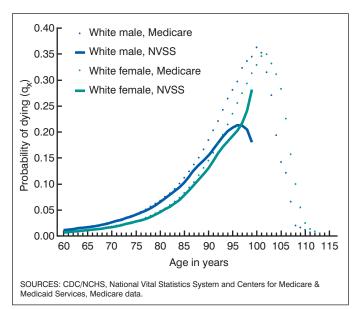


Figure I. Probability of dying  $(q_x)$  for the white population aged 60–115: United States, 2005

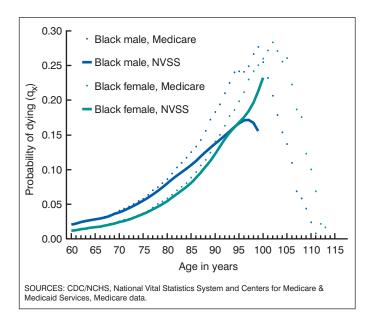


Figure II. Probability of dying  $(q_x)$  for the black population aged 60–115: United States, 2005

used for age 65 and  $q_x$  as defined in equation 4 above was used for ages 66–100. The inclusion of  $q_x^V$  for age 65 was the first step taken to ensure a smooth transition between vital  $q_x^V$  and predicted  $q_x$  (defined below). The model was estimated as follows:

$$\frac{q_x}{1 - q_x} = GH^x, ag{5}$$

where the two fitted parameters G and H are used to smooth  $q_x$  for ages 66–100 and extrapolate  $q_x$  for ages 101–130. Although the probabilities of death estimated from Medicare data  $(q_x^M)$  range from ages 66 to approximately 115,  $q_x$  was extrapolated to age 130 in order to estimate the life table population until no survivors remain. This information is then used to estimate  $L_x$  for ages 100–130, which is used to close the table with the age category 100 and over, combined (discussed below). Predicted  $\hat{q}_x$  was then estimated as follows:

$$\hat{q}_x = \frac{\hat{G}\,\hat{H}^x}{1 + \hat{G}\,\hat{H}^x},\tag{6}$$

where  $\ddot{G}$  and  $\ddot{H}$  are the predicted parameters given by fitting model 5. Predicted parameters for each year during the period 2000–2005 are presented in Table III.

A second step taken to ensure a smooth transition from vital  $q_x^V$  and predicted  $\hat{q}_x$  was to blend predicted  $\hat{q}_x$  and vital  $q_x^V$  from ages 66–74 with a graduating process as follows:

$$q_x = \frac{1}{10} [(75 - x) \ q_x^v + (x - 65)\hat{q}_x], \text{ when } x = 66,...,74.$$
 [7]

Finally, to close the table at age 100 and over (combined),  $_{\infty}q_{100}$  is set equal to 1.0 because all survivors to this age will die at some point in the open-ended age interval. Once  $q_x$  is obtained for each single year of age, the other life table functions may be easily calculated.

## Calculation of remaining life table functions

Survivor function  $(l_x)$ —The life table radix,  $l_0$ , is set at 100,000. For ages greater than 0, the number of survivors remaining at exact age x is calculated as

$$I_x = I_{x-1}(1 - q_{x-1}).$$
 [8]

Decrement function  $(d_x)$ —The number of deaths occurring between age x and x+1 is calculated from the survivor function:

$$d_{x} = I_{x} - I_{x+1} = I_{x} q_{x}.$$
 [9]

Note that  $_{\infty}d_{100} = _{\infty}l_{100}$  since  $_{\infty}q_{100} = 1.0$ .

Person-years lived  $(L_x)$ —Calculated for ages 1 to 99 assuming that the survivor function declines linearly between age x and x+1. This gives the formula

$$L_{x} = \frac{1}{2} (I_{x} + I_{x+1}) = I_{x} - \frac{1}{2} d_{x}.$$
 [10]

For x = 0, the separation factor f is used to calculate  $L_0$ :

$$L_0 = f I_0 + (1 - f) I_1.$$
 [11]

Finally,  $_{\infty}L_{100}$  is estimated as the sum of the extrapolated  $L_x$  values for ages 100 to 130 years.

Person-years lived at and above age x ( $T_x$ )—Calculated by summing  $L_x$  values at and above age x:

$$T_{x} = \sum_{x=0}^{\infty} L_{x}.$$
 [12]

Life expectancy at age x (ex)—Calculated as

$$e_{x} = \frac{T_{x}}{I_{y}}.$$
 [13]

## Abridging the complete life table

An abridged or collapsed version of the complete life table can be easily calculated in which life table functions are shown for 5-year rather than single-year age intervals. It is often desirable to summarize the life table and save space when publishing life table data by single years of age. The abridgement of the complete life table is simplified by an important property of three of the six life table functions. The  $I_x$ ,  $T_x$ , and  $e_x$  functions describe exact age x, that is, the beginning of the age interval x to x + n (n denotes the length of the age interval for 5-year age intervals n = 5). Life expectancy at age 20  $(e_{20})$ , for example, has the same value regardless whether the age interval is 20–21 or 20–25. Thus, the values  $I_x$ ,  $T_x$ , and  $e_x$  can be extracted at 5-year intervals from the complete life table and placed into the abridged life table (compare  $I_x$ ,  $T_x$ , and  $e_x$  in Table IV with the same functions in Table 1). It is also illustrative to compare values for e<sub>x</sub> and I<sub>x</sub> in Tables A and B with their corresponding values presented in Tables 1-9. The  $q_x$ ,  $d_x$ , and  $L_x$  functions, in contrast, describe the age interval x to x + n. In fact, for abridged life tables, the notation for these functions is different  $({}_{n}q_{x}, {}_{n}d_{x}, {}_{n}L_{x})$ . Thus,  ${}_{5}q_{20}$  is the probability

Table III. Estimated parameters G and H used for predicting  $q_x$  for ages 66 through 130 years: U.S. life tables, 2000-2005

					Population				
Year	Total	Male	Female	White	White male	White female	Black	Black male	Black female
2000									
G	0.0000215 1.105797	0.0000332 1.10282	0.0000103 1.113725	0.0000182 1.107947	0.0000275 1.105321	0.00000861 1.116016	0.000137 1.082492	0.0002371 1.078418	0.0000676 1.089819
2001									
G	0.0000206 1.106165	0.0000339 1.102241	0.00000981 1.114213	0.0000175 1.108321	0.000028 1.104774	0.00000825 1.116477	0.0001287 1.08319	0.0002519 1.077373	0.0000604 1.091207
2002									
G	0.0000181 1.107927	0.0000282 1.104715	0.0000088 1.115681	0.0000154 1.110056	0.0000235 1.107102	0.00000742 1.117936	0.0001128 1.084827	0.0001878 1.081164	0.0000556 1.092248
2003									
G	0.0000166 1.108862	0.0000261 1.105422	0.0000081 1.116644	0.0000141 1.111012	0.0000215 1.108004	0.00000687 1.118822	0.0001101 1.084885	0.0002259 1.07831	0.0000503 1.093325
2004									
G	0.0000163 1.108566	0.0000239 1.106048	0.00000821 1.11589	0.0000139 1.110626	0.0000196 1.10871	0.00000703 1.117936	0.0000998 1.085769	0.0001884 1.080348	0.0000473 1.093712
2005									
G	0.0000143 1.11039	0.0000209 1.107902	0.00000723 1.117704	0.0000122 1.112547	0.0000171 1.110561	0.00000615 1.119854	0.0000906 1.087029	0.0001753 1.081192	0.0000425 1.095152

of dying between ages 20 and 25 and will obviously be somewhat larger than  $q_{20}$ , the probability of dying between ages 20 and 21. Taking this into account,  ${}_{n}q_{x}$ ,  ${}_{n}d_{x}$ , and  ${}_{n}L_{x}$  must be recalculated in the abridged life table. It is simplest to begin with  ${}_{n}d_{x}$ . The calculations are made for all but the final age interval as follows:

$$_{n}d_{x}=I_{x}-I_{x+n}$$

$$_{n}q_{x}=\frac{_{n}d_{x}}{I_{x}}$$

$$_{n}L_{x}=T_{x}-T_{x+n}.$$

Note that for the open-ended interval, ages 100 and over:  $_{\infty}d_{100}=I_{100},_{\infty}q_{100}=1.0$ , and  $_{\infty}L_{100}=T_{100}$ . Table IV shows each of the life table functions for the 2005 U.S. total population abridged from Table 1.

Table IV. Life table for the total population: United States, 2005

	Probability of dying between ages x to x+n	Number surviving to age x	Number dying between ages x to x+n	Person-years lived between ages x to x+n	Total number of person-years lived above age x	Expectation of life at age x
Age	$\overline{q_x}$		$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	${nL_x}$	$\overline{T_x}$	e <sub>x</sub>
0–1	0.006879	100.000	688	99,398	7,744,259	77.4
1–4	0.001174	99,312	117	396,970	7,644,861	77.0
5–9	0.000727	99,196	72	495,783	7,247,891	73.1
10–14	0.000898	99.124	89	495,452	6.752.108	68.1
15–19	0.003251	99.035	322	494,460	6,256,656	63.2
20–24	0.004869	98.713	481	492.388	5,762,196	58.4
25–29	0.004865	98,232	478	489,966	5,269,808	53.6
30–34	0.005558	97.754	543	487,455	4.779.842	48.9
35–39	0.007433	97,211	723	484.366	4,292,387	44.2
40–44	0.011588	96.488	1.118	479.833	3.808.021	39.5
45–49	0.017540	95,370	1,673	472,924	3,328,188	34.9
50–54	0.025802	93.697	2.418	462,766	2.855.264	30.5
55–59	0.036299	91,280	3,313	448,572	2,392,498	26.2
60–64	0.055819	87,966	4,910	428,279	1,943,926	22.1
65–69	0.081169	83,056	6,742	399,297	1,515,647	18.2
70–74	0.125559	76,315	9,582	359,010	1,116,350	14.6
75–79	0.200713	66,733	13,394	301,718	757,340	11.3
80–84	0.310947	53,338	16,585	226,111	455,623	8.5
85–89	0.458381	36,753	16,847	140,862	229,512	6.2
90–94	0.630137	19,906	12,544	65,633	88,650	4.5
95–99	0.793665	7,363	5,843	19,689	23,017	3.1
100 and over	1.000000	1,519	1,519	3,329	3,329	2.2

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# Appendix. Revised United States life tables, 2000-2004

## 2000

Table I. Life table for the total population: United States, 2000

			1	1	ı	ı
					Total	
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages $x$ to $x+1$	age x	ages x to x+1	ages x to x+1	age x	at age x
		ago A	agoo x to x	agoo x to xi i	ago A	at age A
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_{x}$
	0.00000		200			70.0
0–1	0.006930	100,000	693	99,392	7,676,600	76.8
1–2	0.000518	99,307	51	99,281	7,577,207	76.3
2–3	0.000343	99,256	34	99,239	7,477,926	75.3
3–4	0.000238	99,222	24	99,210	7,378,687	74.4
4–5	0.000197	99,198	19	99,188	7,279,478	73.4
5–6	0.000182	99,178	18	99,169	7,180,289	72.4
6–7	0.000170	99,160	17	99,152	7,081,120	71.4
7–8	0.000161	99,144	16	99,136	6,981,968	70.4
8–9	0.000148	99,128	15	99,120	6,882,832	69.4
9–10	0.000132	99,113	13	99,106	6,783,712	68.4
10–11	0.000120	99,100	12	99,094	6,684,606	67.5
11–12	0.000126	99,088	12	99,082	6,585,512	66.5
12–13	0.000120	99,076	16	99,067	6,486,430	65.5
13–14	0.000165		24	1		64.5
_	0.000246	99,059		99,047	6,387,362	
14–15		99,035	35	99,017	6,288,315	63.5
15–16	0.000481	98,999	48	98,976	6,189,298	62.5
16–17	0.000596	98,952	59	98,922	6,090,323	61.5
17–18	0.000695	98,893	69	98,859	5,991,400	60.6
18–19	0.000768	98,824	76	98,786	5,892,542	59.6
19–20	0.000821	98,748	81	98,708	5,793,756	58.7
20–21	0.000875	98,667	86	98,624	5,695,048	57.7
21–22	0.000931	98,581	92	98,535	5,596,424	56.8
22–23	0.000963	98,489	95	98,442	5,497,889	55.8
23–24	0.000965	98,394	95	98,347	5,399,447	54.9
24–25	0.000944	98,299	93	98,253	5,301,101	53.9
25–26	0.000917	98,206	90	98,161	5,202,848	53.0
26–27	0.000898	98,116	88	98,072	5,104,687	52.0
27–28	0.000893	98,028	88	97,984	5,006,614	51.1
28–29	0.000909	97,941	89	97,896	4,908,630	50.1
29–30	0.000942	97,852	92	97,806	4,810,734	49.2
30–31	0.000983	97,759	96	97,711	4,712,928	48.2
31–32	0.001030	97,663	101	97,613	4,615,217	47.3
	0.001030	· ·	106		4,517,604	46.3
		97,563		97,510	· ' '	
33–34	0.001170	97,456	114	97,399	4,420,094	45.4
34–35	0.001260	97,342	123	97,281	4,322,695	44.4
35–36	0.001354	97,220	132	97,154	4,225,413	43.5
36–37	0.001454	97,088	141	97,018	4,128,259	42.5
37–38	0.001569	96,947	152	96,871	4,031,242	41.6
38–39	0.001704	96,795	165	96,712	3,934,371	40.6
39–40	0.001858	96,630	180	96,540	3,837,658	39.7
40–41	0.002025	96,450	195	96,353	3,741,118	38.8
41–42	0.002199	96,255	212	96,149	3,644,765	37.9
42–43	0.002383	96,043	229	95,929	3,548,616	36.9
43–44	0.002577	95,815	247	95,691	3,452,687	36.0
44–45	0.002784	95,568	266	95,435	3,356,996	35.1
45–46	0.003012	95,302	287	95,158	3,261,561	34.2
46–47	0.003262	95,015	310	94,860	3,166,403	33.3
47–48	0.003524	94,705	334	94,538	3,071,543	32.4
48–49	0.003794	94,371	358	94,192	2,977,006	31.5
49–50	0.004071	94,013	383	93,821	2,882,814	30.7
50–51	0.004366	93,630	409	93,426	2,788,992	29.8
51–52	0.004689	93,221	437	93,003	2,695,567	28.9
52–53	0.005051	92,784	469	92,550	2,602,564	28.0
	0.005473			1		
53–54		92,316	505	92,063	2,510,014	27.2
54–55	0.005969	91,810	548	91,536	2,417,951	26.3
55–56	0.006556	91,262	598	90,963	2,326,414	25.5
56–57	0.007221	90,664	655	90,337	2,235,451	24.7
57–58	0.007943	90,009	715	89,652	2,145,114	23.8
58–59	0.008689	89,294	776	88,907	2,055,462	23.0
		i .	I .	1	i .	I .

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Table I. Life table for the total population: United States, 2000—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	T <sub>x</sub>	$e_{x}$
9–60	0.009461	88,519	837	88,100	1,966,556	22.2
0–61	0.010318	87,681	905	87,229	1,878,456	21.4
-62	0.011294	86,776	980	86,286	1,791,227	20.6
.–63	0.012344	85,796	1,059	85,267	1,704,941	19.9
⊢64	0.013456	84,737	1,140	84,167	1,619,674	19.1
–65	0.014635	83,597	1,223	82,985	1,535,507	18.4
-66	0.015868	82,374	1,307	81,720	1,452,521	17.6
-67	0.017104	81,067	1,387	80,373	1,370,801	16.9
-68	0.018551	79,680	1,478	78,941	1,290,428	16.2
i–69	0.020232	78,202	1,582	77,411	1,211,487	15.5
i–70	0.022116	76,620	1,694	75,772	1,134,076	14.8
–71	0.024142	74,925	1,809	74,021	1,058,304	14.1
-72	0.026386	73,116	1,929	72,152	984,283	13.5
-73	0.028972	71,187	2,062	70,156	912,131	12.8
-74	0.031938	69,125	2,208	68,021	841,975	12.2
-75	0.035271	66,917	2,360	65,737	773,954	11.6
-76	0.033271	64,557	2,516	63,299	708,217	11.0
-76		· '	1 '		· '	10.4
	0.042925	62,040	2,663	60,709	644,919	
-78	0.047252	59,377	2,806	57,975	584,210	9.8
-79	0.051991	56,572	2,941	55,101	526,235	9.3
-80	0.057177	53,630	3,066	52,097	471,134	8.8
-81	0.062846	50,564	3,178	48,975	419,037	8.3
-82	0.069036	47,386	3,271	45,751	370,062	7.8
-83	0.075786	44,115	3,343	42,443	324,311	7.4
-84	0.083137	40,772	3,390	39,077	281,868	6.9
-85	0.091132	37,382	3,407	35,679	242,791	6.5
-86	0.099811	33,975	3,391	32,280	207,113	6.1
–87	0.109217	30,584	3,340	28,914	174,833	5.7
-88	0.119392	27,244	3,253	25,618	145,919	5.4
-89	0.130377	23,991	3,128	22,427	120,301	5.0
-90	0.142209	20,863	2,967	19,380	97,874	4.7
–91	0.154923	17,896	2,773	16,510	78,494	4.4
-92	0.168551	15,124	2,549	13,849	61,984	4.1
-93	0.183118	12,575	2,303	11,423	48,135	3.8
-94	0.198642	10,272	2,040	9,252	36,711	3.6
-95	0.215137	8,232	1,771	7,346	27,460	3.3
_96	0.232604	6,461	1,503	5,709	20,114	3.1
–96	0.251035	4,958	1,245	4,336	14,404	2.9
-					· / /	2.9
	0.270411	3,713	1,004	3,211	10,069	
-99	0.290704	2,709	788	2,315	6,857	2.5
9–100	0.311867	1,922	599	1,622	4,542	2.4
0 and over	1.000000	1,322	1,322	2,920	2,920	2.2

Table II. Life table for males: United States, 2000

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					Total	
	Probability		Number	Person-years	number of	
		Number		,		Fynastation
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
					•	
Age	$q_x$	$I_x$	$d_{x}$	L <sub>x</sub>	$T_x$	$e_x$
	7.7	'х		-x	· x	
0–1	0.007593	100,000	759	99,333	7,406,575	74.1
1–2	0.000567	99,241	56	99,213	7,307,241	73.6
2–3	0.000380	99,184	38	99,166	7,208,029	72.7
3–4	0.000279	99,147	28	99,133	7,108,863	71.7
4–5	0.000211	99,119	21	99,109	7,009,730	70.7
		· '		· · · · · · · · · · · · · · · · · · ·		
5–6	0.000202	99,098	20	99,088	6,910,621	69.7
6–7	0.000191	99,078	19	99,069	6,811,533	68.7
7–8	0.000181	99,059	18	99,050	6,712,464	67.8
8–9	0.000165	99,041	16	99,033	6,613,414	66.8
9–10	0.000142	99.025	14	99,018	· ' '	65.8
		· '			6,514,380	
10–11	0.000124	99,011	12	99,005	6,415,362	64.8
11–12	0.000131	98,999	13	98,992	6,316,357	63.8
12–13	0.000187	98,986	18	98,977	6,217,365	62.8
13–14	0.000305	98,967	30	98,952	6,118,388	61.8
				1	6.019.436	
14–15	0.000468	98,937	46	98,914	-,,	60.8
15–16	0.000646	98,891	64	98,859	5,920,521	59.9
16–17	0.000813	98,827	80	98,787	5,821,662	58.9
17–18	0.000962	98,747	95	98,699	5,722,875	58.0
18–19	0.001081	98,652	107	98,599	5,624,176	57.0
		· '		· · · · · · · · · · · · · · · · · · ·		
19–20	0.001176	98,545	116	98,487	5,525,577	56.1
20–21	0.001277	98,429	126	98,367	5,427,090	55.1
21–22	0.001376	98,304	135	98,236	5,328,724	54.2
22–23	0.001432	98,168	141	98,098	5,230,488	53.3
23–24	0.001431	98,028	140	97,958	5,132,389	52.4
24–25	0.001388	97,888	136	97,820	5,034,432	51.4
		· '		· · · · · · · · · · · · · · · · · · ·	· ' '	
25–26	0.001330	97,752	130	97,687	4,936,612	50.5
26–27	0.001285	97,622	125	97,559	4,838,925	49.6
27–28	0.001259	97,496	123	97,435	4,741,366	48.6
28–29	0.001265	97,374	123	97,312	4,643,931	47.7
29–30	0.001298	97,250	126	97,187	4,546,619	46.8
			130			
30–31	0.001341	97,124		97,059	4,449,432	45.8
31–32	0.001388	96,994	135	96,927	4,352,373	44.9
32–33	0.001454	96,859	141	96,789	4,255,446	43.9
33–34	0.001545	96,718	149	96,644	4,158,657	43.0
34–35	0.001650	96,569	159	96,489	4,062,013	42.1
35–36	0.001763	96,410	170	96,325	3,965,524	41.1
36–37	0.001765		181			40.2
		96,240		96,149	3,869,199	
37–38	0.002026	96,058	195	95,961	3,773,050	39.3
38–39	0.002193	95,864	210	95,759	3,677,089	38.4
39–40	0.002383	95,654	228	95,540	3,581,330	37.4
40–41	0.002588	95,426	247	95,302	3,485,791	36.5
41–42	0.002804	95,179	267	95,045	3,390,489	35.6
42–43	0.002004	94,912	289	94,768	3,295,443	34.7
				1		
43–44	0.003299	94,623	312	94,467	3,200,676	33.8
44–45	0.003582	94,311	338	94,142	3,106,209	32.9
45–46	0.003898	93,973	366	93,790	3,012,066	32.1
46–47	0.004237	93,607	397	93,409	2,918,276	31.2
47–48	0.004580	93,210	427	92,997	2,824,867	30.3
48–49	0.004908	92,784	455	1		29.4
				92,556	2,731,870	
49–50	0.005229	92,328	483	92,087	2,639,315	28.6
50–51	0.005563	91,845	511	91,590	2,547,228	27.7
51–52	0.005934	91,334	542	91,063	2,455,638	26.9
52–53	0.006359	90,792	577	90,504	2,364,575	26.0
53–54	0.006871	90,215	620	89,905	2,274,071	25.2
54–55	0.007485	89,595	671	89,260	2,184,166	24.4
				1		
55–56	0.008212	88,925	730	88,559	2,094,906	23.6
56–57	0.009033	88,194	797	87,796	2,006,346	22.7
57–58	0.009922	87,398	867	86,964	1,918,550	22.0
58–59	0.010832	86,531	937	86,062	1,831,586	21.2
59–60	0.011767	85,593	1,007	85,090	1,745,524	20.4
60–61	0.01707		· ·			19.6
		84,586	1,083	84,045	1,660,434	
61–62	0.013980	83,503	1,167	82,920	1,576,390	18.9
62–63	0.015256	82,336	1,256	81,708	1,493,470	18.1
63–64	0.016622	81,080	1,348	80,406	1,411,762	17.4
64–65	0.018082	79,732	1,442	79,011	1,331,356	16.7
65–66	0.019594	78,291	1,534	77,524	1,252,345	16.0
66–67	0.021205	76,757	1,628	75,943	1,174,821	15.3
00-07	0.021200	10,737	1,020	10,940	1,174,021	10.0
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Table II. Life table for males: United States, 2000—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
7–68	0.023134	75,129	1,738	74,260	1,098,878	14.6
–69	0.025360	73,391	1,861	72,460	1,024,618	14.0
<del>-</del> 70	0.027822	71,530	1,990	70,535	952,158	13.3
-71	0.030496	69,540	2,121	68,479	881,624	12.7
-72	0.033398	67,419	2,252	66,293	813,144	12.1
-73	0.036634	65.167	2.387	63.974	746.851	11.5
–74	0.040244	62,780	2,526	61,517	682,878	10.9
–75	0.044266	60,253	2,667	58,920	621,361	10.3
i–76	0.048713	57,586	2,805	56,184	562,441	9.8
_77	0.053453	54,781	2,928	53,317	506,257	9.2
–78	0.058627	51,853	3,040	50,333	452,940	8.7
–79	0.064268	48,813	3,137	47,244	402,607	8.2
–80	0.070411	45,676	3,216	44,068	355,363	7.8
–81	0.077092	42,460	3,273	40,823	311,295	7.3
–82	0.084350	39,186	3,305	37,534	270,472	6.9
-83	0.092223	35,881	3,309	34,226	232,939	6.5
–84	0.100751	32,572	3,282	30,931	198,712	6.1
-85	0.109971	29,290	3,221	27,680	167,781	5.7
–86	0.119922	26,069	3.126	24,506	140.101	5.4
–87	0.130641	22,943	2,997	21,444	115,595	5.0
-88	0.130041	19,946	2,836	18,528	94,151	4.7
	0.154523	17,110	2,644	15,788	75,623	4.7
	0.167746	,	2,427		59,835	4.1
	0.181857	14,466 12,040	2,427	13,253 10,945	46,582	3.9
)–91	0.196874	9,850	1,939	8,880	35,637	3.6
–92	0.196674	9,650 7,911	1,939	7,069	26,757	3.6
	0.212609	6,227	1,430	5,512	19,687	3.4
	0.247436	4,797	1,430	4,204	14,175	3.2
-96	0.266107	3,610	961	3,130	9,972	2.8 2.6
-97	0.285653	2,649	757	2,271	6,842	
-98	0.306035	1,893	579	1,603	4,571	2.4
-99	0.327206	1,313	430	1,099	2,968	2.3
9–100	0.349104	884	308	729	1,869	2.1
00 and over	1.000000	575	575	1,140	1,140	2.0

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Table III. Life table for females: United States, 2000

					Total	
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1		ages x to x+1	ages x to x+1		at age x
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
Age	α	l <sub>x</sub>	$d_x$	L <sub>x</sub>	T <sub>x</sub>	$e_x$
Age	$q_x$	'x	u <sub>x</sub>	-x	'x	O <sub>X</sub>
0–1	0.006235	100,000	624	99,454	7,934,834	79.3
		· ·		· ·		
1–2	0.000466	99,376	46	99,353	7,835,379	78.8
2–3	0.000304	99,330	30	99,315	7,736,026	77.9
3–4	0.000195	99,300	19	99,290	7,636,711	76.9
4–5	0.000182	99,281	18	99,272	7,537,421	75.9
5–6	0.000162	99,262	16	99,254	7,438,149	74.9
6–7	0.000148	99,246	15	99,239	7,338,895	73.9
7–8	0.000139	99,232	14	99,225	7,239,656	73.0
8–9	0.000130	99,218	13	99,211	7,140,431	72.0
		· ·			1 1	
9–10	0.000122	99,205	12	99,199	7,041,219	71.0
10–11	0.000116	99,193	12	99,187	6,942,020	70.0
11–12	0.000121	99,181	12	99,175	6,842,833	69.0
12–13	0.000142	99,169	14	99,162	6,743,658	68.0
13–14	0.000184	99,155	18	99,146	6,644,495	67.0
14–15	0.000241	99,137	24	99,125	6,545,349	66.0
15–16	0.000241	99,137	30	99,098	6,446,224	65.0
		· '		· ·		
16–17	0.000367	99,083	36	99,065	6,347,126	64.1
17–18	0.000413	99,047	41	99,026	6,248,061	63.1
18–19	0.000438	99,006	43	98,984	6,149,035	62.1
19–20	0.000446	98,962	44	98,940	6,050,051	61.1
20–21	0.000453	98,918	45	98,896	5,951,111	60.2
21–22	0.000465	98,873	46	98,850	5,852,215	59.2
22–23	0.000473	98,827	47	98,804	5,753,365	58.2
23–24	0.000479	98,781	47	98,757	5,654,561	57.2
	0.000479	98,733	48	98,709	5,555,804	56.3
-		· '		· · ·	· ' '	
25–26	0.000492	98,685	49	98,661	5,457,094	55.3
26–27	0.000502	98,637	50	98,612	5,358,433	54.3
27–28	0.000519	98,587	51	98,562	5,259,821	53.4
28–29	0.000545	98,536	54	98,509	5,161,259	52.4
29–30	0.000580	98,482	57	98,454	5,062,750	51.4
30–31	0.000620	98,425	61	98,395	4,964,296	50.4
31–32	0.000666	98,364	65	98,332	4,865,901	49.5
32–33	0.000720	98,299	71	98,263	4,767,570	48.5
33–34	0.000723	98,228	78	98,189	4,669,306	47.5
34–35	0.000867	98,150	85	98,108	4,571,117	46.6
35–36	0.000944	98,065	93	98,019	4,473,009	45.6
36–37	0.001025	97,973	100	97,922	4,374,990	44.7
37–38	0.001116	97,872	109	97,818	4,277,068	43.7
38–39	0.001221	97,763	119	97,703	4,179,250	42.7
39–40	0.001339	97,644	131	97,578	4,081,547	41.8
40–41	0.001468	97,513	143	97,441	3,983,968	40.9
41–42	0.001603	97,370	156	97,292	3,886,527	39.9
42–43	0.001737	97,214	169	97,129	3,789,235	39.0
43–44	0.001868	97,045	181	96,954	3,692,105	38.0
44–45	0.002002	96,864	194	96,767	3,595,151	37.1
45–46	0.002002	96,670	208	96,566	3,498,384	36.2
46–47	0.002146		223	· ·		35.3
		96,462		96,351	3,401,818	
47–48	0.002502	96,239	241	96,119	3,305,467	34.3
48–49	0.002716	95,998	261	95,868	3,209,349	33.4
49–50	0.002953	95,738	283	95,596	3,113,481	32.5
50–51	0.003211	95,455	307	95,302	3,017,885	31.6
51–52	0.003490	95,148	332	94,982	2,922,583	30.7
52–53	0.003794	94,816	360	94,636	2,827,601	29.8
53–54	0.004134	94,457	391	94,261	2,732,964	28.9
54–55	0.004525	94,066	426	93,853	2,638,703	28.1
55–56	0.004987	93,640	467	93,407	2,544,849	27.2
56–57	0.005516	93,173	514	92,917	2,451,442	26.3
57–58	0.006092	92,660	565	92,377	2,358,526	25.5
58–59	0.006694	92,095	617	91,787	2,266,149	24.6
59–60	0.007324	91,479	670	91,144	2,174,362	23.8
60–61	0.008030	90,809	729	90,444	2,083,218	22.9
61–62	0.008834	90,079	796	89,681	1,992,774	22.1
62–63	0.009696	89,284	866	88,851	1,903,093	21.3
63–64	0.010603	88,418	937	87,949	1,814,242	20.5
64–65	0.011559	87,480	1,011	86,975	1,726,293	19.7
65–66	0.011559	86,469	1,088	85,925	1,639,318	19.0
		85,382	•		1,553,393	18.2
66–67	0.013568	00,30∠	1,158	84,802	1,000,083	10.2
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Table III. Life table for females: United States, 2000—Con.

	Probability of dying between ages x to x+1	Number surviving to age x	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	I <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
-68	0.014708	84,223	1,239	83,604	1,468,591	17.4
–69	0.016019	82,984	1,329	82,320	1,384,987	16.7
–70	0.017506	81,655	1,429	80,940	1,302,667	16.0
–71	0.019140	80,226	1,536	79,458	1,221,727	15.2
-72	0.021011	78,690	1,653	77,863	1,142,269	14.5
-73	0.023228	77.037	1.789	76.142	1.064.406	13.8
-74	0.025815	75,247	1,943	74,276	988,264	13.1
–75	0.028751	73,305	2,108	72,251	913,988	12.5
–76	0.032040	71,197	2,281	70,057	841,737	11.8
_77	0.035555	68,916	2,450	67,691	771,680	11.2
–78	0.039439	66,466	2,621	65,155	703,990	10.6
–79	0.043728	63,844	2,792	62,448	638,835	10.0
-80	0.048460	61,053	2,959	59,573	576,386	9.4
–81	0.053675	58,094	3,118	56,535	516,813	8.9
-82	0.059417	54,976	3,266	53,343	460.278	8.4
-83	0.065730	51,709	3,399	50,010	406,936	7.9
-84	0.072662	48,310	3,510	46,555	356,926	7.4
-85	0.080262	44,800	3,596	43,002	310,370	6.9
–86	0.088581	41,204	3,650	39,379	267,368	6.5
–87	0.097671	37,555	3,668	35,721	227,989	6.1
_88	0.107584	33,887	3,646	32,064	192,268	5.7
_89	0.118370	30,241	3,580	28,451	160,204	5.3
_90	0.130081	26,661	3,468	24,927	131,753	4.9
–91	0.142763	23,193	3,311	21,538	106,826	4.6
_92	0.156458	19,882	3,111	18,327	85,288	4.3
–93	0.171205	16,771	2,871	15,336	66,962	4.0
_94	0.187034	13,900	2,600	12,600	51,626	3.7
-95	0.203966	11,300	2,305	10,148	39,026	3.5
-96	0.222012	8,995	1,997	7,997	28,878	3.2
–97	0.241171	6,998	1,688	6,154	20,881	3.0
–98	0.261428	5,311	1,388	4,616	14,727	2.8
–99	0.282753	3,922	1,109	3,368	10,111	2.6
	0.305098	2,813	858	2,384	6,743	2.4
-100	1.000000	1,955	1,955	4,359	4,359	2.4

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Table IV. Life table for the white population: United States, 2000

					Total	
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
		_				
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
A		,	4	,	7	_
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_{x}$	$e_x$
0.1	0.00000	100.000	F70	00 504	7 700 004	77.0
0–1	0.005695	100,000	570	99,501	7,732,624	77.3
1–2	0.000465	99,430	46	99,407	7,633,124	76.8
2–3	0.000308	99,384	31	99,369	7,533,717	75.8
3–4	0.000220	99,354	22	99,343	7,434,348	74.8
4–5	0.000173	99,332	17	99,323	7,335,005	73.8
5–6	0.000176	99,315	17	99,306	7,235,682	72.9
	0.000107	· '				
•		99,298	16	99,290	7,136,375	71.9
7–8	0.000152	99,282	15	99,275	7,037,085	70.9
8–9	0.000140	99,267	14	99,260	6,937,811	69.9
9–10	0.000124	99,253	12	99,247	6,838,550	68.9
10–11	0.000112	99,241	11	99,236	6,739,303	67.9
11–12	0.000116	99,230	12	99,224	6,640,068	66.9
12–13	0.000154	99,218	15	99,211	6,540,843	65.9
		· ·	23	l '		
13–14	0.000235	99,203		99,191	6,441,633	64.9
14–15	0.000345	99,180	34	99,163	6,342,441	63.9
15–16	0.000467	99,146	46	99,122	6,243,278	63.0
16–17	0.000580	99,099	57	99,071	6,144,156	62.0
17–18	0.000673	99,042	67	99,009	6,045,086	61.0
18–19	0.000735	98,975	73	98,939	5,946,077	60.1
19–20	0.000774	98,902	77	98,864	5,847,138	59.1
20–21	0.000813	98,826	80	98,786	5.748.274	58.2
21–22	0.000854	98,746	84	98,703	5,649,488	57.2
		· ·			· ' '	
22–23	0.000874	98,661	86	98,618	5,550,785	56.3
23–24	0.000869	98,575	86	98,532	5,452,167	55.3
24–25	0.000847	98,489	83	98,448	5,353,634	54.4
25–26	0.000819	98,406	81	98,366	5,255,187	53.4
26–27	0.000799	98,325	79	98,286	5,156,821	52.4
27–28	0.000792	98,247	78	98,208	5,058,535	51.5
28–29	0.000804	98,169	79	98,130	4,960,327	50.5
29–30	0.000834	98,090	82	98,049	4,862,197	49.6
30–31	0.000871	98,008	85	97,966	4,764,148	48.6
		l ·	89	· ·		47.7
	0.000913	97,923		97,878	4,666,183	
32–33	0.000968	97,833	95	97,786	4,568,305	46.7
33–34	0.001045	97,739	102	97,688	4,470,518	45.7
34–35	0.001131	97,637	110	97,581	4,372,831	44.8
35–36	0.001221	97,526	119	97,467	4,275,249	43.8
36–37	0.001315	97,407	128	97,343	4,177,783	42.9
37–38	0.001422	97,279	138	97,210	4,080,439	41.9
38–39	0.001544	97,141	150	97,066	3,983,229	41.0
39–40	0.001681	96,991	163	96,909	3,886,164	40.1
	0.001831	· ·	177			39.1
44 40		96,828		96,739	3,789,254	
41–42	0.001989	96,650	192	96,554	3,692,515	38.2
42–43	0.002153	96,458	208	96,354	3,595,961	37.3
43–44	0.002325	96,251	224	96,139	3,499,607	36.4
44–45	0.002507	96,027	241	95,906	3,403,468	35.4
45–46	0.002708	95,786	259	95,656	3,307,561	34.5
46–47	0.002931	95,527	280	95,387	3,211,905	33.6
47–48	0.003171	95,247	302	95,096	3,116,518	32.7
48–49	0.003424	94,945	325	94,782	3,021,423	31.8
49–50	0.003690	94,620	349	94,445	2,926,641	30.9
50–51	0.003690	· ·				30.0
		94,270	375	94,083	2,832,196	
51–52	0.004283	93,896	402	93,695	2,738,113	29.2
52–53	0.004633	93,494	433	93,277	2,644,418	28.3
53–54	0.005044	93,060	469	92,826	2,551,141	27.4
54–55	0.005529	92,591	512	92,335	2,458,315	26.6
55–56	0.006104	92,079	562	91,798	2,365,980	25.7
56–57	0.006755	91,517	618	91,208	2,274,182	24.8
57–58	0.007459	90,899	678	90,560	2,182,974	24.0
58–59	0.008183	90,221	738	89,852	2,092,414	23.2
59–60	0.008934	89,483	799	89,083	2,002,562	22.4
		l ·		· ·		
60–61	0.009777	88,683	867	88,250	1,913,479	21.6
61–62	0.010747	87,816	944	87,344	1,825,229	20.8
62–63	0.011792	86,873	1,024	86,360	1,737,885	20.0
63–64	0.012892	85,848	1,107	85,295	1,651,525	19.2
64–65	0.014053	84,741	1,191	84,146	1,566,230	18.5
65–66	0.015266	83,550	1,275	82,913	1,482,084	17.7
66–67	0.016492	82,275	1,357	81,597	1,399,171	17.0
	0.0.0102	-,_,	.,507	0.,007	.,555,171	

Table IV. Life table for the white population: United States, 2000—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
7–68	0.017931	80,918	1,451	80,193	1,317,575	16.3
8–69	0.019605	79,467	1,558	78,688	1,237,382	15.6
9–70	0.021480	77,909	1,674	77,073	1,158,694	14.9
0–71	0.023492	76,236	1,791	75,340	1,081,621	14.2
1–72	0.025718	74,445	1,915	73,488	1,006,281	13.5
2–73	0.028287	72,530	2,052	71,504	932,793	12.9
3–74	0.031238	70,479	2,202	69,378	861,289	12.2
1–75	0.034557	68.277	2,359	67,097	791,911	11.6
5–76	0.038254	65,918	2,522	64,657	724,814	11.0
6–77	0.042209	63,396	2,676	62,058	660,157	10.4
7–78	0.046554	60,720	2,827	59,307	598,099	9.9
3–79	0.051321	57,893	2,971	56,408	538,792	9.3
9–80	0.056548	54,922	3,106	53,369	482,384	8.8
)–81	0.062272	51,816	3,227	50,203	429,015	8.3
I–82	0.068533	48,590	3,330	46.925	378.812	7.8
2–83	0.075373	45,260	3,411	43,554	331,887	7.3
3–84	0.082836	41,848	3,467	40,115	288,333	6.9
1–85	0.092664	38,382	3,491	36,636	248,218	6.5
5–86	0.099803	34,891	3,482	33,149	211,582	6.1
5–87	0.109398	31,408	3,436	29,690	178,432	5.7
7–88	0.119793	27,972	3,351	26,297	148,742	5.3
B-89	0.131030	24,621	3,226	23,008	122,445	5.0
9-90	0.131030	21,395	3,063	19,864	99,437	4.6
0–91	0.156188	18,333	2,863	16,901	79,573	4.3
	0.170179	15,469	2,633	14,153	62,672	4.3 4.1
1–92	0.175179	12,837	2,377	11,648	48,519	3.8
3–94	0.201115	10,460	2,104	9,408	36,871	3.5
1–95	0.218090	8,356	1,822	7,445	27,462	3.3
	0.236074	6,534	1,542	5,763	20,017	3.3 3.1
i–96	0.255058	4,991	1,542	4,355	14,255	2.9
	0.275019	· '	· '		9,900	2.9 2.7
**		3,718	1,023	3,207		
3–99	0.295921	2,696	798	2,297	6,693	2.5
9–100	0.317716	1,898	603	1,596	4,396	2.3
00 and over	1.000000	1,295	1,295	2,799	2,799	2.2

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Table V. Life table for white males: United States, 2000

	Probability of dying between ages x to x+1	Number surviving to age x	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
0–1	0.006236	100,000	624	99,452	7,470,457	74.7
1–2	0.000507	99,376	50	99,351	7,371,004	74.2
2–3	0.000345	99,326	34	99,309	7,271,653	73.2
3–4	0.000260	99,292	26	99,279	7,172,344	72.2
–5	0.000193	99,266	19	99,256	7,073,065	71.3
-6	0.000186	99,247	18	99,238	6,973,809	70.3
-7	0.000178	99,228	18	99,220	6,874,571	69.3
-8	0.000171	99,211	17	99,202	6,775,352	68.3
–9	0.000156	99,194	15	99,186	6,676,150	67.3
–10	0.000134	99,178	13	99,172	6,576,964	66.3
–11	0.000117	99,165	12	99,159	6,477,792	65.3
-12	0.000123	99,153	12	99,147	6,378,633	64.3
–13	0.000177	99,141	18	99,132	6,279,485	63.3
–14	0.000291	99,124	29	99,109	6,180,353	62.3
–15	0.000447	99,095	44	99,073	6,081,244	61.4
–16	0.000618	99,050	61	99,020	5,982,171	60.4
–17	0.000776	98,989	77	98,951	5,883,151	59.4
–18	0.000912	98,912	90	98,867	5,784,201	58.5
–19	0.001016	98,822	100	98,772	5,685,333	57.5
–20	0.001092	98,722	108	98,668	5,586,561	56.6
l–21	0.001172	98,614	116	98,556	5,487,893	55.7
–22	0.001250	98,499	123	98,437	5,389,337	54.7
–23	0.001291	98,375	127	98,312	5,290,900	53.8
–24	0.001282	98,248	126	98,185	5,192,588	52.9
-25	0.001237	98,122	121	98,062	5,094,403	51.9
-26	0.001180	98,001	116	97,943	4,996,341	51.0
–27	0.001134	97,885	111	97,830	4,898,398	50.0
–28	0.001110	97,774	109	97,720	4,800,568	49.1
–29	0.001118	97,666	109	97,611	4,702,848	48.2
⊢30	0.001153	97,557	112	97,500	4,605,237	47.2
⊢31	0.001197	97,444	117	97,386	4,507,736	46.3
–32	0.001246	97,328	121	97,267	4,410,350	45.3
–33	0.001311 0.001401	97,206 97,079	127 136	97,143 97,011	4,313,083 4,215,941	44.4 43.4
–35	0.001502	96,943	146	96,870	4,118,930	42.5
–36	0.001502	96,797	156	96,719	4,022,059	41.6
–37	0.001716	96,641	167	96,558	3,925,340	40.6
–38	0.001720	96,475	179	96,385	3,828,782	39.7
–39	0.002010	96,295	194	96,199	3,732,397	38.8
–40	0.002182	96,102	210	95,997	3,636,199	37.8
–41	0.002367	95,892	227	95,779	3,540,202	36.9
–42	0.002562	95,665	245	95,543	3,444,423	36.0
-43	0.002776	95,420	265	95,288	3,348,880	35.1
–44	0.003010	95,155	286	95,012	3,253,593	34.2
–45	0.003267	94,869	310	94,714	3,158,581	33.3
<u>–46</u>	0.003554	94,559	336	94,391	3,063,867	32.4
–47	0.003863	94,223	364	94,041	2,969,476	31.5
′–48	0.004175	93,859	392	93,663	2,875,435	30.6
–49	0.004475	93,467	418	93,258	2,781,772	29.8
)–50	0.004769	93,049	444	92,827	2,688,514	28.9
⊢51	0.005074	92,605	470	92,370	2,595,687	28.0
–52	0.005416	92,135	499	91,886	2,503,317	27.2
–53	0.005815	91,636	533	91,370	2,411,431	26.3
-54	0.006305	91,103	574	90,816	2,320,061	25.5
-55	0.006901	90,529	625	90,217	2,229,245	24.6
-56	0.007610	89,904	684	89,562	2,139,028	23.8
-57	0.008410	89,220	750	88,845	2,049,466	23.0
-58	0.009275	88,470	821	88,059	1,960,621	22.2
-59	0.010162	87,649	891	87,204	1,872,562	21.4
-60	0.011078	86,759	961	86,278	1,785,358	20.6
–61	0.012103	85,797	1,038	85,278	1,699,080	19.8
-62	0.013283	84,759	1,126	84,196	1,613,802	19.0
2–63	0.014563	83,633	1,218	83,024	1,529,606	18.3
-64	0.015922	82,415	1,312	81,759	1,446,582	17.6
-65	0.017364	81,103	1,408	80,399	1,364,822	16.8
–66	0.018853 0.020427	79,695 78,192	1,502 1,597	78,944	1,284,423 1,205,480	16.1 15.4
			1 507	77,394		

Table V. Life table for white males: United States, 2000—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectatior of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
7–68	0.022300	76,595	1,708	75,741	1,128,086	14.7
–69	0.024504	74,887	1,835	73,969	1,052,345	14.1
-70	0.026967	73,052	1,970	72,067	978,376	13.4
-71	0.029578	71,082	2,102	70,031	906,309	12.8
-72	0.032406	68,979	2,235	67,862	836,278	12.1
-73	0.035609	66,744	2,377	65,556	768,416	11.5
-74	0.039241	64,367	2,526	63,105	702,861	10.9
-75	0.043298	61,842	2,678	60,503	639,756	10.3
-76	0.047790	59,164	2,827	57,750	579,253	9.8
-77	0.052559	56,337	2.961	54,856	521.503	9.3
-78	0.057774	53,376	3,084	51,834	466.647	8.7
-79	0.063473	50,292	3,192	48,696	414,813	8.2
-80	0.069692	47,100	3,282	45,458	366,118	7.8
-81	0.076471	43,817	3,351	42,142	320,659	7.3
-82	0.083850	40,466	3,393	38,770	278,517	6.9
-83	0.091870	37,073	3,406	35,370	239,748	6.5
-84	0.100572	33,667	3,386	31,974	204,377	6.1
-85	0.109999	30,281	3,331	28,616	172,403	5.7
-86	0.120192	26,950	3,239	25,331	143,787	5.3
-87	0.131190	23,711	3,111	22,156	118,456	5.0
-88	0.143031	20,601	2,947	19,127	96,300	4.7
i–89	0.155749	17,654	2,750	16,279	77,173	4.4
i–90	0.169374	14,904	2,524	13,642	60,893	4.1
i⊢91	0.183932	12,380	2,277	11,241	47,251	3.8
_92	0.199440	10,103	2,015	9,095	36,010	3.6
-93	0.215910	8,088	1,746	7,215	26,914	3.3
-94	0.233344	6,342	1,480	5,602	19,699	3.1
-95	0.251733	4,862	1,224	4,250	14,098	2.9
-96	0.271060	3,638	986	3,145	9,848	2.7
-97	0.291292	2,652	772	2,266	6,703	2.5
-98	0.312388	1,879	587	1,586	4,437	2.4
-99	0.334290	1,292	432	1,076	2,851	2.2
-100	0.356931	860	307	707	1,775	2.1
0 and over	1.000000	553	553	1,068	1,068	1.9

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Table VI. Life table for white females: United States, 2000

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	$l_x$	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
)–1	0.005127	100,000	513	99,550	7,985,431	79.9
–2	0.000422	99,487	42	99,466	7,885,881	79.3
-3	0.000269	99,445	27	99,432	7,786,414	78.3
-4	0.000177	99,419	18	99,410	7,686,982	77.3
-5	0.000153	99,401	15	99,393	7,587,572	76.3
-6	0.000146	99,386	15	99,379	7,488,179	75.3
-7	0.000138	99,371	14	99,364	7,388,801	74.4
-8	0.000131	99,358	13	99,351	7,289,436	73.4
-9	0.000123	99,345	12	99,338	7,190,085	72.4
-10	0.000114	99,332	11	99,327	7,090,747	71.4
-11	0.000106	99,321	11	99,316	6,991,420	70.4
-12	0.000109	99,310	11	99,305	6,892,104	69.4
-13	0.000130	99,300	13	99,293	6,792,799	68.4
-14	0.000176	99,287	17	99,278	6,693,506	67.4
-15	0.000237	99,269	23	99,258	6,594,228	66.4
-16	0.000307	99,246	30	99,231	6,494,971	65.4
-17	0.000371	99,215	37	99,197	6,395,740	64.5
/-18	0.000417	99,178	41	99,158	6,296,543	63.5
B-19	0.000436	99,137	43	99,116	6,197,385	62.5
)–20	0.000435	99,094	43	99,072	6,098,270	61.5
)–21	0.000430 0.000430	99,051	43	99,030	5,999,198	60.6
-22		99,008	43 42	98,987	5,900,168	59.6 58.6
2–23	0.000429 0.000430	98,966	43	98,945	5,801,181	57.6
–24	0.000430	98,923 98,881	43	98,902 98,859	5,702,237 5,603,335	56.7
-26	0.000433	98,838	43	98,816	5,504,475	55.7
i–27	0.000433	98,795	44	98,773	5,405,659	54.7
7–28	0.000447	98,750	45	98,728	5,306,886	53.7
i–29	0.000477	98,705	47	98,682	5,208,159	52.8
i–30	0.000502	98,658	50	98,633	5,109,477	51.8
<u>–31</u>	0.000531	98,609	52	98,582	5,010,844	50.8
-32	0.000566	98,556	56	98,528	4,912,261	49.8
Y=33	0.000612	98,500	60	98,470	4,813,733	48.9
-34	0.000677	98,440	67	98,407	4,715,263	47.9
-35	0.000749	98,373	74	98,337	4,616,856	46.9
-36	0.000822	98,300	81	98,259	4,518,519	46.0
-37	0.000897	98,219	88	98,175	4,420,260	45.0
–38	0.000979	98,131	96	98,083	4,322,085	44.0
-39	0.001072	98,035	105	97,982	4,224,002	43.1
-40	0.001176	97,930	115	97,872	4,126,020	42.1
H41	0.001291	97,815	126	97,751	4,028,148	41.2
-42	0.001411	97,688	138	97,619	3,930,396	40.2
2–43	0.001528	97,550	149	97,476	3,832,777	39.3
3–44	0.001637	97,401	159	97,322	3,735,301	38.3
-45	0.001747	97,242	170	97,157	3,637,979	37.4
i–46	0.001865	97,072	181	96,982	3,540,822	36.5
-47	0.002005	96,891	194	96,794	3,443,841	35.5
/-48	0.002177	96,697	210	96,591	3,347,047	34.6
-49	0.002386	96,486	230	96,371	3,250,455	33.7
<u>–50</u>	0.002627	96,256	253	96,130	3,154,084	32.8
-51	0.002890	96,003	277 304	95,864	3,057,955	31.9 30.9
-52	0.003171 0.003476	95,726 95,422	332	95,574 95,256	2,962,090 2,866,516	30.9
-54	0.003476	95,091	363	94,909	2,771,260	29.1
-55	0.003613	94,728	398	94,529	2,676,351	28.3
-56	0.004197	94,330	439	94,111	2,581,822	27.4
-57	0.004031	93,892	485	93,649	2,487,711	26.5
-58	0.005770	93,406	535	93,138	2,394,062	25.6
-59	0.006309	92,871	586	92,578	2,300,923	24.8
-60	0.006913	92,285	638	91,966	2,208,345	23.9
-61	0.007597	91,647	696	91,299	2,116,379	23.1
-62	0.008385	90,951	763	90,569	2,025,081	22.3
2–63	0.009230	90,188	832	89,772	1,934,511	21.4
3–64	0.010114	89,356	904	88,904	1,844,739	20.6
-65	0.011045	88,452	977	87,963	1,755,836	19.9
-00						
i–66	0.012039	87,475	1,053	86,948	1,667,872	19.1

Table VI. Life table for white females: United States, 2000—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	$T_x$	e <sub>x</sub>
7–68	0.014149	85,297	1,207	84,694	1,495,064	17.5
-69	0.015453	84,090	1,299	83,440	1,410,371	16.8
-70	0.016931	82,791	1,402	82,090	1,326,931	16.0
-71	0.018552	81,389	1,510	80,634	1,244,841	15.3
-72	0.020408	79,879	1,630	79,064	1,164,207	14.6
73	0.022608	78,249	1,769	77,364	1,085,143	13.9
74	0.025177	76,480	1,925	75,517	1,007,778	13.2
-75	0.028092	74,554	2,094	73,507	932,261	12.5
-76	0.031362	72,460	2,272	71,324	858,754	11.9
-77	0.034873	70,188	2.448	68,964	787,430	11.2
-78	0.038762	67,740	2,626	66,427	718,466	10.6
-79	0.043066	65,114	2,804	63,712	652,039	10.0
-80	0.047823	62,310	2,980	60,820	588,327	9.4
-81	0.053077	59,330	3,149	57,756	527,507	8.9
-82	0.058872	56,181	3,307	54,527	469,752	8.4
-83	0.065256	52,874	3,450	51,148	415,225	7.9
-84	0.072280	49,423	3,572	47,637	364,076	7.4
-85	0.079995	45,851	3,668	44,017	316,439	6.9
-86	0.088454	42,183	3,731	40,317	272,422	6.5
-87	0.097714	38,452	3,757	36,573	232,105	6.0
-88	0.107828	34,695	3,741	32,824	195,532	5.6
-89	0.118851	30,954	3,679	29,114	162,707	5.3
-90	0.130835	27,275	3,568	25,490	133,593	4.9
-91	0.143831	23,706	3,410	22,001	108,103	4.6
-92	0.157883	20,297	3,204	18,694	86,102	4.2
-93	0.173030	17,092	2,957	15,613	67,407	3.9
-94	0.189304	14,135	2,676	12,797	51,794	3.7
-95	0.206726	11,459	2,369	10,274	38,997	3.4
-96	0.225306	9,090	2,048	8,066	28,723	3.2
97	0.245040	7,042	1,726	6,179	20,657	2.9
-98	0.265909	5,316	1,414	4,610	14,478	2.7
-99	0.287878	3,903	1,124	3,341	9,868	2.5
-100	0.310893	2,779	864	2,347	6,527	2.3
				1 '	· · · · · · · · · · · · · · · · · · ·	2.2
100 and over	1.000000	1,915	1,915	4,180	4,180	2.

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Table VII. Life table for the black population: United States, 2000

			•			
					Total	
	Drobobility		Number	Darson Hoors		
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
		,			_	
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_x$
0–1	0.014139	100,000	1,414	98,759	7,176,895	71.8
1–2	0.000826	98,586	81	98,545	7,078,136	71.8
				· ·		
2–3	0.000532	98,505	52	98,479	6,979,591	70.9
3–4	0.000335	98,452	33	98,436	6,881,112	69.9
4–5	0.000302	98,419	30	98,405	6,782,676	68.9
5–6	0.000265	98,390	26	98,377	6,684,272	67.9
6–7	0.000237	98,364	23	98,352	6,585,895	67.0
7–8	0.000215	98,340	21	98,330	6,487,543	66.0
8–9	0.000196	98,319	19	98,310	6,389,213	65.0
9–10	0.000178	98,300	17	98,291	6,290,904	64.0
				· ·		
10–11	0.000169	98,282	17	98,274	6,192,613	63.0
11–12	0.000180	98,266	18	98,257	6,094,338	62.0
12–13	0.000227	98,248	22	98,237	5,996,081	61.0
13–14	0.000319	98,226	31	98,210	5,897,844	60.0
				· ·		
14–15	0.000446	98,195	44	98,173	5,799,634	59.1
15–16	0.000588	98,151	58	98,122	5,701,461	58.1
16–17	0.000732	98,093	72	98,057	5,603,340	57.1
		· '	86	· ·		
	0.000879	98,021		97,978	5,505,282	56.2
18–19	0.001026	97,935	101	97,885	5,407,304	55.2
19–20	0.001172	97,835	115	97,777	5,309,419	54.3
20–21	0.001334	97,720	130	97,655	5,211,642	53.3
				· ·		
21–22	0.001495	97,590	146	97,517	5,113,987	52.4
22–23	0.001612	97,444	157	97,365	5,016,470	51.5
23–24	0.001661	97,287	162	97,206	4,919,105	50.6
24–25	0.001660	97,125	161	97,044	4,821,899	49.6
		· '			' '	
25–26	0.001643	96,964	159	96,884	4,724,855	48.7
26–27	0.001640	96,804	159	96,725	4,627,971	47.8
27–28	0.001655	96,646	160	96,566	4,531,246	46.9
28–29	0.001701	96,486	164	96,404	4,434,680	46.0
		96,322	171	· ·		
29–30	0.001774			96,236	4,338,276	45.0
30–31	0.001858	96,151	179	96,061	4,242,040	44.1
31–32	0.001947	95,972	187	95,879	4,145,978	43.2
32–33	0.002061	95,785	197	95,687	4,050,100	42.3
33–34			207		1 1	41.4
	0.002168	95,588		95,484	3,954,413	
34–35	0.002298	95,381	219	95,271	3,858,929	40.5
35–36	0.002433	95,161	232	95,046	3,763,658	39.6
36–37	0.002585	94,930	245	94,807	3,668,612	38.6
37–38	0.002776	94,685	263	94,553	3,573,805	37.7
				· ·	· ' '	
38–39	0.003021	94,422	285	94,279	3,479,252	36.8
39–40	0.003313	94,136	312	93,981	3,384,973	36.0
40–41	0.003627	93,825	340	93,654	3,290,992	35.1
41–42	0.003954	93,484	370	93,299	3,197,338	34.2
42–43	0.004315	93,115	402	92,914	3,104,039	33.3
				· ·		
43–44	0.004717	92,713	437	92,494	3,011,125	32.5
44–45	0.005160	92,276	476	92,037	2,918,631	31.6
45–46	0.005653	91,799	519	91,540	2,826,593	30.8
46–47	0.006180	91,280	564	90,998	2,735,053	30.0
47–48		90,716	608	· ·		29.1
	0.006707			90,412	2,644,055	
48–49	0.007208	90,108	650	89,783	2,553,643	28.3
49–50	0.007691	89,458	688	89,114	2,463,860	27.5
50–51	0.008205	88,770	728	88,406	2,374,746	26.8
51–52	0.008772	88,042	772	87,656	2,286,340	26.0
				· ·		
52–53	0.009370	87,270	818	86,861	2,198,684	25.2
53–54	0.010014	86,452	866	86,019	2,111,823	24.4
54–55	0.010727	85,586	918	85,127	2,025,804	23.7
55–56	0.011535	84,668	977	84,180	1,940,677	22.9
				· ·		
56–57	0.012451	83,691	1,042	83,170	1,856,497	22.2
57–58	0.013455	82,649	1,112	82,093	1,773,327	21.5
58–59	0.014501	81,537	1,182	80,946	1,691,233	20.7
59–60	0.015560	80,355	1,250	79,730	1,610,287	20.0
			1			
60–61	0.016650	79,105	1,317	78,446	1,530,557	19.3
61–62	0.017819	77,788	1,386	77,095	1,452,111	18.7
62–63	0.019078	76,402	1,458	75,673	1,375,017	18.0
63–64	0.019070				1,299,344	
		74,944	1,534	74,177	1 1	17.3
64–65	0.022016	73,410	1,616	72,602	1,225,167	16.7
		74 704	4 007	70.045	1 1 1 5 0 5 0 5	104
65–66	0.023634	71,794	1,697	70,945	1,152,565	16.1
65–66	0.023634 0.025298	71,794 70,097	1,697	69,210	1,152,565	15.4

Table VII. Life table for the black population: United States, 2000—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectatior of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
7–68	0.027185	68,323	1,857	67,395	1,012,410	14.8
_69	0.029311	66,466	1,948	65,492	945,015	14.2
-70	0.031633	64,518	2,041	63,497	879,523	13.6
-71	0.034086	62,477	2,130	61,412	816,026	13.1
-72	0.036695	60,347	2.214	59,240	754,613	12.5
-73	0.039546	58,133	2,299	56,984	695,373	12.0
-74	0.042666	55,834	2,382	54,643	638,390	11.4
-75	0.046054	53,452	2,462	52,221	583,747	10.9
-76	0.049712	50,990	2,535	49,723	531,526	10.4
-77	0.053593	48,455	2,597	47,157	481.803	9.9
-78	0.057758	45,859	2,649	44,534	434,646	9.5
-79	0.062227	43,210	2,689	41,865	390,112	9.0
-80	0.067016	40,521	2,716	39,163	348,246	8.6
-81	0.072145	37,805	2,727	36,442	309,083	8.2
-82	0.077634	35,078	2,723	33,716	272,641	7.8
-83	0.083504	32,355	2,702	31,004	238,925	7.4
-84	0.089774	29,653	2,662	28,322	207,921	7.0
-85	0.096465	26,991	2,604	25,689	179,599	6.7
-86	0.103598	24,387	2,526	23,124	153,910	6.3
-87	0.111194	21,861	2,431	20,645	130,786	6.0
-88	0.119273	19,430	2,317	18,271	110,141	5.7
_89	0.127854	17,113	2,188	16,019	91,870	5.4
i–90	0.136956	14,925	2,044	13,903	75,851	5.1
<b>–91</b>	0.146598	12,881	1,888	11,936	61,948	4.8
_92	0.156795	10,992	1,724	10,131	50,012	4.5
-93	0.167562	9,269	1,553	8,492	39,881	4.3
i–94	0.178911	7,716	1,380	7,025	31,389	4.1
-95	0.190853	6,335	1,209	5,731	24,364	3.8
-96	0.203395	5,126	1,043	4,605	18,633	3.6
-97	0.216540	4,084	884	3,641	14,028	3.4
-98	0.230289	3,199	737	2,831	10,387	3.2
-99	0.244639	2,463	602	2,161	7,556	3.1
-100	0.259581	1,860	483	1,619	5,394	2.9
0 and over	1.000000	1,377	1,377	3,776	3,776	2.7

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Table VIII. Life table for black males: United States, 2000

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	$T_{x}$	$e_x$
0–1	0.015561	100,000	1,556	98,632	6,819,067	68.2
1–2	0.000925	98,444	91	98,398	6,720,435	68.3
2–3	0.000578	98,353	57	98,324	6,622,036	67.3
3–4	0.000379	98,296	37	98,277	6,523,712	66.4
1–5	0.000297	98,259	29	98,244	6,425,434	65.4
5–6	0.000291	98,230	29	98,215	6,327,190	64.4
5–7	0.000268	98,201	26	98,188	6,228,975	63.4
7–8	0.000248	98,175	24	98,162	6,130,787	62.4
3-9	0.000223	98,150	22	98,139	6,032,625	61.5
) <del>-</del> 10	0.000193 0.000172	98,128	19 17	98,119	5,934,485	60.5 59.5
)–11	0.000172	98,109 98,093	18	98,101 98,084	5,836,366 5,738,265	58.5
2–13	0.000162	98,075	25	98,062	5,640,182	57.5
) <del>-</del> 14	0.000233	98,050	39	98,030	5,542,120	56.5
-15	0.000402	98,010	60	97,981	5,444,089	55.5
i–16	0.000842	97,951	82	97,909	5,346,109	54.6
i–17	0.001072	97,868	105	97,816	5,248,199	53.6
7–18	0.001309	97,763	128	97,699	5,150,384	52.7
3–19	0.001548	97,635	151	97,560	5,052,684	51.8
)–20	0.001788	97,484	174	97,397	4,955,125	50.8
)–21	0.002058	97,310	200	97,210	4,857,727	49.9
-22	0.002328	97,110	226	96,997	4,760,518	49.0
!–23	0.002519	96,884	244	96,762	4,663,521	48.1
–24	0.002588	96,640	250	96,515	4,566,759	47.3
–25	0.002560	96,390	247	96,266	4,470,245	46.4
–26	0.002499	96,143	240	96,023	4,373,979	45.5
–27	0.002455	95,902	235	95,785	4,277,956	44.6
7–28	0.002430	95,667	233	95,551	4,182,171	43.7
3–29	0.002447	95,435	234	95,318	4,086,620	42.8
)–30	0.002499	95,201	238	95,082	3,991,303	41.9
0–31	0.002560	94,963	243	94,842	3,896,221	41.0
-32	0.002626	94,720 94,471	249	94,596	3,801,379	40.1
!=33	0.002740 0.002837	94,471	259 267	94,342 94,079	3,706,783 3,612,442	39.2 38.3
i=35	0.002837	93,945	280	93,805	3,518,363	37.5
i–36	0.002303	93,665	294	93,518	3,424,558	36.6
i=37	0.003317	93,371	310	93,216	3,331,040	35.7
/–38	0.003547	93,061	330	92,896	3,237,824	34.8
3–39	0.003843	92,731	356	92,553	3,144,928	33.9
)–40	0.004199	92,375	388	92,181	3,052,375	33.0
)–41	0.004585	91,987	422	91,776	2,960,194	32.2
-42	0.004990	91,565	457	91,337	2,868,418	31.3
2–43	0.005444	91,108	496	90,860	2,777,081	30.5
J–44	0.005957	90,612	540	90,342	2,686,221	29.6
-45	0.006531	90,073	588	89,778	2,595,878	28.8
-46	0.007174	89,484	642	89,163	2,506,100	28.0
i–47	0.007865	88,842	699	88,493	2,416,937	27.2
/-48	0.008569	88,144	755	87,766	2,328,444	26.4
-49	0.009253	87,388	809	86,984	2,240,678	25.6
-50	0.009924	86,580	859	86,150	2,153,693	24.9
-51	0.010637	85,721	912	85,265	2,067,543	24.1
-52	0.011417	84,809	968	84,325	1,982,279	23.4
–53	0.012241 0.013128	83,840	1,026	83,327	1,897,954 1,814,627	22.6
-55	0.013126	82,814 81,727	1,087 1,153	82,271 81,151	1,732,356	21.9 21.2
-56	0.014107	80,574	1,227	79,961	1,651,206	20.5
-57	0.016478	79,347	1,308	78,694	1,571,245	19.8
_58	0.017796	78,040	1,389	77,345	1,492,551	19.1
i–59	0.019075	76,651	1,462	75,920	1,415,206	18.5
-60	0.020288	75,189	1,525	74,426	1,339,286	17.8
i–61	0.021493	73,664	1,583	72,872	1,264,859	17.2
-62	0.022798	72,080	1,643	71,259	1,191,987	16.5
2-63	0.024242	70,437	1,708	69,583	1,120,729	15.9
3–64	0.025920	68,730	1,781	67,839	1,051,145	15.3
l <del>-</del> 65	0.027846	66,948	1,864	66,016	983,307	14.7
i–66	0.029868	65,084	1,944	64,112	917,291	14.1
6–67	0.032125	63,140	2,028	62,126	853,179	13.5
		1		I .		I

Table VIII. Life table for black males: United States, 2000—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectatior of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
' <del>-</del> 68	0.034716	61,112	2,122	60,051	791,053	12.9
–69	0.037662	58,990	2,222	57,879	731,002	12.4
<b>⊢</b> 70	0.040876	56,768	2,320	55,608	673,123	11.9
–71	0.044245	54,448	2,409	53,243	617,515	11.3
-72	0.047737	52,039	2,484	50,797	564,272	10.8
-73	0.051408	49,555	2,548	48,281	513,475	10.4
–74	0.055290	47,007	2,599	45,708	465,194	9.9
–75	0.059428	44,408	2,639	43,089	419,487	9.4
–76	0.063864	41,769	2,668	40,435	376,398	9.0
-77	0.068529	39,101	2,680	37,762	335,963	8.6
_78	0.073508	36,422	2,677	35,083	298,202	8.2
–79	0.078818	33,745	2,660	32,415	263,118	7.8
-80	0.084477	31,085	2,626	29,772	230,704	7.4
⊢81	0.090502	28,459	2,576	27,171	200,932	7.1
-82	0.096911	25,883	2,508	24,629	173,761	6.7
<u>–83</u>	0.103722	23,375	2,425	22,163	149,131	6.4
i–84	0.110953	20,950	2,325	19,788	126,969	6.1
-85	0.118622	18,626	2,209	17,521	107,180	5.8
i–86	0.126745	16,417	2,081	15,376	89,659	5.5
i–87	0.135339	14,336	1,940	13,366	74,283	5.2
<del>'</del> -88	0.144420	12,396	1,790	11,501	60,917	4.9
9 <del>-</del> 89	0.154001	10,605	1,633	9,789	49,417	4.7
)–90	0.164095	8,972	1,472	8,236	39,628	4.4
)–91	0.174715	7,500	1,310	6,845	31,392	4.2
-92	0.185870	6.190	1,150	5,614	24.547	4.0
-93	0.197566	5,039	996	4,541	18,933	3.8
-94	0.209808	4,044	848	3,619	14,392	3.6
–95	0.222598	3,195	711	2,840	10,772	3.4
-96	0.235936	2,484	586	2,191	7,933	3.2
-97	0.249815	1,898	474	1,661	5,742	3.0
-98	0.264229	1,424	376	1,236	4,081	2.9
_99	0.279165	1.048	292	901	2,845	2.7
-100	0.294607	755	222	644	1,944	2.6
0 and over	1.000000	533	533	1,300	1,300	2.4

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Table IX. Life table for black females: United States, 2000

					Total	
	D l l 10.		NI	D		
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
Age	$q_x$	$I_x$	$d_{x}$	L <sub>x</sub>	$T_x$	$e_x$
	11.	*	- X	×	*	- X
0.4	0.010070	100,000	1.007	00.000	3 503 115	75.4
0–1	0.012672	100,000	1,267	98,890	7,507,115	75.1
1–2	0.000724	98,733	71	98,697	7,408,225	75.0
2–3	0.000483	98,661	48	98,638	7,309,528	74.1
		l '				
3–4	0.000291	98,614	29	98,599	7,210,890	73.1
4–5	0.000306	98,585	30	98,570	7,112,291	72.1
5–6	0.000238	98,555	23	98,543	7,013,721	71.2
6–7	0.000204	98,531	20	98,521	6,915,178	70.2
7–8	0.000181	98,511	18	98,502	6,816,656	69.2
8–9	0.000167	98,493	16	98,485	6,718,154	68.2
9–10	0.000162	98,477	16	98,469	6,619,669	67.2
		· '				
10–11	0.000165	98,461	16	98,453	6,521,200	66.2
11–12	0.000177	98,445	17	98,436	6,422,747	65.2
12–13	0.000200	98,427	20	98,417	6,324,311	64.3
		· '		· '		
13–14	0.000234	98,408	23	98,396	6,225,894	63.3
14–15	0.000276	98,385	27	98,371	6,127,498	62.3
15–16	0.000326	98,357	32	98,341	6,029,127	61.3
16–17	0.000380	98,325	37	98,307	5.930.785	60.3
		· '		· '	-,,	
17–18	0.000437	98,288	43	98,267	5,832,479	59.3
18–19	0.000496	98,245	49	98,221	5,734,212	58.4
19–20	0.000556	98,196	55	98,169	5,635,991	57.4
		· '		· '		
20–21	0.000624	98,142	61	98,111	5,537,822	56.4
21–22	0.000694	98,081	68	98,047	5,439,711	55.5
22–23	0.000754	98,012	74	97,975	5,341,665	54.5
	0.000797	· '	78	i i		53.5
		97,939		97,900	5,243,689	
24–25	0.000828	97,861	81	97,820	5,145,790	52.6
25–26	0.000859	97,779	84	97,738	5,047,970	51.6
26–27	0.000900	97,696	88	97,652	4,950,232	50.7
				i i		
27–28	0.000955	97,608	93	97,561	4,852,581	49.7
28–29	0.001030	97,514	100	97,464	4,755,020	48.8
29–30	0.001122	97,414	109	97,359	4,657,555	47.8
30–31	0.001225	97,305	119	97,245	4,560,196	46.9
31–32	0.001334	97,186	130	97,121	4,462,951	45.9
32–33	0.001452	97,056	141	96,985	4,365,830	45.0
33–34	0.001566	96,915	152	96,839	4,268,845	44.0
					1 '	
	0.001686	96,763	163	96,682	4,172,006	43.1
35–36	0.001804	96,600	174	96,513	4,075,324	42.2
36–37	0.001935	96,426	187	96,333	3,978,811	41.3
37–38	0.002093	96,239	201	96,139	3,882,479	40.3
		l '				
38–39	0.002292	96,038	220	95,928	3,786,340	39.4
39–40	0.002527	95,818	242	95,697	3,690,412	38.5
40–41	0.002778	95,575	266	95,443	3,594,716	37.6
				1 '	l _''	l
41–42	0.003035	95,310	289	95,165	3,499,273	36.7
42–43	0.003315	95,021	315	94,863	3,404,108	35.8
43–44	0.003621	94,706	343	94,534	3,309,245	34.9
44–45	0.003954	94,363	373	94,176	3,214,710	34.1
45–46	0.004323	93,990	406	93,786	3,120,534	33.2
				i i		
46–47	0.004713	93,583	441	93,363	3,026,748	32.3
47–48	0.005093	93,142	474	92,905	2,933,385	31.5
48–49	0.005441	92,668	504	92,416	2,840,480	30.7
49–50	0.005765	92,164	531	91,898	2,748,064	29.8
				i i		
50–51	0.006110	91,632	560	91,352	2,656,166	29.0
51–52	0.006499	91,072	592	90,777	2,564,814	28.2
52–53	0.006913	90,481	625	90,168	2,474,037	27.3
53–54	0.007364	89,855	662	89,524	2,383,869	26.5
				i i		
54–55	0.007873	89,193	702	88,842	2,294,345	25.7
55–56	0.008448	88,491	748	88,117	2,205,503	24.9
56–57	0.009114	87,744	800	87,344	2,117,385	24.1
57–58	0.009894	86,944	860	86,514	2,030,041	23.3
58–59	0.010776	86,084	928	85,620	1,943,527	22.6
59–60	0.011731	85,156	999	84,657	1,857,907	21.8
					1 '	
60–61	0.012749	84,157	1,073	83,621	1,773,251	21.1
61–62	0.013834	83,084	1,149	82,510	1,689,630	20.3
62-63	0.014976	81,935	1,227	81,321	1,607,120	19.6
63–64	0.014370	80,708	1,307	80,055	1,525,799	18.9
			· ·			
64–65	0.017490	79,401	1,389	78,707	1,445,744	18.2
65–66	0.018858	78,013	1,471	77,277	1,367,037	17.5
66–67	0.020213	76,541	1,547	75,768	1,289,760	16.9
	0.020210	10,071	1,0-7	70,700	1,200,700	10.0

Table IX. Life table for black females: United States, 2000—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
7–68	0.021729	74,994	1,630	74,180	1,213,993	16.2
-69	0.023421	73,365	1,718	72,506	1,139,813	15.5
-70	0.025280	71,646	1,811	70,741	1,067,308	14.9
-71	0.027269	69,835	1,904	68,883	996,567	14.3
-72	0.029448	67,931	2,000	66,931	927,684	13.7
-73	0.031910	65,930	2,104	64,879	860.753	13.1
-74	0.034680	63,827	2,214	62,720	795,874	12.5
-75	0.037732	61,613	2,325	60,451	733,155	11.9
-76	0.041050	59,288	2,434	58,071	672,704	11.3
-77	0.044573	56,855	2,534	55,587	614,632	10.8
-78	0.048383	54,320	2,628	53,006	559,045	10.3
-79	0.052500	51,692	2,714	50,335	506,039	9.8
-80	0.056947	48,978	2,789	47,584	455,703	9.3
-81	0.061746	46,189	2,852	44,763	408,120	8.8
-82	0.066921	43,337	2,900	41,887	363,356	8.4
-83	0.072496	40,437	2,932	38,971	321,469	7.9
-84	0.078497	37,505	2,944	36,033	282,498	7.5
-85	0.084948	34,561	2,936	33,093	246,465	7.1
-86	0.091877	31,625	2,906	30,173	213,371	6.7
-87	0.099310	28,720	2,852	27,294	183,199	6.4
-88	0.107273	25,868	2,775	24,480	155,905	6.0
	0.107273	23,093	2,674	21,756	131,425	5.7
	0.113793	,	2,550	19,144	109,669	5.7 5.4
	0.124694	20,419 17,869	2,405	16,666	90,526	5.4 5.1
-	0.134602	,	2,405	· · · · · · · · · · · · · · · · · · ·		4.8
*=	0.155928	15,463 13,222	2,241	14,343 12,191	73,860 59,517	4.8 4.5
11	0.155926	11,160	1,870	10,225	47,326	4.5
-	0.179931		1,672			4.2
	0.179931	9,290		8,454	37,100	
-96		7,619	1,470	6,883	28,646	3.8
-97	0.206723	6,148	1,271	5,513	21,763	3.5
-98	0.221184	4,877	1,079	4,338	16,250	3.3
-99	0.236355	3,799	898	3,350	11,912	3.1
-100	0.252229	2,901	732	2,535	8,562	3.0
0 and over	1.000000	2,169	2,169	6,027	6,027	2.8

# 2001

Table I. Life table for the total population: United States, 2001

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	T <sub>x</sub>	$e_{\scriptscriptstyle X}$
0–1	0.006842	100,000	684	99,404	7,687,420	76.9
1–2	0.000522	99,316	52	99,290	7,588,016	76.4
2–3	0.000335	99,264	33	99,247	7,488,726	75.4
3–4	0.000251	99,231	25	99,218	7,389,479	74.5
4–5	0.000207 0.000182	99,206 99,185	21 18	99,196 99,176	7,290,260 7,191,065	73.5 72.5
5–6	0.000162	99,167	17	99,159	7,191,003	72.5 71.5
7–8	0.000107	99,151	15	99,143	6,992,730	70.5
3–9	0.000140	99,135	14	99,128	6,893,587	69.5
9–10	0.000123	99,121	12	99,115	6,794,458	68.5
)–11	0.000110	99,109	11	99,104	6,695,343	67.6
–12	0.000116	99,098	11	99,093	6,596,239	66.6
2–13	0.000154	99,087	15	99,079	6,497,147	65.6
3–14	0.000234	99,071	23	99,060	6,398,068	64.6
-15	0.000344	99,048	34	99,031	6,299,008	63.6
5–16	0.000469	99,014	46	98,991	6,199,977	62.6
5–17	0.000589	98,968	58	98,939	6,100,986	61.6
7–18	0.000693 0.000772	98,910	69 76	98,875	6,002,047	60.7
3–19	0.000772	98,841 98,765	82	98,803 98,724	5,903,172 5,804,369	59.7 58.8
)–21	0.000827	98,683	87	98,639	5,705,645	57.8
-22	0.000032	98,596	93	98,550	5,607,006	56.9
<u>–23</u>	0.000973	98,503	96	98,455	5,508,456	55.9
<u>–24</u>	0.000983	98,408	97	98,359	5,410,001	55.0
–25	0.000974	98,311	96	98,263	5,311,641	54.0
–26	0.000959	98,215	94	98,168	5,213,378	53.1
i–27	0.000951	98,121	93	98,074	5,115,210	52.1
7–28	0.000950	98,028	93	97,981	5,017,136	51.2
1–29	0.000962	97,934	94	97,887	4,919,155	50.2
H=30	0.000987	97,840	97	97,792	4,821,268	49.3
J <del>-</del> 31	0.001015	97,744	99	97,694	4,723,476	48.3
-32	0.001052	97,644	103	97,593	4,625,782	47.4
2–33	0.001114	97,542	109	97,487	4,528,189	46.4
-34	0.001191	97,433	116	97,375	4,430,701	45.5
i–35	0.001293 0.001406	97,317	126 137	97,254	4,333,326 4,236,072	44.5 43.6
5–36	0.001406	97,191 97,055	148	97,123 96,981	4,236,072	43.6 42.6
/ <del>-</del> 38	0.001523	96,907	160	96,827	4,041,968	41.7
3–39	0.001779	96,747	172	96,661	3,945,141	40.8
i–40	0.001917	96,575	185	96,482	3,848,480	39.8
)–41	0.002062	96,390	199	96,290	3,751,998	38.9
-42	0.002216	96,191	213	96,084	3,655,708	38.0
2–43	0.002385	95,978	229	95,863	3,559,623	37.1
-44	0.002575	95,749	247	95,626	3,463,760	36.2
1–45	0.002789	95,502	266	95,369	3,368,134	35.3
5–46	0.003023	95,236	288	95,092	3,272,765	34.4
5–47	0.003274	94,948	311	94,793	3,177,673	33.5
7–48	0.003543	94,637	335	94,470	3,082,880	32.6
-49	0.003821	94,302	360	94,122	2,988,410	31.7
-50	0.004109	93,942	386	93,749	2,894,288	30.8
–51	0.004416 0.004747	93,556 93,143	413 442	93,349 92,922	2,800,540 2,707,190	29.9 29.1
-53	0.004747	92,701	473	92,464	2,614,269	28.2
-54	0.005102	92,228	507	91,974	2,521,805	27.3
-55	0.005941	91,721	545	91,448	2,429,831	26.5
i–56	0.006460	91,176	589	90,881	2,338,382	25.6
i–57	0.007053	90,587	639	90,267	2,247,501	24.8
7–58	0.007712	89,948	694	89,601	2,157,234	24.0
3–59	0.008420	89,254	752	88,878	2,067,633	23.2
)–60	0.009181	88,503	812	88,096	1,978,754	22.4
)–61	0.010041	87,690	880	87,250	1,890,658	21.6
-62	0.011020	86,810	957	86,331	1,803,408	20.8
1-02	0.011020	00,010	007	00,00.	1,000,100	20.0

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Table I. Life table for the total population: United States, 2001—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age x
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	$e_{x}$
Age  63–64 64–65 65–66 656–67 77–68 68–69 69–70 70–71 71–72 72–73 73–74 74–75 75–76 76–77 77–78 78–79 90–80 30–81 31–82 32–83 33–84 434–85 35–86 36–87 37–88 38–89 38–90 30–91 91–92	qx         0.013167         0.014321         0.015542         0.016784         0.018223         0.019876         0.021722         0.025920         0.028478         0.031414         0.034711         0.038371         0.042273         0.046552         0.051240         0.056374         0.061988         0.068120         0.074811         0.082102         0.090033         0.098649         0.107991         0.118101         0.129022         0.140791         0.153445         0.167014	l <sub>x</sub> 84,817 83,700 82,501 81,219 79,856 78,401 76,842 75,173 73,391 71,489 69,453 67,271 64,936 62,444 59,805 57,021 54,099 51,049 47,885 44,623 41,284 37,895 34,483 31,081 27,725 24,451 21,296 18,298 15,490	d <sub>x</sub> 1,117 1,199 1,282 1,363 1,455 1,558 1,669 1,782 1,902 2,036 2,182 2,335 2,492 2,640 2,784 2,922 3,050 3,164 3,262 3,338 3,390 3,412 3,402 3,357 3,274 3,155 2,998 2,808 2,587	L <sub>x</sub> 84,258 83,101 81,860 80,538 79,128 77,622 76,008 74,282 72,440 70,471 68,362 66,103 63,690 61,124 58,413 55,560 52,574 49,467 46,254 42,954 39,590 36,189 32,782 29,403 26,088 22,873 19,797 16,894 14,196	T <sub>x</sub> 1,631,741 1,547,483 1,464,382 1,382,522 1,301,984 1,222,856 1,145,235 1,069,227 994,945 922,505 852,034 783,672 717,569 653,879 592,754 534,342 478,782 426,208 376,741 330,487 287,534 247,944 211,755 178,973 149,569 123,482 100,608 80,811 63,918	9x 19.2 18.5 17.7 17.0 16.3 15.6 14.9 14.2 13.6 12.9 12.3 11.6 11.1 10.5 9.9 9.4 8.9 8.3 7.9 7.4 7.0 6.5 6.1 5.8 5.4 5.1 4.7 4.4 4.1
2-93 3-94 4-95 5-96 6-97	0.181527 0.197002 0.213453 0.230882 0.249283 0.268639	12,903 10,561 8,480 6,670 5,130 3,851	2,342 2,080 1,810 1,540 1,279 1,035	11,732 9,520 7,575 5,900 4,491 3,334	49,721 37,989 28,469 20,894 14,994 10,503	3.9 3.6 3.4 3.1 2.9 2.7
8-99 9-100 00 and over	0.288919 0.310081 1.000000	2,817 2,003 1,382	814 621 1,382	2,410 1,692 3,067	7,169 4,759 3,067	2.5 2.4 2.2

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Table II. Life table for males: United States, 2001

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
0–1	0.007514	100,000	751	99,344	7,421,341	74.2
1–2	0.000567	99,249	56	99,220	7,321,997	73.8
2–3	0.000376	99,192	37	99,174	7,222,777	72.8
3–4	0.000281	99,155	28	99,141	7,123,603	71.8
–5	0.000237	99,127	23	99,115	7,024,462	70.9
–6	0.000200	99,104	20	99,094	6,925,347	69.9
5–7	0.000185	99,084	18	99,075	6,826,253	68.9
/–8	0.000172	99,066	17	99,057	6,727,178	67.9
-9	0.000152	99,049	15	99,041	6,628,121	66.9
H10	0.000127	99,033	13	99,027	6,529,080	65.9
–11	0.000109	99,021	11	99,015	6,430,053	64.9
-12	0.000117	99,010	12	99,004	6,331,037	63.9
-13	0.000173	98,998	17	98,990	6,232,033	63.0
⊢14	0.000290	98,981	29	98,967	6,133,043	62.0
-15	0.000453	98,953	45	98,930	6,034,076	61.0
5–16	0.000634	98,908	63	98,877	5,935,146	60.0
5–17	0.000807	98,845	80	98,805	5,836,269	59.0
7–18	0.000965	98,765	95	98,718	5,737,464	58.1
3–19	0.001093	98,670	108	98,616	5,638,746	57.1
9–20	0.001194	98,562	118	98,503	5,540,130	56.2
)–21	0.001298	98,445	128	98,381	5,441,627	55.3
1–22	0.001398	98,317	137	98,248	5,343,246	54.3
2–23	0.001457	98,179	143	98,108	5,244,998	53.4
3–24	0.001466	98,036	144	97,964	5,146,890	52.5
l–25	0.001437	97,893	141	97,822	5,048,926	51.6
i–26	0.001393	97,752	136	97,684	4,951,104	50.6
6–27	0.001358 0.001334	97,616	133 130	97,550	4,853,420	49.7 48.8
–20	0.001334	97,483	130	97,418	4,755,870	47.9
) <del>-</del> 29	0.001356	97,353 97,223	132	97,288 97,157	4,658,452 4,561,164	46.9
)–30	0.001382	97,223	134	97,157	4,464,006	46.9
1–32	0.001362	96,957	137	96,889	4,366,982	45.0
2–32	0.001416	,	144			44.1
:33	0.001466	96,820 96,676	152	96,748 96,600	4,270,094 4,173,345	43.2
1–35	0.001572	96,524	164	96,442	4,076,745	42.2
i–35	0.001831	96,361	176	96,272	3,980,303	41.3
5–37	0.001975	96,184	190	96,089	3,884,031	40.4
7–38	0.001373	95,994	204	95,892	3,787,942	39.5
3–39	0.002120	95,790	219	95,681	3,692,050	38.5
9–40	0.0022425	95,571	234	95,455	3,596,369	37.6
)–41	0.002615	95,338	249	95,213	3,500,914	36.7
-42	0.002800	95,088	266	94,955	3,405,701	35.8
2–43	0.003012	94,822	286	94,679	3,310,746	34.9
3–44	0.003263	94,537	308	94,382	3,216,066	34.0
1–45	0.003552	94,228	335	94,061	3,121,684	33.1
5–46	0.003872	93,893	364	93,712	3,027,623	32.2
6–47	0.004211	93,530	394	93,333	2,933,911	31.4
7–48	0.004561	93,136	425	92,924	2,840,579	30.5
3–49	0.004908	92,711	455	92,484	2,747,655	29.6
9–50	0.005253	92,256	485	92,014	2,655,171	28.8
)–51	0.005618	91,772	516	91,514	2,563,157	27.9
–52	0.006014	91,256	549	90,982	2,471,643	27.1
2–53	0.006438	90,707	584	90,415	2,380,662	26.2
l <del>-</del> 54	0.006907	90,123	622	89,812	2,290,247	25.4
–55	0.007442	89,501	666	89,168	2,200,435	24.6
-56	0.008063	88,835	716	88,477	2,111,267	23.8
-57	0.008771	88,118	773	87,732	2,022,790	23.0
-58	0.009564	87,346	835	86,928	1,935,058	22.2
-59	0.010427	86,510	902	86,059	1,848,130	21.4
H-60	0.011360	85,608	973	85,122	1,762,071	20.6
)–61	0.012414	84,636	1,051	84,110	1,676,949	19.8
-62	0.013613	83,585	1,138	83,016	1,592,839	19.1
2–63	0.014905	82,447	1,229	81,833	1,509,823	18.3
3–64	0.016265	81,218	1,321	80,558	1,427,990	17.6
I–65	0.017700	79,897	1,414	79,190	1,347,433	16.9
5–66	0.019206	78,483	1,507	77,729	1,268,242	16.2
	0.020836	76,976	1,604	76,174	1,190,513	15.5

Table II. Life table for males: United States, 2001—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectatior of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
7–68	0.022727	75,372	1,713	74,515	1,114,339	14.8
8–69	0.024909	73,659	1,835	72,742	1,039,824	14.1
9–70	0.027315	71,824	1,962	70,843	967,082	13.5
)–71	0.029873	69,862	2,087	68,819	896,239	12.8
-72	0.032677	67,775	2,215	66,668	827,420	12.2
2–73	0.035870	65,561	2,352	64,385	760,752	11.6
3–74	0.039467	63,209	2,495	61,962	696,368	11.0
1–75	0.043418	60.714	2,636	59,396	634,406	10.4
5–76	0.047765	58,078	2,774	56,691	575,010	9.9
5–77	0.052392	55,304	2,897	53,855	518,319	9.4
7–78	0.057441	52,407	3,010	50,901	464,464	8.9
3–79	0.062944	49,396	3,109	47,842	413,562	8.4
9–80	0.068936	46,287	3,191	44,692	365,720	7.9
)–81	0.075452	43,096	3,252	41,470	321,029	7.4
_82	0.082530	39,845	3,288	38.200	279.558	7.4
2–83	0.090207	36,556	3,298	34,907	241,358	6.6
3–84	0.098521	33,259	3,277	31,620	206,451	6.2
1–85	0.107511	29,982	3,223	28,370	174,830	5.8
5–86	0.107311	26,759	3,136	25,190	146,460	5.5
5–87	0.117214	23,622	3,016	22,114	121,270	5.5
	0.127008	20,606	2,862	19,175	99,156	4.8
	0.150966	17,744	2,679	16,405	79,981	4.5
3–89	0.163872	15,065	2,469	13,831	63,576	4.5
0-91	0.103672	12,596	2,469	11,478	49,745	3.9
	0.177650	12,596	1,992	9,363	38,268	3.9
	0.192320	8,366	1,739	7,497	28,905	3.7
2–93	0.224381	6,627	1,739	5,884	21,409	3.2
	0.224361	5,140	1,243		15,525	3.2
				4,519		
5–96	0.260066	3,897	1,014	3,391	11,006	2.8
5–97	0.279231	2,884	805	2,481	7,616	2.6
7–98	0.299237	2,079	622	1,768	5,134	2.5
3–99	0.320039	1,457	466	1,223	3,367	2.3
9–100	0.341584	990	338	821	2,143	2.2
00 and over	1.000000	652	652	1,322	1,322	2.0

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Table III. Life table for females: United States, 2001

		,				
					Total	
	Probability		Number	Person-years	number of	
		N. I				F
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
	ugos x to x i	uge x	ages x to x i	ages x to x11	l age x	at age x
Age	α	1	d <sub>x</sub>	L <sub>x</sub>	$T_x$	Α
Age	$q_x$	l <sub>x</sub>	u <sub>x</sub>	L <sub>X</sub>	'x	$e_x$
0.1	0.000400	100.000	C1.4	00.407	7.040.040	70.4
0–1	0.006139	100,000	614	99,467	7,942,918	79.4
1–2	0.000475	99,386	47	99,363	7,843,451	78.9
2–3	0.000293	99,339	29	99,324	7,744,089	78.0
3–4	0.000219	99,310	22	99,299	7,644,764	77.0
4–5	0.000177	99,288	18	99,279	7,545,465	76.0
5–6	0.000164	99,271	16	99,262	7,446,186	75.0
6–7	0.000149	99,254	15	99,247	7,346,923	74.0
	0.000138	99,240	14	· · · · · · · · · · · · · · · · · · ·		73.0
		· '		99,233	7,247,677	
8–9	0.000127	99,226	13	99,220	7,148,444	72.0
9–10	0.000118	99,213	12	99,207	7,049,224	71.1
10–11	0.000112	99,202	11	99,196	6,950,017	70.1
11–12	0.000115	99,191	11	99,185	6,850,820	69.1
		· '		i i		
12–13	0.000135	99,179	13	99,173	6,751,636	68.1
13–14	0.000175	99,166	17	99,157	6,652,463	67.1
14–15	0.000230	99,148	23	99,137	6,553,306	66.1
15–16	0.000295	99,126	29	99,111	6,454,169	65.1
		· '		'		
16–17	0.000357	99,096	35	99,079	6,355,058	64.1
17–18	0.000405	99,061	40	99,041	6,255,979	63.2
18–19	0.000431	99,021	43	99,000	6,156,938	62.2
19–20	0.000439	98,978	43	98,956	6,057,939	61.2
		· '		i i		
20–21	0.000445	98,935	44	98,913	5,958,982	60.2
21–22	0.000456	98,891	45	98,868	5,860,070	59.3
22–23	0.000467	98,846	46	98,823	5.761.201	58.3
23–24	0.000479	98,799	47	98,776	5,662,379	57.3
		· '		· '		
24–25	0.000493	98,752	49	98,728	5,563,603	56.3
25–26	0.000511	98,704	50	98,678	5,464,875	55.4
26–27	0.000531	98,653	52	98,627	5,366,197	54.4
27–28	0.000555	98,601	55	98,573	5,267,570	53.4
			57	i i		
28–29	0.000580	98,546		98,517	5,168,997	52.5
29–30	0.000609	98,489	60	98,459	5,070,479	51.5
30–31	0.000641	98,429	63	98,397	4,972,020	50.5
31–32	0.000680	98,366	67	98,332	4,873,623	49.5
32–33	0.000737	98,299	72	98,263	4,775,291	48.6
33–34	0.000804	98,226	79	98,187	4,677,028	47.6
34–35	0.000889	98,147	87	98,104	4,578,841	46.7
35–36	0.000979	98,060	96	98,012	4,480,738	45.7
36–37	0.001072	97,964	105	97,912	4,382,726	44.7
					1 '	
37–38	0.001172	97,859	115	97,802	4,284,814	43.8
38–39	0.001279	97,744	125	97,682	4,187,012	42.8
39–40	0.001393	97,619	136	97,551	4,089,330	41.9
40–41	0.001514	97,483	148	97,410	3,991,779	40.9
	0.001640				l	
		97,336	160	97,256	3,894,369	40.0
42–43	0.001768	97,176	172	97,090	3,797,113	39.1
43–44	0.001900	97,005	184	96,912	3,700,023	38.1
44–45	0.002041	96,820	198	96,721	3,603,110	37.2
45–46	0.002194	96,623	212	96,517	3,506,389	36.3
46–47	0.002164	96,411	228	96,297	3,409,872	35.4
		· ·		i i		
47–48	0.002555	96,183	246	96,060	3,313,575	34.5
48–49	0.002769	95,937	266	95,804	3,217,515	33.5
49–50	0.003003	95,671	287	95,528	3,121,711	32.6
50–51	0.003257	95,384	311	95,229	3,026,183	31.7
	0.003529	95,073	335	i i	2,930,955	30.8
51–52				94,906	· ' '	
52–53	0.003821	94,738	362	94,557	2,836,049	29.9
53–54	0.004145	94,376	391	94,180	2,741,492	29.0
54–55	0.004512	93,985	424	93,773	2,647,312	28.2
55–56	0.004941	93,561	462	93,330	2,553,539	27.3
				i i		
56–57	0.005433	93,098	506	92,846	2,460,209	26.4
57–58	0.005974	92,593	553	92,316	2,367,364	25.6
58–59	0.006547	92,040	603	91,738	2,275,047	24.7
59–60	0.007157	91,437	654	91,110	2,183,309	23.9
				· ·		
60–61	0.007850	90,783	713	90,426	2,092,199	23.0
61–62	0.008643	90,070	778	89,681	2,001,773	22.2
62–63	0.009491	89,291	847	88,868	1,912,092	21.4
63–64	0.010374	88,444	918	87,985	1,823,225	20.6
64–65	0.011302	87,526	989	87,032	1,735,239	19.8
65–66	0.012300	86,537	1,064	86,005	1,648,208	19.0
66–67	0.013290	85,473	1,136	84,905	1,562,203	18.3
		· ·	· ·	I '	· ·	1

Table III. Life table for females: United States, 2001—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
67–68	0.014435	84,337	1,217	83,728	1,477,298	17.5
8–69	0.015749	83,119	1,309	82,465	1,393,570	16.8
9–70	0.017234	81,810	1,410	81,105	1,311,105	16.0
)–71	0.018866	80,400	1,517	79,642	1,229,999	15.3
-72	0.020730	78,884	1,635	78,066	1,150,357	14.6
2–73	0.022926	77,248	1,771	76,363	1,072,291	13.9
3–74	0.025483	75,477	1,923	74,516	995,929	13.2
1–75	0.028383	73,554	2.088	72,510	921,413	12.5
5–76	0.031636	71,466	2,261	70,336	848,903	11.9
5–77	0.035122	69,205	2,431	67,990	778,567	11.3
7–78	0.038977	66,775	2,603	65,473	710,577	10.6
3–79	0.043237	64,172	2,775	62,785	645,104	10.1
9–80	0.047938	61,397	2,943	59,926	582,319	9.5
)–81	0.053122	58,454	3,105	56,902	522,393	8.9
_82	0.058833	55,349	3,256	53.721	465.491	8.4
2–83	0.065114	52,093	3,392	50,397	411,771	7.9
3–84	0.072016	48,701	3,507	46,947	361,374	7.4
1–85	0.079586	45,193	3,597	43,395	314,427	7.4
5–86	0.079366	41,597	3,655	39,769	271,032	6.5
6–87	0.096941	37,941	3,678	36,102	231,263	6.1
	0.106830	34,263	3,660	32,433	195,160	5.7
	0.117596	30,603	3,599	28,804	162,727	5.7
8–89	0.129291	27,004	3,491	25,258	133,924	5.0
0–91	0.141961	23,513	3,338	25,256	108,665	4.6
	0.141961	23,513	3,338	18,605	86,822	4.6
	0.170399	17,035	2,903	15,583	68,217	4.3
2–93	0.170399	17,035	2,632	12,816	52,634	3.7
	0.203185	14,132	2,337	10,332	39,818	3.7
					1	
5–96	0.221257	9,163	2,027	8,150	29,486	3.2 3.0
	0.240451	7,136	1,716	6,278	21,336	2.8
**	0.260753	5,420	1,413	4,713	15,058	
3–99	0.282132	4,007	1,130	3,442	10,345	2.6
9–100	0.304542	2,876	876	2,438	6,903	2.4
00 and over	1.000000	2,000	2,000	4,465	4,465	2.2

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Table IV. Life table for the white population: United States, 2001

		,				
					Total	
				l _		
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
			, ,			
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
			_	_	_	
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_x$
	17.	*	- X	*		- X
0–1	0.005648	100,000	565	99,506	7,740,962	77.4
1–2	0.000468	99,435	47	99,412	7,641,456	76.8
2–3	0.000318	99,389	32	99,373	7,542,044	75.9
3–4	0.000232	99,357	23	99,346	7,442,672	74.9
		· ·				
4–5	0.000195	99,334	19	99,324	7,343,326	73.9
5–6	0.000171	99,315	17	99,306	7,244,002	72.9
		· '	16		· ' '	
6–7	0.000157	99,298		99,290	7,144,695	72.0
7–8	0.000146	99,282	15	99,275	7,045,406	71.0
8–9	0.000131	99,268	13	99,261	6,946,131	70.0
		· ·				
9–10	0.000113	99,255	11	99,249	6,846,870	69.0
10–11	0.000100	99,243	10	99,238	6,747,621	68.0
		· '		· '		
11–12	0.000104	99,233	10	99,228	6,648,382	67.0
12–13	0.000142	99,223	14	99,216	6,549,154	66.0
13–14	0.000221	99,209	22	· '		65.0
		· '		99,198	6,449,938	
14–15	0.000330	99,187	33	99,171	6,350,740	64.0
15–16	0.000454	99,154	45	99,132	6,251,570	63.0
		· '		i i		
16–17	0.000571	99,109	57	99,081	6,152,438	62.1
17–18	0.000670	99.053	66	99,020	6,053,357	61.1
		· '		i i		
18–19	0.000737	98,986	73	98,950	5,954,337	60.2
19–20	0.000780	98,913	77	98,875	5,855,387	59.2
20–21	0.000821	98,836	81	98,796		58.2
		· '		· '	5,756,512	
21–22	0.000864	98,755	85	98,712	5,657,717	57.3
22–23	0.000889	98,670	88	98,626	5,559,004	56.3
		· '		· '		
23–24	0.000894	98,582	88	98,538	5,460,378	55.4
24–25	0.000884	98,494	87	98,450	5,361,841	54.4
25–26		· '	86	· '	· ' '	53.5
	0.000870	98,407		98,364	5,263,390	
26–27	0.000860	98,321	85	98,279	5,165,026	52.5
27–28	0.000858	98,237	84	98,194	5,066,747	51.6
		· ·		i i		
28–29	0.000868	98,152	85	98,110	4,968,553	50.6
29–30	0.000890	98,067	87	98,023	4,870,443	49.7
		l ·		i i		
30–31	0.000916	97,980	90	97,935	4,772,420	48.7
31–32	0.000949	97,890	93	97,844	4,674,485	47.8
32–33	0.001007	97,797	99	97,748	4,576,641	46.8
		l ·				
33–34	0.001079	97,699	105	97,646	4,478,893	45.8
34–35	0.001174	97,593	115	97,536	4,381,247	44.9
		l ·				
35–36	0.001280	97,479	125	97,416	4,283,711	43.9
36–37	0.001388	97,354	135	97,286	4,186,295	43.0
37–38	0.001503	97,219	146	97,146	1 ' '	42.1
		· ·			4,089,009	
38–39	0.001622	97,073	157	96,994	3,991,863	41.1
39–40	0.001746	96,915	169	96,831	3,894,869	40.2
		· ·		i i	· ' '	
40–41	0.001877	96,746	182	96,655	3,798,039	39.3
41–42	0.002017	96,564	195	96,467	3,701,384	38.3
42–43	0.002170	96,370	209	96,265	3,604,917	37.4
		· ·		i i		
43–44	0.002341	96,160	225	96,048	3,508,652	36.5
44–45	0.002533	95,935	243	95,814	3,412,604	35.6
45–46	0.002745	95,692	263	95,561	3,316,790	34.7
		· ·		i i	· ' '	
46–47	0.002974	95,430	284	95,288	3,221,229	33.8
47–48	0.003220	95,146	306	94,993	3,125,941	32.9
		· ·		i i		
48–49	0.003479	94,840	330	94,675	3,030,949	32.0
49–50	0.003748	94,510	354	94,332	2,936,274	31.1
50–51	0.004036	94,155	380	93,965	2,841,942	30.2
		· ·		i i		
51–52	0.004349	93,775	408	93,571	2,747,976	29.3
52–53	0.004688	93,368	438	93,149	2,654,405	28.4
				i i		
53–54	0.005067	92,930	471	92,694	2,561,256	27.6
54–55	0.005502	92,459	509	92,205	2,468,562	26.7
55–56	0.006009	91,950	552	91,674	2,376,357	25.8
		l ·			· ' '	
56–57	0.006585	91,398	602	91,097	2,284,683	25.0
57–58	0.007224	90,796	656	90,468	2,193,587	24.2
		l ·				
58–59	0.007913	90,140	713	89,783	2,103,119	23.3
59–60	0.008660	89,427	774	89,039	2,013,335	22.5
60–61	0.009517	88,652	844	88,230	1,924,296	21.7
61–62	0.010498	87,808	922	87,348	1,836,066	20.9
		l ·				
62–63	0.011543	86,887	1,003	86,385	1,748,718	20.1
63–64	0.012618	85,884	1,084	85,342	1,662,333	19.4
64–65	0.013735	84,800	1,165	84,218	1,576,991	18.6
		l ·	· ·			
65–66	0.014915	83,635	1,247	83,012	1,492,773	17.8
66–67	0.016140	82,388	1,330	81,723	1,409,762	17.1
		,000	.,555	5.,5	1,,	1

Table IV. Life table for the white population: United States, 2001—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
7–68	0.017580	81,058	1,425	80,346	1,328,039	16.4
3–69	0.019249	79,633	1,533	78,867	1,247,693	15.7
9–70	0.021110	78,100	1,649	77,276	1,168,827	15.0
)–71	0.023100	76,452	1,766	75,569	1,091,551	14.3
1–72	0.025303	74,686	1,890	73,741	1,015,982	13.6
2–73	0.027846	72,796	2,027	71,782	942,241	12.9
3–74	0.030766	70,769	2,177	69,680	870,459	12.3
1–75	0.034049	68,591	2,335	67,424	800,779	11.7
5–76	0.037698	66,256	2,498	65,007	733,355	11.1
6–77	0.041612	63,758	2,653	62,432	668,348	10.5
7–78	0.045912	61,105	2,805	59,702	605,917	9.9
3–79	0.050634	58,300	2,952	56,824	546,214	9.4
9–80	0.055812	55,348	3,089	53,803	489,390	8.8
D–81	0.061486	52,259	3,213	50,652	435,587	8.3
1–82	0.067695	49,046	3,320	47,385	384,935	7.8
2–83	0.074482	45,725	3,406	44,023	337,549	7.4
3–84	0.081889	42,320	3,466	40,587	293,527	6.9
4–85	0.089962	38,854	3,495	37,106	252,940	6.5
5–86	0.098744	35,359	3,491	33,613	215,833	6.1
6–87	0.108282	31,867	3,451	30,142	182,220	5.7
	0.108282	28,417	3,371	26,731	152,078	5.4
7–88	0.118620	25,046	3,251		125,347	5.4
9–90	0.129801			23,420	101,927	4.7
		21,795	3,092	20,249	· /	4.7
0–91	0.154854	18,703	2,896	17,255	81,678	
	0.168797 0.183722	15,807	2,668	14,473	64,423	4.1 3.8
2–93		13,139	2,414	11,932	49,950	3.5
	0.199650	10,725	2,141	9,654	38,019	
1–95	0.216592	8,584	1,859	7,654	28,365	3.3
5–96	0.234551	6,724	1,577	5,936	20,711	3.1
5–97	0.253517	5,147	1,305	4,495	14,775	2.9
7–98	0.273468	3,842	1,051	3,317	10,280	2.7
3–99	0.294370	2,792	822	2,381	6,963	2.5
9–100	0.316175	1,970	623	1,658	4,583	2.3
00 and over	1.000000	1,347	1,347	2,924	2,924	2.2

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Table V. Life table for white males: United States, 2001

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	T <sub>x</sub>	$e_x$
)–1	0.006209	100,000	621	99,455	7,482,571	74.8
-2	0.000508	99,379	51	99,354	7,383,116	74.3
2–3	0.000358	99,329	36	99,311	7,283,762	73.3
-4	0.000264	99,293	26	99,280	7,184,451	72.4
–5	0.000222	99,267	22	99,256	7,085,171	71.4
-6	0.000185	99,245	18	99,236	6,985,915	70.4
-7	0.000170	99,226	17	99,218	6,886,680	69.4
-8	0.000158	99,210	16	99,202	6,787,462	68.4
-9	0.000139	99,194	14	99,187	6,688,260	67.4
-10	0.000115	99,180	11	99,174	6,589,073	66.4
-11	0.000098	99,169	10	99,164	6,489,899	65.4
-12	0.000106	99,159	10	99,154	6,390,735	64.4
-13	0.000160	99,149	16	99,141	6,291,581	63.5
-14	0.000273	99,133	27	99,119	6,192,440	62.5
-15	0.000429	99,106	43	99,084	6,093,321	61.5
-16	0.000603	99,063	60	99,033	5,994,237	60.5
-17	0.000768	99,003	76	98,965	5,895,204	59.5
-18	0.000914	98,927	90	98,882	5,796,238	58.6
-19	0.001026	98,837	101	98,786	5,697,356	57.6
-20	0.001109	98,736	110	98,681	5,598,570 5,499,889	56.7
-21	0.001193 0.001274	98,626	118 125	98,567	' '	55.8 54.8
-22	0.001274	98,508 98,383	130	98,446 98,318	5,401,322 5,302,876	53.9
-24	0.001321	98,253	130	98,188	5,204,558	53.9
-25	0.001323	98,123	127	98,059	5,106,370	52.0
-26	0.001257	97,996	123	97,934	5,008,311	51.1
27	0.001225	97,872	120	97,812	4,910,377	50.2
-28	0.001204	97,752	118	97,694	4,812,565	49.2
-29	0.001205	97,635	118	97,576	4,714,871	48.3
-30	0.001225	97,517	119	97,457	4,617,295	47.3
-31	0.001250	97,398	122	97,337	4,519,838	46.4
-32	0.001283	97,276	125	97,214	4,422,501	45.5
-33	0.001349	97,151	131	97,086	4,325,287	44.5
-34	0.001432	97,020	139	96,951	4,228,202	43.6
-35	0.001549	96,881	150	96,806	4,131,251	42.6
-36	0.001678	96,731	162	96,650	4,034,445	41.7
-37	0.001814	96,569	175	96,481	3,937,795	40.8
-38	0.001956	96,394	189	96,299	3,841,314	39.9
-39	0.002103	96,205	202	96,104	3,745,014	38.9
-40	0.002257	96,003	217	95,894	3,648,910	38.0
-41	0.002416	95,786	231	95,670	3,553,016	37.1
-42	0.002589	95,555	247	95,431	3,457,346	36.2
-43	0.002784	95,307	265	95,175	3,361,915	35.3
-44	0.003010	95,042	286	94,899	3,266,740	34.4
-45	0.003267	94,756	310	94,601	3,171,841	33.5
-46	0.003552	94,446	335	94,279	3,077,240	32.6
-47	0.003856	94,111	363	93,929	2,982,962	31.7
-48	0.004172	93,748	391	93,552	2,889,032	30.8
-49	0.004490	93,357	419	93,147	2,795,480	29.9
-50	0.004811	92,938	447	92,714	2,702,332	29.1
-51	0.005150	92,491	476	92,252	2,609,618	28.2 27.4
52	0.005520 0.005921	92,014 91,506	508 542	91,760 91,235	2,517,366 2,425,605	26.5
54	0.006370	90,965	579	90,675	2,334,370	25.7
55	0.006886	90,385	622	90,074	2,243,695	24.8
56	0.007486	89,763	672	89,427	2,153,621	24.0
57	0.007480	89,091	728	88,727	2,153,021	23.2
58	0.008937	88,363	790	87,968	1,975,468	22.4
-59	0.009776	87,573	856	87,145	1,887,500	21.6
-60	0.010694	86,717	927	86,253	1,800,354	20.8
-61	0.011745	85,790	1,008	85,286	1,714,101	20.0
-62	0.012948	84,782	1,098	84,233	1,628,815	19.2
-63	0.014239	83,684	1,192	83,089	1,544,582	18.5
-64	0.015580	82,493	1,285	81,850	1,461,494	17.7
	0.016980	81,207	1,379	80,518	1,379,643	17.0
-65						
-66	0.018445	79,829	1,472	79,092	1,299,125	16.3

Table V. Life table for white males: United States, 2001—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
7–68	0.021898	76,787	1,681	75,946	1,142,462	14.9
-69	0.024062	75,105	1,807	74,202	1,066,516	14.2
–70	0.026464	73,298	1,940	72,328	992,314	13.5
-71	0.029004	71,358	2,070	70,323	919,986	12.9
-72	0.031769	69,288	2,201	68,188	849,663	12.3
-73	0.034922	67.087	2.343	65,916	781.475	11.6
-74	0.038510	64,744	2,493	63,498	715,559	11.1
-75	0.042506	62,251	2,646	60,928	652,062	10.5
-76	0.046897	59,605	2,795	58,207	591,134	9.9
-77	0.051558	56,810	2,929	55,345	532,926	9.4
–78	0.056653	53,881	3,053	52,355	477,581	8.9
_79	0.062220	50,828	3,163	49,247	425,226	8.4
_80	0.068294	47,666	3,255	46,038	375,979	7.9
–81	0.074913	44,411	3,327	42,747	329,941	7.4
–82	0.082117	41,084	3,374	39,397	287,194	7.0
–83	0.089947	37,710	3,392	36,014	247,797	6.6
-84	0.098444	34,318	3,378	32,629	211,783	6.2
–85	0.107648	30,940	3,331	29,274	179,155	5.8
–86	0.107646	27,609	3,247	25,986	149.880	5.4
–87	0.117600	24,362	3,127	22,799	123,895	5.1
–88	0.126340	24,302	2,971	19,750	101,096	4.8
	0.152331	18,265	2,782	16,873	81,346	4.6 4.5
				· '	· · · · · · · · · · · · · · · · · · ·	
H-90	0.165648	15,482	2,565	14,200	64,472	4.2
⊢91	0.179881	12,918	2,324	11,756	50,272	3.9
-92	0.195052	10,594	2,066	9,561	38,516	3.6
-93	0.211173	8,528	1,801	7,627	28,955	3.4
-94	0.228248	6,727	1,535	5,959	21,328	3.2
-95	0.246273	5,191	1,279	4,552	15,369	3.0
-96	0.265232	3,913	1,038	3,394	10,817	2.8
-97	0.285099	2,875	820	2,465	7,423	2.6
-98	0.305834	2,055	629	1,741	4,957	2.4
-99	0.327387	1,427	467	1,193	3,216	2.3
<u>–</u> 100	0.349694	960	336	792	2,023	2.1
0 and over	1.000000	624	624	1,231	1,231	2.0

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Table VI. Life table for white females: United States, 2001

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_{x}$	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
0–1	0.005059	100,000	506	99,558	7,991,307	79.9
-2	0.000426	99,494	42	99,473	7,891,748	79.3
-3	0.000276	99,452	27	99,438	7,792,276	78.4
–4	0.000199	99,424	20	99,414	7,692,838	77.4
-5	0.000167	99,404	17	99,396	7,593,423	76.4
-6	0.000155	99,388	15	99,380	7,494,027	75.4
-7	0.000144	99,372	14	99,365	7,394,647	74.4
-8	0.000134	99,358	13	99,351	7,295,282	73.4
-9	0.000123	99,345	12	99,339	7,195,930	72.4
-10	0.000111	99,333	11	99,327	7,096,592	71.4
-11	0.000102	99,321	10	99,316	6,997,265	70.5
-12	0.000103	99,311	10	99,306	6,897,948	69.5
-13	0.000122	99,301	12	99,295	6,798,642	68.5
-14	0.000166	99,289	16	99,281	6,699,347	67.5
-15	0.000225	99,273	22	99,261	6,600,066	66.5
–16	0.000296	99,250	29	99,236	6,500,805	65.5
–17	0.000361	99,221	36	99,203	6,401,569	64.5
–18	0.000409	99,185	41	99,165	6,302,366	63.5
–19	0.000430	99,144	43	99,123	6,203,202	62.6
–20	0.000429	99,102	43	99,081	6,104,079	61.6
–21	0.000425	99,059	42	99,038	6,004,998	60.6
–22	0.000427	99,017	42	98,996	5,905,960	59.6
–23	0.000429	98,975	42	98,954	5,806,964	58.7
–24	0.000435	98,932	43	98,911	5,708,010	57.7
-25	0.000445	98,889	44	98,867	5,609,099	56.7
-26	0.000459	98,845	45	98,823	5,510,232	55.7
-27	0.000474	98,800	47	98,777	5,411,409	54.8
-28	0.000493	98,753	49	98,729	5,312,633	53.8
-29	0.000514	98,705	51	98,679	5,213,904	52.8
-30	0.000539	98,654	53	98,627	5,115,225	51.9
-31	0.000567	98,601	56	98,573	5,016,597	50.9
-32	0.000602	98,545	59	98,515	4,918,025	49.9
-33	0.000652	98,485	64	98,453	4,819,510	48.9
-34	0.000713	98,421	70	98,386	4,721,057	48.0
-35	0.000789	98,351	78	98,312	4,622,670	47.0
-36	0.000870 0.000953	98,274	85	98,231	4,524,358	46.0
-37		98,188	94	98,141	4,426,127	45.1
-38	0.001042 0.001134	98,094	102 111	98,043	4,327,986	44.1 43.2
–39	0.001134	97,992 97,881	120	97,937 97,821	4,229,943 4,132,006	43.2 42.2
	0.001230	97,761	130	97,696	4,034,185	41.3
–41	0.001332	97,631	141	97,560	3,936,489	40.3
-43	0.001552	97,490	151	97,414	3,838,929	39.4
-44	0.001670	97,339	163	97,257	3,741,515	38.4
-45	0.001799	97,176	175	97,089	3,644,257	37.5
-46	0.001940	97,001	188	96,907	3,547,169	36.6
-47	0.002097	96,813	203	96,712	3,450,261	35.6
-48	0.002277	96,610	220	96,500	3,353,550	34.7
_49	0.002479	96,390	239	96,271	3,257,050	33.8
-50	0.002700	96,151	260	96,021	3,160,779	32.9
-51	0.002940	95,892	282	95,751	3,064,758	32.0
-52	0.003198	95,610	306	95,457	2,969,007	31.1
-53	0.003480	95,304	332	95,138	2,873,550	30.2
-54	0.003796	94,972	361	94,792	2,778,412	29.3
-55	0.004158	94,612	393	94,415	2,683,621	28.4
-56	0.004581	94,218	432	94,002	2,589,206	27.5
-57	0.005062	93,787	475	93,549	2,495,203	26.6
-58	0.005588	93,312	521	93,051	2,401,654	25.7
-59	0.006144	92,790	570	92,505	2,308,603	24.9
-60	0.006739	92,220	621	91,910	2,216,098	24.0
-61	0.007425	91,599	680	91,259	2,124,188	23.2
-62	0.008215	90,919	747	90,545	2,032,929	22.4
-63	0.009050	90,172	816	89,764	1,942,384	21.5
-64	0.009900	89,356	885	88,913	1,852,620	20.7
-65	0.010783	88,471	954	87,994	1,763,707	19.9
-66	0.011732	87,517	1,027	87,004	1,675,713	19.1
6–67	0.012703	86,490	1,099	85,941	1,588,709	18.4

Table VI. Life table for white females: United States, 2001—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	$e_x$
7–68	0.013847	85,392	1,182	84,800	1,502,768	17.6
i–69	0.015176	84,209	1,278	83,570	1,417,968	16.8
–70	0.016677	82,931	1,383	82,240	1,334,397	16.1
–71	0.018316	81,548	1,494	80,801	1,252,158	15.4
-72	0.020175	80,055	1,615	79,247	1,171,356	14.6
-73	0.022358	78.440	1.754	77,563	1,092,109	13.9
-74	0.024894	76,686	1,909	75,731	1,014,547	13.2
-75	0.027774	74,777	2,077	73,738	938,815	12.6
-76	0.031010	72,700	2,254	71,573	865.077	11.9
_77	0.034497	70,446	2,430	69,230	793,504	11.3
-78	0.038361	68,015	2,609	66,711	724,274	10.6
_79	0.042639	65,406	2,789	64,012	657,563	10.1
-80	0.047370	62,617	2,966	61.134	593,551	9.5
–81	0.052597	59,651	3,137	58,082	532,417	8.9
–82	0.058366	56,514	3,298	54,865	474,334	8.4
<u>1</u> –83	0.064724	53,215	3,444	51,493	419,470	7.9
-84	0.071722	49,771	3,570	47,986	367,977	7.4
-85	0.079413	46,201	3,669	44,367	319,991	6.9
–86	0.087850	42.532	3,736	40.664	275.624	6.5
–87	0.097089	38,796	3,767	36,913	234,960	6.1
_88	0.107186	35,029	3,755	33,152	198,047	5.7
3–89	0.107100	31,275	3,696	29,426	164,896	5.3
) <del>-</del> 90	0.130170	27,578	3,590	25,783	135,469	4.9
–91	0.143161	23,988	3,434	22,271	109,686	4.6
	0.157214	20,554	3,231	18,938	87,415	4.3
–92	0.157214	17,323	2,986	15,830	68,476	4.0
–94	0.172370	14,337	2,705	12,984	52,647	3.7
–95	0.206104	11,632	2,397	10,433	39,662	3.4
	0.224716	9,235	2,075	8,197	29,229	3.2
–96	0.244491	9,235 7,159	1,750	6,284	29,229 21,032	3.2 2.9
		· '		· '		2.9
	0.265410 0.287439	5,409	1,436	4,691	14,748	2.7 2.5
-99		3,973	1,142	3,402	10,057	
9–100	0.310522	2,831	879	2,392	6,654	2.4
0 and over	1.000000	1,952	1,952	4,263	4,263	2.2

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Table VII. Life table for the black population: United States, 2001

			,			
					Total	
	Drobobility		Number	Doroon vooro		
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
						<del>                                     </del>
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_{x}$
	***	^			^	
0–1	0.013975	100,000	1,397	98,788	7,197,386	72.0
1–2	0.000812	98,603	80	98,563	7,098,597	72.0
2–3	0.000441	98,523	43	98,501	7,000,035	71.1
3–4	0.000353	98,479	35	98,462	6,901,534	70.1
	0.000268	· '	26			69.1
4–5		98,444		98,431	6,803,072	
5–6	0.000249	98,418	24	98,406	6,704,641	68.1
6–7	0.000225	98,393	22	98,382	6,606,235	67.1
7–8	0.000206	98,371	20	98,361	6,507,853	66.2
	0.000188	98,351	18	98,342	6,409,492	65.2
9–10	0.000172	98,333	17	98,324	6,311,150	64.2
10–11	0.000163	98,316	16	98,308	6,212,826	63.2
11–12	0.000175	98,300	17	98,291	6,114,518	62.2
		· '		1		
12–13	0.000219	98,283	22	98,272	6,016,227	61.2
13–14	0.000307	98,261	30	98,246	5,917,955	60.2
14–15	0.000431	98,231	42	98,210	5,819,709	59.2
15–16	0.000573	98,188	56	98,160		58.3
		· '		1	5,721,500	
16–17	0.000719	98,132	71	98,097	5,623,339	57.3
17–18	0.000871	98,062	85	98,019	5,525,243	56.3
18–19	0.001020	97,976	100	97,926	5,427,224	55.4
				1		
19–20	0.001160	97,876	114	97,820	5,329,297	54.4
20–21	0.001309	97,763	128	97,699	5,231,478	53.5
21–22	0.001455	97,635	142	97,564	5,133,779	52.6
22–23	0.001562	97,493	152	97,417	5,036,215	51.7
				1		
23–24	0.001616	97,341	157	97,262	4,938,799	50.7
24–25	0.001632	97,183	159	97,104	4,841,537	49.8
25–26	0.001638	97,025	159	96,945	4,744,433	48.9
26–27	0.001653	96,866	160	96,786	4,647,488	48.0
				1		
27–28	0.001675	96,706	162	96,625	4,550,702	47.1
28–29	0.001710	96,544	165	96,461	4,454,078	46.1
29–30	0.001759	96,378	170	96,294	4,357,617	45.2
30–31	0.001811	96,209	174	96,122	4,261,323	44.3
31–32	0.001873	96,035	180	95,945	4,165,201	43.4
32–33	0.001995	95,855	191	95,759	4,069,256	42.5
33–34	0.002096	95,664	201	95,563	3,973,497	41.5
34–35	0.002258	95,463	216	95,355	3,877,934	40.6
35–36	0.002431	95,248	232	95,132	3,782,578	39.7
36–37	0.002614	95,016	248	94,892	3,687,446	38.8
37–38	0.002824	94,768	268	94,634	3,592,555	37.9
38–39	0.003066	94,500	290	94,355	3,497,921	37.0
				1		
39–40	0.003337	94,210	314	94,053	3,403,566	36.1
40–41	0.003625	93,896	340	93,726	3,309,512	35.2
41–42	0.003926	93,556	367	93,372	3,215,787	34.4
42–43	0.004254	93,188	396	92,990	3,122,415	33.5
				1		
43–44	0.004618	92,792	428	92,578	3,029,425	32.6
44–45	0.005021	92,363	464	92,132	2,936,847	31.8
45–46	0.005464	91,900	502	91,649	2,844,715	31.0
46–47	0.005939	91,398	543	91,126	2,753,067	30.1
47–48	0.006442	90,855	585	90,562	2,661,941	29.3
				1		
48–49	0.006961	90,269	628	89,955	2,571,379	28.5
49–50	0.007492	89,641	672	89,305	2,481,423	27.7
50–51	0.008063	88,969	717	88,611	2,392,118	26.9
51–52	0.008672	88,252	765	87,869	2,303,507	26.1
				1		
52–53	0.009292	87,487	813	87,080	2,215,638	25.3
53–54	0.009930	86,674	861	86,244	2,128,558	24.6
54–55	0.010618	85,813	911	85,358	2,042,314	23.8
55–56	0.011411	84,902	969	84,418	1,956,956	23.0
					' '	
56–57	0.012323	83,933	1,034	83,416	1,872,539	22.3
57–58	0.013312	82,899	1,104	82,347	1,789,123	21.6
58–59	0.014313	81,795	1,171	81,210	1,706,776	20.9
59–60	0.015306	80,625	1,234	80,008	1,625,566	20.2
60–61	0.016312	79,391	1,295	78,743	1,545,558	19.5
61–62	0.017418	78,096	1,360	77,415	1,466,815	18.8
62–63	0.018666	76,735	1,432	76,019	1,389,400	18.1
63–64	0.020114	75,303	1,515	74,546	1,313,381	17.4
64–65	0.021742	73,788	1,604	72,986	1,238,835	16.8
65–66	0.023464	72,184	1,694	71,337	1,165,849	16.2
66–67	0.025150	70,490	1,773	69,604	1,094,512	15.5
00 0	0.020100	70,700	',,,,	00,004	1,00-7,012	10.0

Table VII. Life table for the black population: United States, 2001—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectatior of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
37–68	0.026948	68,717	1,852	67,792	1,024,908	14.9
8–69	0.028897	66,866	1,932	65,900	957,116	14.3
9–70	0.031036	64,933	2,015	63,926	891,217	13.7
)–71	0.033350	62,918	2,098	61,869	827,291	13.1
_72	0.035900	60,820	2,183	59,728	765,422	12.6
2–73	0.038764	58,636	2,273	57,500	705,694	12.0
3–74	0.041936	56,363	2,364	55,182	648,194	11.5
I–75	0.045370	54,000	2.450	52.775	593.012	11.0
5–76	0.049058	51,550	2,529	50,285	540,237	10.5
5–77	0.052923	49,021	2,594	47,724	489,952	10.0
7–78	0.057074	46,427	2,650	45,102	442,228	9.5
3–79	0.061530	43,777	2,694	42,430	397,127	9.1
) <del>-</del> 80	0.066309	41,083	2,724	39,721	354,697	8.6
)–81	0.071432	38,359	2,740	36,989	314,976	8.2
_82	0.076917	35,619	2.740	34.249	277.987	7.8
2–83	0.082786	32,879	2,722	31,518	243,738	7.4
3–84	0.089060	30,157	2,686	28,814	212,219	7.4
1–85	0.095759	27,472	2,631	26,156	183,405	6.7
5–86	0.102906	24,841	2,556	23,563	157,249	6.3
5–87	0.102900	22,285	2,463	21,053	133,686	6.0
	0.118624	19,822	2,351	18,646	112,633	5.7
7–88	0.127237	17,470	2,223	16,359	93,987	5.4
9-90	0.136378	15,248	2,079	14,208	77,628	5.1
9–90	0.136376	13,168	1,923	12,206	63,420	4.8
	0.146066	11,245	1,923	10,366	51,214	4.6
	0.150318	9,487	1,756	8,694	40,848	4.6
2–93	0.178571	7,901	1,411	7,196	32,154	4.5
	0.176571	6,490	1,237		24,958	3.8
				5,872		
	0.203228	5,253	1,068	4,719	19,086	3.6
5–97	0.216475	4,186	906	3,733	14,367	3.4
7–98	0.230335	3,280	755	2,902	10,634	3.2
3–99	0.244806	2,524	618	2,215	7,732	3.1
9–100	0.259879	1,906	495	1,659	5,517	2.9
00 and over	1.000000	1,411	1,411	3,859	3,859	2.7

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Table VIII. Life table for black males: United States, 2001

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
0–1	0.015432	100,000	1,543	98,653	6,843,103	68.4
1–2	0.000889	98,457	87	98,413	6,744,450	68.5
2–3	0.000504	98,369	50	98,345	6,646,037	67.6
3–4	0.000390	98,320	38	98,301	6,547,692	66.6
–5	0.000312	98,281	31	98,266	6,449,391	65.6
–6	0.000284	98,251	28	98,237	6,351,125	64.6
i–7	0.000262	98,223	26	98,210	6,252,888	63.7
'–8	0.000243	98,197	24	98,185	6,154,678	62.7
–9	0.000217	98,173	21	98,163	6,056,493	61.7
–10	0.000188	98,152	18	98,143	5,958,331	60.7
–11	0.000168	98,134	16	98,125	5,860,188	59.7
–12	0.000179	98,117	18	98,108	5,762,063	58.7
–13	0.000248	98,100	24	98,087	5,663,954	57.7
–14	0.000393	98,075	39	98,056	5,565,867	56.8
–15	0.000600	98,037	59	98,007	5,467,811	55.8
i–16	0.000834	97,978	82	97,937	5,369,804	54.8
5–17	0.001071	97,896	105	97,844	5,271,867	53.9
7–18	0.001316	97,791	129	97,727	5,174,023	52.9
3–19	0.001559	97,662	152	97,586	5,076,296	52.0
9–20	0.001791	97,510	175	97,423	4,978,710	51.1
)–21	0.002042	97,336	199	97,236	4,881,287	50.1
-22	0.002286	97,137	222	97,026	4,784,051	49.3
2–23	0.002458	96,915	238	96,796	4,687,025	48.4
3–24	0.002530	96,677	245	96,554	4,590,230	47.5
-25	0.002523	96,432	243	96,310	4,493,675	46.6
i–26	0.002486	96,189	239	96,069	4,397,365	45.7
i–27	0.002461	95,950	236	95,831	4,301,296	44.8
7–28	0.002445	95,713	234	95,596	4,205,464	43.9
3–29	0.002455	95,479	234	95,362	4,109,868	43.0
9–30	0.002491	95,245	237	95,126	4,014,506	42.1
)–31	0.002529	95,008	240	94,888	3,919,379	41.3
-32	0.002575	94,767	244	94,645	3,824,492	40.4
2–33	0.002710	94,523	256	94,395	3,729,846	39.5
34	0.002793	94,267	263	94,136	3,635,451	38.6
i–35	0.002967 0.003163	94,004	279 296	93,865	3,541,315	37.7 36.8
i=37	0.003103	93,725 93,429	315	93,577 93,271	3,447,451 3,353,874	35.9
–37	0.003607	93,429	336	92,946	3,260,603	35.0
39	0.003869	92,778	359	92,598	3,167,657	34.1
-40	0.003009	92,419	384	92,227	3.075.059	33.3
	0.004464	92,034	411	91,829	2,982,832	32.4
-41	0.004796	91,624	439	91,404	2,891,003	31.6
2–43	0.005195	91,184	474	90,947	2,799,599	30.7
3–44	0.005689	90,711	516	90,453	2.708.652	29.9
l–45	0.006273	90,194	566	89,912	2,618,199	29.0
5–46	0.006928	89,629	621	89,318	2,528,288	28.2
5–47	0.007622	89,008	678	88,668	2,438,969	27.4
7–48	0.008335	88,329	736	87,961	2,350,301	26.6
H-49	0.009031	87,593	791	87,198	2,262,340	25.8
)–50	0.009712	86,802	843	86,381	2,175,142	25.1
)–51	0.010435	85,959	897	85,511	2,088,762	24.3
–52	0.011213	85,062	954	84,585	2,003,251	23.6
–53	0.012006	84,108	1,010	83,603	1,918,666	22.8
–54	0.012830	83,098	1,066	82,565	1,835,063	22.1
-55	0.013726	82,032	1,126	81,469	1,752,497	21.4
–56	0.014756	80,906	1,194	80,309	1,671,028	20.7
-57	0.015935	79,712	1,270	79,077	1,590,719	20.0
-58	0.017206	78,442	1,350	77,767	1,511,641	19.3
-59	0.018477	77,093	1,424	76,380	1,433,874	18.6
<del>-</del> 60	0.019719	75,668	1,492	74,922	1,357,493	17.9
)–61	0.020964	74,176	1,555	73,398	1,282,571	17.3
1–62	0.022331	72,621	1,622	71,810	1,209,173	16.7
2–63	0.023875	70,999	1,695	70,152	1,137,363	16.0
-64	0.025679	69,304	1,780	68,414	1,067,211	15.4
-65	0.027724	67,524	1,872	66,588	998,797	14.8
-66	0.029877	65,652	1,961	64,672	932,208	14.2
6–67	0.032192	63,691	2,050	62,666	867,536	13.6

Table VIII. Life table for black males: United States, 2001—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
-68	0.034687	61,641	2,138	60,572	804,871	13.1
-69	0.037413	59,503	2,226	58,389	744,299	12.5
-70	0.040387	57,276	2,313	56,120	685,910	12.0
-71	0.043561	54,963	2,394	53,766	629,790	11.5
-72	0.046953	52,569	2,468	51,335	576.024	11.0
-73	0.050618	50,101	2,536	48,833	524,689	10.5
-74	0.054545	47,565	2,594	46,267	475,856	10.0
-75	0.058714	44,970	2,640	43,650	429,589	9.6
-76	0.063137	42,330	2,673	40,994	385,939	9.1
-77	0.067691	39,657	2,684	38,315	344,945	8.7
–78	0.072549	36,973	2,682	35,632	306,630	8.3
-79	0.077726	34,290	2,665	32,958	270,999	7.9
-80	0.083239	31,625	2,632	30,309	238,041	7.5
-81	0.089106	28,993	2,583	27,701	207,732	7.2
-82	0.095343	26,409	2,518	25,150	180,031	6.8
-83	0.101968	23,891	2,436	22,673	154,881	6.5
-84	0.108997	21,455	2,339	20,286	132,207	6.2
-85	0.116449	19,117	2,339	18,004	111,921	5.9
	0.124338	16,891	2,100	15,840	93,918	5.6
-86	0.132682	14,790	1,962	13,809	78.077	5.3
-		,	1 '		- / -	5.3 5.0
-88	0.141496	12,828	1,815	11,920	64,268	
-89	0.150793	11,013	1,661	10,183	52,348	4.8
-90	0.160586	9,352	1,502	8,601	42,165	4.5
-91	0.170888	7,850	1,342	7,180	33,564	4.3
-92	0.181708	6,509	1,183	5,917	26,384	4.1
-93	0.193053	5,326	1,028	4,812	20,467	3.8
-94	0.204929	4,298	881	3,858	15,655	3.6
-95	0.217339	3,417	743	3,046	11,797	3.5
-96	0.230282	2,674	616	2,367	8,751	3.3
-97	0.243757	2,059	502	1,808	6,385	3.1
-98	0.257756	1,557	401	1,356	4,577	2.9
-99	0.272269	1,156	315	998	3,221	2.8
<u>–100</u>	0.287283	841	242	720	2,223	2.6
0 and over	1.000000	599	599	1,503	1,503	2.5

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Table IX. Life table for black females: United States, 2001

		· · · · · · · · · · · · · · · · ·				
					Total	
	D l l 10.		NI	D		
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
					_	
Age	$q_x$	$l_x$	$d_{x}$	L <sub>x</sub>	$T_x$	$e_x$
	4x	·x	-x	_x	· x	- X
0.4	0.040470	100.000	4 0 4 7	00.000	7.504.000	75.0
0–1	0.012472	100,000	1,247	98,926	7,524,603	75.2
1–2	0.000732	98,753	72	98,717	7,425,676	75.2
2–3	0.000376	98,681	37	98,662	7,326,960	74.2
		l '	-	· '	· ' '	
3–4	0.000314	98,643	31	98,628	7,228,298	73.3
4–5	0.000223	98,612	22	98,601	7,129,670	72.3
5–6	0.000212	98,590	21	98,580	7,031,069	71.3
		· '				
6–7	0.000186	98,569	18	98,560	6,932,489	70.3
7–8	0.000168	98,551	17	98,543	6,833,928	69.3
8–9	0.000158	98,535	16	98,527	6,735,385	68.4
		l '				
9–10	0.000155	98,519	15	98,512	6,636,859	67.4
10–11	0.000159	98,504	16	98,496	6,538,347	66.4
11–12	0.000170	98,488	17	98,480	6,439,851	65.4
12–13	0.000170	98,472	19	98,462	6,341,371	64.4
		· '		· '		
13–14	0.000219	98,453	22	98,442	6,242,909	63.4
14–15	0.000257	98,431	25	98,419	6,144,467	62.4
15–16	0.000302	98,406	30	98,391	6,046,048	61.4
		· '		i i		
16–17	0.000352	98,376	35	98,359	5,947,657	60.5
17–18	0.000408	98,342	40	98,322	5,849,298	59.5
18–19	0.000465	98,302	46	98,279	5,750,976	58.5
			51	· '		57.5
19–20	0.000521	98,256		98,230	5,652,697	
20–21	0.000582	98,205	57	98,176	5,554,467	56.6
21–22	0.000645	98,148	63	98,116	5,456,291	55.6
22–23	0.000702	98,084	69	98,050	5,358,175	54.6
		· '		i i	· ' '	
23–24	0.000751	98,016	74	97,979	5,260,125	53.7
24–25	0.000797	97,942	78	97,903	5,162,146	52.7
25–26	0.000851	97,864	83	97,822	5,064,243	51.7
			89	i i		
26–27	0.000913	97,781		97,736	4,966,421	50.8
27–28	0.000976	97,691	95	97,644	4,868,685	49.8
28–29	0.001037	97,596	101	97,545	4,771,041	48.9
29–30	0.001099	97,495	107	97,441	4,673,496	47.9
30–31	0.001164	97,388	113	97,331	4,576,054	47.0
31–32	0.001242	97,274	121	97,214	4,478,723	46.0
32–33	0.001357	97,154	132	97,088	4,381,509	45.1
33–34	0.001471	97,022	143	96,950	4,284,422	44.2
34–35	0.001623	96,879	157	96,800	4,187,471	43.2
35–36	0.001778	96,722	172	96,636	4,090,671	42.3
36–37	0.001939	96,550	187	96,456	3,994,035	41.4
37–38	0.002129	96,363	205	96,260	3,897,579	40.4
38–39	0.002354	96,158	226	96,044	3,801,318	39.5
39–40	0.002608	95,931	250	95,806	3,705,274	38.6
	0.002880		276	i i		37.7
40–41		95,681		95,543	3,609,468	1
41–42	0.003154	95,405	301	95,255	3,513,925	36.8
42–43	0.003419	95,105	325	94,942	3,418,670	35.9
43–44	0.003670	94,779	348	94,605	3,323,728	35.1
44–45	0.003920	94,432	370	94,246	3,229,122	34.2
				i i		
45–46	0.004182	94,061	393	93,865	3,134,876	33.3
46–47	0.004473	93,668	419	93,459	3,041,011	32.5
47–48	0.004802	93,249	448	93,025	2,947,553	31.6
48–49	0.005172	92,801	480	92,561	2,854,528	30.8
				i i		
49–50	0.005579	92,321	515	92,064	2,761,966	29.9
50–51	0.006024	91,806	553	91,530	2,669,903	29.1
51–52	0.006493	91,253	593	90,957	2,578,373	28.3
52–53	0.006973	90,661	632	90,345	2,487,416	27.4
				i i		
53–54	0.007465	90,028	672	89,692	2,397,071	26.6
54–55	0.007996	89,356	715	88,999	2,307,379	25.8
55–56	0.008612	88,642	763	88,260	2,218,380	25.0
56–57	0.009329	87,879	820	87,469	2,130,120	24.2
57–58	0.010114	87,059	880	86,618	2,042,651	23.5
58–59	0.010921	86,178	941	85,708	1,956,033	22.7
59–60	0.011735	85,237	1,000	84,737	1,870,325	21.9
60–61	0.012573	84,237	1,059	83,707	1,785,588	21.2
61–62	0.013500	83,178	1,123	82,616	1,701,881	20.5
62–63	0.014547	82,055	1,194	81,458	1,619,265	19.7
63–64	0.015757	80,861	1,274	80,224	1,537,807	19.0
64–65	0.017113	79,587	1,362	78,906	1,457,583	18.3
65–66	0.018561	78,225	1,452	77,499	1,378,676	17.6
66–67	0.019926	76,773	1,530	76,008	1,301,177	16.9
	I	I	I	I.	I	I

Table IX. Life table for black females: United States, 2001—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	$e_{x}$
7–68	0.021371	75,243	1,608	74,439	1,225,169	16.3
-69	0.022930	73,635	1,688	72,791	1,150,730	15.6
-70	0.024655	71,947	1,774	71,060	1,077,938	15.0
-71	0.026545	70,173	1,863	69,242	1,006,878	14.3
-72	0.028689	68,310	1,960	67,330	937,637	13.7
-73	0.031171	66,351	2,068	65,316	870.306	13.1
-74	0.033983	64,282	2,185	63,190	804,990	12.5
-75	0.037066	62,098	2,302	60,947	741,799	11.9
-76	0.040398	59,796	2,416	58,588	680,852	11.4
-77	0.043920	57,381	2,520	56,120	622,264	10.8
-78	0.047735	54,860	2,619	53,551	566,144	10.3
-79	0.051863	52,242	2,709	50,887	512,593	9.8
-80	0.056327	49,532	2,790	48,137	461,706	9.3
-81	0.061150	46,742	2,858	45,313	413,569	8.8
-82	0.066357	43,884	2,912	42,428	368,256	8.4
-83	0.071974	40,972	2,949	39,497	325,828	8.0
-84	0.078026	38,023	2,967	36,540	286,330	7.5
-85	0.084541	35,056	2,964	33,574	249,791	7.1
-86	0.091546	32,093	2,938	30,624	216,216	6.7
-87	0.099068	29,155	2,888	27,710	185,593	6.4
-88	0.107136	26,266	2,814	24.859	157,882	6.0
i–89	0.115776	23,452	2,715	22,095	133,023	5.7
_90	0.125015	20,737	2,592	19,441	110,928	5.3
–90	0.134880	18,145	2,447	16,921	91,488	5.0
_92	0.145393	15,697	2,282	14,556	74,567	4.8
–93	0.156578	13,415	2,100	12,365	60,010	4.5
_94	0.168453	11,314	1,906	10,362	47,646	4.2
-95	0.181035	9,409	1,703	8,557	37,284	4.0
-96	0.194338	7,705	1,497	6,957	28.727	3.7
-96	0.194336	6,208	1,497	5,561	21,771	3.7
-	0.223134	4,914	1,097	4,366	16,210	3.3
	0.238629	3,818	911	· '		3.3 3.1
	0.254847		741	3,362	11,844	
9–100		2,907		2,536	8,481	2.9
0 and over	1.000000	2,166	2,166	5,945	5,945	2.7

## 2002

Table I. Life table for the total population: United States, 2002

Age         q <sub>x</sub> l <sub>x</sub> d <sub>x</sub> L <sub>x</sub> T <sub>x</sub> 0-1         0.006971         100,000         697         99,389         7,693,910           1-2         0.000487         99,303         48         99,279         7,594,522           2-3         0.000319         99,255         32         99,239         7,495,243           3-4         0.000232         99,223         23         99,211         7,396,004           4-5         0.000198         99,200         20         99,190         7,296,793           5-6         0.000177         99,180         18         99,171         7,197,603           6-7         0.000164         99,163         16         99,155         7,098,431           7-8         0.000154         99,146         15         99,139         6,999,277           8-9         0.000140         99,131         14         99,124         6,900,138           9-10         0.000124         99,117         12         99,111         6,801,014           0-11         0.000133         99,105         11         99,099         6,701,903           12-12         0.00013         99,094         12         99,088	
1-2         0.000487         99,303         48         99,279         7,594,522           2-3         0.000319         99,255         32         99,239         7,495,243           3-4         0.000232         99,223         23         99,111         7,396,004           4-5         0.000188         99,200         20         99,190         7,296,793           5-6         0.000177         99,180         18         99,171         7,197,603           6-7         0.000164         99,163         16         99,155         7,098,431           7-8         0.000164         99,146         15         99,139         6,999,277           8-9         0.000140         99,131         14         99,124         6,900,138           9-10         0.000124         99,117         12         99,111         6,801,014           10-11         0.000113         99,105         11         99,099         6,701,903           11-12         0.000120         99,094         12         99,088         6,602,803           12-13         0.000158         99,082         16         99,074         6,503,716           13-14         0.000238         99,066         24	e <sub>x</sub>
2-3         0.000319         99,255         32         99,239         7,495,243           3-4         0.000232         99,223         23         99,211         7,396,004           4-5         0.000177         99,180         18         99,171         7,197,603           6-6         0.000177         99,180         18         99,171         7,197,603           6-7         0.000164         99,163         16         99,155         7,098,431           7-8         0.000154         99,146         15         99,139         6,999,277           8-9         0.000140         99,131         14         99,124         6,900,138           9-10         0.000124         99,117         12         99,111         6,801,014           0-11         0.000133         99,105         11         99,099         6,701,903           1-12         0.000120         99,094         12         99,088         6,602,803           2-13         0.000158         99,082         16         99,074         6,503,716           3-14         0.000238         99,066         24         99,054         6,404,642           4-15         0.000475         99,008         47	76.9
3-4         0.000232         99,223         23         99,211         7,396,004           4-5         0.000198         99,200         20         99,190         7,296,793           5-6         0.000177         99,180         18         99,171         7,197,603           6-7         0.000164         99,163         16         99,155         7,098,431           7-8         0.000140         99,131         14         99,124         6,900,138           8-9         0.000140         99,131         14         99,124         6,900,138           9-10         0.000124         99,117         12         99,111         6,801,014           0-11         0.000113         99,105         11         99,099         6,701,903           1-12         0.000120         99,094         12         99,088         6,602,803           2-13         0.000158         99,082         16         99,074         6,503,716           3-14         0.000475         99,084         35         99,025         6,305,587           5-16         0.000475         99,008         47         98,985         6,206,562           6-17         0.000596         98,961         59	76.5
4-5         0.000198         99,200         20         99,190         7,296,793           5-6         0.000177         99,180         18         99,171         7,197,603           3-7         0.000164         99,163         16         99,155         7,098,431           7-8         0.000140         99,131         14         99,124         6,999,277           3-9         0.000140         99,131         14         99,124         6,900,138           3-10         0.000124         99,117         12         99,111         6,801,014           0-11         0.000113         99,105         11         99,099         6,701,903           2-13         0.000120         99,094         12         99,088         6,602,803           2-13         0.000158         99,082         16         99,074         6,503,716           3-14         0.000238         99,066         24         99,054         6,404,642           4-15         0.000349         99,043         35         99,025         6,305,587           5-16         0.000475         99,08         47         98,985         6,206,562           5-17         0.000596         98,961         59	75.5
5-6         0.000177         99,180         18         99,171         7,197,603           3-7         0.000164         99,163         16         99,155         7,098,431           7-8         0.000154         99,146         15         99,139         6,999,277           8-9         0.000140         99,131         14         99,124         6,900,138           9-10         0.000124         99,117         12         99,111         6,801,014           0-11         0.000113         99,105         11         99,099         6,701,903           -12.         0.000120         99,094         12         99,088         6,602,803           2-13         0.000158         99,082         16         99,074         6,503,716           3-14         0.000238         99,066         24         99,054         6,404,642           4-15         0.000349         99,043         35         99,025         6,305,587           5-16         0.000475         99,008         47         98,985         6,206,562           5-17         0.000596         98,961         59         98,932         6,107,577           7-8         0.000782         98,833         77	74.5
5-7         0.000164         99,163         16         99,155         7,099,431           7-8         0.000154         99,146         15         99,139         6,999,277           8-9         0.000140         99,131         14         99,124         6,900,138           9-10         0.000124         99,117         12         99,111         6,801,014           9-11         0.000113         99,105         11         99,099         6,701,903           -12         0.000120         99,094         12         99,088         6,602,803           2-13         0.000158         99,082         16         99,074         6,503,716           3-14         0.000238         99,066         24         99,054         6,404,642           1-15         0.000349         99,043         35         99,025         6,305,587           3-16         0.000475         99,008         47         98,985         6,206,562           3-17         0.000596         98,961         59         98,932         6,107,577           -18         0.000703         98,902         70         98,867         6,008,646           3-29         0.000837         98,755         83	73.6
7-8         0.000154         99,146         15         99,139         6,999,277           1-9         0.000140         99,131         14         99,124         6,900,138           1-10         0.000113         99,105         11         99,099         6,701,903           1-11         0.000120         99,094         12         99,088         6,602,803           1-12         0.000158         99,082         16         99,074         6,503,716           1-14         0.000238         99,066         24         99,054         6,404,642           1-15         0.000349         99,043         35         99,025         6,305,587           1-16         0.000475         99,008         47         98,985         6,206,562           1-17         0.000793         98,902         70         98,867         6,008,646           1-18         0.000782         98,833         77         98,794         5,909,778           1-20         0.000837         98,755         83         98,714         5,810,985           1-21         0.000890         98,673         88         98,629         5,712,271           -22         0.000943         98,585         93	72.6
1-9	71.6 70.6
1-10	69.6
1-11.         0.000113         99,105         11         99,099         6,701,903           -12.         0.000120         99,094         12         99,088         6,602,803           1-13         0.000158         99,082         16         99,074         6,503,716           1-14         0.000238         99,066         24         99,054         6,404,642           -15         0.000349         99,043         35         99,025         6,305,587           1-16         0.000475         99,008         47         98,985         6,206,562           1-17         0.000596         98,961         59         98,932         6,107,577           1-18         0.000703         98,902         70         98,867         6,008,646           1-19         0.000782         98,833         77         98,794         5,909,778           1-20         0.000837         98,755         83         98,714         5,810,985           1-21         0.000890         98,673         88         98,629         5,712,271           1-22         0.000943         98,585         93         98,538         5,613,642           1-23         0.000975         98,492         96	68.6
-12.         0.000120         99,094         12         99,088         6,602,803           1-13         0.000158         99,082         16         99,074         6,503,716           1-14         0.000238         99,066         24         99,054         6,404,642           -15         0.000349         99,043         35         99,025         6,305,587           1-16         0.000475         99,008         47         98,985         6,206,562           1-17         0.000596         98,961         59         98,932         6,107,577           1-18         0.000703         98,902         70         98,867         6,008,646           1-19         0.000782         98,833         77         98,794         5,909,778           1-20         0.000837         98,755         83         98,714         5,810,985           1-21         0.000890         98,673         88         98,629         5,712,271           1-22         0.000943         98,585         93         98,538         5,613,642           1-23         0.000975         98,492         96         98,444         5,515,104           1-24         0.000981         98,396         97	67.6
2-13     0.000158     99,082     16     99,074     6,503,716       1-14     0.000238     99,066     24     99,054     6,404,642       -15     0.000349     99,043     35     99,025     6,305,587       1-16     0.000475     99,008     47     98,985     6,206,562       1-17     0.000596     98,961     59     98,932     6,107,577       1-18     0.000703     98,902     70     98,867     6,008,646       1-19     0.000782     98,833     77     98,794     5,909,778       1-20     0.000837     98,755     83     98,714     5,810,985       1-21     0.000890     98,673     88     98,629     5,712,271       1-22     0.000943     98,585     93     98,538     5,613,642       1-23     0.000975     98,492     96     98,444     5,515,104       1-24     0.000981     98,396     97     98,347     5,416,660       1-25     0.000968     98,299     95     98,252     5,318,313       1-26     0.000949     98,204     93     98,157     5,220,061       1-27     0.000935     98,111     92     98,065     5,121,904	66.6
1-14       0.000238       99,066       24       99,054       6,404,642         -15       0.000349       99,043       35       99,025       6,305,587         1-16       0.000475       99,008       47       98,985       6,206,562         1-17       0.000596       98,961       59       98,932       6,107,577         -18       0.000703       98,902       70       98,867       6,008,646         1-19       0.000782       98,833       77       98,794       5,909,778         1-20       0.000837       98,755       83       98,714       5,810,985         1-21       0.000890       98,673       88       98,629       5,712,271         2-22       0.000943       98,585       93       98,538       5,613,642         1-23       0.000975       98,492       96       98,444       5,515,104         1-24       0.000981       98,396       97       98,347       5,416,660         1-25       0.000968       98,299       95       98,252       5,318,313         1-26       0.000949       98,204       93       98,157       5,220,061         1-27       0.000935       98,111       9	65.6
-15         0.000349         99,043         35         99,025         6,305,587           -16         0.000475         99,008         47         98,985         6,206,562           -17         0.000596         98,961         59         98,932         6,107,577           -18         0.000703         98,902         70         98,867         6,008,646           -19         0.000782         98,833         77         98,794         5,909,778           -20         0.000837         98,755         83         98,714         5,810,985           -21         0.000890         98,673         88         98,629         5,712,271           -22         0.000943         98,585         93         98,538         5,613,642           -23         0.000975         98,492         96         98,444         5,515,104           -24         0.000981         98,396         97         98,347         5,416,660           -25         0.000988         98,299         95         98,252         5,318,313           -26         0.000949         98,204         93         98,157         5,220,061           -27         0.000935         98,111         92	64.7
-16         0.000475         99,008         47         98,985         6,206,562           -17         0.000596         98,961         59         98,932         6,107,577           -18         0.000703         98,902         70         98,867         6,008,646           -19         0.000782         98,833         77         98,794         5,909,778           -20         0.000837         98,755         83         98,714         5,810,985           -21         0.000890         98,673         88         98,629         5,712,271           -22         0.000943         98,585         93         98,538         5,613,642           -23         0.000975         98,492         96         98,444         5,515,104           -24         0.000981         98,396         97         98,347         5,416,660           -25         0.000968         98,299         95         98,252         5,318,313           -26         0.000949         98,204         93         98,157         5,220,061           -27         0.000935         98,111         92         98,065         5,121,904	63.7
-17         0.000596         98,961         59         98,932         6,107,577           -18         0.000703         98,902         70         98,867         6,008,646           -19         0.000782         98,833         77         98,794         5,909,778           -20         0.000837         98,755         83         98,714         5,810,985           -21         0.000890         98,673         88         98,629         5,712,271           -22         0.000943         98,585         93         98,538         5,613,642           -23         0.000975         98,492         96         98,444         5,515,104           -24         0.000981         98,396         97         98,347         5,416,660           -25         0.000968         98,299         95         98,252         5,318,313           -26         0.000949         98,204         93         98,157         5,220,061           -27         0.000935         98,111         92         98,065         5,121,904	62.7
7-18     0.000703     98,902     70     98,867     6,008,646       1-19     0.000782     98,833     77     98,794     5,909,778       1-20     0.000837     98,755     83     98,714     5,810,985       1-21     0.000890     98,673     88     98,629     5,712,271       1-22     0.000943     98,585     93     98,538     5,613,642       1-23     0.000975     98,492     96     98,444     5,515,104       1-24     0.000981     98,396     97     98,347     5,416,660       1-25     0.000968     98,299     95     98,252     5,318,313       1-26     0.000949     98,204     93     98,157     5,220,061       1-27     0.000935     98,111     92     98,065     5,121,904	61.7
1-19     0.000782     98,833     77     98,794     5,909,778       1-20     0.000837     98,755     83     98,714     5,810,985       1-21     0.000890     98,673     88     98,629     5,712,271       1-22     0.000943     98,585     93     98,538     5,613,642       1-23     0.000975     98,492     96     98,444     5,515,104       1-24     0.000981     98,396     97     98,347     5,416,660       1-25     0.000968     98,299     95     98,252     5,318,313       1-26     0.000949     98,204     93     98,157     5,220,061       1-27     0.000935     98,111     92     98,065     5,121,904	60.8
1-20     0.000837     98,755     83     98,714     5,810,985       1-21     0.000890     98,673     88     98,629     5,712,271       1-22     0.000943     98,585     93     98,538     5,613,642       1-23     0.000975     98,492     96     98,444     5,515,104       1-24     0.000981     98,396     97     98,347     5,416,660       1-25     0.000968     98,299     95     98,252     5,318,313       1-26     0.000949     98,204     93     98,157     5,220,061       1-27     0.000935     98,111     92     98,065     5,121,904	59.8
1-21     0.000890     98,673     88     98,629     5,712,271       -22     0.000943     98,585     93     98,538     5,613,642       2-23     0.000975     98,492     96     98,444     5,515,104       1-24     0.000981     98,396     97     98,347     5,416,660       1-25     0.000968     98,299     95     98,252     5,318,313       1-26     0.000949     98,204     93     98,157     5,220,061       1-27     0.000935     98,111     92     98,065     5,121,904	58.8
-22     0.000943     98,585     93     98,538     5,613,642       -23     0.000975     98,492     96     98,444     5,515,104       -24     0.000981     98,396     97     98,347     5,416,660       -25     0.000968     98,299     95     98,252     5,318,313       -26     0.000949     98,204     93     98,157     5,220,061       -27     0.000935     98,111     92     98,065     5,121,904	57.9
-23     0.000975     98,492     96     98,444     5,515,104       -24     0.000981     98,396     97     98,347     5,416,660       -25     0.000968     98,299     95     98,252     5,318,313       -26     0.000949     98,204     93     98,157     5,220,061       -27     0.000935     98,111     92     98,065     5,121,904	56.9
-24     0.000981     98,396     97     98,347     5,416,660       -25     0.000968     98,299     95     98,252     5,318,313       -26     0.000949     98,204     93     98,157     5,220,061       -27     0.000935     98,111     92     98,065     5,121,904	56.0
-25     0.000968     98,299     95     98,252     5,318,313       -26     0.000949     98,204     93     98,157     5,220,061       -27     0.000935     98,111     92     98,065     5,121,904	55.0
-26     0.000949     98,204     93     98,157     5,220,061       -27     0.000935     98,111     92     98,065     5,121,904	54.1
i–27	53.2
	52.2
-20	51.3
H-29	50.3
-30	49.3
⊢31	48.4
_32	47.4
2-33	46.5
114 97,375 4,437,427 ±34	45.5
<i>⊢</i> 35	44.6
i=36	43.7
-37	42.7
-38 · · · · · · · · · · · · · · 0.001592   96,922   154   96,845   4,048,671	41.8
-39 · · · · · · · · · · · · 0.001737   96,768   168   96,684   3,951,825	40.8
-40   0.001895   96,600   183   96,508   3,855,141	39.9
⊢41	39.0
-42 · · · · · · · · · · · 0.002229 96,218 214 96,111 3,662,315	38.1
-43     0.002409     96,004     231     95,888     3,566,204	37.1
-44     0.002604     95,773     249     95,648     3,470,316	36.2
-45     0.002819     95,523     269     95,389     3,374,668	35.3
-46        0.003054     95,254       291     95,109       3,279,279	34.4
5-47	33.5
-48	32.6
-49	31.8
-50	30.9
-51	30.0
-52	29.1
-53	28.3
-54	27.4
-55	26.6
-56	25.7
-57   0.007065   90,590   640   90,270   2,253,915	24.9 24.1
	23.2
	23.2
⊢60	22.4
-61	20.8
	20.8
2–63	

Table I. Life table for the total population: United States, 2002—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectatior of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	$e_x$
63–64	0.012904	84,878	1,095	84,331	1,638,018	19.3
4–65	0.014009	83,783	1,174	83,196	1,553,687	18.5
i–66	0.015199	82,609	1,256	81,982	1,470,491	17.8
6–67	0.016429	81,354	1,337	80,685	1,388,510	17.1
'–68	0.017863	80,017	1,429	79,303	1,307,824	16.3
3–69	0.019508	78,588	1,533	77,821	1,228,522	15.6
9–70	0.021339	77,055	1,644	76,233	1,150,700	14.9
)–71	0.023316	75,411	1,758	74,531	1,074,468	14.2
1–72	0.025519	73,652	1,880	72,713	999,936	13.6
2–73	0.028060	71,773	2,014	70,766	927,224	12.9
3–74	0.030976	69,759	2,161	68,678	856,458	12.3
1–75	0.034258	67,598	2,316	66,440	787,779	11.7
5–76	0.037919	65,282	2,475	64,045	721,339	11.0
6–77	0.041840	62,807	2,628	61,493	657,295	10.5
7–78	0.046147	60,179	2,777	58,790	595,802	9.9
8–79	0.050874	57,402	2,920	55,942	537,011	9.4
9–80	0.056057	54,482	3,054	52,955	481,070	8.8
0–81	0.061734	51,428	3,175	49,840	428,115	8.3
1–82	0.067944	48,253	3,278	46,614	378,275	7.8
2–83	0.074729	44,974	3,361	43,294	331,661	7.4
3–84	0.082132	41,613	3,418	39,905	288,367	6.9
4–85	0.090196	38,196	3,445	36,473	248,463	6.5
5–86	0.098968	34,751	3,439	33,031	211,990	6.1
6–87	0.108490	31,311	3,397	29,613	178,959	5.7
7–88	0.118808	27,914	3,316	26,256	149,346	5.4
8–89	0.129964	24,598	3,197	23,000	123,090	5.0
9–90	0.141999	21,401	3,039	19,882	100,090	4.7
0–91	0.154950	18,362	2,845	16,940	80,209	4.4
1–92	0.168850	15,517	2,620	14,207	63,269	4.1
2–93	0.183725	12,897	2,369	11,712	49,062	3.8
3–94	0.199596	10,527	2,101	9,477	37,350	3.5
i–95	0.216475	8,426	1,824	7,514	27,873	3.3
i–96	0.234363	6,602	1,547	5,828	20,359	3.1
5–97	0.253251	5,055	1,280	4,415	14,531	2.9
7–98	0.273119	3,775	1,031	3,259	10,116	2.7
8–99	0.293932	2,744	806	2,341	6,857	2.7
9–100	0.315642	1,937	611	1,632	4,516	2.3
	1.000000	1,937	1,326	2,884	2,884	2.3 2.2
00 and over	1.000000	1,320	1,320	2,884	2,884	2.2

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Table II. Life table for males: United States, 2002

			1		T	ı
					Total	
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
	ugoo x to x++	ugo x	ugoo x to x i i	ugoo x to xi i	ugo x	at ago x
Age	$q_x$	$l_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_{x}$
		^	^	^	^	^
0–1	0.007639	100,000	764	99,332	7,428,683	74.3
1–2	0.000540	99,236	54	99,209	7,329,351	73.9
2–3	0.000361	99,183	36	99,165	7,230,142	72.9
3–4	0.000267	99,147	26	99,134	7,130,977	71.9
4–5	0.000229	99,120	23	99,109	7,031,844	70.9
5–6	0.000197	99,098	20	99,088	6,932,735	70.0
6–7	0.000137	99,078	18	99,069	6,833,647	69.0
7–8	0.000172	99,060	17	99,051	1 1	68.0
		· '		· ·	6,734,578	
8–9	0.000154	99,043	15	99,035	6,635,527	67.0
9–10	0.000130	99,027	13	99,021	6,536,492	66.0
10–11	0.000113	99,015	11	99,009	6,437,471	65.0
11–12	0.000121	99,003	12	98,998	6,338,462	64.0
12–13	0.000176	98,992	17	98,983	6,239,464	63.0
13–14	0.000291	98,974	29	98,960	6,140,481	62.0
14–15	0.000452	98,945	45	98,923	6,041,522	61.1
15–16	0.000633	98,901	63	98,869	5,942,599	60.1
16–17	0.000808	98,838	80	98,798	5,843,729	59.1
17–18	0.000969	98,758	96	98,710	5,744,931	58.2
18–19	0.001098	98,662	108	98,608	5,646,221	57.2
19–20	0.001098	98,554	118	98,495	5,547,613	56.3
20–21	0.001199	98,436	128	98,372	5,449,118	55.4
	0.001300	· '		· ·		
21–22		98,308	137	98,239	5,350,746	54.4
22–23	0.001453	98,171	143	98,099	5,252,507	53.5
23–24	0.001460	98,028	143	97,956	5,154,407	52.6
24–25	0.001429	97,885	140	97,815	5,056,451	51.7
25–26	0.001384	97,745	135	97,677	4,958,636	50.7
26–27	0.001345	97,610	131	97,544	4,860,958	49.8
27–28	0.001320	97,479	129	97,414	4,763,414	48.9
28–29	0.001321	97,350	129	97,286	4,666,000	47.9
29–30	0.001346	97,221	131	97,156	4,568,714	47.0
30–31	0.001378	97,090	134	97,024	4,471,558	46.1
31–32	0.001415	96,957	137	96,888	4,374,535	45.1
32–33	0.001484	96,820	144	96,748	4,277,647	44.2
33–34	0.001548	96,676	150	96,601	1 1	43.2
			159		4,180,899	42.3
	0.001647	96,526		96,447	4,084,298	
35–36	0.001760	96,367	170	96,282	3,987,851	41.4
36–37	0.001888	96,198	182	96,107	3,891,569	40.5
37–38	0.002039	96,016	196	95,918	3,795,462	39.5
38–39	0.002213	95,820	212	95,714	3,699,544	38.6
39–40	0.002404	95,608	230	95,493	3,603,829	37.7
40–41	0.002604	95,378	248	95,254	3,508,336	36.8
41–42	0.002812	95,130	267	94,996	3,413,082	35.9
42–43	0.003037	94,863	288	94,718	3,318,086	35.0
43–44	0.003288	94,574	311	94,419	3,223,367	34.1
44–45	0.003568	94,263	336	94,095	3,128,948	33.2
45–46	0.003874	93,927	364	93,745	3,034,853	32.3
46–47	0.004200	93,563	393	93,367	2,941,108	31.4
47–48	0.004542	93,170	423	92,959	2,847,741	30.6
48–49	0.004893	92,747	454	92,520	2,754,782	29.7
49–50	0.005254	92,293	485	92,051	2,662,262	28.8
50–51	0.005640	91,808	518	91,549	2,570,211	28.0
51–52	0.006058	91,291	553	91,014	2,478,662	27.2
52–53	0.006508	90,738	591	90,442	2,387,648	26.3
53–54	0.006999		631	· · ·	· ' '	25.5
		90,147		89,832	2,297,205	
54–55	0.007543	89,516	675	89,178	2,207,374	24.7
55–56	0.008156	88,841	725	88,479	2,118,195	23.8
56–57	0.008838	88,116	779	87,727	2,029,717	23.0
57–58	0.009588	87,337	837	86,919	1,941,990	22.2
58–59	0.010405	86,500	900	86,050	1,855,071	21.4
59–60	0.011301	85,600	967	85,116	1,769,021	20.7
60–61	0.012326	84,633	1,043	84,111	1,683,905	19.9
61–62	0.013487	83,590	1,127	83,026	1,599,794	19.1
62–63	0.014730	82,462	1,215	81,855	1,516,768	18.4
63–64	0.016017	81,247	1,301	80,597	1,434,913	17.7
64–65	0.017365	79,946	1,388	79,252	1,354,316	16.9
65–66	0.017363	79,946	1,477	79,252	1,275,064	16.2
	0.020360	76,556	1,477			15.5
66–67	0.020300	/ / ,001	1,509	76,296	1,197,245	15.5

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Table II. Life table for males: United States, 2002—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
7–68	0.022205	75,512	1,677	74,673	1,120,948	14.8
-69	0.024331	73,835	1,797	72,937	1,046,275	14.2
-70	0.026704	72,038	1,924	71,077	973,338	13.5
-71	0.029235	70,115	2,050	69,090	902,262	12.9
-72	0.031999	68,065	2,178	66,976	833.172	12.2
-73	0.035141	65,887	2,315	64.729	766.196	11.6
-74	0.038712	63,572	2,461	62,341	701,467	11.0
-75	0.042678	61,111	2,608	59,807	639,125	10.5
-76	0.047037	58,503	2,752	57,127	579,319	9.9
-77	0.051708	55,751	2,883	54,309	522,192	9.4
-78	0.056815	52,868	3,004	51,366	467,883	8.9
-79	0.062393	49,864	3,111	48,309	416,516	8.4
-80	0.068479	46,753	3,202	45,152	368,208	7.9
-81	0.075111	43,552	3,271	41,916	323,055	7.4
-82	0.082329	40,280	3,316	38,622	281,139	7.0
-83	0.090173	36,964	3,333	35,298	242,517	6.6
-84	0.098683	33,631	3,319	31,972	207,220	6.2
-85	0.107902	30,312	3,271	28,677	175,248	5.8
-86	0.117869	27,041	3,187	25,448	146,571	5.4
-87	0.178624	23,854	3,068	22,320	121,124	5.1
-88	0.140204	20,786	2,914	19,329	98,803	4.8
	0.152645	17,872	2,728	16,508	79,475	4.6
	0.165976					4.4
		15,144	2,513	13,887	62,967	4.2 3.9
–91	0.180224	12,630	2,276	11,492	49,080	3.9 3.6
*=	0.195408 0.211541	10,354	2,023	9,342	37,588	
11		8,331	1,762	7,450	28,246	3.4 3.2
	0.228628	6,568	1,502	5,818	20,796	
-95	0.246664	5,067	1,250	4,442	14,979	3.0
-96	0.265632	3,817	1,014	3,310	10,537	2.8
-97	0.285506	2,803	800	2,403	7,227	2.6
-98	0.306247	2,003	613	1,696	4,824	2.4
-99	0.327803	1,389	455	1,162	3,128	2.3
_100	0.350111	934	327	770	1,967	2.1
0 and over	1.000000	607	607	1,196	1,196	2.0

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Table III. Life table for females: United States, 2002

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age x
Age	$q_x$	I <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
0–1	0.006271	100,000	627	99,449	7,948,798	79.5
–2	0.000431	99,373	43	99,351	7,849,350	79.0
:-3	0.000276	99,330	27	99,316	7,749,998	78.0
3–4	0.000195	99,303	19	99,293	7,650,682	77.0
–5	0.000166	99,283	17	99,275	7,551,389	76.1
i–6	0.000155	99,267	15	99,259	7,452,114	75.1
–7	0.000143	99,251	14	99,244	7,352,854	74.1
/-8	0.000135	99,237	13	99,231	7,253,610	73.1
H-9	0.000127	99,224	13	99,218	7,154,380	72.1
)–10	0.000118	99,211	12	99,205	7,055,162	71.1
⊢11	0.000114 0.000118	99,199 99,188	11 12	99,194	6,955,957	70.1 69.1
–12	0.000116	99,176	14	99,182 99,170	6,856,763 6,757,581	68.1
	0.000140	99,163	18	99,154	6,658,411	67.1
–15	0.000162	99,145	24	99,133	6,559,257	66.2
i–16	0.000308	99,121	30	99,106	6,460,125	65.2
5–17	0.000373	99,090	37	99,072	6,361,019	64.2
<u>'–18</u>	0.000423	99,053	42	99,032	6,261,947	63.2
<b>–</b> 19	0.000448	99,012	44	98,989	6,162,915	62.2
)–20	0.000454	98,967	45	98,945	6,063,925	61.3
–21	0.000458	98,922	45	98,900	5,964,981	60.3
–22	0.000466	98,877	46	98,854	5,866,081	59.3
-23	0.000473	98,831	47	98,807	5,767,227	58.4
-24	0.000479	98,784	47	98,760	5,668,420	57.4
.–25	0.000487	98,737	48	98,713	5,569,659	56.4
i–26	0.000497	98,689	49 50	98,664	5,470,947	55.4
i–27	0.000510 0.000530	98,640 98,589	52	98,614 98,563	5,372,283 5,273,668	54.5 53.5
i–29	0.000556	98,537	55	98,510	5,175,105	52.5
) <del>-</del> 30	0.000587	98,482	58	98,453	5,076,595	51.5
i–31	0.000623	98,425	61	98,394	4,978,142	50.6
-32	0.000665	98,363	65	98,330	4,879,748	49.6
<u>1</u> –33	0.000723	98,298	71	98,262	4,781,417	48.6
i–34	0.000783	98,227	77	98,188	4,683,155	47.7
–35	0.000862	98,150	85	98,107	4,584,967	46.7
i–36	0.000948	98,065	93	98,019	4,486,859	45.8
–37	0.001040	97,972	102	97,921	4,388,841	44.8
–38	0.001145	97,870	112	97,814	4,290,919	43.8
-39	0.001263	97,758	124	97,697	4,193,105	42.9
-40	0.001390	97,635	136	97,567	4,095,408	41.9
–41	0.001520 0.001653	97,499	148 161	97,425	3,997,841	41.0 40.1
–42	0.001653	97,351 97,190	174	97,270 97,103	3,900,416 3,803,146	39.1
-44	0.001789	97,016	187	96,922	3,706,043	38.2
_45	0.002085	96,829	202	96,728	3,609,121	37.3
i–46	0.002252	96,627	218	96,518	3,512,393	36.4
i–47	0.002433	96,409	235	96,292	3,415,875	35.4
′–48	0.002622	96,175	252	96,049	3,319,583	34.5
–49	0.002816	95,922	270	95,787	3,223,534	33.6
–50	0.003017	95,652	289	95,508	3,127,747	32.7
-51	0.003231	95,364	308	95,210	3,032,239	31.8
-52	0.003470	95,056	330	94,891	2,937,029	30.9
-53	0.003746	94,726	355	94,548	2,842,138	30.0
-54	0.004074	94,371	384	94,179	2,747,590	29.1
-55	0.004457	93,986	419	93,777	2,653,411	28.2
-56	0.004900 0.005390	93,568 93,109	458 502	93,338 92,858	2,559,634 2,466,296	27.4 26.5
-58	0.005390	92,607	547	92,334	2,373,438	25.6
–59	0.006451	92,060	594	91,763	2,281,104	24.8
i–60	0.007022	91,466	642	91,145	2,189,342	23.9
)–61	0.007675	90,824	697	90,475	2,098,197	23.1
-62	0.008429	90,127	760	89,747	2,007,722	22.3
2–63	0.009241	89,367	826	88,954	1,917,975	21.5
1–64	0.010096	88,541	894	88,094	1,829,021	20.7
–65	0.011008	87,647	965	87,165	1,740,927	19.9
-66	0.012008	86,682	1,041	86,162	1,653,762	19.1
i–67	0.013021	85,641	1,115	85,084	1,567,600	18.3

Table III. Life table for females: United States, 2002—Con.

Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectatior of life at age <i>x</i>
l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
84,526	1,199	83,927	1,482,516	17.5
83,327	1,292	82,681	1,398,589	16.8
82,035	1,394	81,338	1,315,908	16.0
80,641	1,502	79,890	1,234,570	15.3
79,140	1,621	78,329	1,154,680	14.6
77,519	1,757	76,640	1,076,350	13.9
75,762	1,909	74,807	999,710	13.2
73,852	2,074	72,815	924,903	12.5
71,778	2,249	70,654	852,088	11.9
69,529	2.422	68,318	781,434	11.2
67,107	2,598	65,808	713,116	10.6
64,509	2,774	63,123	647,308	10.0
61,736	2,947	60,263	584,185	9.5
58,789	3,113	57,233	523,922	8.9
55,676	3,270	54,041	466,690	8.4
52,406	3,410	50,701	412,649	7.9
48,996	3,531	47,230	361,948	7.4
45,465	3,625	43,652	314,717	6.9
41,840	3,688	39,996	271,065	6.5
38,152	3,714	36,295	231,069	6.1
34,438	3,699	32,589	194,774	5.7
30,739	3,638	28,920	162,186	5.3
27,101	3,530	25,336	133,265	4.9
23,571	3,375	21,883	107,929	4.6
20,196	3,173	18,609	86,046	4.3
17,023	2,931	15,557	67,437	4.0
14,092	2,654	12,765	51,879	3.7
11,437	2,352	10,261	39,115	3.4
9,085	2,036	8,067	28,854	3.2
7,049	1,718	6,190	20,786	2.9
		,		2.7
		,		2.5
				2.4
		,		2.4
	7,049 5,331 3,921 2,799 1,933	5,331 1,410 3,921 1,123 2,799 865	5,331     1,410     4,626       3,921     1,123     3,360       2,799     865     2,366	5,331     1,410     4,626     14,596       3,921     1,123     3,360     9,970       2,799     865     2,366     6,610

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Table IV. Life table for the white population: United States, 2002

		,				
					Total	
				l _		
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
			, ,			
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
					_	
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_x$
				-		-
0.4	0.005700	100,000	F70	00.400	7 744 040	77.4
0–1	0.005786	100,000	579	99,493	7,744,816	77.4
1–2	0.000437	99,421	43	99,400	7,645,323	76.9
2–3	0.000291	99,378	29	99,363	7,545,923	75.9
		· ·				
3–4	0.000212	99,349	21	99,339	7,446,560	75.0
4–5	0.000175	99,328	17	99,319	7,347,221	74.0
5–6	0.000161	99,311	16	99,303	7,247,902	73.0
6–7	0.000153	99,295	15	99,287	7,148,599	72.0
7–8	0.000145	99,279	14	99,272	7,049,312	71.0
		· '				
8–9	0.000131	99,265	13	99,259	6,950,040	70.0
9–10	0.000113	99,252	11	99,246	6,850,782	69.0
		· ·		i i		
10–11	0.000099	99,241	10	99,236	6,751,535	68.0
11–12	0.000103	99,231	10	99,226	6,652,299	67.0
	0.000141	99,221	14	99,214		66.0
		· '		· '	6,553,073	
13–14	0.000223	99,207	22	99,196	6,453,859	65.1
14–15	0.000337	99,185	33	99,168	6,354,663	64.1
		· '		i i		
15–16	0.000467	99,151	46	99,128	6,255,495	63.1
16–17	0.000590	99,105	58	99.076	6,156,367	62.1
		· '		,		
17–18	0.000693	99,047	69	99,012	6,057,291	61.2
18–19	0.000762	98,978	75	98,940	5,958,279	60.2
19–20	0.000803	98,902	79	98,863	5,859,339	59.2
		· '		· '		
20–21	0.000841	98,823	83	98,781	5,760,476	58.3
21–22	0.000880	98,740	87	98,697	5,661,695	57.3
		· '		i i		
22–23	0.000900	98,653	89	98,609	5,562,998	56.4
23–24	0.000899	98,564	89	98,520	5,464,390	55.4
24–25	0.000882	98,476	87	98,432	5,365,870	54.5
		· '		· · · · · · · · · · · · · · · · · · ·	· ' '	
25–26	0.000859	98,389	84	98,347	5,267,437	53.5
26–27	0.000840	98,304	83	98,263	5,169,091	52.6
27–28	0.000833	98,222	82	98,181	5,070,828	51.6
		· ·		i i		
28–29	0.000844	98,140	83	98,099	4,972,647	50.7
29–30	0.000871	98,057	85	98,015	4,874,548	49.7
30–31	0.000906	97,972	89	97,927	4,776,533	48.8
31–32	0.000945	97,883	92	97,837	4,678,606	47.8
	0.001004	97,791	98	97,742	4,580,769	46.8
		l ·				
33–34	0.001060	97,692	104	97,641	4,483,028	45.9
34–35	0.001139	97,589	111	97,533	4,385,387	44.9
		l ·				
35–36	0.001226	97,478	120	97,418	4,287,854	44.0
36–37	0.001325	97,358	129	97,294	4,190,436	43.0
37–38	0.001444	97,229	140	97,159	4,093,142	42.1
		· ·				
38–39	0.001584	97,089	154	97,012	3,995,983	41.2
39–40	0.001738	96,935	168	96,851	3,898,971	40.2
	0.001898	96,767	184	i i		39.3
40–41				96,675	3,802,120	l
41–42	0.002061	96,583	199	96,484	3,705,445	38.4
42–43	0.002229	96,384	215	96,277	3,608,962	37.4
				i i		
43–44	0.002406	96,169	231	96,054	3,512,685	36.5
44–45	0.002597	95,938	249	95,813	3,416,631	35.6
45–46	0.002807	95,689	269	95,554	3,320,818	34.7
46–47	0.003034	95,420	289	95,275	3,225,264	33.8
		· ·		i i		
47–48	0.003271	95,131	311	94,975	3,129,988	32.9
48–49	0.003514	94,819	333	94,653	3,035,013	32.0
		· ·		i i		
49–50	0.003766	94,486	356	94,308	2,940,361	31.1
50–51	0.004034	94,130	380	93,941	2,846,052	30.2
51–52	0.004332	93,751	406	93,548	2,752,112	29.4
		· ·		i i	1 ' '	
52–53	0.004672	93,345	436	93,126	2,658,564	28.5
53–54	0.005068	92,908	471	92,673	2,565,438	27.6
54–55	0.005525	· ·	511	i i		
		92,438		92,182	2,472,765	26.8
55–56	0.006045	91,927	556	91,649	2,380,582	25.9
56–57	0.006618	91,371	605	91,069	2,288,933	25.1
		l ·		i i		
57–58	0.007232	90,767	656	90,438	2,197,864	24.2
58–59	0.007880	90,110	710	89,755	2,107,426	23.4
59–60	0.008580	89,400	767	89,017	2,017,671	22.6
60–61	0.009388	88,633	832	88,217	1,928,654	21.8
61–62	0.010318	87,801	906	87,348	1,840,437	21.0
		l ·				
62–63	0.011316	86,895	983	86,403	1,753,089	20.2
63–64	0.012352	85,912	1,061	85,381	1,666,686	19.4
		l ·	· ·			
64–65	0.013443	84,850	1,141	84,280	1,581,305	18.6
65–66	0.014624	83,710	1,224	83,098	1,497,025	17.9
66–67	0.015864	82,486	1,309	81,831	1,413,927	17.1
00 07	0.013004	02,400	1,509	01,001	1,710,321	''.'
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Table IV. Life table for the white population: United States, 2002—Con.

Age	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
	$q_{x}$	I <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	$T_x$	e <sub>x</sub>
7–68	0.017313	81,177	1,405	80,474	1,332,096	16.4
–69	0.018970	79,772	1,513	79,015	1,251,621	15.7
–70	0.020803	78,258	1,628	77,444	1,172,606	15.0
-71	0.022770	76,630	1,745	75,758	1,095,162	14.3
-72	0.024958	74,886	1,869	73,951	1,019,404	13.6
-73	0.027483	73,017	2,007	72,013	945,453	12.9
-74	0.030385	71,010	2,158	69,931	873,439	12.3
-75	0.033658	68,852	2,317	67,694	803,508	11.7
-76	0.037314	66,535	2,483	65,293	735,815	11.1
-77	0.041252	64,052	2,642	62,731	670,521	10.5
-78	0.045585	61,410	2,799	60,010	607,790	9.9
-79	0.050349	58,611	2,951	57,135	547,780	9.3
-80	0.055582	55,660	3,094	54,113	490.645	8.8
-81	0.061324	52,566	3,224	50,954	436,532	8.3
-82	0.067617	49,342	3,336	47,674	385,578	7.8
-83	0.074504	46,006	3,428	44,292	337,904	7.3
–84	0.082031	42,578	3,493	40,832	293,612	6.9
–85	0.090244	39,086	3,527	37,322	252,780	6.5
–86	0.099191	35,558	3,527	33,795	215,458	6.1
–87	0.108918	32,031	3,489	30,287	181,663	5.7
-88	0.119473	28,543	3,410	26,838	151,376	5.3
B–89	0.130900	25,133	3,290	23,488	124,538	5.0
–90	0.143243	21,843	3,129	20,278	101,051	4.6
–91	0.156540	18,714	2,929	17,249	80,773	4.3
_92	0.170825	15,784	2,696	14,436	63,523	4.0
–93	0.186126	13,088	2,436	11,870	49,087	3.8
_94	0.202463	10,652	2,157	9,574	37,217	3.5
-95	0.219847	8,495	1,868	7,562	27,644	3.3
-96	0.238277	6,628	1,579	5,838	20,082	3.0
-96	0.257741	5,048	1,301	4,398	14,244	2.8
–97	0.278215	3,747	1,043	3,226	9,846	2.6
	0.278215	3,747 2.705	810	2,299	9,846	2.6 2.4
	0.299659	,	610		- ,	
H-100		1,894		1,589	4,321	2.3
00 and over	1.000000	1,284	1,284	2,731	2,731	2.1

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Table V. Life table for white males: United States, 2002

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
0–1	0.006417	100,000	642	99,439	7,487,200	74.9
-2	0.000478	99,358	48	99,335	7,387,760	74.4
-3	0.000325	99,311	32	99,295	7,288,426	73.4
–4	0.000243	99,278	24	99,266	7,189,131	72.4
-5	0.000205	99,254	20	99,244	7,089,865	71.4
-6	0.000179	99,234	18	99,225	6,990,621	70.4
-7	0.000171	99,216	17	99,208	6,891,395	69.5
-8	0.000161	99,199	16	99,191	6,792,188	68.5
-9	0.000142	99,183	14	99,176	6,692,996	67.5
-10	0.000117	99,169	12	99,163	6,593,820	66.5
-11	0.000096	99,158	10	99,153	6,494,657	65.5
-12	0.000102	99,148	10	99,143	6,395,504	64.5
-13	0.000155	99,138	15	99,130	6,296,361	63.5
–14	0.000271	99,123	27	99,109	6,197,230	62.5
-15	0.000433	99,096	43	99,074	6,098,121	61.5
-16	0.000615	99,053	61	99,022	5,999,047	60.6
-17	0.000788	98,992	78	98,953	5,900,024	59.6
-18	0.000940	98,914	93	98,867	5,801,072	58.6
-19	0.001054	98,821	104	98,769	5,702,204	57.7
-20	0.001134	98,717	112	98,661	5,603,435	56.8
-21	0.001213	98,605	120	98,545	5,504,774	55.8
-22	0.001289	98,485	127	98,422	5,406,229	54.9
-23	0.001329	98,358	131	98,293	5,307,807	54.0
-24	0.001325 0.001290	98,228 98,098	130 127	98,163	5,209,514	53.0 52.1
-25	0.001239	97,971	121	98,034 97,910	5,111,351 5,013,317	52.1 51.2
-27	0.001239	97,850	117	97,791	4,915,407	50.2
-28	0.001190	97,733	114	97,676	4,817,615	49.3
-29	0.001103	97,618	115	97,561	4,719,940	48.4
-30	0.001774	97,504	117	97,445	4,622,379	47.4
-31	0.001244	97,386	121	97,326	4,524,934	46.5
-32	0.001244	97,265	125	97,203	4,427,608	45.5
-33	0.001355	97,140	132	97,074	4,330,405	44.6
-34	0.001413	97,008	137	96,940	4,233,331	43.6
-35	0.001500	96,871	145	96,799	4,136,391	42.7
-36	0.001596	96,726	154	96,649	4,039,592	41.8
-37	0.001709	96,572	165	96,489	3,942,943	40.8
-38	0.001852	96,407	179	96,317	3,846,454	39.9
-39	0.002027	96,228	195	96,131	3,750,136	39.0
-40	0.002224	96,033	214	95,926	3,654,006	38.0
-41	0.002430	95,820	233	95,703	3,558,079	37.1
-42	0.002639	95,587	252	95,461	3,462,376	36.2
-43	0.002856	95,334	272	95,198	3,366,916	35.3
-44	0.003085	95,062	293	94,916	3,271,717	34.4
-45	0.003333	94,769	316	94,611	3,176,802	33.5
-46	0.003604	94,453	340	94,283	3,082,191	32.6
-47	0.003895	94,113	367	93,929	2,987,908	31.7
-48	0.004200	93,746	394	93,549	2,893,978	30.9
-49	0.004512	93,352	421	93,142	2,800,429	30.0
-50	0.004834	92,931 92,482	449 479	92,707	2,707,287 2,614,581	29.1 28.3
-52	0.005176 0.005551	92,003	511	92,243	2,522,338	26.3 27.4
-53	0.005969	91,493	546	91,748 91,220	2,430,590	26.6
-54	0.006445	90,947	586	90,654	2,339,370	25.7
-55	0.006984	90,360	631	90,045	2,248,717	24.9
56	0.007595	89,729	681	89,389	2,158,672	24.1
57	0.007333	89,048	736	88,680	2,069,283	23.2
58	0.009000	88,312	795	87,914	1,980,603	22.4
-59	0.009786	87,517	856	87,089	1,892,689	21.6
-60	0.010644	86,660	922	86,199	1,805,600	20.8
-61	0.011635	85,738	998	85,239	1,719,401	20.1
-62	0.012773	84,740	1,082	84,199	1,634,162	19.3
-63	0.013999	83,658	1,171	83,072	1,549,963	18.5
-64	0.015276	82,487	1,260	81,857	1,466,891	17.8
-65	0.016619	81,227	1,350	80,552	1,385,034	17.1
-66	0.018056	79,877	1,442	79,156	1,304,482	16.3
–67	0.019623	78,435	1,539	77,665	1,225,326	15.6
			l .	I.	I	1

Table V. Life table for white males: United States, 2002—Con.

Age	Probability of dying between ages x to x+1	Number surviving to age x	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
	$q_x$		d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
67–68	0.021472	76,895	1,651	76,070	1,147,661	14.9
88–69	0.023605	75,244	1,776	74,356	1,071,591	14.2
9–70	0.025961	73,468	1,907	72,515	997,235	13.6
0–71	0.028461	71,561	2,037	70,543	924,721	12.9
1–72	0.031195	69,524	2,169	68,440	854,178	12.3
2–73	0.034316	67,355	2,311	66,200	785,738	11.7
3–74	0.037877	65,044	2,464	63,812	719,539	11.1
I–75	0.041861	62,580	2,620	61,271	655,726	10.5
5–76	0.046267	59,961	2,774	58,574	594,456	9.9
5–77	0.050970	57,186	2,915	55,729	535,882	9.4
/–78	0.056123	54,272	3,046	52,749	480,153	8.8
i–79	0.061762	51,226	3,164	49,644	427,404	8.3
)–80	0.067928	48,062	3,265	46,430	377.761	7.9
)–81	0.074660	44,797	3,345	43,125	331,331	7.4
-82	0.082000	41,453	3,399	39,753	288,206	7.0
<u>9</u> 83	0.089992	38,054	3,425	36,341	248.453	6.5
1 <del>-</del> 84	0.098679	34,629	3,417	32,920	212,111	6.1
i–85	0.108106	31,212	3,374	29,525	179,191	5.7
i–86	0.118314	27,838	3,294	26,191	149,666	5.4
S–87	0.129347	24,544	3,175	22,957	123,475	5.0
7–88	0.141243	21,369	3.018	19.860	100,519	4.7
3–89	0.154040	18,351	2,827	16,938	80,658	4.4
9–90	0.167771	15,524	2,605	14,222	63,721	4.1
)–91	0.182461	12,920	2,357	11,741	49,498	3.8
I–92	0.198131	10,562	2,093	9,516	37,757	3.6
2–93	0.214793	8,470	1,819	7,560	28,241	3.3
i–94	0.232450	6.650	1,546	5.878	20,681	3.1
–95	0.251095	5,105	1,282	4,464	14,804	2.9
–96	0.270707	3,823	1,035	3,305	10,340	2.7
–97	0.291256	2,788	812	2,382	7,035	2.7
/ <del>-</del> 98	0.291250	1,976	618	1,667	4,653	2.4
-96	0.334968	1,358	455	1,131	2,986	2.4
	0.358000	903	323	742	2,966 1,855	2.2 2.1
9–100		903 580	580			1.9
00 and over	1.000000	580	280	1,113	1,113	1.9

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Table VI. Life table for white females: United States, 2002

		,				
					Total	
	Probability		Number	Person-years	number of	
		Number		,		Funcatation
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
	agoo x to x++	ugo x	agoo x to x++	agoo x to x++	ago x	at ago x
Age	α	$l_x$	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
Age	$q_x$	'x	u <sub>x</sub>	x	'x	U <sub>X</sub>
0.4	0.005101	100.000	E40	00.540	7.004.000	70.0
0–1	0.005124	100,000	512	99,549	7,994,866	79.9
1–2	0.000394	99,488	39	99,468	7,895,317	79.4
2–3	0.000255	99,448	25	99,436	7,795,849	78.4
		· '		· ·		
3–4	0.000179	99,423	18	99,414	7,696,413	77.4
4–5	0.000143	99,405	14	99,398	7,596,999	76.4
5–6	0.000142	99,391	14	99,384	7,497,601	75.4
6-7	0.000134	99,377	13	99,370	7,398,217	74.4
7–8	0.000128	99,364	13	99,357	7,298,846	73.5
		· '		· ·		
8–9	0.000119	99,351	12	99,345	7,199,489	72.5
9–10	0.000109	99,339	11	99,334	7,100,144	71.5
10–11	0.000101	99,328	10	99,323	7,000,811	70.5
1–12	0.000104	99,318	10	99,313	6,901,487	69.5
		· '		· ·		
2–13	0.000126	99,308	13	99,302	6,802,174	68.5
13–14	0.000172	99,295	17	99,287	6,702,873	67.5
14–15	0.000236	99,278	23	99,267	6,603,586	66.5
15–16	0.000200	99,255	31	99,239	6,504,319	65.5
				· ·		
16–17	0.000380	99,224	38	99,205	6,405,080	64.6
17–18	0.000431	99,186	43	99,165	6,305,875	63.6
18–19	0.000452	99,144	45	99,121	6,206,710	62.6
19–20	0.000450	99,099	45	99,076	6,107,589	61.6
		· '		· ·		
20–21	0.000444	99,054	44	99,032	6,008,512	60.7
21–22	0.000443	99,010	44	98,988	5,909,480	59.7
22–23	0.000442	98,966	44	98,944	5,810,492	58.7
23–24	0.000443	98,923	44	98,901	5,711,547	57.7
				· ·		
24–25	0.000447	98,879	44	98,857	5,612,647	56.8
25–26	0.000452	98,835	45	98,812	5,513,790	55.8
26–27	0.000461	98,790	45	98,767	5,414,978	54.8
27–28	0.000474	98,744	47	98,721	5,316,211	53.8
28–29	0.000494	98,698	49	98,673	5,217,489	52.9
				· ·	1 1	
29–30	0.000520	98,649	51	98,623	5,118,816	51.9
30–31	0.000550	98,597	54	98,570	5,020,193	50.9
31–32	0.000586	98,543	58	98,514	4,921,623	49.9
32–33	0.000638	98,486	63	98,454	4,823,108	49.0
33–34	0.000693	98,423	68	98,389	4,724,654	48.0
34–35	0.000766	98,355	75	98,317	4,626,266	47.0
35–36	0.000845	98,279	83	98,238	4,527,949	46.1
36–37	0.000930	98,196	91	98,150	4,429,711	45.1
37–38	0.001026	98,105	101	98,054	4,331,561	44.2
38–39	0.001132	98,004	111	97,949	4,233,506	43.2
				· ·	1 1	
39–40	0.001244	97,893	122	97,832	4,135,557	42.2
40–41	0.001359	97,771	133	97,705	4,037,725	41.3
41–42	0.001477	97,639	144	97,566	3,940,020	40.4
42–43	0.001598	97,494	156	97,416	3,842,454	39.4
43–44	0.001330	97,339	168	97,255	3,745,037	38.5
44–45	0.001861	97,171	181	97,080	3,647,783	37.5
45–46	0.002012	96,990	195	96,892	3,550,702	36.6
46–47	0.002176	96,795	211	96,690	3,453,810	35.7
47–48	0.002349	96,584	227	96,471	3,357,120	34.8
48–49	0.002545		243	· ·		33.8
		96,357		96,236	3,260,650	
49–50	0.002712	96,114	261	95,984	3,164,414	32.9
50–51	0.002910	95,853	279	95,714	3,068,430	32.0
51–52	0.003134	95,574	300	95,425	2,972,716	31.1
52–53	0.003401	95,275	324	95,113	2,877,292	30.2
53–54	0.003724	94,951	354	94,774	2,782,179	29.3
54–55	0.004105	94,597	388	94,403	2,687,405	28.4
55–56	0.004545	94,209	428	93,995	2,593,002	27.5
56–57	0.005026	93,781	471	93,545	2,499,007	26.6
57–58	0.005536	93,309	517	93,051	2,405,462	25.8
				· ·		
58–59	0.006063	92,793	563	92,512	2,312,411	24.9
59–60	0.006624	92,230	611	91,925	2,219,899	24.1
60–61	0.007274	91,619	666	91,286	2,127,975	23.2
61–62	0.008027	90,953	730	90,588	2,036,688	22.4
62–63	0.008833	90,223	797	89,824	1,946,101	21.6
63–64	0.009668	89,426	865	88,994	1,856,276	20.8
64–65	0.010549	88,561	934	88,094	1,767,282	20.0
65–66	0.011523	87,627	1,010	87,122	1,679,188	19.2
66–67	0.012529	86,617	1,085	86,075	1,592,066	18.4
		,	.,		,,	1

Table VI. Life table for white females: United States, 2002—Con.

	Probability of dying between ages x to x+1	Number surviving to age x	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
67–68	0.013694	85,532	1,171	84,947	1,505,991	17.6
8–69	0.015016	84,361	1,267	83,728	1,421,045	16.8
9–70	0.016492	83,094	1,370	82,409	1,337,317	16.1
0–71	0.018112	81,724	1,480	80,984	1,254,908	15.4
I–72	0.019960	80,244	1,602	79,443	1,173,924	14.6
2–73	0.022129	78,642	1,740	77,772	1,094,481	13.9
3–74	0.024651	76,902	1,896	75,954	1,016,709	13.2
1–75	0.027523	75,006	2.064	73,974	940.755	12.5
5–76	0.030764	72,942	2,244	71,820	866,781	11.9
6–77	0.034267	70,698	2,423	69,487	794,962	11.2
7–78	0.038155	68,275	2,605	66,973	725,475	10.6
3–79	0.042463	65,670	2,789	64,276	658,502	10.0
9–80	0.047235	62,882	2,970	61,397	594,227	9.4
)–81	0.052513	59,911	3,146	58,338	532,830	8.9
I–82	0.058345	56,765	3,312	55.109	474.492	8.4
2–83	0.064780	53,453	3,463	51,722	419,382	7.8
3–84	0.004700	49,991	3,593	48,194	367,660	7.6 7.4
4–85	0.079671	46,398	3,697	44,550	319,466	6.9
5–86	0.088238	42,701	3,768	40,817	274,916	6.4
6–87	0.000230	38,933	3,801	37,033	234,099	6.0
	0.107900	35,132	3,791	33,237	197,066	5.6
		· '	1 '	· '	· · · · · · · · · · · · · · · · · · ·	5.2
	0.119110 0.131313	31,342	3,733	29,475	163,829	4.9
* **	0.131313	27,608	3,625	25,796 22,250	134,354	4.9 4.5
		23,983	3,467		108,559	
1–92	0.158900	20,516	3,260	18,886	86,309	4.2 3.9
2–93	0.174373	17,256	3,009	15,752	67,423	3.9 3.6
	0.191009	14,247	2,721	12,886	51,671	
1–95	0.208832	11,526	2,407	10,322	38,785	3.4
5–96	0.227849	9,119	2,078	8,080	28,462	3.1
5-97	0.248055	7,041	1,747	6,168	20,382	2.9
7–98	0.269428	5,295	1,426	4,581	14,215	2.7
8–99	0.291927	3,868	1,129	3,303	9,633	2.5
9–100	0.315493	2,739	864	2,307	6,330	2.3
00 and over	1.000000	1,875	1,875	4,023	4,023	2.1

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Table VII. Life table for the black population: United States, 2002

			,			
					Total	
				_		
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
			, ,		, ,	
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
					_	
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_x$
				-		
0.4	0.014004	100,000	1 400	00.740	7.011.000	70.4
0–1	0.014324	100,000	1,432	98,742	7,211,923	72.1
1–2	0.000753	98,568	74	98,530	7,113,180	72.2
2–3	0.000454	98,493	45	98,471	7,014,650	71.2
		,		· ·		
3–4	0.000334	98,449	33	98,432	6,916,179	70.3
4–5	0.000311	98,416	31	98,400	6,817,747	69.3
		,				
5–6	0.000256	98,385	25	98,373	6,719,346	68.3
6–7	0.000228	98,360	22	98,349	6,620,974	67.3
	0.000208	· ·	20	· ·		66.3
		98,338		98,327	6,522,625	
8–9	0.000193	98,317	19	98,308	6,424,298	65.3
9–10	0.000183	98,298	18	98,289	6,325,990	64.4
		· ·		· ·		
10–11	0.000184	98,280	18	98,271	6,227,701	63.4
11–12	0.000201	98,262	20	98,252	6,129,430	62.4
12–13	0.000245	98,242	24	98,230	6,031,177	61.4
				· '	· ' '	
13–14	0.000321	98,218	31	98,203	5,932,947	60.4
14–15	0.000427	98,187	42	98,166	5,834,745	59.4
				· '	· ' '	
15–16	0.000549	98,145	54	98,118	5,736,579	58.5
16–17	0.000679	98,091	67	98,058	5,638,461	57.5
17–18	0.000821	98,024	80	97,984	5,540,403	56.5
		,				
18–19	0.000967	97,944	95	97,897	5,442,419	55.6
19–20	0.001109	97,849	108	97,795	5,344,522	54.6
		,		i i		
20–21	0.001257	97,741	123	97,679	5,246,727	53.7
21–22	0.001400	97,618	137	97,550	5,149,048	52.7
22–23	0.001509	97,481	147	97,408	5,051,498	51.8
				i i		
23–24	0.001576	97,334	153	97,258	4,954,090	50.9
24–25	0.001612	97,181	157	97,103	4.856.833	50.0
25–26	0.001644	97,024	159	96,944	4,759,730	49.1
				i i		
26–27	0.001684	96,865	163	96,783	4,662,786	48.1
27–28	0.001722	96,702	167	96,618	4,566,003	47.2
28–29	0.001758	96,535	170	96,450	4,469,384	46.3
29–30	0.001796	96,365	173	96,279	4,372,934	45.4
30–31	0.001833	96,192	176	96,104	4,276,656	44.5
		· ·				
31–32	0.001882	96,016	181	95,926	4,180,551	43.5
32–33	0.002001	95,835	192	95,739	4,084,626	42.6
		· ·			1 '	
33–34	0.002087	95,643	200	95,544	3,988,887	41.7
34–35	0.002247	95,444	214	95,337	3,893,343	40.8
35–36	0.002427	95,229	231	95,114	3,798,007	39.9
				· ·	1 '	
36–37	0.002615	94,998	248	94,874	3,702,893	39.0
37–38	0.002819	94,750	267	94,616	3,608,019	38.1
38–39	0.003038	94,483	287	94,339	3,513,402	37.2
				i i		
39–40	0.003270	94,196	308	94,042	3,419,063	36.3
40–41	0.003510	93,888	330	93,723	3,325,022	35.4
		· ·		1'	l _''	
41–42	0.003769	93,558	353	93,382	3,231,299	34.5
42–43	0.004072	93,205	380	93,016	3,137,917	33.7
43–44	0.004437	92,826	412	92,620	3,044,901	32.8
44–45			449		2,952,281	
	0.004862	92,414		92,189		31.9
45–46	0.005329	91,965	490	91,720	2,860,092	31.1
46–47	0.005821	91,475	532	91,209	2,768,372	30.3
47–48			577	i i		
	0.006340	90,942		90,654	2,677,163	29.4
48–49	0.006875	90,366	621	90,055	2,586,509	28.6
49–50	0.007422	89,745	666	89,411	2,496,454	27.8
50–51	0.008011	89,078	714	88,722	2,407,043	27.0
51–52	0.008640	88,365	763	87,983	2,318,321	26.2
52–53	0.009274	87,601	812	87,195	2,230,338	25.5
				i i		
53–54	0.009916	86,789	861	86,359	2,143,143	24.7
54–55	0.010596	85,928	911	85,473	2,056,784	23.9
		· ·				
55–56	0.011368	85,018	966	84,535	1,971,311	23.2
56–57	0.012253	84,051	1,030	83,536	1,886,776	22.4
57–58	0.013221	83,022	1,098	82,473	1,803,240	21.7
			· ·			
58–59	0.014225	81,924	1,165	81,341	1,720,767	21.0
59–60	0.015240	80,759	1,231	80,143	1,639,426	20.3
					1 '	
60–61	0.016299	79,528	1,296	78,880	1,559,282	19.6
61–62	0.017450	78,232	1,365	77,549	1,480,403	18.9
62–63	0.018667	76,866	1,435	76,149	1,402,854	18.3
63–64	0.019961	75,432	1,506	74,679	1,326,705	17.6
64–65	0.021337	73,926	1,577	73,137	1,252,026	16.9
		72,349	· ·		1 '	
65–66	0.022751		1,646	71,526	1,178,889	16.3
66–67	0.024183	70,702	1,710	69,848	1,107,363	15.7
	I	I	I	I	I	I

Table VII. Life table for the black population: United States, 2002—Con.

Age	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectatior of life at age <i>x</i>
	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	$e_{x}$
7–68	0.025850	68,993	1,783	68,101	1,037,516	15.0
3–69	0.027807	67,209	1,869	66,275	969,415	14.4
9–70	0.030035	65,340	1,963	64,359	903,140	13.8
)–71	0.032451	63,378	2,057	62,350	838,781	13.2
-72	0.035066	61,321	2,150	60,246	776,431	12.7
–73	0.037951	59,171	2,246	58,048	716,185	12.1
-74	0.041103	56,925	2,340	55,755	658,137	11.6
-75	0.044506	54,586	2,429	53,371	602,382	11.0
i–76	0.048180	52,156	2,513	50,900	549,011	10.5
i–77	0.052054	49,643	2,584	48,351	498,111	10.0
7–78	0.056221	47,059	2,646	45,736	449,760	9.6
i–79	0.060701	44,414	2,696	43,066	404,023	9.1
i–80	0.065512	41,718	2,733	40,351	360,958	8.7
)–81	0.070677	38,985	2,755	37,607	320.607	8.2
<b>–</b> 82	0.076215	36,229	2,761	34,849	283,000	7.8
2–83	0.082149	33,468	2,749	32,093	248,151	7.4
1–84	0.088501	30,719	2,719	29,359	216,058	7.0
I–85	0.095293	28,000	2,668	26,666	186,698	6.7
i–86	0.102547	25,332	2,598	24,033	160,032	6.3
5–87	0.110287	22,734	2,507	21,481	135,999	6.0
/-88	0.118533	20,227	2,398	19,028	114,519	5.7
3–89	0.127308	17,829	2,270	16,694	95,491	5.4
9–90	0.136631	15,560	2,126	14,497	78,796	5.1
)–91	0.146523	13,434	1,968	12,449	64,300	4.8
I–92	0.157001	11,465	1,800	10,565	51,850	4.5
2–93	0.168080	9,665	1,625	8,853	41,285	4.3
3–94	0.179775	8,041	1,446	7,318	32,432	4.0
1–95	0.192095	6,595	1,267	5,962	25,114	3.8
5–96	0.205049	5,328	1,093	4,782	19,153	3.6
<i>5</i> –97	0.218639	4,236	926	3,773	14,371	3.4
/_98	0.232867	3,310	771	2,924	10,598	3.2
3–99	0.247727	2,539	629	2,224	7,674	3.0
9–100	0.263210	1,910	503	1,659	5,449	2.9
	1.000000	1,407	1,407	3,791	3,791	2.7
100 and over	1.000000	1,407	1,407	3,791	3,791	2.7

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Table VIII. Life table for black males: United States, 2002

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age x
Age	$q_x$	$l_x$	$d_x$	L <sub>x</sub>	T <sub>x</sub>	$e_{\scriptscriptstyle X}$
-1	0.015395	100,000	1,539	98,650	6,860,079	68.6
-2	0.000855	98,461	84	98,418	6,761,429	68.7
-3	0.000516	98,376	51	98,351	6,663,011	67.7
-4	0.000406	98,326	40	98,306	6,564,660	66.8
-5	0.000362	98,286	36	98,268	6,466,354	65.8
-6	0.000293	98,250	29	98,236	6,368,086	64.8
-7	0.000261	98,221	26	98,208	6,269,851	63.8
-8	0.000238 0.000216	98,196 98,172	23 21	98,184 98,162	6,171,642 6,073,458	62.9 61.9
- <del>9</del>	0.000210	98,151	19	98,141	5,975,296	60.9
-11	0.000193	98,132	19	98,122	5,877,155	59.9
-12	0.00015	98,113	21	98,102	5,779,033	58.9
-13	0.000282	98,092	28	98,078	5,680,931	57.9
-14	0.000406	98,064	40	98,044	5,582,853	56.9
–15	0.000581	98,024	57	97,996	5,484,809	56.0
–16	0.000780	97,967	76	97,929	5,386,813	55.0
-17	0.000988	97,891	97	97,842	5,288,884	54.0
/-18	0.001217	97,794	119	97,735	5,191,042	53.1
-19	0.001455	97,675	142	97,604	5,093,307	52.1
)–20	0.001689	97,533	165	97,451	4,995,703	51.2
–21	0.001937 0.002174	97,368	189 211	97,274	4,898,253	50.3 49.4
2–23	0.002174	97,180 96,968	228	97,074 96,854	4,800,979 4,703,904	49.4 48.5
-24	0.002352	96,740	237	96,622	4,607,050	47.6
<i>–</i> 25	0.002491	96,503	240	96,383	4,510,428	46.7
<u>–26</u>	0.002514	96,263	242	96,142	4,414,045	45.9
–27	0.002545	96,021	244	95,899	4,317,904	45.0
–28	0.002563	95,777	245	95,654	4,222,005	44.1
J–29	0.002572	95,531	246	95,408	4,126,351	43.2
9–30	0.002581	95,285	246	95,162	4,030,943	42.3
)–31	0.002581	95,039	245	94,917	3,935,780	41.4
-32	0.002595	94,794	246	94,671	3,840,864	40.5
2–33	0.002727	94,548	258	94,419	3,746,193	39.6
–34	0.002795 0.002986	94,290	264 281	94,158	3,651,773	38.7 37.8
i–35	0.002980	94,027 93,746	301	93,886 93,596	3,557,615 3,463,729	36.9
S-37	0.003437	93,445	321	93,285	3,370,133	36.1
'–38	0.003665	93,124	341	92,953	3,276,848	35.2
3–39	0.003880	92,783	360	92,603	3,183,895	34.3
<b>⊢</b> 40	0.004096	92,423	379	92,233	3,091,292	33.4
-41	0.004313	92,044	397	91,846	2,999,059	32.6
–42	0.004571	91,647	419	91,438	2,907,213	31.7
-43	0.004915	91,228	448	91,004	2,815,776	30.9
3–44	0.005383	90,780	489	90,535	2,724,772	30.0
I–45	0.005963 0.006610	90,291	538	90,022	2,634,236	29.2
5–46	0.000010	89,753 89,159	593 650	89,456 88,835	2,544,214 2,454,758	28.3 27.5
<del>-48</del>	0.008009	88,510	709	88,155	2,365,924	26.7
i=49	0.008754	87,801	769	87,417	2,277,768	25.9
-50	0.009517	87,032	828	86,618	2,190,352	25.2
–51	0.010349	86,204	892	85,758	2,103,734	24.4
–52	0.011235	85,312	959	84,833	2,017,976	23.7
–53	0.012108	84,353	1,021	83,843	1,933,143	22.9
-54	0.012956	83,332	1,080	82,792	1,849,300	22.2
-55	0.013823	82,252	1,137	81,684	1,766,508	21.5
-56	0.014783	81,115	1,199	80,516	1,684,824	20.8
–57	0.015892	79,916 78,646	1,270	79,281	1,604,308	20.1
–58	0.017135 0.018476	78,646 77,299	1,348 1,428	77,973 76,585	1,525,027 1,447,054	19.4 18.7
–60	0.019871	77,299 75,871	1,508	75,117	1,370,470	18.1
–61	0.021349	74,363	1,588	73,569	1,295,353	17.4
-62	0.022922	72,775	1,668	71,941	1,221,784	16.8
-63	0.024511	71,107	1,743	70,236	1,149,843	16.2
–64	0.026085	69,364	1,809	68,460	1,079,607	15.6
–65	0.027666	67,555	1,869	66,620	1,011,147	15.0
-66	0.029222	65,686	1,919	64,726	944,527	14.4
-67	0.030914	63,766	1,971	62,781	879,801	13.8

Table VIII. Life table for black males: United States, 2002—Con.

Age	Probability of dying between ages x to x+1	Number surviving to age x	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectatior of life at age <i>x</i>
	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
37–68	0.033007	61,795	2,040	60,775	817,020	13.2
8–69	0.035597	59,756	2,127	58,692	756,244	12.7
9–70	0.038603	57,628	2,225	56,516	697,552	12.1
)–71	0.041846	55,404	2,318	54,245	641,036	11.6
-72	0.045262	53,085	2,403	51,884	586.792	11.1
2–73	0.048918	50,683	2,479	49,443	534,908	10.6
3–74	0.052804	48,203	2,545	46,931	485,465	10.1
I–75	0.056944	45,658	2.600	44,358	438,534	9.6
5–76	0.061393	43,058	2,643	41,736	394,176	9.2
6–77	0.066047	40,415	2,669	39,080	352,439	8.7
7–78	0.071027	37,745	2,681	36,405	313,359	8.3
3–79	0.076351	35,064	2,677	33,726	276,955	7.9
) <del>-</del> 80	0.082040	32,387	2,657	31,059	243,229	7.5
)–81	0.088112	29,730	2,620	28,420	212,170	7.5
_82	0.094587	27.111	2,564	25,828	183.750	6.8
2–83	0.101485	24,546	2,491	23,301	157,921	6.4
3–84	0.108826	22,055	2,400	20,855	134,620	6.1
1–85	0.116628	19,655	2,400	18,509	113,765	5.8
5–86	0.124912	17,363	2,169	16,278	95,256	5.5
5–87	0.124912	15,194	2,109	14,178	78,978	5.2
	0.142994		1,882	12,221	64,800	4.9
	0.152827	13,163 11,280	1,724	10,418	52,578	4.9
8–89	0.163206	9,556	1,560	8,777	42,160	4.7
0–91	0.174146	7,997	1,393	7,300	33,383	4.4
	0.174146	6,604	1,226	5,991	26,083	3.9
	0.105057	5,378	1,063	4,846	20,083	3.9
2–93	0.197745	4,315	908	3,861	15,245	3.7
	0.210416	3,407	762	3,026	11,385	3.3
5–96	0.237519	2,645	628	2,331	8,359	3.2
5–97	0.251940	2,017	508	1,763	6,028	3.0
7–98	0.266931	1,508	403	1,307	4,266	2.8
3–99	0.282476	1,106	312	950	2,959	2.7
9–100	0.298558	793	237	675	2,009	2.5
00 and over	1.000000	557	557	1,334	1,334	2.4

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Table IX. Life table for black females: United States, 2002

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	$l_x$	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
-1	0.013220	100,000	1,322	98,837	7,535,685	75.4
-2	0.000648	98,678	64	98,646	7,436,849	75.4
-3	0.000389	98,614	38	98,595	7,338,203	74.4
-4	0.000259	98,576	26	98,563	7,239,608	73.4
-5	0.000260	98,550	26	98,537	7,141,045	72.5
-6	0.000219	98,525	22	98,514	7,042,508	71.5
-7	0.000193	98,503	19	98,494	6,943,994	70.5
-8	0.000177	98,484	17	98,475	6,845,500	69.5
-9	0.000168	98,467	17	98,458	6,747,025	68.5
-10	0.000168	98,450	17	98,442	6,648,567	67.5
-11	0.000174	98,434	17	98,425	6,550,125	66.5
-12	0.000187	98,416	18	98,407	6,451,700	65.6
-13	0.000206	98,398	20	98,388	6,353,293	64.6
-14	0.000233	98,378	23	98,366	6,254,905	63.6
-15	0.000267	98,355	26	98,342	6,156,539	62.6
-16	0.000309	98,329	30	98,313	6,058,197	61.6
-17	0.000357	98,298	35	98,281	5,959,884	60.6
-18	0.000409	98,263	40	98,243	5,861,603	59.7
-19	0.000464	98,223	46	98,200	5,763,360	58.7
-20	0.000518	98,177	51	98,152	5,665,160	57.7
-21	0.000575	98,127	56	98,098	5,567,008	56.7
-22	0.000634	98,070	62	98,039	5,468,910	55.8
-23	0.000687	98,008	67 72	97,974 97,905	5,370,871	54.8 53.8
-24	0.000733 0.000778	97,941	76	· ·	5,272,897	52.9
-26	0.000778	97,869 97,793	81	97,831 97,752	5,174,992 5,077,161	52.9 51.9
-27	0.000891	97,712	87	97,668	4,979,409	51.0
-28	0.000956	97,624	93	97,578	4,881,741	50.0
-29	0.001022	97,531	100	97,481	4,784,163	49.1
-30	0.001022	97,431	106	97,378	4,686,682	48.1
-31	0.001000	97,325	113	97,269	4,589,304	47.2
-32	0.001130	97,213	120	97,153	4,492,035	46.2
-33	0.001255	97,092	131	97,027	4,394,882	45.3
-34	0.001450	96,961	141	96,891	4,297,855	44.3
-35	0.001586	96,820	154	96,743	4,200,965	43.4
-36	0.001729	96,667	167	96,583	4,104,221	42.5
-37	0.001882	96,500	182	96,409	4,007,638	41.5
-38	0.002068	96,318	199	96,218	3,911,229	40.6
-39	0.002290	96,119	220	96,009	3,815,011	39.7
-40	0.002539	95,899	243	95,777	3,719,002	38.8
-41	0.002799	95,655	268	95,521	3,623,225	37.9
-42	0.003060	95,388	292	95,242	3,527,704	37.0
-43	0.003327	95,096	316	94,937	3,432,462	36.1
-44	0.003603	94,779	341	94,608	3,337,525	35.2
-45	0.003894	94,438	368	94,254	3,242,916	34.3
-46	0.004207	94,070	396	93,872	3,148,663	33.5
-47	0.004542	93,674	425	93,461	3,054,790	32.6
-48	0.004891	93,249	456	93,021	2,961,329	31.8
-49	0.005249	92,793	487	92,549	2,868,308	30.9
-50	0.005616	92,306	518	92,046	2,775,759	30.1
-51	0.006006	91,787	551	91,512	2,683,713	29.2
-52	0.006424	91,236	586	90,943	2,592,201	28.4
-53	0.006867	90,650	622	90,339	2,501,258	27.6
-54	0.007347	90,027	661	89,697	2,410,920	26.8
-55	0.007884	89,366	705	89,014	2,321,223	26.0
-56	0.008514	88,661	755	88,284	2,232,209	25.2
-57	0.009233	87,907 87,005	812	87,501	2,143,925	24.4
-58	0.009998	87,095 86.224	871	86,660	2,056,424	23.6
-59	0.010753	86,224 85 207	927 980	85,761	1,969,765	22.8 22.1
	0.011491	85,297 84,317		84,807	1,884,004	
-61	0.012253	84,317 83.284	1,033	83,800	1,799,197	21.3 20.6
-63	0.013110 0.014079	83,284 82 102	1,092	82,738	1,715,397 1,632,659	
-64	0.014079	82,192 81,035	1,157 1,232	81,613 80,419	1,551,046	19.9 19.1
	0.016457	79,803	1,313	79,147	1,470,627	18.4
-65				10.14/	1.4/0.04/	10.4
-65	0.017805	78,490	1,397	77,791	1,391,480	17.7

Table IX. Life table for black females: United States, 2002—Con.

Age	Probability of dying between ages x to x+1	Number surviving to age x	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
	$q_{x}$		d <sub>x</sub>			e <sub>x</sub>
7–68	0.020593	75,617	1,557	74,839	1,237,334	16.4
-69	0.022215	74,060	1,645	73,238	1,162,496	15.7
–70	0.024028	72,415	1,740	71,545	1,089,258	15.0
-71	0.026011	70,675	1,838	69,756	1,017,713	14.4
-72	0.028223	68,837	1,943	67,865	947,957	13.8
-73	0.030738	66.894	2,056	65,866	880.092	13.2
-74	0.033548	64,838	2,175	63,750	814,226	12.6
-75	0.036614	62,663	2,294	61,515	750,476	12.0
-76	0.039935	60,368	2,411	59,163	688,960	11.4
-77	0.043459	57,957	2,519	56,698	629,798	10.9
-78	0.047279	55,439	2,621	54,128	573,099	10.3
-79	0.051416	52,818	2,716	51,460	518,971	9.8
-80	0.055894	50,102	2,800	48,702	467,512	9.3
-81	0.060737	47,302	2,873	45,865	418,810	8.9
–82	0.065970	44,429	2,931	42,963	372,945	8.4
-83	0.071620	41,498	2,972	40,012	329,982	8.0
–84	0.077713	38,526	2,994	37,029	289,970	7.5
–85	0.084278	35,532	2,995	34,034	252,941	7.5 7.1
11	0.091342	32,537	2,972	31,051	218,907	6.7
–86	0.098934	29,565	2,972	28,103	187,856	6.4
	0.107084	26,640	2,853	25,214	159,753	6.0
						5.7
-89	0.115818	23,787	2,755	22,410	134,539	
)–90	0.125164	21,032	2,633	19,716	112,129	5.3
-91	0.135150	18,400	2,487	17,157	92,413	5.0
-92	0.145800	15,913	2,320	14,753	75,257	4.7
-93	0.157136	13,593	2,136	12,525	60,504	4.5
-94	0.169179	11,457	1,938	10,488	47,978	4.2
-95	0.181946	9,519	1,732	8,653	37,491	3.9
-96	0.195450	7,787	1,522	7,026	28,838	3.7
-97	0.209699	6,265	1,314	5,608	21,812	3.5
-98	0.224696	4,951	1,113	4,395	16,204	3.3
-99	0.240440	3,839	923	3,377	11,809	3.1
H-100	0.256922	2,916	749	2,541	8,432	2.9
0 and over	1.000000	2,167	2,167	5,890	5,890	2.7

## 2003

Table I. Life table for the total population: United States, 2003

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	$T_x$	$e_{x}$
0-1	0.006865	100,000	687	99,394	7,707,634	77.1
	0.000469	99,313	47	99,290	7,608,240	76.6
	0.000337	99,267	33	99,250	7,508,950	75.6
	0.000254	99,233	25	99,221	7,409,700	74.7
4–5 5–6 6–7 7–8	0.000194 0.000178 0.000160 0.000147 0.000132	99,208 99,189 99,171 99,156 99,141	19 18 16 15 13	99,199 99,180 99,164 99,148 99,134	7,310,479 7,211,280 7,112,100 7,012,937 6,913,788	73.7 72.7 71.7 70.7 69.7
9–10	0.000117	99,128	12	99,122	6,814,654	68.7
	0.000109	99,116	11	99,111	6,715,532	67.8
	0.000118	99,105	12	99,100	6,616,421	66.8
	0.000157	99,094	16	99,086	6,517,322	65.8
13–14	0.000233	99,078	23	99,067	6,418,236	64.8
	0.000339	99,055	34	99,038	6,319,169	63.8
	0.000460	99,022	46	98,999	6,220,130	62.8
	0.000577	98,976	57	98,947	6,121,132	61.8
	0.000684	98,919	68	98,885	6,022,184	60.9
18–19	0.000769	98,851	76	98,813	5,923,299	59.9
	0.000832	98,775	82	98,734	5,824,486	59.0
	0.000894	98,693	88	98,649	5,725,752	58.0
	0.000954	98,605	94	98,558	5,627,103	57.1
22–23	0.000990	98,511	98	98,462	5,528,545	56.1
23–24	0.000997	98,413	98	98,364	5,430,083	55.2
24–25	0.000982	98,315	97	98,267	5,331,719	54.2
25–26	0.000960	98,219	94	98,171	5,233,452	53.3
26–27	0.000942	98,124	92	98,078	5,135,281	52.3
27–28	0.000936	98,032	92	97,986	5,037,203	51.4
	0.000947	97,940	93	97,894	4,939,217	50.4
	0.000974	97,847	95	97,800	4,841,323	49.5
	0.001008	97,752	98	97,703	4,743,524	48.5
	0.001046	97,654	102	97,603	4,645,821	47.6
32–33	0.001109	97,551	108	97,497	4,548,218	46.6
	0.001162	97,443	113	97,387	4,450,721	45.7
	0.001244	97,330	121	97,270	4,353,334	44.7
	0.001336	97,209	130	97,144	4,256,065	43.8
36–37	0.001441	97,079	140	97,009	4,158,920	42.8
	0.001567	96,939	152	96,863	4,061,911	41.9
	0.001714	96,787	166	96,704	3,965,048	41.0
	0.001874	96,621	181	96,531	3,868,344	40.0
	0.002038	96,440	197	96,342	3,771,813	39.1
41–42	0.002207	96,244	212	96,138	3,675,471	38.2
42–43	0.002389	96,032	229	95,917	3,579,333	37.3
43–44	0.002593	95,802	248	95,678	3,483,416	36.4
44–45	0.002819	95,554	269	95,419	3,387,738	35.5
45–46	0.003064	95,284	292	95,138	3,292,319	34.6
46–47	0.003322	94,992	316	94,835	3,197,181	33.7
	0.003589	94,677	340	94,507	3,102,346	32.8
	0.003863	94,337	364	94,155	3,007,840	31.9
	0.004148	93,973	390	93,778	2,913,685	31.0
50–51	0.004458	93,583	417	93,374	2,819,907	30.1
	0.004800	93,166	447	92,942	2,726,533	29.3
	0.005165	92,718	479	92,479	2,633,591	28.4
	0.005554	92,239	512	91,983	2,541,112	27.5
	0.005971	91,727	548	91,453	2,449,129	26.7
55–56	0.006423	91,179	586	90,887	2,357,675	25.9
56–57	0.006925	90,594	627	90,280	2,266,789	25.0
57–58	0.007496	89,966	674	89,629	2,176,508	24.2
58–59	0.008160	89,292	729	88,928	2,086,879	23.4
59–60	0.008927	88,564	791	88,168	1,997,951	22.6
60–61	0.009827	87,773	863	87,342	1,909,783	21.8
	0.010831	86,910	941	86,440	1,822,441	21.0
	0.011872	85,969	1,021	85,459	1,736,001	20.2

Table I. Life table for the total population: United States, 2003—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
3–64	0.012891	84,949	1,095	84,401	1,650,543	19.4
-65	0.013908	83,853	1,166	83,270	1,566,142	18.7
-66	0.015003	82,687	1,241	82,067	1,482,871	17.9
-67	0.016139	81,447	1,315	80,789	1,400,805	17.2
68	0.017479	80,132	1,401	79,432	1,320,015	16.5
69	0.019036	78,731	1,499	77,982	1,240,583	15.8
70	0.020797	77,233	1,606	76,430	1,162,601	15.1
-71	0.022722	75,627	1,718	74,767	1,086,172	14.4
-72	0.024891	73,908	1,840	72,988	1,011,404	13.7
-73	0.027407	72,068	1,975	71,081	938,416	13.0
-74	0.030294	70,093	2,123	69,032	867,335	12.4
-75	0.033535	67,970	2,279	66,830	798,303	11.7
-76	0.037146	65,691	2,440	64,471	731,473	11.1
77	0.041023	63,250	2,595	61,953	667,003	10.5
-78	0.045287	60,656	2.747	59,282	605,050	10.0
-79	0.049971	57,909	2,894	56,462	545,767	9.4
-80	0.055111	55,015	3,032	53,499	489,305	8.9
-81	0.060746	51,983	3,158	50,404	435.806	8.4
-82	0.066916	48.825	3,267	47,192	385,402	7.9
-83	0.073664	45,558	3,356	43,880	338,210	7.4
-84	0.081034	42.202	3,420	40,492	294,330	7.0
-85	0.089070	38,782	3,454	37,055	253,838	6.5
-86	0.097817	35,328	3,456	33,600	216,783	6.1
-87	0.107323	31,872	3,421	30,162	183,183	5.7
-88	0.117632	28,452	3,347	26,778	153,021	5.4
-89	0.128789	25,105	3,233	23,488	126,243	5.0
-90	0.140834	21,872	3,080	20,331	102,754	4.7
-91	0.153808	18,791	2,890	17,346	82,423	4.4
-92	0.167743	15,901	2,667	14,567	65,077	4.1
-93	0.182668	13,234	2,417	12,025	50,509	3.8
-94	0.198604	10,816	2,148	9,742	38,484	3.6
95	0.215564	8,668	1,869	7,734	28,742	3.3
96	0.233550	6,800	1,588	6,006	21,008	3.1
-96	0.252554	5,212				2.9
			1,316	4,553	15,002	
-98	0.272554	3,895	1,062	3,365	10,449	2.7
-99	0.293516	2,834	832	2,418	7,084	2.5
-100	0.315391	2,002	631	1,686	4,666	2.3
0 and over	1.000000	1,371	1,371	2,980	2,980	2.2

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Table II. Life table for males: United States, 2003

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age x
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
-1	0.007611	100,000	761	99,329	7,446,333	74.5
-2	0.000522	99,239	52	99,213	7,347,003	74.0
-3	0.000371	99,187	37	99,169	7,247,790	73.1
-4	0.000288	99,150	29	99,136	7,148,621	72.1
-5	0.000215	99,122	21	99,111	7,049,485	71.1
-6	0.000196	99,100	19	99,091	6,950,374	70.1
-7	0.000179	99,081	18	99,072	6,851,284	69.1
-8	0.000165	99,063	16	99,055	6,752,212	68.2
-9	0.000147	99,047	15	99,040	6,653,156	67.2
-10	0.000126 0.000113	99,032 99,020	12 11	99,026 99,014	6,554,117 6,455,091	66.2 65.2
-11	0.000113	99,020	12	99,003	6,356,076	64.2
-13	0.000123	98,996	18	98,987	6,257,074	63.2
-14	0.000100	98,979	29	98,964	6,158,086	62.2
-15	0.000445	98,950	44	98,928	6,059,122	61.2
-16	0.000618	98,906	61	98,875	5,960,194	60.3
i–17	0.000787	98,845	78	98,806	5,861,319	59.3
′–18	0.000946	98,767	93	98,720	5,762,514	58.3
I–19	0.001079	98,673	106	98,620	5,663,794	57.4
9–20	0.001186	98,567	117	98,508	5,565,174	56.5
)–21	0.001293	98,450	127	98,386	5,466,665	55.5
-22	0.001392	98,323	137	98,254	5,368,279	54.6
2–23	0.001449	98,186	142	98,115	5,270,025	53.7
3–24	0.001456	98,044	143	97,972	5,171,910	52.8
-25	0.001424	97,901	139	97,831	5,073,938	51.8
-26	0.001376	97,761	135	97,694	4,976,107	50.9
:-27	0.001334	97,627	130	97,562	4,878,412	50.0
/–28	0.001308 0.001311	97,497 97,369	128 128	97,433 97,305	4,780,851 4,683,418	49.0 48.1
) <del>-</del> 30	0.001311	97,241	130	97,176	4,586,112	47.2
i⊢31	0.001337	97,111	134	97,044	4,488,936	46.2
-32	0.001417	96,978	137	96,909	4,391,892	45.3
2–33	0.001489	96,840	144	96,768	4,294,983	44.4
3–34	0.001541	96,696	149	96,621	4,198,215	43.4
-35	0.001628	96,547	157	96,468	4,101,594	42.5
5–36	0.001729	96,390	167	96,306	4,005,125	41.6
i–37	0.001848	96,223	178	96,134	3,908,819	40.6
'–38	0.001996	96,045	192	95,949	3,812,685	39.7
3–39	0.002171	95,854	208	95,750	3,716,735	38.8
-40	0.002365	95,646	226	95,532	3,620,986	37.9
-41	0.002566	95,419	245	95,297	3,525,453	36.9
-42	0.002775	95,174	264	95,042	3,430,157	36.0
2–43	0.003006 0.003270	94,910	285 309	94,768 94,470	3,335,114 3,240,347	35.1 34.2
i–45	0.003566	94,625 94,316	336	94,470	3,145,876	33.4
5–46	0.003889	93,979	365	93,796	3,051,729	32.5
5–47	0.004225	93,614	396	93,416	2,957,932	31.6
/–48	0.004575	93,218	426	93,005	2,864,516	30.7
–49	0.004932	92,792	458	92,563	2,771,511	29.9
–50	0.005303	92,334	490	92,089	2,678,948	29.0
L-51	0.005708	91,844	524	91,582	2,586,859	28.2
-52	0.006148	91,320	561	91,039	2,495,277	27.3
–53	0.006606	90,759	600	90,459	2,404,237	26.5
-54	0.007074	90,159	638	89,840	2,313,778	25.7
-55	0.007561	89,521	677	89,183	2,223,938	24.8
-56	0.008082	88,845	718	88,486	2,134,755	24.0
–57	0.008662	88,127 87,363	763 815	87,745 86,956	2,046,270	23.2 22.4
–58	0.009332 0.010128	87,363 86,548	877	86,956 86,110	1,958,525 1,871,569	22.4
–60	0.010126	85,671	948	85,198	1,785,459	20.8
–61	0.012157	84,724	1,030	84,209	1,700,262	20.6
-62	0.013379	83,694	1,120	83,134	1,616,053	19.3
-63	0.014658	82,574	1,210	81,969	1,532,919	18.6
3–64	0.015922	81,364	1,295	80,716	1,450,950	17.8
l–65	0.017186	80,068	1,376	79,380	1,370,234	17.1
<u>–66 </u>	0.018538	78,692	1,459	77,963	1,290,854	16.4
–67	0.020001	77,233	1,545	76,461	1,212,892	15.7

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Table II. Life table for males: United States, 2003—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectatior of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	$e_{x}$
7–68	0.021724	75,689	1,644	74,867	1,136,431	15.0
8–69	0.023713	74,044	1,756	73,166	1,061,564	14.3
9–70	0.025956	72,289	1,876	71,350	988,398	13.7
)–71	0.028373	70.412	1,998	69,413	917,047	13.0
-72	0.031046	68,414	2,124	67,352	847,634	12.4
2–73	0.034164	66,290	2,265	65,158	780,282	11.8
3–74	0.037672	64,026	2,412	62,820	715,124	11.2
I–75	0.041566	61,614	2.561	60,333	652.304	10.6
5–76	0.045853	59,053	2,708	57,699	591,971	10.0
5–77	0.050443	56,345	2,842	54,924	534,272	9.5
7–78	0.055466	53,503	2,968	52,019	479,348	9.0
3–79	0.060956	50,535	3.080	48,995	427,329	8.5
9–80	0.066952	47,455	3,177	45,866	378,335	8.0
)–81	0.073492	44,277	3,254	42,650	332,468	7.5
_82	0.080615	41,023	3,307	39.370	289.818	7.5
2–83	0.088363	37,716	3,333	36,050	250,448	6.6
3–84	0.096777	34,384	3,328	32,720	214,398	6.2
1–85	0.105899	31,056	3,289	29,412	181,678	5.8
5–86	0.105699	27,767	3,215	26,160	152,266	5.5
5–87	0.113770	24,553	3,104	23,001	126,106	5.5 5.1
	0.137922	21,448	2,958	19,969	103,106	4.8
	0.150277	18,490	2,779	17,101	83,137	4.5
3–89	0.163529	15,712	2,779	14,427	66,036	4.2
0-91	0.103529	13,142	2,335	11,975	51,609	3.9
	0.177705	10,807	2,335	9,765	39,634	3.9
	0.192827	8,723	1,822	7,812	29,869	3.7
2–93	0.225955	6,901	1,559	6,121	29,009	3.4
	0.243964	5,341	1,303	/	15,936	3.2
				4,690	· · · · · · · · · · · · · · · · · · ·	
5–96	0.262922 0.282801	4,038	1,062	3,507	11,246	2.8 2.6
		2,977	842	2,556	7,739	
**	0.303564	2,135	648	1,811	5,183	2.4
3–99	0.325160	1,487	483	1,245	3,373	2.3
9–100	0.347527	1,003	349	829	2,128	2.1
00 and over	1.000000	655	655	1,299	1,299	2.0

Table III. Life table for females: United States, 2003

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	number of person-years lived above age <i>x</i>	Expectation of life at age x
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
<u>-1</u>	0.006083	100,000	608	99,460	7,959,589	79.6
–2	0.000414	99,392	41	99,371	7,860,128	79.1
!-3	0.000301	99,351	30	99,336	7,760,757	78.1
–4	0.000218	99,321	22	99,310	7,661,422	77.1
-5	0.000172	99,299	17	99,290	7,562,112	76.2
-6	0.000158	99,282	16	99,274	7,462,821	75.2
–7	0.000141	99,266	14	99,259	7,363,547	74.2
-8	0.000128	99,252	13	99,246	7,264,288	73.2
-9	0.000117	99,240	12	99,234	7,165,042	72.2
–10	0.000109	99,228	11	99,223	7,065,808	71.2
–11	0.000105	99,217	10	99,212	6,966,586	70.2
-12	0.000111	99,207	11	99,201	6,867,374	69.2
<u> </u> -13	0.000132	99,196	13	99,189	6,768,172	68.2
–14	0.000173	99,183	17	99,174	6,668,983	67.2
–15	0.000228	99,166	23	99,154	6,569,809	66.3
i–16	0.000293	99,143	29	99,129	6,470,654	65.3
i–17	0.000356	99,114	35	99,096	6,371,526	64.3
′–18	0.000408	99,079	40	99,059	6,272,430	63.3
H=19	0.000440	99,038	44	99,017	6,173,371	62.3
-20	0.000457	98,995	45	98,972	6,074,355	61.4
–21	0.000472	98,949	47	98,926	5,975,382	60.4
–22	0.000489	98,903	48	98,879	5,876,456	59.4
-23	0.000502	98,854	50	98,830	5,777,578	58.4
–24	0.000510	98,805	50	98,780	5,678,748	57.5
–25	0.000516	98,754	51	98,729	5,579,969	56.5
-26	0.000522	98,703	52	98,678	5,481,240	55.5
i–27	0.000533	98,652	53	98,626	5,382,562	54.6
7–28	0.000548	98,599	54	98,572	5,283,936	53.6
-29	0.000570	98,545	56	98,517	5,185,364	52.6
-30	0.000597	98,489	59	98,460	5,086,847	51.6
-31	0.000629	98,430	62	98,399	4,988,387	50.7
–32	0.000667	98,368	66	98,336	4,889,988	49.7
–33	0.000722	98,303	71	98,267	4,791,652	48.7
<u>–34</u>	0.000778	98,232	76	98,194	4,693,384	47.8
-35	0.000854	98,155	84	98,114	4,595,191	46.8
-36	0.000938	98,072	92	98,026	4,497,077	45.9
-37	0.001031	97,980	101	97,929	4,399,052	44.9
-38	0.001137	97,879	111	97,823	4,301,123	43.9
-39	0.001256	97,767	123	97,706	4,203,300	43.0
-40	0.001383	97,644	135	97,577	4,105,594	42.0
-41	0.001513	97,509	147	97,436	4,008,017	41.1
-42	0.001644	97,362	160	97,282	3,910,581	40.2
2–43	0.001781	97,202	173	97,115	3,813,299	39.2
H-44	0.001926	97,029	187	96,935	3,716,184	38.3
.–45	0.002084	96,842 96,640	202 218	96,741	3,619,248	37.4 36.4
i–46	0.002257 0.002439	96,640 96,422	235	96,531 96,304	3,522,507 3,425,976	36.4 35.5
7–48	0.002439	96,422	253	96,060	3,329,672	35.5 34.6
-49	0.002825	95,934	271	95,798	3,233,612	33.7
i–50	0.003030	95,663	290	95,518	3,137,813	32.8
–50 · · · · · · · · · · · · · · · · · · ·	0.003254	95,373	310	95,218	3,042,295	31.9
_52	0.003505	95,063	333	94,896	2,947,077	31.0
<u>–53</u>	0.003786	94,730	359	94,550	2,852,181	30.1
-54	0.004102	94,371	387	94,177	2,757,631	29.2
-55	0.004456	93,984	419	93,774	2,663,454	28.3
-56	0.004847	93,565	454	93,338	2,569,679	27.5
-57	0.005278	93,111	491	92,866	2,476,341	26.6
_58	0.005762	92,620	534	92,353	2,383,475	25.7
-59	0.006311	92,086	581	91,796	2,291,122	24.9
i=60	0.006935	91,505	635	91,188	2,199,326	24.9
⊢61	0.007669	90,871	697	90,522	2,108,138	23.2
-62	0.007669	90,174	766	89,791	2,100,130	23.2 22.4
-63	0.006492	89,408	835	88,991	1,927,825	21.6
-64	0.010157	88,573	900	88,123	1,838,834	20.8
_65	0.010137	87,674	962	87,193	1,750,711	20.0
-66	0.010972	86,712	1,028	86,197	1,663,518	19.2

Table III. Life table for females: United States, 2003—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectatior of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	$e_{x}$
-68	0.013863	84,589	1,173	84,002	1,492,185	17.6
-69	0.015138	83,416	1,263	82,785	1,408,182	16.9
-70	0.016597	82,153	1,363	81,472	1,325,398	16.1
-71	0.018216	80,790	1,472	80,054	1,243,926	15.4
-72	0.020067	79,318	1,592	78,522	1,163,872	14.7
-73	0.022231	77.726	1.728	76.862	1.085.350	14.0
-74	0.024733	75,999	1,880	75,059	1,008,487	13.3
-75	0.027574	74,119	2,044	73,097	933,429	12.6
-76	0.030781	72,075	2,219	70,966	860.332	11.9
-77	0.034249	69,857	2,392	68,660	789,366	11.3
-78	0.038091	67,464	2,570	66,179	720,706	10.7
-79	0.042346	64,894	2,748	63,520	654,527	10.1
-80	0.047053	62,146	2,924	60,684	591.006	9.5
-81	0.052255	59,222	3,095	57,675	530,322	9.0
-82	0.057997	56,127	3,255	54,500	472,647	8.4
-83	0.064327	52,872	3,401	51,172	418,148	7.9
-84	0.071295	49,471	3,527	47,708	366,976	7.4
-85	0.078955	45,944	3,627	44,130	319,269	6.9
-86	0.087360	42.317	3,697	40,468	275,138	6.5
-87	0.096566	38,620	3,729	36,755	234,670	6.1
-88	0.106628	34,890	3,720	33,030	197,915	5.7
-89	0.117603	31,170	3,666	29,337	164,885	5.3
-90	0.129544	27,504	3,563	25,723	135,547	4.9
–91	0.142501	23,941	3,412	22,236	109,824	4.6
-92	0.156521	20,530	3,213	18,923	87,589	4.3
-93	0.171645	17,316	2,972	15,830	68,666	4.0
-94	0.187904	14,344	2,695	12,996	52,835	3.7
-95	0.205321	11,649	2,392	10,453	39,839	3.4
–96	0.223908	9,257	2,073	8,221	29,386	3.2
–90	0.243662	7,184	1,751	6,309	21,165	2.9
–97 –98	0.264564	5,434	1,438	4,715	14,856	2.7
-99	0.286580	3,996	1,145	3,424	10,141	2.7
**	0.200500	2,851	883	2,410	6,718	2.5 2.4
-100	1.000000	1,968	1,968	4,308	4,308	2.4

Table IV. Life table for the white population: United States, 2003

	1 Pr	,					
					Total		
	Probability		Number	Person-years	number of		
	of dying	Number	dying	lived	person-years	Expectation	
	between			I .	1	of life	
		surviving to	between	between	lived above		
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x	
A a a	~	1	4	1	т	_	
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	$e_x$	
0–1	0.005725	100,000	572	99,494	7,757,613	77.6	
		· ·		1			
1–2	0.000418	99,428	42	99,407	7,658,118	77.0	
2–3	0.000301	99,386	30	99,371	7,558,712	76.1	
3–4	0.000232	99,356	23	99,345	7,459,341	75.1	
4–5	0.000186	99,333	19	99,324	7,359,996	74.1	
5–6	0.000164	99,314	16	99,306	7,260,673	73.1	
6–7	0.000151	99,298	15	99,291	7,161,366	72.1	
7–8	0.000140	99,283	14	99,276	7,062,076	71.1	
8–9	0.000146	99,269	12	99,263	6,962,799	70.1	
		· ·		1			
9–10	0.000108	99,257	11	99,252	6,863,536	69.1	
10–11	0.000097	99,246	10	99,241	6,764,285	68.2	
11–12	0.000103	99,237	10	99,232	6,665,043	67.2	
12–13	0.000141	99,226	14	99,219	6,565,812	66.2	
13–14	0.000219	99,212	22	99,202	6,466,592	65.2	
14–15	0.000328	99,191	33	99,174	6,367,391	64.2	
15–16	0.000451	99,158	45	99,136	6,268,216	63.2	
16–17	0.000431	99,113	56	99,085	6,169,081	62.2	
17–18	0.000569	99,113	67	99,065	6,069,995	61.3	
		· '					
18–19	0.000746	98,991	74	98,954	5,970,971	60.3	
19–20	0.000796	98,917	79	98,877	5,872,018	59.4	
20–21	0.000844	98,838	83	98,796	5,773,140	58.4	
21–22	0.000891	98,755	88	98,711	5,674,344	57.5	
22–23	0.000917	98,666	90	98,621	5,575,634	56.5	
23–24	0.000917	98,576	90	98,531	5,477,013	55.6	
24–25	0.000899	98,486	89	98,441	5,378,482	54.6	
25–26	0.000873	98,397	86	98,354	5,280,040	53.7	
26–27	0.000852	98,311	84	98,269	5,181,686	52.7	
27–28	0.000843	98,227	83	98,186	5,083,417	51.8	
	0.000854	98,144	84		4,985,231	50.8	
				98,103			
29–30	0.000882	98,061	86	98,017	4,887,129	49.8	
30–31	0.000918	97,974	90	97,929	4,789,111	48.9	
31–32	0.000957	97,884	94	97,837	4,691,182	47.9	
32–33	0.001017	97,791	99	97,741	4,593,345	47.0	
33–34	0.001066	97,691	104	97,639	4,495,604	46.0	
34–35	0.001138	97,587	111	97,532	4,397,965	45.1	
35–36	0.001219	97,476	119	97,417	4,300,433	44.1	
36–37	0.001313	97,357	128	97,293	4,203,016	43.2	
37–38	0.001429	97,229	139	97,160	4,105,723	42.2	
38–39	0.001568	97,090	152	97,014	4,008,563	41.3	
39–40	0.001721	96,938	167	96,855	3,911,549	40.4	
40–41	0.001721	96,771	182	96,681	3,814,694	39.4	
				1			
41–42	0.002037	96,590	197	96,491	3,718,013	38.5	
42–43	0.002207	96,393	213	96,287	3,621,522	37.6	
43–44	0.002392	96,180	230	96,065	3,525,236	36.7	
44–45	0.002595	95,950	249	95,826	3,429,171	35.7	
45–46	0.002817	95,701	270	95,566	3,333,345	34.8	
46–47	0.003051	95,432	291	95,286	3,237,779	33.9	
47–48	0.003292	95,140	313	94,984	3,142,493	33.0	
48–49	0.003536	94,827	335	94,659	3,047,509	32.1	
49–50	0.003790	94,492	358	94,313	2,952,849	31.2	
50–51	0.004065	94,134	383	93,942	2,858,537	30.4	
51–52	0.004373	93,751	410	93,546	2,764,594	29.5	
52–53	0.004716	93,341	440	93,121	2,671,048	28.6	
53–54	0.005100	92,901	474	92,664	2,577,927	27.7	
54–55	0.005100	92,427	511	92,172	2,485,263	26.9	
	0.005985	91,917	550	91,642	2,393,091	26.0	
56–57	0.006490	91,367	593	91,070	2,301,449	25.2	
57–58	0.007055	90,774	640	90,453	2,210,379	24.4	
58–59	0.007700	90,133	694	89,786	2,119,926	23.5	
59–60	0.008442	89,439	755	89,062	2,030,139	22.7	
60–61	0.009316	88,684	826	88,271	1,941,078	21.9	
61–62	0.010299	87,858	905	87,406	1,852,807	21.1	
62–63	0.011323	86,953	985	86,461	1,765,401	20.3	
63–64	0.011323	85,969	1,060	85,439	1,678,940	19.5	
64–65	0.012326	84,909	1,132	84,343	1,593,502	18.8	
			•				
65–66	0.014434	83,776	1,209	83,172	1,509,159	18.0	
66–67	0.015591	82,567	1,287	81,923	1,425,988	17.3	
		•	•	1	•	•	

Table IV. Life table for the white population: United States, 2003—Con.

	Probability of dying between ages x to x+1	Number surviving to age x	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	$T_x$	$e_{x}$
7–68	0.016947	81,280	1,377	80,591	1,344,064	16.5
3–69	0.018510	79,902	1,479	79,163	1,263,473	15.8
–70	0.020265	78,423	1,589	77,629	1,184,310	15.1
-71	0.022176	76,834	1,704	75,982	1,106,682	14.4
-72	0.024332	75,130	1,828	74,216	1,030,699	13.7
-73	0.026838	73,302	1,967	72,319	956,483	13.0
-74	0.029718	71,335	2,120	70,275	884,165	12.4
-75	0.032953	69,215	2,281	68,075	813,890	11.8
-76	0.036558	66,934	2,447	65,711	745,815	11.1
-77	0.040452	64,487	2.609	63,183	680,104	10.5
-78	0.044742	61,879	2,769	60,494	616,921	10.0
-79	0.049463	59,110	2,924	57,648	556,427	9.4
-80	0.054654	56,186	3,071	54,651	498,779	8.9
-81	0.060355	53,116	3,206	51,513	444,128	8.4
-82	0.066608	49,910	3,324	48,248	392,615	7.9
-83	0.073459	46,585	3,422	44,874	344,368	7.4
-84	0.080954	43,163	3,494	41,416	299,494	6.9
-85	0.089140	39,669	3,536	37,901	258,077	6.5
-86	0.098065	36,133	3,543	34,361	220,176	6.1
-87	0.107778	32,590	3,512	30,833	185,815	5.7
-88	0.118327	29,077	3,441	27,357	154,982	5.3
_89	0.129758	25,636	3,327	23,973	127,625	5.0
-90	0.142116	22,310	3,171	20,725	103,652	4.6
-91	0.155440	19,139	2,975	17,652	82,927	4.3
–92	0.169766	16,164	2,744	14,792	65,275	4.0
–93	0.185123	13,420	2,484	12,178	50,483	3.8
i–94	0.201533	10,936	2,204	9,834	38,305	3.5
_95	0.219005	8,732	1,912	7,776	28,471	3.3
-96	0.237542	6,820	1,620	6,010	20,696	3.0
-97	0.257132	5,200	1,337	4,531	14,686	2.8
-97	0.277748	3,863	1,073	3,326	10,155	2.6
-99	0.299351	2,790	835	2,372	6,829	2.4
–99	0.321886	1,955	629	1,640	4,457	2.4
				· · · · · · · · · · · · · · · · · · ·		2.3
100 and over	1.000000	1,325	1,325	2,817	2,817	

Table V. Life table for white males: United States, 2003

		,				
					Total	
	Probability		Number	Person-years	number of	
		Number		,		Funcatation
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
		•			•	
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_x$
	1/4	^	^	^	^	^
0–1	0.006366	100,000	637	99,440	7,504,262	75.0
1–2	0.000460	99,363	46	99,341	7,404,821	74.5
2–3	0.000330	99,318	33	99,301	7,305,481	73.6
3–4	0.000263	99,285	26	99,272	7,206,179	72.6
4–5	0.000201	99,259	20	99,249	7,106,908	71.6
5–6	0.000182	99,239	18	99,230	7,007,659	70.6
6–7	0.000169	99,221	17	99,212	6,908,429	69.6
					· ' '	
7–8	0.000158	99,204	16	99,196	6,809,217	68.6
8–9	0.000140	99,188	14	99,181	6,710,020	67.6
9–10	0.000117	99,174	12	99,169	6,610,839	66.7
10–11	0.000101	99,163	10	99,158	6,511,670	65.7
11–12	0.000101	99,153	11	99,148		64.7
		· '		/	6,412,512	
12–13	0.000161	99,142	16	99,134	6,313,365	63.7
13–14	0.000271	99,126	27	99,113	6,214,231	62.7
14–15	0.000425	99,099	42	99,078	6,115,118	61.7
15–16	0.000596	99,057	59	99,028	6,016,040	60.7
16–17	0.000761	98,998	75	98,961	5,917,012	59.8
		· '		1		
17–18	0.000910	98,923	90	98,878	5,818,051	58.8
18–19	0.001029	98,833	102	98,782	5,719,174	57.9
19–20	0.001118	98,731	110	98,676	5,620,392	56.9
20–21	0.001206	98,621	119	98,561	5,521,716	56.0
21–22	0.001289	98,502	127	98,438	5,423,155	55.1
				1		
22–23	0.001333	98,375	131	98,309	5,324,716	54.1
23–24	0.001331	98,244	131	98,178	5,226,407	53.2
24–25	0.001295	98,113	127	98,049	5,128,229	52.3
25–26	0.001242	97,986	122	97,925	5,030,179	51.3
26–27	0.001197	97,864	117	97,806	4,932,254	50.4
27–28	0.001170	97,747	114	97,690	4,834,449	49.5
				1		
28–29	0.001177	97,633	115	97,575	4,736,759	48.5
29–30	0.001210	97,518	118	97,459	4,639,183	47.6
30–31	0.001254	97,400	122	97,339	4,541,725	46.6
31–32	0.001301	97,278	127	97,214	4,444,386	45.7
32–33	0.001372	97,151	133	97,084	4,347,171	44.7
33–34	0.001423	97,018	138	96,949	4,250,087	43.8
				1		
34–35	0.001503	96,880	146	96,807	4,153,138	42.9
35–36	0.001594	96,734	154	96,657	4,056,331	41.9
36–37	0.001703	96,580	164	96,498	3,959,674	41.0
37–38	0.001842	96,415	178	96,327	3,863,177	40.1
38–39	0.002011	96,238	194	96,141	3,766,850	39.1
39–40	0.002200	96,044	211	95,939	3,670,709	38.2
				1		
40–41	0.002395	95,833	230	95,718	3,574,770	37.3
41–42	0.002595	95,604	248	95,479	3,479,052	36.4
42–43	0.002811	95,355	268	95,221	3,383,572	35.5
43–44	0.003053	95,087	290	94,942	3,288,351	34.6
44–45	0.003320	94,797	315	94,640	3,193,409	33.7
45–46	0.003613	94,482	341	94,312	3,098,769	32.8
46–47	0.003920	94,141	369	93,957	3,004,457	31.9
				1		
47–48	0.004234	93,772	397	93,573	2,910,501	31.0
48–49	0.004551	93,375	425	93,163	2,816,927	30.2
49–50	0.004877	92,950	453	92,723	2,723,765	29.3
50–51	0.005231	92,497	484	92,255	2,631,041	28.4
51–52	0.005623	92,013	517	91,754	2,538,787	27.6
52–53	0.006047	91,496	553	91,219	2,447,032	26.7
				1		
53–54	0.006502	90,942	591	90,647	2,355,813	25.9
54–55	0.006993	90,351	632	90,035	2,265,167	25.1
55–56	0.007521	89,719	675	89,382	2,175,132	24.2
56–57	0.008103	89,044	722	88,684	2,085,750	23.4
57–58	0.008764	88,323	774	87,936	1,997,066	22.6
58–59	0.009534	87,549	835	87,131	1,909,131	21.8
59–60	0.010433	86,714	905	86,262	1,821,999	21.0
60–61	0.011494	85,809	986	85,316	1,735,737	20.2
61–62	0.012687	84,823	1,076	84,285	1,650,421	19.5
62–63	0.013942	83,747	1,168	83,163	1,566,136	18.7
63–64	0.015190	82,579	1,254	81,952	1,482,973	18.0
64–65	0.016449	81,325	1,338	80,656	1,401,021	17.2
65–66	0.017808	79,987	1,424	79,275	1,320,365	16.5
66-67	0.019280	78,563	1,515	77,806	1,241,089	15.8
		,	.,		,=,	

Table V. Life table for white males: United States, 2003—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
7–68	0.020997	77,048	1,618	76,239	1,163,284	15.1
3–69	0.022967	75,430	1,732	74,564	1,087,044	14.4
9–70	0.025171	73,698	1,855	72,771	1,012,480	13.7
)–71	0.027546	71,843	1,979	70,853	939,710	13.1
-72	0.030202	69,864	2,110	68,809	868,856	12.4
2–73	0.033279	67,754	2,255	66,627	800,047	11.8
3–74	0.036803	65,499	2,411	64,294	733,421	11.2
4–75	0.040728	63,089	2,569	61,804	669,127	10.6
5–76	0.045048	60,519	2,726	59,156	607,323	10.0
5–77	0.049671	57,793	2,871	56,358	548,167	9.5
7–78	0.054742	54,922	3,007	53,419	491,809	9.0
3–79	0.060298	51,916	3,130	50,350	438,390	8.4
9–80	0.066378	48,785	3,238	47,166	388,040	8.0
)–81	0.073024	45,547	3,326	43,884	340,874	7.5
I–82	0.080278	42,221	3,389	40,526	296,990	7.0
2–83	0.088184	38,832	3,424	37,119	256,463	6.6
3–84	0.096786	35,407	3,427	33,694	219,344	6.2
1–85	0.106130	31,980	3,394	30,283	185,650	5.8
5–86	0.116260	28,586	3,323	26,925	155,367	5.4
5–87	0.127219	25,263	3,214	23,656	128,442	5.1
7–88	0.139049	22,049	3,066	20,516	104,786	4.8
B-89	0.151787	18,983	2,881	17,542	84,270	4.4
9–90	0.165468	16,102	2,664	14,770	66,728	4.1
)–90	0.180120	13,437	2,420	12,227	51,959	3.9
1–92	0.195766	11,017	2,420	9,939	39,731	3.6
2–93	0.193700	8,860	1,882	7,919	29,793	3.4
3–94	0.230081	6,978	1,606	6.175	21,873	3.1
i–95	0.248750	5,373	1,336	4,704	15,698	2.9
. 11	0.268405	4,036	1,083	3,495	10,994	2.7
		· '		· · · · · · · · · · · · · · · · · · ·	1	2.7
5–97	0.289015 0.310537	2,953 2,099	853 652	2,526 1,773	7,499 4,973	2.5
7–98		· '	482	· · · · · · · · · · · · · · · · · · ·	1	2.4
3–99	0.332911	1,447		1,207	3,199	
9–100	0.356064	966	344	794	1,993	2.1
00 and over	1.000000	622	622	1,199	1,199	1.9

Table VI. Life table for white females: United States, 2003

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
<b>-1</b>	0.005052	100,000	505	99,551	8,004,213	80.0
-2	0.000374	99,495	37	99,476	7,904,663	79.4
-3	0.000270	99,458	27	99,444	7,805,186	78.5
-4	0.000199	99,431	20	99,421	7,705,742	77.5
-5	0.000171	99,411	17	99,402	7,606,322	76.5
6	0.000146	99,394	15	99,387	7,506,919	75.5
-7	0.000131	99,379	13	99,373	7,407,533	74.5
8	0.000120	99,366	12	99,360	7,308,160	73.5
9	0.000109	99,354	11	99,349	7,208,800	72.6
-10	0.000099	99,343	10	99,339	7,109,451	71.6
-11	0.000092	99,334	9	99,329	7,010,112	70.6
12	0.000097	99,324	10	99,320	6,910,783	69.6
-13	0.000119	99,315	12	99,309	6,811,464	68.6
-14	0.000164	99,303	16	99,295	6,712,155	67.6
-15	0.000226	99,287	22	99,276	6,612,860	66.6
-16	0.000298	99,264	30	99,250	6,513,584	65.6
-17	0.000366	99,235	36	99,217	6,414,334	64.6
-18	0.000418	99,199	41	99,178	6,315,118	63.7
-19	0.000445	99,157	44	99,135	6,215,940	62.7
-20	0.000452	99,113	45	99,091	6,116,805	61.7
-21	0.000456	99,068	45	99,045	6,017,714	60.7
-22	0.000464	99,023	46	99,000	5,918,669	59.8
-23	0.000469	98,977	46	98,954	5,819,669	58.8
-24	0.000472	98,930	47	98,907	5,720,715	57.8
-25	0.000474	98,884	47	98,860	5,621,808	56.9
-26	0.000477	98,837	47	98,813	5,522,948	55.9
-27	0.000483	98,790	48	98,766	5,424,135	54.9
-28	0.000494	98,742	49	98,718	5,325,369	53.9
-29	0.000511	98,693	50	98,668	5,226,651	53.0
-30	0.000535	98,643	53	98,616	5,127,983	52.0
-31	0.000563	98,590	55	98,562	5,029,367	51.0
-32	0.000597	98,535	59	98,505	4,930,804	50.0
-33	0.000646	98,476	64	98,444	4,832,299	49.1
-34	0.000693	· ·	68			48.1
I		98,412	75	98,378	4,733,855	
-35	0.000759	98,344	82	98,307	4,635,477	47.1
-36	0.000830	98,269		98,229	4,537,170	46.2
-37	0.000910	98,188	89	98,143	4,438,942	45.2
-38	0.001005	98,098	99	98,049	4,340,799	44.2
-39	0.001114	98,000	109	97,945	4,242,750	43.3
-40	0.001232	97,891	121	97,830	4,144,805	42.3
-41	0.001352	97,770	132	97,704	4,046,974	41.4
-42	0.001473	97,638	144	97,566	3,949,270	40.4
-43	0.001597	97,494	156	97,416	3,851,705	39.5
-44	0.001727	97,338	168	97,254	3,754,288	38.6
-45	0.001867	97,170	181	97,079	3,657,034	37.6
-46	0.002021 0.002186	96,989 oe 703	196	96,891	3,559,955	36.7 35.8
-47		96,793	212	96,687	3,463,064	
-48	0.002356	96,581	228	96,467	3,366,377	34.9
-49	0.002530	96,354	244	96,232	3,269,910	33.9
-50	0.002715	96,110	261	95,979	3,173,678	33.0
-51	0.002915	95,849	279	95,709	3,077,699	32.1
-52	0.003144	95,570	300	95,419	2,981,990	31.2
-53	0.003413	95,269	325	95,107	2,886,570	30.3
-54	0.003730	94,944	354	94,767	2,791,464	29.4
-55	0.004093	94,590	387	94,396	2,696,697	28.5
-56	0.004494	94,203	423	93,991	2,602,301	27.6
-57	0.004930	93,779	462	93,548	2,508,310	26.7
-58	0.005410	93,317	505	93,065	2,414,762	25.9
-59	0.005945	92,812	552	92,536	2,321,697	25.0
-60	0.006549	92,260	604	91,958	2,229,161	24.2
–61	0.007263	91,656	666	91,323	2,137,203	23.3
-62	0.008069	90,990	734	90,623	2,045,879	22.5
-63	0.008897	90,256	803	89,855	1,955,256	21.7
-64	0.009697	89,453	867	89,020	1,865,401	20.9
-65	0.010497	88,586	930	88,121	1,776,382	20.1
-66	0.011379	87,656	997	87,157	1,688,261	19.3
i–67	0.012304	86,658	1,066	86,125	1,601,104	18.5

Table VI. Life table for white females: United States, 2003—Con.

	Probability of dying between ages x to x+1	Number surviving to age x	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	$T_x$	$e_{x}$
7–68	0.013403	85,592	1,147	85,019	1,514,978	17.7
8–69	0.014681	84,445	1,240	83,825	1,429,960	16.9
9–70	0.016134	83,205	1,342	82,534	1,346,135	16.2
0–71	0.017744	81,863	1,453	81,137	1,263,600	15.4
I–72	0.019586	80,410	1,575	79,623	1,182,464	14.7
2–73	0.021740	78,835	1,714	77,978	1,102,841	14.0
3–74	0.024233	77,121	1,869	76,187	1,024,863	13.3
1–75	0.027063	75,253	2,037	74,234	948.676	12.6
5–76	0.030261	73,216	2,216	72,108	874,441	11.9
6–77	0.033735	71,001	2,395	69,803	802,333	11.3
7–78	0.037593	68,605	2,579	67,316	732,530	10.7
3–79	0.041872	66,026	2,765	64,644	665,214	10.1
9–80	0.046616	63,262	2,949	61,787	600,570	9.5
)–81	0.051868	60,313	3,128	58,748	538,783	8.9
I–82	0.057675	57,184	3,298	55,535	480.035	8.4
2–83	0.064089	53,886	3,454	52,159	424,500	7.9
3–84	0.004003	50,433	3,589	48,638	372,340	7.4
1–85	0.078950	46,844	3,698	44,995	323,702	6.9
5–86	0.076930	43,145	3,776	41,258	278,707	6.5
5–87	0.096901	39,370	3,815	37,462	237,450	6.0
7–88	0.107181	35,555	3,811	33,649	199,987	5.6
B-89	0.107181	31,744	3,759	29,865	166,338	5.2
9-90	0.130639	27,985	3,656	26,157	136,473	4.9
0–91	0.143928	24,329	3,502	22,579	110,316	4.5
	0.143926	20,828	3,297	19,179	87,737	4.5 4.2
1–92	0.156522	17,530	3,048	16,006	68,558	3.9
3–94	0.173804	14,482	2,760	13,102	52,552	3.6
1–95	0.208509	11.722	2,444	10,500	39,450	3.4
	0.206509	9,278	2,444	8,222	28,950	3.4
	0.247986	7,166	1,777	6,277	20,728	2.9
	0.247986	5,389	· '			2.9 2.7
**			1,452	4,663	14,450	2.7 2.5
3–99	0.292177	3,937	1,150	3,361	9,787	
9–100	0.315926	2,786	880	2,346	6,426	2.3
00 and over	1.000000	1,906	1,906	4,080	4,080	2.1

Table VII. Life table for the black population: United States, 2003

			,			
					Total	
	Drobobility.		Number	Boroon vooro		
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
		,	,	,	-	
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_x$
0–1	0.014035	100,000	1,403	98,754	7,230,570	72.3
1–2	0.000735	98,597	73	98,560	7,131,816	72.3
	0.000500		49			71.4
2–3		98,524		98,499	7,033,256	
3–4	0.000380	98,475	37	98,456	6,934,756	70.4
4–5	0.000238	98,437	23	98,426	6,836,300	69.4
5–6	0.000249	98,414	25	98,402	6,737,875	68.5
	0.000248	· · · · · · · · · · · · · · · · · · ·	21			
6–7		98,389		98,379	6,639,473	67.5
7–8	0.000190	98,368	19	98,359	6,541,094	66.5
8–9	0.000173	98,350	17	98,341	6,442,735	65.5
9–10	0.000164	98,333	16	98,325	6,344,394	64.5
10–11	0.000166		16		6,246,070	63.5
		98,317		98,308		
11–12	0.000185	98,300	18	98,291	6,147,761	62.5
12–13	0.000229	98,282	22	98,271	6,049,470	61.6
13–14	0.000303	98,260	30	98,245	5,951,199	60.6
				1		
14–15	0.000406	98,230	40	98,210	5,852,955	59.6
15–16	0.000524	98,190	51	98,164	5,754,745	58.6
16–17	0.000651	98,139	64	98,107	5,656,580	57.6
17–18	0.000796	98,075	78	98,036	5,558,474	56.7
-		· '		1		
18–19	0.000949	97,997	93	97,950	5,460,438	55.7
19–20	0.001100	97,904	108	97,850	5,362,488	54.8
20–21	0.001258	97,796	123	97,734	5,264,639	53.8
21–22	0.001408	97,673	138	97,604	5,166,904	52.9
				1		
22–23	0.001519	97,535	148	97,461	5,069,300	52.0
23–24	0.001582	97,387	154	97,310	4,971,839	51.1
24–25	0.001609	97,233	156	97,155	4,874,529	50.1
25–26	0.001628	97,077	158	96,998	4,777,374	49.2
26–27	0.001656	96,919	161	96,838	4,680,377	48.3
		· ·				
27–28	0.001683	96,758	163	96,677	4,583,538	47.4
28–29	0.001712	96,595	165	96,512	4,486,862	46.5
29–30	0.001746	96,430	168	96,346	4,390,349	45.5
30–31	0.001781	96,261	171	96,176	4,294,004	44.6
		· ·				
31–32	0.001828	96,090	176	96,002	4,197,828	43.7
32–33	0.001943	95,914	186	95,821	4,101,826	42.8
33–34	0.002016	95,728	193	95,631	4,006,005	41.8
34–35	0.002164	95,535	207	95,432	3,910,373	40.9
		· ·				
35–36	0.002333	95,328	222	95,217	3,814,942	40.0
36–37	0.002516	95,106	239	94,986	3,719,725	39.1
37–38	0.002723	94,867	258	94,737	3,624,739	38.2
38–39	0.002953	94,608	279	94,469	3,530,001	37.3
39–40	0.003202	94,329	302	94,178	3,435,532	36.4
				1		
40–41	0.003458	94,027	325	93,864	3,341,355	35.5
41–42	0.003732	93,702	350	93,527	3,247,490	34.7
42–43	0.004046	93,352	378	93,163	3,153,964	33.8
43–44	0.004419	92,974	411	92,769	3,060,800	32.9
44–45	0.004847	92,563	449	92,339	2,968,032	32.1
				1		
45–46	0.005307	92,115	489	91,870	2,875,692	31.2
46–47	0.005787	91,626	530	91,361	2,783,822	30.4
47–48	0.006305	91,096	574	90,809	2,692,461	29.6
48–49	0.006861	90,522	621	90,211	2,601,652	28.7
				· ·	' '	
49–50	0.007453	89,900	670	89,565	2,511,441	27.9
50–51	0.008110	89,230	724	88,869	2,421,876	27.1
51–52	0.008805	88,507	779	88,117	2,333,007	26.4
52–53	0.009471	87,727	831	87,312	2,244,890	25.6
53–54	0.010080	86,897	876	86,459	2,157,578	24.8
				1		
54–55	0.010663	86,021	917	85,562	2,071,120	24.1
55–56	0.011280	85,103	960	84,623	1,985,558	23.3
56–57	0.012001	84,143	1,010	83,638	1,900,934	22.6
57–58	0.012846	83,134	1,068	82,600	1,817,296	21.9
			· ·	1		
58–59	0.013843	82,066	1,136	81,498	1,734,696	21.1
59–60	0.014970	80,930	1,212	80,324	1,653,199	20.4
60–61	0.016222	79,718	1,293	79,071	1,572,875	19.7
61–62	0.017559	78,425	1,377			
		· ·	· ·	77,736	1,493,803	19.0
62–63	0.018902	77,048	1,456	76,320	1,416,067	18.4
63–64	0.020179	75,591	1,525	74,829	1,339,747	17.7
64–65	0.021408	74,066	1,586	73,273	1,264,918	17.1
65–66	0.022626	72,480	1,640	71,660	1,191,645	16.4
		· ·	· ·			
66–67	0.023878	70,841	1,692	69,995	1,119,985	15.8
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Table VII. Life table for the black population: United States, 2003—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectatior of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
7–68	0.025419	69,149	1,758	68,270	1,049,990	15.2
–69	0.027313	67,391	1,841	66,471	981,720	14.6
-70	0.029512	65,551	1,935	64,583	915,249	14.0
-71	0.031893	63,616	2,029	62,602	850,665	13.4
-72	0.034447	61,587	2,122	60,526	788,064	12.8
-73	0.037255	59,466	2,215	58,358	727,537	12.2
-74	0.040323	57,250	2,309	56,096	669,179	11.7
-75	0.043657	54,942	2,399	53,743	613,083	11.2
-76	0.047284	52,543	2,484	51,301	559,341	10.6
-77	0.051092	50,059	2,558	48,780	508.040	10.1
-78	0.055190	47,501	2,622	46,190	459,260	9.7
-79	0.059595	44,880	2,675	43,542	413,069	9.2
-80	0.064329	42,205	2,715	40,847	369,527	8.8
–81	0.069410	39,490	2,741	38,119	328,680	8.3
-82	0.074861	36,749	2,751	35,373	290,560	7.9
-83	0.080703	33,998	2.744	32,626	255,187	7.5
-84	0.086958	31,254	2,718	29,895	222,561	7.1
-85	0.093648	28,536	2,672	27,200	192,665	6.8
-86	0.100796	25,864	2,607	24,561	165,465	6.4
-87	0.108424	23,257	2,522	21,996	140,905	6.1
-88	0.116555	20,735	2,417	19,527	118,909	5.7
–89	0.125210	18,319	2,294	17,172	99,381	5.4
–90	0.134410	16,025	2,154	14,948	82,210	5.1
–90	0.144175	13,871	2,000	12,871	67,262	4.8
–91	0.154522	11,871	1,834	10,954	54,391	4.6
–93	0.165468	10,037	1,661	9,206	43,437	4.3
–94	0.177028	8,376	1,483	7,635	34,230	4.1
_95	0.189212	6,893	1,304	6,241	26,596	3.9
-96	0.202028	5,589	1,129	5,024	20,355	3.6
-97	0.215482	4,460	961	3,979	15,330	3.4
-98	0.229574	3,499	803	3,979	11,351	3.4
	0.244301	2,696	659	2,366	8,254	3.2
-99	0.244301	2,096	529	1,773	5,888	2.9
-100					1	
0 and over	1.000000	1,508	1,508	4,115	4,115	2.7

Table VIII. Life table for black males: United States, 2003

					Total	
	Drobobility		Number	Doroon vooro		
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
			,		_	+
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_x$
						<del>                                     </del>
0–1	0.015565	100,000	1,557	98,616	6,877,837	68.8
1–2	0.000858	98,443	84	98,401	6,779,221	68.9
		l '				
2–3	0.000543	98,359	53	98,332	6,680,819	67.9
3–4	0.000437	98,306	43	98,284	6,582,487	67.0
4–5	0.000290	98,263	28	98,248	6,484,203	66.0
5–6	0.000275	98,234	27	98,221	6,385,954	65.0
6–7	0.000239	98,207	23	98,196	6,287,734	64.0
7–8	0.000212	98,184	21	98,173	6,189,538	63.0
8–9	0.000189	98,163	19	98,154	6,091,365	62.1
9–10	0.000172	98,144	17	98,136	5,993,211	61.1
		· '	17		1 ' '	
10–11	0.000169	98,128		98,119	5,895,075	60.1
11–12	0.000194	98,111	19	98,102	5,796,956	59.1
12–13	0.000262	98,092	26	98,079	5,698,854	58.1
13–14	0.000387	98,066	38	98,047	5,600,775	57.1
14–15	0.000563	98,028	55	98,001	5,502,727	56.1
				1		
15–16	0.000765	97,973	75	97,936	5,404,727	55.2
16–17	0.000977	97,898	96	97,850	5,306,791	54.2
17–18	0.001210	97,803	118	97,743	5,208,940	53.3
18–19	0.001450	97,684	142	97,613	5,111,197	52.3
				1	· ' '	
19–20	0.001681	97,543	164	97,461	5,013,583	51.4
20–21	0.001922	97,379	187	97,285	4,916,123	50.5
21–22	0.002149	97,192	209	97,087	4,818,838	49.6
22–23	0.002318	96,983	225	96,870	4,721,751	48.7
23–24	0.002411	96,758	233	96,641	4,624,880	47.8
24–25	0.002411	96,525	236	96,407	4,528,239	46.9
		· /		· · · · · · · · · · · · · · · · · · ·	· ' '	
25–26	0.002464	96,289	237	96,170	4,431,833	46.0
26–27	0.002489	96,051	239	95,932	4,335,663	45.1
27–28	0.002501	95,812	240	95,692	4,239,731	44.3
28–29	0.002506	95,573	240	95,453	4,144,038	43.4
29–30	0.002510	95,333	239	95,213	4,048,586	42.5
		95,094	239	1		41.6
30–31	0.002512			94,974	3,953,372	
31–32	0.002526	94,855	240	94,735	3,858,398	40.7
32–33	0.002648	94,615	250	94,490	3,763,663	39.8
33–34	0.002675	94,365	252	94,239	3,669,173	38.9
34–35	0.002819	94,112	265	93,980	3,574,934	38.0
35–36	0.002990	93,847	281	93,707	3,480,954	37.1
36–37	0.003180	93,567	298	93,418	3,387,247	36.2
37–38	0.003406	93,269	318	93,110	3,293,830	35.3
38–39	0.003667	92,951	341	92,781	3,200,719	34.4
39–40	0.003958	92,610	367	92,427	3,107,939	33.6
40–41	0.004261	92,244	393	92,047	3,015,511	32.7
41–42	0.004592	91,851	422	91,640	2,923,464	31.8
		91,429	456	91,201		31.0
42–43	0.004986			1	2,831,824	
43–44	0.005465	90,973	497	90,725	2,740,623	30.1
44–45	0.006026	90,476	545	90,203	2,649,898	29.3
45–46	0.006629	89,931	596	89,633	2,559,695	28.5
46–47	0.007261	89,335	649	89,010	2,470,062	27.6
47–48	0.007957	88,686	706	88,333	2,381,052	26.8
48–49				1		
	0.008723	87,980	767	87,597	2,292,718	26.1
49–50	0.009552	87,213	833	86,796	2,205,122	25.3
50–51	0.010481	86,380	905	85,927	2,118,325	24.5
51–52	0.011460	85,475	980	84,985	2,032,398	23.8
52–53	0.012387	84,495	1,047	83,972	1,947,413	23.0
53–54	0.013205	83,448	1,102	82,897	1,863,442	22.3
			· ·	1		
54–55	0.013957	82,346	1,149	81,772	1,780,544	21.6
55–56	0.014735	81,197	1,196	80,599	1,698,773	20.9
56–57	0.015648	80,001	1,252	79,375	1,618,174	20.2
57–58	0.016720	78,749	1,317	78,091	1,538,799	19.5
58–59	0.017997	77,432	1,394	76,735	1,460,708	18.9
59–60		76,039	· ·	75,299		18.2
	0.019453		1,479		1,383,973	
60–61	0.021074	74,559	1,571	73,774	1,308,674	17.6
61–62	0.022799	72,988	1,664	72,156	1,234,900	16.9
62-63	0.024523	71,324	1,749	70,450	1,162,744	16.3
63–64	0.026136	69,575	1,818	68,666	1,092,294	15.7
64–65	0.027656	67,757	1,874	66,820	1,023,629	15.1
65–66	0.029122	65,883	1,919	64,923	956,809	14.5
			· ·		· '	
66–67	0.030803	63,964	1,970	62,979	891,885	13.9
	'	1	'	t .	1	1

Table VIII. Life table for black males: United States, 2003—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	$e_{\scriptscriptstyle X}$
<i>7</i> –68	0.032879	61,994	2,038	60,975	828,906	13.4
-69	0.035450	59,956	2,125	58,893	767,932	12.8
–70	0.038425	57,830	2,222	56,719	709,039	12.3
-71	0.041613	55,608	2,314	54,451	652,320	11.7
-72	0.044946	53,294	2,395	52,096	597,869	11.2
-73	0.048505	50,899	2,469	49,664	545.772	10.7
-74	0.052288	48,430	2,532	47,164	496,108	10.2
-75	0.056310	45,897	2,584	44,605	448,945	9.8
-76	0.060604	43,313	2,625	42,001	404,339	9.3
-77	0.065041	40,688	2,646	39,365	362,339	8.9
-78	0.069779	38,042	2,654	36,714	322,974	8.5
-79	0.074834	35,387	2,648	34,063	286,260	8.1
-80	0.080224	32,739	2,626	31,426	252,197	7.7
-81	0.085967	30,113	2,589	28,818	220,771	7.7
-82	0.092079	27,524	2,534	26,257	191,953	7.0
-83	0.098578	24,990	2,463	23,758	165,696	6.6
-84	0.105484	22,526	2,376	21,338	141,938	6.3
-85	0.103464	20,150	2,273	19,013	120,600	6.0
	0.120581	17,877	2,156	16,799	101,587	5.7
-86	0.128808	,	2,025	14,709	84,788	5.7 5.4
-		15,721	· '	· '	,	
-88	0.137508	13,696	1,883	12,755	70,079	5.1
-89	0.146696	11,813	1,733	10,946	57,325	4.9
-90	0.156387	10,080	1,576	9,292	46,378	4.6
-91	0.166594	8,504	1,417	7,795	37,086	4.4
-92	0.177326	7,087	1,257	6,459	29,291	4.1
-93	0.188594	5,830	1,100	5,280	22,833	3.9
-94	0.200403	4,731	948	4,257	17,552	3.7
-95	0.212757	3,783	805	3,380	13,296	3.5
-96	0.225658	2,978	672	2,642	9,915	3.3
-97	0.239104	2,306	551	2,030	7,273	3.2
-98	0.253090	1,755	444	1,533	5,243	3.0
–99	0.267605	1,310	351	1,135	3,711	2.8
<u> –100</u>	0.282638	960	271	824	2,576	2.7
0 and over	1.000000	689	689	1,751	1,751	2.5

Table IX. Life table for black females: United States, 2003

					Total	
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
					1	
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
_						
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_x$
0–1	0.012448	100,000	1,245	98,896	7,557,499	75.6
1–2	0.000608	98,755	60	98,725	7,458,603	75.5
				· ·		
2–3	0.000457	98,695	45	98,673	7,359,878	74.6
3–4	0.000321	98,650	32	98,634	7,261,205	73.6
4–5	0.000185	98,618	18	98,609	7,162,571	72.6
5–6	0.000223	98,600	22	98,589	7,063,962	71.6
6–7	0.000189	98,578	19	98,569	6,965,373	70.7
				· ·		
7–8	0.000167	98,560	16	98,551	6,866,804	69.7
8–9	0.000156	98,543	15	98,535	6,768,252	68.7
9–10	0.000155	98,528	15	98,520	6,669,717	67.7
10–11	0.000163	98,512	16	98,504	6,571,197	66.7
				i i		
11–12	0.000176	98,496	17	98,488	6,472,693	65.7
12–13	0.000194	98,479	19	98,469	6,374,205	64.7
13–14	0.000216	98,460	21	98,449	6,275,735	63.7
14–15	0.000243	98,439	24	98,427	6,177,286	62.8
15–16	0.000275	98,415	27	98,401	6,078,859	61.8
		· '		i i		
16–17	0.000315	98,388	31	98,372	5,980,458	60.8
17–18	0.000367	98,357	36	98,339	5,882,086	59.8
18–19	0.000433	98,321	43	98,299	5,783,747	58.8
19–20	0.000506	98,278	50	98,253	5,685,448	57.9
20–21	0.000585	98,228	57	98,200	5,587,195	56.9
21–22	0.000662	98,171	65	98,138	5,488,995	55.9
		· '		i i		
22–23	0.000724	98,106	71	98,070	5,390,857	54.9
23–24	0.000767	98,035	75	97,997	5,292,787	54.0
24–25	0.000798	97,960	78	97,921	5,194,789	53.0
25–26	0.000832	97,882	81	97,841	5,096,869	52.1
26–27	0.000878	97,800	86	97,757	4,999,028	51.1
27–28	0.000930	97,714	91	97,669	4,901,271	50.2
			97	1		49.2
	0.000989	97,623		97,575	4,803,602	
29–30	0.001052	97,527	103	97,475	4,706,027	48.3
30–31	0.001119	97,424	109	97,370	4,608,552	47.3
31–32	0.001196	97,315	116	97,257	4,511,182	46.4
32–33	0.001315	97,199	128	97,135	4,413,925	45.4
33–34	0.001422	97,071	138	97,002	4,316,790	44.5
				1		
34–35	0.001577	96,933	153	96,856	4,219,789	43.5
35–36	0.001745	96,780	169	96,696	4,122,932	42.6
36–37	0.001921	96,611	186	96,518	4,026,236	41.7
37–38	0.002114	96,426	204	96,324	3,929,718	40.8
38–39	0.002318	96,222	223	96,110	3,833,394	39.8
39–40	0.002531	95,999	243	95,877	3,737,284	38.9
				i i	1 1	
40–41	0.002747	95,756	263	95,624	3,641,407	38.0
41–42	0.002971	95,493	284	95,351	3,545,783	37.1
42–43	0.003218	95,209	306	95,056	3,450,432	36.2
43–44	0.003497	94,903	332	94,737	3,355,376	35.4
44–45	0.003811	94,571	360	94,391	3,260,639	34.5
45–46	0.004146	94,210	391	94,015	3,166,249	33.6
46–47	0.004140	93,820	422	93,609	3,072,234	32.7
-				i i		
47–48	0.004861	93,398	454	93,171	2,978,625	31.9
48–49	0.005243	92,944	487	92,700	2,885,454	31.0
49–50	0.005640	92,457	521	92,196	2,792,753	30.2
50–51	0.006076	91,935	559	91,656	2,700,557	29.4
51–52	0.006542	91,377	598	91,078	2,608,901	28.6
52–53	0.007002	90,779	636	90,461	2,517,824	27.7
53–54	0.007447		671	i i		26.9
		90,143		89,808	2,427,362	
54–55	0.007900	89,472	707	89,119	2,337,555	26.1
55–56	0.008392	88,765	745	88,393	2,248,436	25.3
56–57	0.008967	88,020	789	87,626	2,160,043	24.5
57–58	0.009645	87,231	841	86,810	2,072,418	23.8
58–59	0.010441	86,390	902	85,939	1,985,607	23.0
59–60	0.011337	85,488	969	85,003	1,899,668	22.2
				1		
60–61	0.012337	84,519	1,043	83,997	1,814,665	21.5
61–62	0.013415	83,476	1,120	82,916	1,730,668	20.7
62–63	0.014508	82,356	1,195	81,759	1,647,752	20.0
63–64	0.015567	81,161	1,263	80,530	1,565,993	19.3
64–65	0.016608	79,898	1,327	79,234	1,485,464	18.6
65–66	0.017668	78,571	1,388	77,877	1,406,229	17.9
			· ·	1		
66–67	0.018727	77,183	1,445	76,460	1,328,352	17.2
			1	t .	t .	ı

Table IX. Life table for black females: United States, 2003—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	$T_x$	e <sub>x</sub>
7–68	0.020011	75,737	1,516	74,980	1,251,892	16.5
-69	0.021567	74,222	1,601	73,421	1,176,913	15.9
–70	0.023371	72,621	1,697	71,772	1,103,491	15.2
-71	0.025345	70,924	1,798	70,025	1,031,719	14.5
-72	0.027510	69,126	1,902	68,175	961,694	13.9
-73	0.029949	67,225	2,013	66,218	893.518	13.3
-74	0.032667	65,211	2,130	64,146	827,300	12.7
-75	0.035658	63,081	2,249	61,956	763,154	12.1
-76	0.038941	60,832	2,369	59,647	701,198	11.5
-77	0.042420	58,463	2,480	57,223	641,551	11.0
-78	0.046196	55,983	2,586	54,690	584,328	10.4
-79	0.050291	53,397	2,685	52,054	529,638	9.9
-80	0.054728	50,711	2,775	49,324	477,584	9.4
–81	0.059531	47,936	2,854	46,509	428,260	8.9
-82	0.064727	45,082	2,918	43,623	381,751	8.5
-83	0.070343	42,164	2,966	40,681	338,128	8.0
-84	0.076406	39,198	2,995	37,701	297,447	7.6
–85	0.082945	36,203	3,003	34,702	259,746	7.2
-86	0.089990	33,200	2,988	31,707	225,044	6.8
_87	0.097568	30,213	2,948	28,739	193,338	6.4
-88	0.105711	27,265	2,882	25,824	164,599	6.0
	0.103711	24,383	2,791	22,987	138,775	5.7
	0.123806	21,592	2,791	20,256	115,787	5.7 5.4
	0.123815	18,919	2,532	17,653	95,532	5.4
-	0.133613	· '	2,368	15,203	77,879	4.8
*=	0.155882	16,387 14,019	2,366	12,927	62,675	4.8 4.5
11	0.167986	11,834	1,988	10,840	49,749	4.5
-	0.180828	· '			38,909	4.2
		9,846	1,780	8,956	· · · · · · · · · · · · · · · · · · ·	
-96	0.194423	8,066	1,568	7,282	29,953	3.7
-97	0.208779	6,497	1,357	5,819	22,671	3.5
-98	0.223901	5,141	1,151	4,565	16,852	3.3
-99	0.239786	3,990	957	3,512	12,287	3.1
-100	0.256426	3,033	778	2,644	8,775	2.9
0 and over	1.000000	2,255	2,255	6,131	6,131	2.7

Table I. Life table for the total population: United States, 2004

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	T <sub>x</sub>	$e_{\scriptscriptstyle X}$
0–1	0.006799	100,000	680	99,403	7,746,401	77.5
1–2	0.000483	99,320	48	99,296	7,646,998	77.0
2–3	0.000297	99,272	29	99,257	7,547,702	76.0
3–4	0.000224	99,243	22	99,232	7,448,444	75.1
4–5	0.000188 0.000172	99,220 99,202	19 17	99,211 99,193	7,349,213 7,250,002	74.1 73.1
6–7	0.000172	99,185	16	99,177	7,250,002	73.1 72.1
7–8	0.000151	99,169	15	99,161	7,150,603	71.1
8–9	0.000136	99,154	14	99,147	6,952,470	70.1
9–10	0.000119	99,140	12	99,134	6,853,323	69.1
0–11	0.000106	99,129	11	99,123	6,754,189	68.1
–12	0.000112	99,118	11	99,112	6,655,066	67.1
2–13	0.000149	99,107	15	99,100	6,555,953	66.2
3–14	0.000227	99,092	23	99,081	6,456,854	65.2
1–15	0.000337	99,070	33	99,053	6,357,773	64.2
5–16	0.000461	99,036	46	99,014	6,258,720	63.2
6–17	0.000579	98,991	57	98,962	6,159,706	62.2
7–18	0.000684	98,933	68	98,900	6,060,744	61.3
3–19	0.000763	98,866	75	98,828	5,961,844	60.3
9–20	0.000819 0.000873	98,790 98,709	81 86	98,750	5,863,016	59.3 58.4
)–21	0.000873	98,623	91	98,666 98,577	5,764,267 5,665,601	57.4
2–23	0.000920	98,532	95	98,484	5,567,023	56.5
<u>–24</u>	0.000972	98,437	96	98,389	5,468,539	55.6
-25	0.000969	98,341	95	98,294	5,370,149	54.6
i–26	0.000960	98,246	94	98,199	5,271,855	53.7
i–27	0.000954	98,152	94	98,105	5,173,656	52.7
/ <del>-</del> 28	0.000952	98,058	93	98,012	5,075,551	51.8
-29	0.000958	97,965	94	97,918	4,977,540	50.8
i–30	0.000973	97,871	95	97,824	4,879,621	49.9
)–31	0.000994	97,776	97	97,727	4,781,798	48.9
-32	0.001023	97,679	100	97,629	4,684,071	48.0
2–33	0.001074	97,579	105	97,526	4,586,442	47.0
H-34	0.001119	97,474	109	97,419	4,488,916	46.1
-35	0.001192	97,365	116	97,307	4,391,496	45.1
5–36	0.001275	97,249	124	97,187	4,294,189	44.2
i–37	0.001373	97,125	133	97,058	4,197,002	43.2
–38	0.001493	96,992	145	96,919	4,099,944	42.3
3–39	0.001634	96,847	158	96,768	4,003,025	41.3
)–40	0.001788	96,689	173	96,602	3,906,257	40.4
)–41	0.001945	96,516	188	96,422	3,809,655	39.5
-42	0.002107	96,328	203	96,227	3,713,233	38.5
2–43	0.002287	96,125	220	96,015	3,617,007	37.6
3–44	0.002494	95,905	239	95,786	3,520,992	36.7
-45	0.002727	95,666	261	95,536	3,425,206	35.8
i–46	0.002982	95,405	284	95,263	3,329,670	34.9
<u>–47                                    </u>	0.003246 0.003520	95,121 94,812	309 334	94,966	3,234,407	34.0 33.1
–40	0.003520	94,478	359	94,645 94,299	3,139,441 3,044,796	32.2
-50	0.003799	94,119	385	93,927	2,950,497	31.3
-51	0.004088	93,735	413	93,528	2,856,570	30.5
-52	0.004750	93,322	443	93,100	2,763,042	29.6
-53	0.005113	92,878	475	92,641	2,669,942	28.7
-54	0.005488	92,404	507	92,150	2,577,301	27.9
-55	0.005400	91,896	540	91,626	2,485,151	27.0
5–56	0.006295	91,356	575	91,069	2,393,525	26.2
5–57	0.006754	90,781	613	90,475	2,302,456	25.4
7–58	0.007280	90,168	656	89,840	2,211,982	24.5
3–59	0.007903	89,512	707	89,158	2,122,142	23.7
)–60	0.008634	88,804	767	88,421	2,032,984	22.9
Head	0.009493	88,037	836	87,620	1,944,563	22.1
1			911	86,746	1,856,943	21.3
-62	0.010449	87,202	911	00,740	1,000,540	21.0

Table I. Life table for the total population: United States, 2004—Con.

Age	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age $x$
		I <sub>x</sub>	$d_x$	L <sub>x</sub>		
3–64	0.012428	85,303	1,060	84,773	1,684,401	19.7
4–65	0.013408	84,243	1,130	83,678	1,599,628	19.0
i–66	0.014473	83,113	1,203	82,512	1,515,950	18.2
6–67	0.015577	81,910	1,276	81,272	1,433,438	17.5
′–68	0.016862	80,634	1,360	79,955	1,352,166	16.8
3–69	0.018343	79,275	1,454	78,548	1,272,211	16.0
9–70	0.020022	77,821	1,558	77,042	1,193,664	15.3
)–71	0.021878	76,262	1,668	75,428	1,116,622	14.6
1–72	0.023977	74,594	1,789	73,700	1,041,194	14.0
2–73	0.026399	72,805	1,922	71,844	967,494	13.3
3–74	0.029163	70,883	2,067	69,850	895,650	12.6
1–75	0.032264	68,816	2,220	67,706	825,800	12.0
5–76	0.035728	66,596	2,379	65,406	758,094	11.4
6–77	0.039454	64,217	2,534	62,950	692,687	10.8
7–78	0.043551	61,683	2,686	60,340	629,737	10.2
8–79	0.048052	58,997	2,835	57,579	569,397	9.7
9–80	0.052992	56,162	2,976	54,674	511,818	9.1
0–81	0.058409	53,186	3,107	51,632	457,144	8.6
1–82	0.064342	50,079	3,222	48,468	405,512	8.1
2–83	0.070833	46,857	3,319	45,198	357,044	7.6
3–84	0.077923	43,538	3,393	41,842	311,846	7.2
4–85	0.085659	40,145	3,439	38,426	270,004	6.7
5–86	0.094083	36,707	3,453	34,980	231,579	6.3
6–87	0.103243	33,253	3,433	31,537	196,599	5.9
7–88	0.113183	29,820	3,375	28,132	165,062	5.5
8–89	0.123948	26,445	3,278	24,806	136,930	5.2
9–90	0.135580	23,167	3,141	21,597	112,124	4.8
0–91	0.148119	20,026	2,966	18,543	90,527	4.5
1–92	0.161601	17,060	2,757	15,681	71,984	4.2
2–93	0.176056	14,303	2,518	13,044	56,303	3.9
3–94	0.191510	11,785	2,257	10,656	43,259	3.7
I–95	0.207977	9,528	1,982	8,537	32,602	3.4
i–96	0.225465	7,546	1,701	6,696	24,065	3.2
5–97	0.243971	5,845	1,426	5,132	17,370	3.0
7–98	0.263479	4,419	1,164	3,837	12,238	2.8
3–99	0.283962	3,255	924	2,793	8,401	2.6
9–100	0.305376	2,330	712	1,975	5,608	2.4
	1.000000	1,619	1,619	3,634	3,634	2.4
00 and over	1.000000	1,019	1,019	3,034	3,034	2.2

Table II. Life table for males: United States, 2004

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					Total	
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
	ugos x to x11	ugo x	ageo x to x i i	ugoo x to x11	ugo x	at ago x
Age	$q_x$	$l_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_x$
	1/4	^	^	^	^	^
0–1	0.007475	100,000	747	99,344	7,487,725	74.9
1–2	0.000508	99,253	50	99,227	7,388,381	74.4
2–3	0.000326	99,202	32	99,186	7,289,154	73.5
3–4	0.000250	99,170	25	99,157	7,189,968	72.5
4–5	0.000208	99,145	21	99,135	7.090.811	71.5
5–6	0.000191	99,124	19	99,115	6,991,676	70.5
6–7	0.000181	99,105	18	99,096	6,892,561	69.5
7–8	0.000171	99,087	17	99,079	6,793,464	68.6
8–9	0.000171	99,070	15	99,063	6,694,386	67.6
9–10	0.000132	99,055	12	99,049	6,595,323	66.6
		· '				
10–11	0.000105	99,043	10	99,038	6,496,273	65.6
11–12	0.000111	99,033	11	99,027	6,397,236	64.6
12–13	0.000162	99,022	16	99,014	6,298,208	63.6
13–14	0.000274	99,006	27	98,992	6,199,195	62.6
14–15	0.000431	98,978	43	98,957	6,100,203	61.6
15–16	0.000608	98,936	60	98,906	6,001,246	60.7
16–17	0.000777	98,876	77	98,837	5,902,340	59.7
17–18	0.000935	98,799	92	98,753	5,803,503	58.7
18–19	0.001064	98,706	105	98,654	5,704,750	57.8
19–20	0.001166	98,601	115	98,544	5,606,096	56.9
20–21	0.001266	98,486	125	98,424	5,507,553	55.9
21–22	0.001360	98,362	134	98,295	5,409,128	55.0
22–23	0.001419	98,228	139	98,158	5,310,834	54.1
23–24	0.001435	98.089	141	98,018	5,212,675	53.1
24–25	0.001433	97,948	139	97,878	5,114,657	52.2
25–26	0.001419	97,809	136	97,741	5,016,779	51.3
26–27	0.001365	97,673	133	97,606	4,919,038	50.4
			131	1		
27–28	0.001344	97,540		97,474	4,821,432	49.4
28–29	0.001336	97,408	130	97,343	4,723,958	48.5
29–30	0.001341	97,278	130	97,213	4,626,614	47.6
30–31	0.001352	97,148	131	97,082	4,529,401	46.6
31–32	0.001371	97,017	133	96,950	4,432,319	45.7
32–33	0.001424	96,884	138	96,815	4,335,369	44.7
33–34	0.001469	96,746	142	96,675	4,238,554	43.8
34–35	0.001553	96,604	150	96,529	4,141,880	42.9
35–36	0.001653	96,454	159	96,374	4,045,351	41.9
36–37	0.001770	96,294	170	96,209	3,948,977	41.0
37–38	0.001911	96,124	184	96,032	3,852,768	40.1
38–39	0.002075	95,940	199	95,841	3,756,736	39.2
39–40	0.002254	95,741	216	95,633	3,660,896	38.2
40–41	0.002438	95,525	233	95,409	3,565,263	37.3
41–42	0.002632	95,292	251	95,167	3,469,854	36.4
42–43	0.002853	95,042	271	94,906	3,374,687	35.5
43–44	0.003113	94,770	295	94,623	3,279,781	34.6
44–45	0.003412	94,475	322	94,314	3,185,158	33.7
45–46	0.003735	94,153	352	93,977	3,090,844	32.8
46–47	0.004071	93,801	382	93,610	2,996,867	31.9
47–48	0.004428	93,420	414	93,213	2,903,256	31.1
48–49	0.004806	93,006	447	92,782	2,810,043	30.2
49–50	0.005206	92,559	482	92,318	2,717,261	29.4
50–51	0.005648	92,077	520	91,817	2,624,943	28.5
51–52	0.005040	91,557	560	91,277	2,533,126	27.7
52–53	0.006594	90,997	600	90,697	2,441,850	26.8
53–54	0.006594	90,397	637	90,078	2,351,153	26.0
54–55	0.007043	89,760	672	89,424	2,351,155	25.2
	0.007488	89,088	708			24.4
				88,734	2,171,651	
56–57	0.008459	88,380	748	88,006	2,082,918	23.6
57–58	0.009064	87,632	794	87,235	1,994,912	22.8
58–59	0.009810	86,838	852	86,412	1,907,677	22.0
59–60	0.010706	85,986	921	85,526	1,821,265	21.2
60–61	0.011763	85,065	1,001	84,565	1,735,740	20.4
61–62	0.012934	84,065	1,087	83,521	1,651,175	19.6
62–63	0.014159	82,977	1,175	82,390	1,567,653	18.9
63–64	0.015362	81,802	1,257	81,174	1,485,264	18.2
64–65	0.016558	80,546	1,334	79,879	1,404,089	17.4
65–66	0.017847	79,212	1,414	78,505	1,324,210	16.7
66–67	0.019227	77,798	1,496	77,051	1,245,705	16.0
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Table II. Life table for males: United States, 2004—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	I <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	$T_x$	e <sub>x</sub>
7–68	0.020833	76,303	1,590	75,508	1,168,655	15.3
8–69	0.022675	74,713	1,694	73,866	1,093,147	14.6
–70	0.024777	73,019	1,809	72,114	1,019,281	14.0
-71	0.027094	71,210	1,929	70,245	947,166	13.3
-72	0.029671	69,280	2,056	68,253	876,921	12.7
-73	0.032638	67,225	2.194	66,128	808,669	12.0
-74	0.036016	65,031	2,342	63,860	742,541	11.4
-75	0.039775	62,689	2,493	61,442	678,681	10.8
-76	0.043903	60,195	2,643	58,874	617,239	10.3
-77	0.048334	57,552	2,782	56,162	558,366	9.7
–78	0.053187	54,771	2,913	53,314	502,204	9.2
-79	0.058497	51,858	3,034	50,341	448,890	8.7
-80	0.064302	48,824	3,139	47,254	398,549	8.2
-81	0.070639	45,685	3,227	44,071	351,295	7.7
-82	0.077549	42,458	3,293	40,811	307,224	7.2
-83	0.085073	39,165	3,332	37,499	266,413	6.8
-84	0.093254	35,833	3,342	34,162	228,914	6.4
–85	0.102133	32,492	3,318	30,832	194,751	6.0
_86	0.112155	29,173	3,260	27,543	163,919	5.6
–87	0.11754	25,173	3,165	24,330	136,376	5.3
-	0.122137		1 '		· · · · · · · · · · · · · · · · · · ·	5.5 4.9
	0.133364	22,747	3,034	21,230	112,046	4.9 4.6
-89		19,713	2,868	18,279	90,816	4.6
	0.158454	16,846	2,669	15,511	72,536	
91	0.172361	14,176	2,443	12,955	57,025	4.0
-92	0.187217	11,733	2,197	10,635	44,071	3.8
-93	0.203040	9,536	1,936	8,568	33,436	3.5
94	0.219839	7,600	1,671	6,765	24,868	3.3
-95	0.237613	5,929	1,409	5,225	18,103	3.1
-96	0.256351	4,520	1,159	3,941	12,878	2.8
-97	0.276033	3,362	928	2,898	8,937	2.7
-98	0.296622	2,434	722	2,073	6,040	2.5
-99	0.318073	1,712	544	1,440	3,967	2.3
)–100	0.340325	1,167	397	969	2,528	2.2
0 and over	1.000000	770	770	1,559	1,559	2.0

Table III. Life table for females: United States, 2004

			1	1		
					Total	
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
Λαο	~	1	d	1	$T_x$	0
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	1 <sub>X</sub>	$e_x$
0–1	0.006091	100,000	609	00.465	7,994,462	79.9
		· ·		99,465		
1–2	0.000457	99,391	45	99,368	7,894,997	79.4
2–3	0.000267	99,346	26	99,332	7,795,629	78.5
3–4	0.000197	99,319	20	99,309	7,696,297	77.5
4–5	0.000168	99,299	17	99,291	7,596,988	76.5
5–6	0.000151	99,283	15	99,275	7,497,697	75.5
6–7	0.000138	99,268	14	99,261	7,398,421	74.5
7–8	0.000130	99,254	13	99,248	7,299,160	73.5
		· '				
8–9	0.000120	99,241	12	99,235	7,199,913	72.5
9–10	0.000112	99,229	11	99,224	7,100,677	71.6
10–11	0.000107	99,218	11	99,213	7,001,454	70.6
11–12	0.000113	99,208	11	99,202	6,902,241	69.6
12–13	0.000135	99,196	13	99,190	6,803,039	68.6
13–14	0.000178	99,183	18	99,174	6,703,849	67.6
		· '		· · · · · · · · · · · · · · · · · · ·		
14–15	0.000237	99,165	23	99,154	6,604,675	66.6
15–16	0.000306	99,142	30	99,127	6,505,521	65.6
16–17	0.000371	99,112	37	99,093	6,406,394	64.6
17–18	0.000421	99,075	42	99,054	6,307,301	63.7
18–19	0.000446	99,033	44	99,011	6,208,247	62.7
19–20	0.000453	98,989	45	98,967	6,109,236	61.7
20–21	0.000456	98,944	45	98,922	6,010,270	60.7
21–22	0.000450	98,899	46	98,876	' '	59.8
				1	5,911,348	
22–23	0.000471	98,853	47	98,830	5,812,472	58.8
23–24	0.000481	98,807	47	98,783	5,713,642	57.8
24–25	0.000492	98,759	49	98,735	5,614,860	56.9
25–26	0.000506	98,710	50	98,686	5,516,125	55.9
26–27	0.000522	98,661	51	98,635	5,417,439	54.9
27–28	0.000541	98,609	53	98,582	5,318,804	53.9
28–29	0.000565	98,556	56	98,528	5,220,222	53.0
			58	1	' '	52.0
29–30	0.000593	98,500		98,471	5,121,694	
30–31	0.000627	98,442	62	98,411	5,023,223	51.0
31–32	0.000667	98,380	66	98,347	4,924,813	50.1
32–33	0.000718	98,314	71	98,279	4,826,465	49.1
33–34	0.000764	98,244	75	98,206	4,728,186	48.1
34–35	0.000825	98,169	81	98,128	4,629,980	47.2
35–36	0.000892	98,088	88	98,044	4,531,852	46.2
36–37	0.000971	98,000	95	97,953	4,433,808	45.2
37–38	0.001071	97,905	105	97,853	4,335,855	44.3
38–39	0.001190	97,800	116	97,742	4,238,002	43.3
39–40	0.001321	97,684	129	97,619	4,140,260	42.4
40–41	0.001453	97,555	142	97,484	4,042,641	41.4
41–42	0.001586	97,413	154	97,336	3,945,157	40.5
42–43	0.001727	97,259	168	97,175	3,847,821	39.6
43–44	0.001883	97,091	183	96,999	3,750,646	38.6
44–45	0.002055	96,908	199	96,808	3,653,647	37.7
45–46	0.002243	96,709	217	96,600	3,556,839	36.8
46–47				1		
	0.002439	96,492	235	96,374	3,460,238	35.9
47–48	0.002633	96,256	253	96,130	3,363,864	34.9
48–49	0.002819	96,003	271	95,868	3,267,734	34.0
49–50	0.003005	95,732	288	95,588	3,171,867	33.1
50–51	0.003205	95,445	306	95,292	3,076,278	32.2
51–52	0.003432	95,139	327	94,975	2,980,987	31.3
52–53	0.003695	94,812	350	94,637	2,886,011	30.4
53–54	0.004001	94,462	378	94,273	2,791,374	29.6
				1		
54–55	0.004346	94,084	409	93,880	2,697,101	28.7
55–56	0.004725	93,675	443	93,454	2,603,222	27.8
56–57	0.005137	93,232	479	92,993	2,509,768	26.9
57–58	0.005594	92,754	519	92,494	2,416,775	26.1
58–59	0.006110	92,235	564	91,953	2,324,281	25.2
59–60	0.006697	91,671	614	91,364	2,232,328	24.4
60–61	0.007389		673			23.5
		91,057		90,721	2,140,964	
61–62	0.008167	90,384	738	90,015	2,050,243	22.7
62–63	0.008977	89,646	805	89,244	1,960,227	21.9
63–64	0.009776	88,842	868	88,407	1,870,983	21.1
64–65	0.010581	87,973	931	87,508	1,782,576	20.3
65–66	0.011466	87,042	998	86,543	1,695,068	19.5
66–67	0.012376	86,044	1,065	85,512	1,608,525	18.7
•• •• •• •• •• •• •• •• •• •• •• •• ••	0.012070	55,044	1,300	55,512	1,000,020	13.7

Table III. Life table for females: United States, 2004—Con.

	Probability of dying between ages x to x+1	Number surviving to age x	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	$T_x$	e <sub>x</sub>
7–68	0.013444	84,979	1,142	84,408	1,523,014	17.9
-69	0.014679	83,837	1,231	83,222	1,438,606	17.2
–70	0.016088	82,606	1,329	81,942	1,355,384	16.4
-71	0.017666	81,277	1,436	80,559	1,273,442	15.7
-72	0.019465	79,841	1,554	79,064	1,192,883	14.9
-73	0.021542	78.287	1.686	77,444	1.113.819	14.2
-74	0.023925	76,601	1,833	75,684	1,036,375	13.5
-75	0.026633	74,768	1,991	73,772	960.691	12.8
-76	0.029707	72,777	2.162	71,696	886,918	12.2
-77	0.033036	70,615	2,333	69,448	815,222	11.5
-78	0.036724	68,282	2,508	67,028	745,774	10.9
-79	0.040806	65,774	2,684	64,432	678,746	10.3
-80	0.045321	63,090	2,859	61,661	614,313	9.7
-81	0.050309	60,231	3,030	58,716	552,653	9.2
–82	0.055814	57,201	3,193	55,605	493,937	8.6
–83	0.061882	54,008	3,342	52,337	438,332	8.1
-84	0.068561	50,666	3,474	48,929	385,995	7.6
–85	0.075904	47,192	3,582	45,401	337,065	7.1
-86	0.083962	43,610	3,662	41,780	291.664	6.7
–87	0.092789	39,949	3,707	38.095	249,884	6.3
-88	0.102441	36,242	3,713	34,386	211,789	5.8
<del>-89  -89  </del>	0.112972	32,529	3,675	30,692	177,403	5.5
) <del>-</del> 90	0.124435	28,854	3,590	27,059	146,711	5.1
–91	0.136882	25,264	3,458	23,535	119,652	4.7
	0.150360	21,806	3,279	20,166	96.117	4.7
–92	0.164911	18,527	3,055	16,999	75,951	4.4
–94	0.180572	15,472	2,794	14,075	58,952	3.8
–95	0.197368	12,678	2,502	11,427	44,877	3.5
	0.215316	10,176	2,191	9,080	33,450	3.3
–96	0.234419	7,985	1,872	7,049	· · · · · · · · · · · · · · · · · · ·	3.3 3.1
-			· '		24,370	3.1 2.8
	0.254667	6,113	1,557	5,335	17,321	2.8 2.6
-99	0.276034	4,556	1,258	3,927	11,986	
H-100	0.298475	3,299	985	2,806	8,059	2.4
0 and over	1.000000	2,314	2,314	5,253	5,253	2.3

Table IV. Life table for the white population: United States, 2004

		,				
					Total	
				_		
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
			, ,		, ,	
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
					_	
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_x$
	17.	*	- X	*	*	- X
0–1	0.005657	100,000	566	99,502	7,794,367	77.9
1–2	0.000436	99,434	43	99,413	7,694,864	77.4
		· '				
2–3	0.000266	99,391	26	99,378	7,595,452	76.4
3–4	0.000199	99,364	20	99,355	7,496,074	75.4
		· '				
4–5	0.000174	99,345	17	99,336	7,396,719	74.5
5–6	0.000154	99,327	15	99,320	7,297,383	73.5
			15			
6–7	0.000146	99,312		99,305	7,198,064	72.5
7–8	0.000138	99,298	14	99,291	7,098,759	71.5
8–9	0.000125	99,284	12	99,278	6,999,468	70.5
9–10	0.000107	99,271	11	99,266	6,900,190	69.5
10–11	0.000094	99,261	9	99,256	6.800.924	68.5
					, ,	
11–12	0.000098	99,251	10	99,247	6,701,668	67.5
12–13	0.000136	99,242	13	99,235	6,602,422	66.5
13–14	0.000215	· '	21	· · · · · · · · · · · · · · · · · · ·		65.5
		99,228		99,218	6,503,187	
14–15	0.000326	99,207	32	99,191	6,403,969	64.6
15–16	0.000451	99,175	45	99,152	6,304,778	63.6
		· '				
16–17	0.000568	99,130	56	99,102	6,205,626	62.6
17–18	0.000670	99,073	66	99,040	6,106,525	61.6
		· '		· · · · · · · · · · · · · · · · · · ·		
18–19	0.000742	99,007	73	98,970	6,007,484	60.7
19–20	0.000788	98,934	78	98,895	5,908,514	59.7
	0.000832	· '		1		
20–21		98,856	82	98,815	5,809,619	58.8
21–22	0.000876	98,773	86	98,730	5,710,805	57.8
22–23	0.000901	98,687	89	98,643	5,612,074	56.9
		· '		· · · · · · · · · · · · · · · · · · ·		
23–24	0.000907	98,598	89	98,553	5,513,432	55.9
24–25	0.000897	98,509	88	98,464	5,414,878	55.0
				· · · · · · · · · · · · · · · · · · ·	, , ,	
25–26	0.000882	98,420	87	98,377	5,316,414	54.0
26–27	0.000870	98,333	86	98,291	5,218,037	53.1
27–28	0.000863	98,248	85	98,206	5,119,746	52.1
		· ·				
28–29	0.000866	98,163	85	98,121	5,021,541	51.2
29–30	0.000880	98,078	86	98,035	4,923,420	50.2
		· ·				
30–31	0.000900	97,992	88	97,948	4,825,385	49.2
31–32	0.000927	97,904	91	97,858	4,727,438	48.3
		· ·				
32–33	0.000977	97,813	96	97,765	4,629,580	47.3
33–34	0.001022	97,717	100	97,667	4,531,815	46.4
	0.001092	97,617	107	97,564	4,434,147	45.4
		· ·				
35–36	0.001174	97,511	114	97,454	4,336,583	44.5
36–37	0.001268	97,396	124	97,335	4,239,130	43.5
		· ·			· ' '	
37–38	0.001383	97,273	134	97,206	4,141,795	42.6
38–39	0.001516	97,138	147	97,065	4,044,589	41.6
				1	, , ,	
39–40	0.001660	96,991	161	96,911	3,947,525	40.7
40–41	0.001807	96,830	175	96,743	3,850,614	39.8
41–42	0.001957	96,655	189	96,560	3,753,872	38.8
				1		
42–43	0.002123	96,466	205	96,363	3,657,311	37.9
43–44	0.002312	96,261	223	96,150	3,560,948	37.0
44–45	0.002525	96,038	242	95,917	3,464,798	36.1
				1		
45–46	0.002757	95,796	264	95,664	3,368,881	35.2
46–47	0.002999	95,532	286	95,389	3,273,217	34.3
47–48	0.003248	95,245	309	95,091	3,177,828	33.4
				1		
48–49	0.003500	94,936	332	94,770	3,082,737	32.5
49–50	0.003761	94,604	356	94,426	2,987,967	31.6
				1		
50–51	0.004046	94,248	381	94,057	2,893,541	30.7
51–52	0.004362	93,867	409	93,662	2,799,484	29.8
				1	, , ,	
52–53	0.004702	93,457	439	93,238	2,705,822	29.0
53–54	0.005061	93,018	471	92,783	2,612,584	28.1
54–55	0.005444	92,547	504	92,295	2,519,802	27.2
				1		
55–56	0.005851	92,043	538	91,774	2,427,507	26.4
56–57	0.006298	91,505	576	91,217	2,335,733	25.5
57–58	0.006814	90,929	620	90,619	2,244,516	24.7
58–59	0.007428	90,309	671	89,974	2,153,897	23.9
59–60	0.008153	89,638	731	89,273	2,063,924	23.0
60–61	0.009012	88,907	801	88,507	1,974,651	22.2
61–62	0.009968	88,106	878	87,667	1,886,144	21.4
62-63	0.010960	87,228	956	86,750	1,798,477	20.6
63–64		86,272				19.8
	0.011926	· ·	1,029	85,757	1,711,728	
64–65	0.012889	85,243	1,099	84,694	1,625,970	19.1
65–66	0.013942	84,144	1,173	83,558	1,541,277	18.3
		· ·				
66–67	0.015055	82,971	1,249	82,346	1,457,719	17.6
	I	I	I	I	I	I .

Table IV. Life table for the white population: United States, 2004—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	$T_x$	e <sub>x</sub>
7–68	0.016352	81,722	1,336	81,054	1,375,373	16.8
-69	0.017842	80,386	1,434	79,668	1,294,319	16.1
–70	0.019523	78,951	1,541	78,181	1,214,650	15.4
-71	0.021376	77,410	1,655	76,583	1,136,470	14.7
-72	0.023469	75,755	1,778	74,866	1,059,887	14.0
-73	0.025880	73,977	1,915	73,020	985,021	13.3
-74	0.028631	72,063	2,063	71,031	912,001	12.7
-75	0.031718	70,000	2,220	68,889	840,970	12.0
-76	0.035171	67,779	2,384	66,587	772,080	11.4
-77	0.038911	65,395	2,545	64,123	705,493	10.8
-78	0.043030	62,851	2,704	61,499	641,370	10.2
-79	0.047564	60,146	2,861	58,716	579,871	9.6
-80	0.052549	57,286	3,010	55,780	521,155	9.1
-81	0.058025	54,275	3,149	52,701	465,375	8.6
-82	0.064033	51,126	3,274	49,489	412,674	8.1
-83	0.070616	47,852	3,379	46,163	363,185	7.6
-84	0.077820	44,473	3,461	42,743	317,022	7.0 7.1
–85	0.085691	41,012	3,514	39,255	274,279	6.7
–86	0.094277	37,498	3,535	35,730	235,024	6.3
–87	0.103626	33,963	3,519	32,203	199,294	5.9
	0.103626	,	1 '	1 '	167,091	5.5
**	0.113785	30,443	3,464	28,711		5.5 5.1
		26,979	3,367	25,296	138,380	
	0.136721	23,612	3,228	21,998	113,084	4.8
-91	0.149583	20,384	3,049	18,859	91,086	4.5
-92	0.163427	17,335	2,833	15,918	72,227	4.2
-93	0.178283	14,502	2,585	13,209	56,308	3.9
-94	0.194176	11,916	2,314	10,759	43,099	3.6
-95	0.211121	9,603	2,027	8,589	32,340	3.4
-96	0.229125	7,575	1,736	6,707	23,751	3.1
-97	0.248182	5,840	1,449	5,115	17,044	2.9
-98	0.268272	4,390	1,178	3,801	11,929	2.7
-99	0.289362	3,212	930	2,748	8,127	2.5
H-100	0.311404	2,283	711	1,927	5,380	2.4
0 and over	1.000000	1,572	1,572	3,452	3,452	2.2

Table V. Life table for white males: United States, 2004

	Probability of dying between ages x to x+1	Number surviving to age x	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
0–1	0.006219	100,000	622	99,453	7,543,190	75.4
1–2	0.000455	99,378	45	99,355	7,443,738	74.9
2–3	0.000300	99,333	30	99,318	7,344,382	73.9
3–4	0.000222	99,303	22	99,292	7,245,064	73.0
–5	0.000197	99,281	20	99,271	7,145,772	72.0
-6	0.000174	99,261	17	99,253	7,046,501	71.0
–7	0.000167	99,244	17	99,236	6,947,248	70.0
-8	0.000158	99,228	16	99,220	6,848,012	69.0
-9	0.000140	99,212	14	99,205	6,748,793	68.0
–10	0.000115	99,198	11	99,192	6,649,588	67.0
–11	0.000096	99,187	9	99,182	6,550,396	66.0
-12	0.000101	99,177	10	99,172	6,451,214	65.0
–13	0.000152	99,167	15	99,160	6,352,041	64.1
–14	0.000261	99,152	26	99,139	6,252,882	63.1
–15	0.000414	99,126	41	99,106	6,153,743	62.1
–16	0.000585	99,085	58	99,056	6,054,637	61.1
–17	0.000747	99,027	74	98,990	5,955,581	60.1
–18	0.000896	98,953	89	98,909	5,856,591	59.2
–19	0.001015	98,865	100	98,814	5,757,682	58.2
–20	0.001107	98,764	109	98,710	5,658,867	57.3
–21	0.001196	98,655	118	98,596	5,560,158	56.4
–22	0.001280	98,537	126	98,474	5,461,562	55.4
–23	0.001329	98,411	131	98,345	5,363,088	54.5
–24	0.001336	98,280	131	98,214	5,264,743	53.6
–25	0.001312	98,149	129	98,084	5,166,529	52.6
–26	0.001275	98,020	125	97,957	5,068,445	51.7
-27	0.001243	97,895	122	97,834	4,970,487	50.8
-28	0.001217	97,773	119	97,714	4,872,653	49.8
–29	0.001207	97,654	118	97,595	4,774,939	48.9
–30	0.001212	97,536	118	97,477	4,677,344	48.0
–31	0.001225	97,418	119	97,359	4,579,867	47.0
–32	0.001246	97,299	121	97,238	4,482,508	46.1
–33	0.001298	97,178	126	97,115	4,385,270	45.1
–34	0.001346	97,052	131	96,986	4,288,155	44.2
–35	0.001430	96,921	139	96,852	4,191,169	43.2
–36	0.001528	96,782	148	96,708	4,094,317	42.3
–37	0.001642	96,634	159	96,555	3,997,609	41.4
–38	0.001781	96,476	172	96,390	3,901,054	40.4
–39	0.001942	96,304	187	96,211	3,804,664	39.5
–40	0.002119	96,117	204	96,015	3,708,453	38.6
–41	0.002299	95,913	221	95,803	3,612,438	37.7
–42		95,693	238	95,574	3,516,635	36.7
–43	0.002694	95,455	257	95,326	3,421,061	35.8
-44	0.002930	95,198	279	95,058	3,325,735	34.9
-45	0.003196	94,919	303	94,767	3,230,677	34.0
-46	0.003483	94,615	330	94,451	3,135,910	33.1
-47	0.003784	94,286	357	94,107	3,041,460	32.3
-48	0.004106	93,929	386	93,736	2,947,352	31.4
-49	0.004449	93,543	416	93,335	2,853,616	30.5
-50	0.004814	93,127	448	92,903	2,760,281	29.6
-51	0.005219	92,679	484	92,437	2,667,378	28.8
-52	0.005655	92,195	521	91,934	2,574,941	27.9
-53	0.006094	91,674	559	91,394	2,483,007	27.1
-54	0.006518	91,115	594	90,818	2,391,612	26.2
-55	0.006938	90,521	628	90,207	2,300,794	25.4
-56	0.007371	89,893	663	89,562	2,210,587	24.6
-57	0.007859	89,231	701	88,880	2,121,025	23.8
-58	0.008442	88,529	747	88,156	2,032,145	23.0
-59	0.009172	87,782	805	87,379	1,943,989	22.1
-60	0.010059	86,977	875	86,539	1,856,609	21.3
-61	0.011113	86,102	957	85,624	1,770,070	20.6
-62	0.012281	85,145	1,046	84,622	1,684,446	19.8
2–63	0.013499	84,099	1,135	83,532	1,599,824	19.0
-64	0.014686	82,964	1,218	82,355	1,516,293	18.3
-65	0.015862	81,746	1,297	81,097	1,433,938	17.5
-66	0.017141 0.018516	80,449 79,070	1,379 1,464	79,760 78,338	1,352,840 1,273,081	16.8 16.1

Table V. Life table for white males: United States, 2004—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectatior of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	e <sub>x</sub>
7–68	0.020117	77,606	1,561	76,825	1,194,743	15.4
i–69	0.021959	76,045	1,670	75,210	1,117,917	14.7
–70	0.024038	74,375	1,788	73,481	1,042,707	14.0
-71	0.026312	72,587	1,910	71,632	969,226	13.4
-72	0.028872	70,677	2,041	69,657	897,594	12.7
-73	0.031833	68,637	2.185	67,544	827,937	12.1
-74	0.035209	66,452	2,340	65,282	760,393	11.4
–75	0.038968	64,112	2,498	62,863	695,111	10.8
–76	0.043119	61,614	2,657	60,285	632,248	10.3
i–77	0.047583	58,957	2,805	57,554	571,962	9.7
_78	0.052485	56,152	2,947	54,678	514,408	9.2
_79	0.057860	53,205	3,078	51,665	459,730	8.6
-80	0.063749	50,126	3,196	48,528	408,064	8.1
-81	0.070193	46,931	3,294	45,284	359,536	7.7
-82	0.077234	43,636	3,370	41,951	314,252	7.2
-83	0.084917	40,266	3,419	38,557	272,301	6.8
-84	0.093288	36,847	3,437	35,128	233,744	6.3
-85	0.102391	33,410	3,421	31,699	198,616	5.9
-86	0.112272	29,989	3,367	28,305	166,917	5.6
–87	0.122976	26,622	3,274	24,985	138,612	5.2
-88	0.134546	23,348	3,141	21,777	113,627	4.9
i–89	0.147022	20,207	2,971	18,721	91,849	4.5
)–90	0.160440	17,236	2.765	15,853	73,128	4.2
)–91	0.174833	14,471	2,530	13,206	57,275	4.0
-92	0.190223	11,941	2,271	10,805	44,069	3.7
<u>9</u> 93	0.206629	9,669	1,998	8,670	33,265	3.4
94	0.224059	7,671	1,719	6,812	24,594	3.2
–95	0.242510	5,952	1,444	5,231	17,782	3.0
-96	0.261967	4,509	1,181	3,918	12,552	2.8
–97	0.282403	3,328	940	2,858	8,633	2.6
–98	0.303777	2,388	725	2,025	5,776	2.4
_99	0.326034	1,663	542	1,392	3,750	2.3
–99 · · · · · · · · · · · · · · · · · ·	0.349103	1,121	391	925	2,359	2.3
100 and over	1.000000	729	729	1,434	1,434	2.

Table VI. Life table for white females: United States, 2004

					Total	
	Probability		Number	Person-years	number of	
	of dying	Number		lived		Expectation
			dying		person-years	
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
	-	•	•	-	•	-
Age	$q_x$	$l_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_{x}$
	1/4	^	^	^	^	^
0–1	0.005066	100,000	507	99,555	8,037,428	80.4
				· ·	1 1	
1–2	0.000416	99,493	41	99,473	7,937,873	79.8
2–3	0.000231	99,452	23	99,440	7,838,401	78.8
3–4	0.000175	99,429	17	99,420	7,738,960	77.8
4–5	0.000151	99,412	15	99,404	7,639,540	76.8
		· '		· ·	1 1	
5–6	0.000133	99,397	13	99,390	7,540,136	75.9
6–7	0.000124	99,383	12	99,377	7,440,746	74.9
7–8	0.000118	99,371	12	99,365	7,341,369	73.9
8–9	0.000109	99,359	11	99,354	7,242,004	72.9
9–10	0.000099	99,349	10	99,344	7,142,650	71.9
		· '		· ·	1 1	
10–11	0.000092	99,339	9	99,334	7,043,306	70.9
11–12	0.000096	99,330	10	99,325	6,943,972	69.9
12–13	0.000119	99,320	12	99,314	6,844,647	68.9
13–14	0.000167	99,308	17	99,300	6,745,333	67.9
				· ·	1 1	
14–15	0.000233	99,292	23	99,280	6,646,033	66.9
15–16	0.000309	99,268	31	99,253	6,546,753	65.9
16–17	0.000380	99,238	38	99,219	6,447,500	65.0
17–18	0.000431	99,200	43	99,179	6,348,281	64.0
18–19	0.000451	99,157	45	1 '		63.0
		· '		99,135	6,249,102	
19–20	0.000449	99,113	44	99,090	6,149,967	62.1
20–21	0.000442	99,068	44	99,046	6,050,877	61.1
21–22	0.000441	99,024	44	99,003	5,951,830	60.1
22–23	0.000440	98,981	44	98,959	5,852,828	59.1
23–24	0.000443	98,937	44	98,915	5,753,869	58.2
	0.000440	98,893	45	98,871	5,654,953	57.2
		· '		1 '	· ' '	
25–26	0.000459	98,849	45	98,826	5,556,082	56.2
26–27	0.000469	98,803	46	98,780	5,457,256	55.2
27–28	0.000484	98,757	48	98,733	5,358,476	54.3
28–29	0.000503	98,709	50	98,684	5,259,743	53.3
29–30	0.000527	98,660	52	98,634	5,161,058	52.3
	0.000557		55	I '		51.3
30–31		98,608		98,580	5,062,425	
31–32	0.000593	98,553	58	98,524	4,963,844	50.4
32–33	0.000641	98,494	63	98,463	4,865,321	49.4
33–34	0.000684	98,431	67	98,398	4,766,858	48.4
34–35	0.000742	98,364	73	98,328	4,668,460	47.5
35–36	0.000806	98,291	79	98,252	4,570,133	46.5
36–37	0.000881	98,212	86	98,169	4,471,881	45.5
				I '	1 1	
37–38	0.000971	98,125	95	98,078	4,373,713	44.6
38–39	0.001077	98,030	106	97,977	4,275,635	43.6
39–40	0.001191	97,925	117	97,866	4,177,657	42.7
40–41	0.001305	97,808	128	97,744	4,079,791	41.7
41–42	0.001420	97,680	139	97,611	3,982,047	40.8
42–43	0.001546	97,542	151	97,466	3,884,436	39.8
43–44		97,391		· ·	1 1	38.9
	0.001690		165	97,309	3,786,970	
44–45	0.001850	97,226	180	97,136	3,689,661	37.9
45–46	0.002029	97,046	197	96,948	3,592,525	37.0
46–47	0.002214	96,849	214	96,742	3,495,577	36.1
47–48	0.002393	96,635	231	96,519	3,398,835	35.2
48–49	0.002557	96,404	247	96,280	3,302,315	34.3
49–50	0.002718	96,157	261	96,027	3,206,035	33.3
				· ·		
50–51	0.002889	95,896	277	95,757	3,110,008	32.4
51–52	0.003091	95,619	296	95,471	3,014,251	31.5
52–53	0.003337	95,323	318	95,164	2,918,780	30.6
53–54	0.003639	95,005	346	94,832	2,823,615	29.7
54–55	0.003989	94,659	378	94,471	2,728,783	28.8
55–56	0.004374	94,282	412	94,076	2,634,312	27.9
	0.004374		449	· ·	2,540,237	27.1
56–57		93,870		93,645		
57–58	0.005243	93,420	490	93,175	2,446,592	26.2
58–59	0.005756	92,930	535	92,663	2,353,417	25.3
59–60	0.006338	92,396	586	92,103	2,260,754	24.5
60–61	0.007028	91,810	645	91,487	2,168,651	23.6
61–62	0.007803	91,165	711	90,809	2,077,164	22.8
				I '		
62–63	0.008605	90,453	778	90,064	1,986,355	22.0
63–64	0.009386	89,675	842	89,254	1,896,290	21.1
64–65	0.010170	88,833	903	88,382	1,807,036	20.3
65–66	0.011039	87,930	971	87,445	1,718,655	19.5
66–67	0.011950	86,959	1,039	86,440	1,631,210	18.8
			.,		,,	1

Table VI. Life table for white females: United States, 2004—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectatior of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
7–68	0.013021	85,920	1,119	85,361	1,544,770	18.0
i–69	0.014259	84,801	1,209	84,197	1,459,410	17.2
–70	0.015666	83,592	1,310	82,937	1,375,213	16.5
-71	0.017239	82,283	1,419	81,573	1,292,275	15.7
-72	0.019032	80,864	1,539	80,095	1,210,702	15.0
-73	0.021097	79,325	1.674	78,488	1,130,607	14.3
-74	0.023465	77,652	1,822	76,741	1,052,119	13.5
_75	0.026156	75,830	1,983	74,838	975,378	12.9
-76	0.029217	73,846	2,158	72,767	900,540	12.2
–77	0.032550	71,689	2,333	70,522	827,772	11.5
–78	0.036250	69,355	2,514	68,098	757,250	10.9
_79	0.040352	66,841	2,697	65,493	689,152	10.3
-80	0.044898	64,144	2,880	62,704	623,660	9.7
-81	0.049928	61,264	3,059	59,735	560,956	9.2
-82	0.055490	58,205	3,230	56,590	501,221	8.6
–83	0.061631	54,975	3,388	53,281	444,631	8.1
-84	0.068402	51,587	3,529	49,823	391,350	7.6
–85	0.005402	48,059	3,646	46,236	341,527	7.0 7.1
	0.084052	44,413	3,733	42,546	295,291	6.6
-86	0.093042		3,785	· '	252,745	6.2
		40,680	· '	38,787		5.8
-88	0.102886	36,895	3,796	34,997	213,957	
8-89	0.113641	33,099	3,761	31,218	178,960	5.4
-90	0.125364	29,338	3,678	27,499	147,742	5.0
<u>–91</u>	0.138107	25,660	3,544	23,888	120,243	4.7
-92	0.151920	22,116	3,360	20,436	96,355	4.4
-93	0.166847	18,756	3,129	17,191	75,919	4.0
-94	0.182925	15,627	2,859	14,197	58,728	3.8
-95	0.200180	12,768	2,556	11,490	44,531	3.5
-96	0.218627	10,212	2,233	9,096	33,040	3.2
-97	0.238268	7,980	1,901	7,029	23,945	3.0
-98	0.259088	6,078	1,575	5,291	16,916	2.8
<b>⊢</b> 99	0.281055	4,503	1,266	3,871	11,625	2.6
)–100	0.304121	3,238	985	2,745	7,754	2.4
00 and over	1.000000	2,253	2,253	5,009	5,009	2.2

Table VII. Life table for the black population: United States, 2004

			,			
					Total	
	Description (CO)		Nicosia	D		
	Probability		Number	Person-years	number of	
	of dying	Number	dying	lived	person-years	Expectation
	between	surviving to	between	between	lived above	of life
	ages x to x+1	age x	ages x to x+1	ages x to x+1	age x	at age x
Age	$q_x$	$I_x$	$d_x$	L <sub>x</sub>	$T_x$	$e_x$
	11.	*	- X	*	*	- X
0.1	0.012026	100,000	1 204	00.705	7.076.476	70.0
0–1	0.013836	100,000	1,384	98,785	7,276,476	72.8
1–2	0.000715	98,616	71	98,581	7,177,692	72.8
2–3	0.000441	98,546	43	98,524	7,079,111	71.8
3–4	0.000348	98,502	34	98,485	6,980,586	70.9
4–5	0.000279	98,468	27	98,454	6,882,101	69.9
5–6	0.000261	98,441	26	98,428	6,783,647	68.9
		· · · · · · · · · · · · · · · · · · ·				
6–7	0.000237	98,415	23	98,403	6,685,219	67.9
7–8	0.000216	98,392	21	98,381	6,586,816	66.9
8–9	0.000195	98,370	19	98,361	6,488,435	66.0
9–10	0.000176	98,351	17	98,343	6,390,074	65.0
10–11	0.000166	98,334	16	98,326	6,291,731	64.0
11–12	0.000175	98,318	17	98,309	6,193,405	63.0
12–13	0.000216	98,300	21	98,290	6,095,096	62.0
-				1		
13–14	0.000296	98,279	29	98,265	5,996,807	61.0
14–15	0.000412	98,250	40	98,230	5,898,542	60.0
15–16	0.000546	98,210	54	98,183	5,800,312	59.1
			67	1		
16–17	0.000684	98,156		98,122	5,702,129	58.1
17–18	0.000826	98,089	81	98,048	5,604,007	57.1
18–19	0.000957	98,008	94	97,961	5,505,959	56.2
19–20	0.001076	97,914	105	97,861	5,407,998	55.2
		· '		1		
20–21	0.001197	97,809	117	97,750	5,310,136	54.3
21–22	0.001318	97,692	129	97,627	5,212,386	53.4
22–23	0.001416	97,563	138	97,494	5,114,759	52.4
				1		
23–24	0.001485	97,425	145	97,353	5,017,265	51.5
24–25	0.001535	97,280	149	97,206	4,919,912	50.6
25–26	0.001582	97,131	154	97,054	4,822,707	49.7
26–27	0.001633	96,977	158	96,898	4,725,653	48.7
				1		
27–28	0.001679	96,819	163	96,738	4,628,755	47.8
28–29	0.001716	96,656	166	96,573	4,532,017	46.9
29–30	0.001750	96,490	169	96,406	4,435,444	46.0
30–31	0.001787	96,322	172	96,235	4,339,038	45.0
31–32	0.001834	96,149	176	96,061	4,242,802	44.1
32–33	0.001931	95,973	185	95,880	4,146,741	43.2
33–34	0.001972	95,788	189	95,693	4,050,861	42.3
		· ·				
34–35	0.002071	95,599	198	95,500	3,955,168	41.4
35–36	0.002185	95,401	208	95,297	3,859,668	40.5
36–37	0.002322	95,192	221	95,082	3,764,371	39.5
37–38	0.002498	94,971	237	94,853	3,669,289	38.6
38–39	0.002717	94,734	257	94,605	3,574,437	37.7
39–40	0.002968	94,477	280	94,336	3,479,831	36.8
40–41	0.003225	94,196	304	94,044	3,385,495	35.9
				1		
41–42	0.003493	93,893	328	93,729	3,291,451	35.1
42–43	0.003804	93,565	356	93,387	3,197,722	34.2
43–44	0.004175	93,209	389	93,014	3,104,336	33.3
44–45	0.004604	92,819	427	92,606	3,011,322	32.4
		92,392		1	, , ,	31.6
45–46	0.005069		468	92,158	2,918,716	
46–47	0.005553	91,924	510	91,668	2,826,558	30.7
47–48	0.006066	91,413	555	91,136	2,734,889	29.9
48–49	0.006609	90,859	600	90,559	2,643,753	29.1
49–50	0.007180	90,258	648	89,934	2,553,195	28.3
50–51	0.007808	89,610	700	89,260	2,463,261	27.5
51–52	0.008477	88,911	754	88,534	2,374,000	26.7
52–53	0.009143	88,157	806	87,754	2,285,467	25.9
				1		
53–54	0.009782	87,351	854	86,924	2,197,713	25.2
54–55	0.010412	86,496	901	86,046	2,110,789	24.4
55–56	0.011087	85,596	949	85,121	2,024,743	23.7
				1		
56–57	0.011841	84,647	1,002	84,146	1,939,622	22.9
57–58	0.012664	83,644	1,059	83,115	1,855,476	22.2
58–59	0.013566	82,585	1,120	82,025	1,772,362	21.5
		· ·				
59–60	0.014553	81,465	1,186	80,872	1,690,337	20.7
60–61	0.015649	80,279	1,256	79,651	1,609,465	20.0
61–62	0.016852	79,023	1,332	78,357	1,529,813	19.4
62–63	0.018111	77,691	· ·			
			1,407	76,988	1,451,456	18.7
63–64	0.019367	76,284	1,477	75,546	1,374,469	18.0
64–65	0.020611	74,807	1,542	74,036	1,298,923	17.4
65–66	0.021872	73,265	1,602	72,464	1,224,887	16.7
		· ·	· ·			
66–67	0.023132	71,663	1,658	70,834	1,152,423	16.1
		I .	I .	T.	I .	I .

Table VII. Life table for the black population: United States, 2004—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	$T_x$	e <sub>x</sub>
-68	0.024609	70,005	1,723	69,144	1,081,589	15.5
-69	0.026363	68,282	1,800	67,382	1,012,446	14.8
-70	0.028382	66,482	1,887	65,539	945,063	14.2
-71	0.030586	64,595	1,976	63,607	879,525	13.6
-72	0.033006	62,619	2,067	61,586	815,917	13.0
-73	0.035736	60,553	2.164	59,471	754,331	12.5
_74	0.038772	58,389	2,264	57,257	694,861	11.9
_75	0.042076	56,125	2,361	54,944	637,604	11.4
-76	0.045635	53,763	2,454	52,537	582,660	10.8
–77	0.049356	51,310	2,532	50,044	530,123	10.3
–78	0.053364	48,777	2,603	47,476	480,079	9.8
_79	0.057677	46,175	2,663	44,843	432,603	9.4
-80	0.062315	43,511	2,711	42,156	387,760	8.9
–81	0.067300	40,800	2,746	39,427	345,605	8.5
-82	0.072653	38,054	2,765	36,672	306,178	8.0
-83	0.078396	35,289	2,767	33,906	269,506	7.6
-84	0.084551	32,523	2,750	31,148	235,600	7.2
-85	0.091142	29,773	2,714	28,416	204,452	6.9
-86	0.098192	27,059	2,657	25,731	176,036	6.5
_87	0.105723	24,402	2,580	23,112	150,305	6.2
-88	0.103723	21,822	2,483	20,581	127,193	5.8
–89	0.1122323	19,340	2,366	18,157	106,612	5.5
i–69	0.121435	16,974	2,231	15,859	88,454	5.2
–90	0.131433	14,743	2,231	13,703	72,596	4.9
–91	0.151389	12,663	1,917	11,704	58,893	4.9
–92	0.162266	10,746	1,744	9,874	47,189	4.7
–93	0.173765	9,002	1,564	8,220	37,315	4.4
-	0.175765	7,438		6,746	29,095	3.9
			1,383			
-96	0.198675 0.212101	6,055 4,852	1,203	5,454	22,348	3.7 3.5
-97			1,029	4,338	16,895	
-98	0.226178	3,823	865	3,391	12,557	3.3
-99	0.240904	2,958	713	2,602	9,166	3.1
9–100	0.256271	2,246	575	1,958	6,564	2.9
0 and over	1.000000	1,670	1,670	4,607	4,607	2.8

Table VIII. Life table for black males: United States, 2004

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	$l_x$	$d_x$	L <sub>x</sub>	T <sub>x</sub>	$e_{\scriptscriptstyle X}$
-1	0.015251	100,000	1,525	98,662	6,926,814	69.3
-2	0.000764	98,475	75	98,437	6,828,152	69.3
-3	0.000469	98,400	46	98,377	6,729,714	68.4
–4	0.000395	98,354	39	98,334	6,631,338	67.4
–5	0.000306	98,315	30	98,300	6,533,004	66.4
-6	0.000282	98,285	28	98,271	6,434,704	65.5
–7	0.000260	98,257	26	98,244	6,336,433	64.5
-8	0.000238	98,231	23	98,220	6,238,189	63.5
-9	0.000207	98,208	20	98,198	6,139,969	62.5
-10	0.000173	98,188	17	98,179	6,041,772	61.5
-11	0.000149	98,171	15	98,163	5,943,592	60.5
-12	0.000157 0.000220	98,156	15 22	98,148	5,845,429	59.6
-13	0.000220	98,141 98,119	35	98,130 98,102	5,747,281 5,649,151	58.6 57.6
_15	0.000549	98,084	54	98,057	5,551,049	56.6
_16	0.000349	98,030	76	97,993	5,452,992	55.6
_17	0.00174	97,955	98	97,995	5,354,999	54.7
'–18	0.001002	97,856	121	97,796	5,257,094	53.7
_19	0.001443	97,736	141	97,665	5,159,298	52.8
<u>–20                                    </u>	0.001628	97,595	159	97,515	5,061,633	51.9
)–21	0.001816	97,436	177	97,347	4,964,117	50.9
–22	0.002001	97,259	195	97,162	4,866,770	50.0
!–23	0.002148	97,064	208	96,960	4,769,608	49.1
B–24	0.002247	96,856	218	96,747	4,672,648	48.2
–25	0.002310	96,638	223	96,527	4,575,901	47.4
–26	0.002365	96,415	228	96,301	4,479,375	46.5
–27	0.002422	96,187	233	96,070	4,383,074	45.6
-28	0.002463	95,954	236	95,836	4,287,003	44.7
-29	0.002486	95,718	238	95,599	4,191,167	43.8
-30	0.002499	95,480	239	95,360	4,095,568	42.9
)–31	0.002508 0.002528	95,241 95,002	239 240	95,122 94,882	4,000,208 3,905,086	42.0 41.1
1–32 · · · · · · · · · · · · · · · · · · ·	0.002526	94,762	250	94,637	3,810,204	40.2
i–34	0.002638	94,512	249	94,388	3,715,567	39.3
-35	0.002739	94,263	258	94,134	3,621,179	38.4
-36	0.002864	94,005	269	93,870	3,527,045	37.5
-37	0.003013	93,736	282	93,594	3,433,175	36.6
′–38	0.003196	93,453	299	93,304	3,339,581	35.7
<b>⊢</b> 39	0.003411	93,154	318	92,996	3,246,277	34.8
-40	0.003657	92,837	339	92,667	3,153,281	34.0
-41	0.003908	92,497	361	92,316	3,060,614	33.1
–42	0.004190	92,136	386	91,943	2,968,298	32.2
2–43	0.004557	91,750	418	91,541	2,876,355	31.4
45	0.005040	91,332	460	91,101	2,784,815	30.5
l–45	0.005627	90,871	511 567	90,616	2,693,713	29.6 28.8
i–46	0.006270 0.006934	90,360 89,793	623	90,077 89,482	2,603,098 2,513,021	28.8 28.0
'–48	0.007644	89,171	682	88,830	2,423,539	27.2
_49	0.008393	88,489	743	88,118	2,334,709	26.4
-50	0.009187	87,747	806	87,343	2,246,591	25.6
–51	0.010064	86,940	875	86,503	2,159,247	24.8
–52	0.011005	86,065	947	85,592	2,072,744	24.1
-53	0.011933	85,118	1,016	84,610	1,987,152	23.3
-54	0.012806	84,103	1,077	83,564	1,902,542	22.6
-55	0.013648	83,026	1,133	82,459	1,818,978	21.9
-56	0.014537	81,892	1,190	81,297	1,736,519	21.2
-57	0.015530	80,702	1,253	80,075	1,655,222	20.5
-58	0.016606	79,449	1,319	78,789	1,575,147	19.8
-59	0.017783	78,129	1,389	77,435	1,496,358	19.2
-60	0.019070	76,740	1,463	76,008	1,418,923	18.5
-61	0.020497	75,276	1,543	74,505	1,342,915	17.8
–62	0.022059 0.023685	73,734 72,107	1,626 1,708	72,920 71,253	1,268,410	17.2 16.6
63	0.025285	72,107 70,399	1,780	69,509	1,195,490 1,124,237	16.0
_65	0.026839	68,619	1,842	67,698	1,054,728	15.4
-66	0.028379	66,778	1,895	65,830	987,029	14.8
-67	0.030014	64,883	1,947	63,909	921,199	14.2

Table VIII. Life table for black males: United States, 2004—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age x	Expectatior of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
7–68	0.031934	62,935	2,010	61,930	857,290	13.6
i–69	0.034224	60,925	2,085	59,883	795,360	13.1
<b>⊢</b> 70	0.036862	58,840	2,169	57,756	735,477	12.5
–71	0.039716	56,671	2,251	55,546	677,721	12.0
–72	0.042803	54,421	2,329	53,256	622,176	11.4
–73	0.046248	52.091	2.409	50,887	568.920	10.9
3–74	0.050036	49,682	2,486	48,439	518,033	10.4
-75	0.054097	47,196	2,553	45,920	469,594	9.9
i–76	0.058389	44,643	2,607	43,340	423,674	9.5
i⊢77	0.062786	42,036	2,639	40,717	380,335	9.0
/–78	0.067490	39,397	2,659	38,068	339,618	8.6
J <del>-</del> 79	0.072519	36,738	2,664	35,406	301,550	8.2
)–80	0.077892	34,074	2,654	32,747	266.144	7.8
)–81	0.083627	31,420	2,628	30,106	233,397	7.4
-82	0.089743	28,792	2,584	27,500	203,291	7.1
2–83	0.096260	26,208	2,523	24,947	175,791	6.7
1 <del>-</del> 84	0.103196	23,686	2,444	22,463	150,844	6.4
I–85	0.110571	21,241	2,349	20,067	128,380	6.0
i–86	0.118403	18,893	2,237	17,774	108,313	5.7
i–87	0.126711	16,656	2,110	15,600	90,539	5.4
/ <del>-</del> 88	0.135512	14,545	1,971	13,560	74,939	5.2
3–89	0.133312	12,574	1,821	11,664	61,379	4.9
	0.154660	10,753	1,663	· '	49,715	4.6
	0.165036	9,090	1,500	9,922 8,340	39,794	4.6
)–91	0.175963		1,336	· '	· '	4.4
-92	0.175963	7,590 6,254	1,336	6,922 5,668	31,454 24,531	3.9
	0.199507	5,082	1,014	4,575	18,863	3.7
• • • • • • • • • • • • • • • • • • • •	0.199507	4,068	863	3,637	14,288	3.5
-96	0.225341	3,205	722	2,844	10,652	3.3
<del>-</del> 97	0.239117	2,483	594	2,186	7,808	3.1
-98	0.253460	1,889	479	1,650	5,622	3.0
3–99	0.268359	1,410	378	1,221	3,972	2.8
9–100	0.283802	1,032	293	885	2,751	2.7
00 and over	1.000000	739	739	1,865	1,865	2.5

Table IX. Life table for black females: United States, 2004

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectation of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	$d_x$	L <sub>x</sub>	$T_x$	$e_x$
-1	0.012367	100,000	1,237	98,912	7,597,716	76.0
-2	0.000664	98,763	66	98,731	7,498,805	75.9
-3	0.000413	98,698	41	98,677	7,400,074	75.0
-4	0.000300	98,657	30	98,642	7,301,397	74.0
-5	0.000251	98,627	25	98,615	7,202,754	73.0
-6	0.000239	98,603	24	98,591	7,104,140	72.0
-7	0.000212	98,579	21	98,569	7,005,549	71.1
-8	0.000194	98,558	19	98,549	6,906,980	70.1
9	0.000183	98,539	18	98,530	6,808,432	69.1
-10	0.000180	98,521	18	98,512	6,709,902	68.1
-11	0.000183	98,503	18	98,494	6,611,390	67.1
12	0.000193	98,485	19	98,476	6,512,895	66.1
-13	0.000211	98,466	21	98,456	6,414,420	65.1
-14	0.000236	98,445	23	98,434	6,315,964	64.2
-15	0.000270	98,422	27	98,409	6,217,530	63.2
-16	0.000311	98,396	31	98,380	6,119,121	62.2
-17	0.000357	98,365	35	98,347	6,020,741	61.2
-18	0.000407	98,330	40	98,310	5,922,393	60.2
-19	0.000458	98,290	45	98,267	5,824,083	59.3
-20	0.000510	98,245	50	98,220	5,725,816	58.3
-21	0.000564	98,195	55	98,167	5,627,596	57.3
-22	0.000622	98,139	61	98,109	5,529,429	56.3
-23	0.000675	98.078	66	98,045	5,431,320	55.4
-24	0.00075	98,012	71	97,977	5,333,275	54.4
-25	0.000723	97,941	76	97,903	5,235,298	53.5
-26	0.000773	97,865	81	97,825	5,137,395	52.5
-27	0.000827	97,784	87	97,741	5,039,570	51.5
-28	0.00088		93	1		50.6
		97,698		97,651	4,941,829	
-29	0.001008	97,605	98	97,556	4,844,178	49.6
-30	0.001066	97,506	104	97,454	4,746,622	48.7
-31	0.001131	97,402	110	97,347	4,649,167	47.7
-32	0.001206	97,292	117	97,234	4,551,820	46.8
-33	0.001304	97,175	127	97,112	4,454,586	45.8
-34	0.001373	97,048	133	96,982	4,357,475	44.9
-35	0.001472	96,915	143	96,844	4,260,493	44.0
-36	0.001576	96,772	153	96,696	4,163,649	43.0
-37	0.001701	96,620	164	96,538	4,066,953	42.1
-38	0.001873	96,456	181	96,365	3,970,415	41.2
-39	0.002097	96,275	202	96,174	3,874,050	40.2
-40	0.002354	96,073	226	95,960	3,777,876	39.3
-41	0.002618	95,847	251	95,721	3,681,916	38.4
-42	0.002878	95,596	275	95,458	3,586,195	37.5
-43	0.003141	95,321	299	95,171	3,490,737	36.6
-44	0.003415	95,021	325	94,859	3,395,566	35.7
-45	0.003707	94,697	351	94,521	3,300,706	34.9
-46	0.004016	94,346	379	94,156	3,206,185	34.0
-47	0.004342	93,967	408	93,763	3,112,029	33.1
-48	0.004688	93,559	439	93,340	3,018,266	32.3
-49	0.005056	93,120	471	92,885	2,924,926	31.4
-50	0.005446	92,649	505	92,397	2,832,041	30.6
-51	0.005872	92,145	541	91,874	2,739,644	29.7
-52	0.006326	91,604	579	91,314	2,647,770	28.9
-53	0.006784	91,024	618	90,716	2,556,456	28.1
-54	0.007237	90,407	654	90,080	2,465,740	27.3
-55	0.007699	89,753	691	89,407	2,375,661	26.5
-56	0.008203	89,062	731	88,696	2,286,253	25.7
-57	0.008771	88,331	775	87,944	2,197,557	24.9
-58	0.009404	87,556	823	87,145	2,109,614	24.1
-59	0.010108	86,733	877	86,294	2,022,469	23.3
-60	0.010888	85,856	935	85,389	1,936,175	22.6
-61	0.011765	84,921	999	84,422	1,850,786	21.8
-62	0.012737	83,922	1,069	83,388	1,766,364	21.0
-63	0.013760	82,853	1,140	82,283	1,682,977	20.3
-64	0.014792	81,713	1,209	81,109	1,600,693	19.6
	0.011104	0.,, 10		1		
l l	0.015832	80.505	1.275	/9.8h/	1,519.584	18.9
-65	0.015832 0.016911	80,505 79,230	1,275 1,340	79,867 78,560	1,519,584 1,439,717	18.9 18.2

Table IX. Life table for black females: United States, 2004—Con.

	Probability of dying between ages x to x+1	Number surviving to age <i>x</i>	Number dying between ages x to x+1	Person-years lived between ages x to x+1	Total number of person-years lived above age <i>x</i>	Expectatior of life at age <i>x</i>
Age	$q_x$	l <sub>x</sub>	d <sub>x</sub>	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub>
7–68	0.019271	76,488	1,474	75,751	1,283,968	16.8
–69	0.020772	75,014	1,558	74,235	1,208,216	16.1
–70	0.022498	73,456	1,653	72,630	1,133,981	15.4
–71	0.024394	71,803	1,752	70,928	1,061,351	14.8
-72	0.026496	70,052	1,856	69,124	990,424	14.1
-73	0.028884	68.196	1.970	67,211	921.300	13.5
-74	0.031558	66,226	2,090	65,181	854,089	12.9
_75	0.034494	64,136	2,212	63,030	788,908	12.3
-76	0.037694	61,924	2,334	60,757	725,878	11.7
_77	0.041082	59,590	2,448	58,366	665,121	11.2
–78	0.044759	57,142	2,558	55,863	606,756	10.6
–79	0.048749	54,584	2,661	53,254	550,893	10.1
–80	0.053075	51,923	2,756	50,545	497,639	9.6
_81	0.057762	49,167	2,840	47,747	447,094	9.1
–82	0.062834	46,327	2,911	44,872	399,347	8.6
–83	0.068320	43,416	2,966	41,933	354,475	8.2
–84	0.074247	40,450	3,003	38,948	312,542	7.7
–85	0.080644	37,447	3,020	35,937	273,594	7.7
–86	0.087540	34,427	3,014	32,920	237,657	6.9
–87	0.094964	31,413	2,983	29,922	204,737	6.5
–88	0.102948	28,430	2,965	29,922	174,815	6.1
	0.102946	25,503	2,844	24,081	147,848	5.8
				· '	· · · · · · · · · · · · · · · · · · ·	5.6 5.5
	0.120708	22,659	2,735	21,292	123,767	5.5 5.1
91	0.130543	19,924	2,601	18,624	102,476	
-92	0.141051	17,323	2,443	16,101	83,852	4.8
-93	0.152257	14,880	2,266	13,747	67,751	4.6
-94	0.164183	12,614	2,071	11,579	54,004	4.3
-95	0.176848	10,543	1,865	9,611	42,425	4.0
-96	0.190267	8,679	1,651	7,853	32,814	3.8
-97	0.204452	7,027	1,437	6,309	24,962	3.6
-98	0.219408	5,591	1,227	4,977	18,653	3.3
-99	0.235134	4,364	1,026	3,851	13,675	3.1
9–100	0.251624	3,338	840	2,918	9,824	2.9
00 and over	1.000000	2,498	2,498	6,907	6,907	2.8

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