

# ACTUARIAL NOTE

Number 2008.2  
June 2008

Social Security Administration  
Office of the Chief Actuary

## Unisex Life Expectancies at Birth and Age 65

*by Felicitie Bell, K. Mark Bye, and Al Winters*

Life expectancies at birth and age 65 are shown in tables V.A.3 and V.A.4 of the 2008 Annual Report of the Board of Trustees. The life expectancies in those tables are presented on both a period and a cohort basis, separately, for males and females. This note provides the corresponding unisex life expectancies, and a brief explanation of their calculation method.

The following standard actuarial functions<sup>1</sup> are used in this note:

$\overset{\circ}{e}_x$  = the average number of years of life remaining at exact age  $x$

$l_x$  = the number of persons surviving to exact age  $x$

$l_0$  = the starting number of persons in life table at age 0 (radix)

Additionally, a second subscript is used to denote gender where the letters  $u$ ,  $m$ , and  $f$  represent unisex, male, and female, respectively.

The Office of the Chief Actuary computes all unisex life table values from the corresponding male and female life tables based on the assumption of an annual sex ratio<sup>2</sup> of 1,050 male births occurring for every 1,000 female births. Thus, a unisex life table is created by combining a male life table with radix<sup>3</sup> 105,000 and a female life table with radix 100,000, and then rescaling the combined table to radix 100,000. At a given age  $x$ , the unisex life expectancy may be calculated as:

$$\overset{\circ}{e}_{x,u} = \frac{l_{x,m} \overset{\circ}{e}_{x,m} + l_{x,f} \overset{\circ}{e}_{x,f}}{l_{x,m} + l_{x,f}} \quad (1)$$

For unisex life expectancy at birth, notice that Equation (1) can be reduced for the case where  $x = 0$ ,  $l_{0,m} = 105,000$  and  $l_{0,f} = 100,000$ . In this case, unisex life expectancy at birth

<sup>1</sup> These actuarial functions are described in chapter IV of Actuarial Study Number 120, Life Tables for the United States Social Security Area 1900-2100. This study can be found at the following web address : <http://www.socialsecurity.gov/OACT/NOTES/as120/TOC.html>

<sup>2</sup> Since 1945, the sex ratio has varied from 1,046 to 1,059 male births to female births. For more information on the sex ratio see page 9 of the National Vital Statistics Report, Volume 56, Number 6.

<sup>3</sup> The radix of a life table is defined as  $l_0$ , and is selected to be an arbitrary but generally large integer.

is equal to the sum of 1.05 times male life expectancy at birth plus female life expectancy at birth divided by 2.05. Thus, we have the equation below:

$$\overset{\circ}{e}_{0,u} = \frac{1.05 \overset{\circ}{e}_{0,m} + 1.00 \overset{\circ}{e}_{0,f}}{2.05} \quad (2)$$

For age 65, the unisex life expectancy is computed as:

$$\overset{\circ}{e}_{65,u} = \frac{l_{65,m} \overset{\circ}{e}_{65,m} + l_{65,f} \overset{\circ}{e}_{65,f}}{l_{65,m} + l_{65,f}} \quad (3)$$

The tables on the following pages correspond to tables V.A.3 and V.A.4 of the 2008 Trustees Report. Table 1 presents historical and projected unisex life expectancies on a period basis (for the intermediate alternative, only) in the same format as table V.A.3 of the Trustees Report. Similarly, table 2 shows the unisex life expectancies on a cohort basis in the same format as table V.A.4 of the Trustees Report. For the purpose of comparison and easy accessibility, gender specific life expectancies are included in Tables 1 and 2. Detailed versions of tables 1 and 2, which contain unisex life expectancies for all years from 1940-2100, are also attached.

**Table 1 - Period Life Expectancies<sup>1</sup>**

Calendar Year	Unisex		Male		Female	
	At birth	At age 65	At birth	At age 65	At birth	At age 65
<b>Historical Data:</b>						
1940....	63.5	12.7	61.4	11.9	65.7	13.4
1945....	65.6	13.6	62.9	12.6	68.4	14.4
1950....	68.3	14.0	65.6	12.8	71.1	15.1
1955....	69.7	14.5	66.7	13.1	72.8	15.6
1960....	69.9	14.5	66.7	12.9	73.2	15.9
1965....	70.2	14.8	66.8	12.9	73.8	16.3
1970....	70.9	15.3	67.2	13.1	74.9	17.1
1975....	72.6	16.0	68.7	13.7	76.6	18.0
1980....	73.6	16.3	69.9	14.0	77.5	18.4
1985....	74.6	16.6	71.1	14.4	78.2	18.6
1990....	75.3	17.2	71.8	15.1	78.9	19.1
1995....	75.7	17.3	72.5	15.4	79.1	19.1
1996....	76.0	17.3	73.0	15.5	79.2	19.1
1997....	76.3	17.4	73.4	15.6	79.4	19.1
1998....	76.5	17.4	73.7	15.7	79.4	19.1
1999....	76.5	17.4	73.8	15.7	79.3	19.0
2000....	76.6	17.5	74.0	15.9	79.4	19.0
2001....	76.7	17.6	74.1	16.1	79.5	19.1
2002....	76.8	17.7	74.2	16.2	79.5	19.1
2003....	76.9	17.8	74.4	16.3	79.6	19.2
2004....	77.3	18.1	74.8	16.7	80.0	19.5
2005 <sup>2</sup> ....	77.3	17.9	74.9	16.5	79.8	19.2
2006 <sup>2</sup> ....	77.4	17.9	75.1	16.6	79.8	19.2
2007 <sup>2</sup> ....	77.5	18.0	75.2	16.7	79.9	19.2
<b>Projected:<sup>3</sup></b>						
2010....	77.8	18.1	75.7	16.9	80.0	19.3
2015....	78.3	18.4	76.3	17.3	80.4	19.5
2020....	78.8	18.7	76.9	17.6	80.9	19.8
2025....	79.4	19.0	77.5	17.9	81.3	20.0
2030....	79.8	19.3	78.0	18.2	81.8	20.3
2035....	80.3	19.5	78.5	18.5	82.2	20.6
2040....	80.8	19.8	79.0	18.8	82.6	20.9
2045....	81.2	20.1	79.5	19.0	83.1	21.2
2050....	81.7	20.4	80.0	19.3	83.4	21.4
2055....	82.1	20.6	80.4	19.6	83.8	21.7
2060....	82.5	20.9	80.8	19.8	84.2	21.9
2065....	82.9	21.1	81.3	20.1	84.6	22.2
2070....	83.2	21.4	81.7	20.3	84.9	22.4
2075....	83.6	21.6	82.0	20.6	85.2	22.6
2080....	84.0	21.8	82.4	20.8	85.6	22.8
2085....	84.3	22.0	82.8	21.0	85.9	23.1

<sup>1</sup> The period life expectancy at a given age for a given year represents the average number of years of life remaining if a group of persons at that age were to experience the mortality rates for the year over the course of their remaining lives.

<sup>2</sup> Estimated.

<sup>3</sup> The projected values are based on the intermediate assumptions of the 2008 Trustees Report.

**Table 2 - Cohort Life Expectancies<sup>1</sup>**

Calendar Year	Unisex		Male		Female	
	At birth <sup>2</sup>	At age 65 <sup>3</sup>	At birth <sup>2</sup>	At age 65 <sup>3</sup>	At birth <sup>2</sup>	At age 65 <sup>3</sup>
1940....	72.8	13.8	69.8	12.7	75.8	14.7
1945....	74.4	14.3	71.6	13.0	77.3	15.4
1950....	75.6	14.7	72.8	13.1	78.5	16.2
1955....	76.3	15.1	73.5	13.1	79.2	16.7
1960....	76.9	15.5	74.2	13.2	79.6	17.4
1965....	77.6	15.9	75.1	13.5	80.2	18.0
1970....	78.6	16.4	76.2	13.8	81.0	18.5
1975....	79.4	16.7	77.2	14.2	81.7	18.7
1980....	80.2	16.9	78.1	14.7	82.4	18.7
1985....	80.8	17.2	78.8	15.3	83.0	18.9
1990....	81.4	17.5	79.5	15.8	83.5	19.0
1995....	82.0	17.8	80.1	16.3	84.0	19.2
1996....	82.1	17.9	80.3	16.5	84.1	19.3
1997....	82.2	18.0	80.3	16.6	84.2	19.3
1998....	82.3	18.1	80.4	16.7	84.2	19.3
1999....	82.4	18.2	80.6	16.8	84.3	19.4
2000....	82.5	18.2	80.6	16.9	84.4	19.5
2001....	82.6	18.3	80.7	17.0	84.5	19.5
2002....	82.6	18.4	80.8	17.1	84.5	19.6
2003....	82.7	18.4	80.9	17.2	84.6	19.6
2004....	82.8	18.5	81.0	17.2	84.7	19.7
2005....	82.9	18.6	81.1	17.3	84.8	19.7
2006....	83.0	18.6	81.2	17.4	84.9	19.8
2007....	83.1	18.7	81.3	17.5	85.0	19.8
2010....	83.4	18.9	81.6	17.7	85.2	20.0
2015....	83.8	19.2	82.1	18.0	85.6	20.3
2020....	84.2	19.5	82.5	18.3	85.9	20.6
2025....	84.5	19.8	82.9	18.6	86.3	20.9
2030....	84.9	20.1	83.3	18.9	86.6	21.2
2035....	85.3	20.3	83.7	19.2	86.9	21.4
2040....	85.6	20.6	84.0	19.5	87.2	21.7
2045....	85.9	20.9	84.4	19.8	87.5	22.0
2050....	86.3	21.1	84.8	20.0	87.8	22.2
2055....	86.6	21.4	85.1	20.3	88.1	22.5
2060....	86.9	21.6	85.4	20.6	88.4	22.7
2065....	87.2	21.9	85.7	20.8	88.7	22.9
2070....	87.4	22.1	86.0	21.0	88.9	23.2
2075....	87.7	22.3	86.3	21.3	89.2	23.4
2080....	88.0	22.6	86.6	21.5	89.4	23.6
2085....	88.3	22.8	86.9	21.7	89.7	23.8

<sup>1</sup> The cohort life expectancy at a given age for a given year represents the average number of years of life remaining if a group of persons at that age were to experience the mortality rates for the series of years in which they reach each succeeding age. All mortality rates are consistent with those used for the intermediate assumptions of the 2008 Trustees Report.

<sup>2</sup> Cohort life expectancies at birth for those born on January 1 of the calendar year is based on a combination of actual and estimated death rates for birth years 1940 to 2004. For birth years after 2004, these values are based solely on estimated death rates.

<sup>3</sup> Age 65 cohort life expectancy for those attaining age 65 on January 1 of the calendar years before 1975 is based on actual data. For 1975 through 2004, these values are based on a combination of actual and estimated death rates. After 2004, these values are based solely on estimated death rates.

**Detailed Table 1 - Period Life Expectancies**

Calendar Year	Unisex		Male		Female	
	At birth	At age 65	At birth	At age 65	At birth	At age 65
1940	63.5	12.7	61.4	11.9	65.7	13.4
1941	64.1	13.0	61.9	12.2	66.5	13.8
1942	64.9	13.3	62.6	12.4	67.4	14.1
1943	64.6	13.0	62.3	12.1	67.1	13.7
1944	65.2	13.3	62.7	12.5	67.8	14.1
1945	65.6	13.6	62.9	12.6	68.4	14.4
1946	66.7	13.8	64.3	12.9	69.2	14.6
1947	67.1	13.6	64.6	12.6	69.7	14.5
1948	67.4	13.8	64.8	12.7	70.2	14.7
1949	67.9	13.9	65.3	12.8	70.7	14.9
1950	68.3	14.0	65.6	12.8	71.1	15.1
1951	68.4	14.1	65.7	12.8	71.4	15.2
1952	68.6	14.2	65.8	13.0	71.6	15.3
1953	68.9	14.2	66.0	12.9	72.0	15.3
1954	69.7	14.6	66.7	13.2	72.7	15.8
1955	69.7	14.5	66.7	13.1	72.8	15.6
1956	69.8	14.5	66.7	13.0	72.9	15.7
1957	69.5	14.3	66.5	12.9	72.7	15.6
1958	69.7	14.4	66.6	12.9	72.9	15.7
1959	69.9	14.6	66.8	13.1	73.2	15.9
1960	69.9	14.5	66.7	12.9	73.2	15.9
1961	70.3	14.7	67.1	13.1	73.6	16.1
1962	70.1	14.6	66.9	12.9	73.5	16.0
1963	69.9	14.5	66.6	12.8	73.4	16.0
1964	70.2	14.8	66.8	13.0	73.7	16.3
1965	70.2	14.8	66.8	12.9	73.8	16.3
1966	70.2	14.7	66.7	12.9	73.9	16.3
1967	70.5	14.9	67.0	13.0	74.3	16.6
1968	70.3	14.9	66.6	12.8	74.2	16.6
1969	70.6	15.1	66.9	13.0	74.6	16.9
1970	70.9	15.3	67.2	13.1	74.9	17.1
1971	71.1	15.3	67.4	13.1	75.1	17.1
1972	71.2	15.3	67.4	13.1	75.2	17.2
1973	71.5	15.4	67.6	13.2	75.5	17.4
1974	72.1	15.7	68.3	13.5	76.0	17.7
1975	72.6	16.0	68.7	13.7	76.6	18.0
1976	72.8	16.1	69.1	13.8	76.8	18.1
1977	73.2	16.3	69.4	13.9	77.2	18.3
1978	73.3	16.3	69.6	14.0	77.3	18.3
1979	73.7	16.5	70.0	14.2	77.7	18.6
1980	73.6	16.3	69.9	14.0	77.5	18.4
1981	74.0	16.5	70.4	14.2	77.9	18.6
1982	74.4	16.7	70.8	14.5	78.2	18.8
1983	74.4	16.6	70.9	14.3	78.1	18.6
1984	74.6	16.6	71.1	14.4	78.2	18.7
1985	74.6	16.6	71.1	14.4	78.2	18.6
1986	74.6	16.7	71.1	14.5	78.3	18.7
1987	74.7	16.7	71.2	14.6	78.2	18.6
1988	74.8	16.8	71.3	14.6	78.4	18.7
1989	75.0	17.0	71.6	14.9	78.6	18.9
1990	75.3	17.2	71.8	15.1	78.9	19.1

**Detailed Table 1 - Period Life Expectancies (cont.)**

Calendar Year	Unisex		Male		Female	
	At birth	At age 65	At birth	At age 65	At birth	At age 65
1991	75.4	17.3	72.0	15.2	79.0	19.2
1992	75.7	17.4	72.3	15.3	79.2	19.3
1993	75.4	17.2	72.1	15.2	79.0	19.0
1994	75.6	17.3	72.3	15.3	79.1	19.1
1995	75.7	17.3	72.5	15.4	79.1	19.1
1996	76.0	17.3	73.0	15.5	79.2	19.1
1997	76.3	17.4	73.4	15.6	79.4	19.1
1998	76.5	17.4	73.7	15.7	79.4	19.1
1999	76.5	17.4	73.8	15.7	79.3	19.0
2000	76.6	17.5	74.0	15.9	79.4	19.0
2001	76.7	17.6	74.1	16.1	79.5	19.1
2002	76.8	17.7	74.2	16.2	79.5	19.1
2003	76.9	17.8	74.4	16.3	79.6	19.2
2004	77.3	18.1	74.8	16.7	80.0	19.5
2005	77.3	17.9	74.9	16.5	79.8	19.2
2006	77.4	17.9	75.1	16.6	79.8	19.2
2007	77.5	18.0	75.2	16.7	79.9	19.2
2008	77.6	18.0	75.4	16.8	79.9	19.2
2009	77.7	18.1	75.5	16.9	80.0	19.3
2010	77.8	18.1	75.7	16.9	80.0	19.3
2011	77.9	18.2	75.8	17.0	80.1	19.3
2012	78.0	18.2	76.0	17.1	80.2	19.4
2013	78.1	18.3	76.1	17.1	80.3	19.4
2014	78.2	18.3	76.2	17.2	80.3	19.4
2015	78.3	18.4	76.3	17.3	80.4	19.5
2016	78.4	18.4	76.4	17.3	80.5	19.5
2017	78.5	18.5	76.6	17.4	80.6	19.6
2018	78.6	18.6	76.7	17.5	80.7	19.7
2019	78.7	18.6	76.8	17.5	80.8	19.7
2020	78.8	18.7	76.9	17.6	80.9	19.8
2021	79.0	18.7	77.0	17.6	81.0	19.8
2022	79.1	18.8	77.1	17.7	81.1	19.9
2023	79.2	18.9	77.2	17.8	81.2	19.9
2024	79.3	18.9	77.4	17.8	81.2	20.0
2025	79.4	19.0	77.5	17.9	81.3	20.0
2026	79.5	19.0	77.6	17.9	81.4	20.1
2027	79.6	19.1	77.7	18.0	81.5	20.2
2028	79.7	19.1	77.8	18.1	81.6	20.2
2029	79.8	19.2	77.9	18.1	81.7	20.3
2030	79.8	19.3	78.0	18.2	81.8	20.3
2031	79.9	19.3	78.1	18.2	81.9	20.4
2032	80.0	19.4	78.2	18.3	82.0	20.4
2033	80.1	19.4	78.3	18.4	82.1	20.5
2034	80.2	19.5	78.4	18.4	82.1	20.6
2035	80.3	19.5	78.5	18.5	82.2	20.6
2036	80.4	19.6	78.6	18.5	82.3	20.7
2037	80.5	19.7	78.7	18.6	82.4	20.7
2038	80.6	19.7	78.8	18.6	82.5	20.8
2039	80.7	19.8	78.9	18.7	82.6	20.8
2040	80.8	19.8	79.0	18.8	82.6	20.9

**Detailed Table 1 - Period Life Expectancies (cont.)**

Calendar Year	Unisex		Male		Female	
	At birth	At age 65	At birth	At age 65	At birth	At age 65
2041	80.9	19.9	79.1	18.8	82.7	20.9
2042	81.0	19.9	79.2	18.9	82.8	21.0
2043	81.1	20.0	79.3	18.9	82.9	21.0
2044	81.1	20.0	79.4	19.0	83.0	21.1
2045	81.2	20.1	79.5	19.0	83.1	21.2
2046	81.3	20.2	79.6	19.1	83.1	21.2
2047	81.4	20.2	79.7	19.1	83.2	21.3
2048	81.5	20.3	79.8	19.2	83.3	21.3
2049	81.6	20.3	79.9	19.3	83.4	21.4
2050	81.7	20.4	80.0	19.3	83.4	21.4
2051	81.7	20.4	80.0	19.4	83.5	21.5
2052	81.8	20.5	80.1	19.4	83.6	21.5
2053	81.9	20.5	80.2	19.5	83.7	21.6
2054	82.0	20.6	80.3	19.5	83.8	21.6
2055	82.1	20.6	80.4	19.6	83.8	21.7
2056	82.2	20.7	80.5	19.6	83.9	21.7
2057	82.2	20.7	80.6	19.7	84.0	21.8
2058	82.3	20.8	80.7	19.7	84.1	21.8
2059	82.4	20.8	80.7	19.8	84.1	21.9
2060	82.5	20.9	80.8	19.8	84.2	21.9
2061	82.6	20.9	80.9	19.9	84.3	22.0
2062	82.6	21.0	81.0	19.9	84.3	22.0
2063	82.7	21.0	81.1	20.0	84.4	22.1
2064	82.8	21.1	81.2	20.0	84.5	22.1
2065	82.9	21.1	81.3	20.1	84.6	22.2
2066	82.9	21.2	81.3	20.1	84.6	22.2
2067	83.0	21.2	81.4	20.2	84.7	22.2
2068	83.1	21.3	81.5	20.2	84.8	22.3
2069	83.2	21.3	81.6	20.3	84.8	22.3
2070	83.2	21.4	81.7	20.3	84.9	22.4
2071	83.3	21.4	81.7	20.4	85.0	22.4
2072	83.4	21.5	81.8	20.4	85.0	22.5
2073	83.5	21.5	81.9	20.5	85.1	22.5
2074	83.5	21.5	82.0	20.5	85.2	22.6
2075	83.6	21.6	82.0	20.6	85.2	22.6
2076	83.7	21.6	82.1	20.6	85.3	22.7
2077	83.7	21.7	82.2	20.7	85.4	22.7
2078	83.8	21.7	82.3	20.7	85.4	22.8
2079	83.9	21.8	82.4	20.8	85.5	22.8
2080	84.0	21.8	82.4	20.8	85.6	22.8
2081	84.0	21.9	82.5	20.9	85.6	22.9
2082	84.1	21.9	82.6	20.9	85.7	22.9
2083	84.2	22.0	82.7	21.0	85.8	23.0
2084	84.2	22.0	82.7	21.0	85.8	23.0
2085	84.3	22.0	82.8	21.0	85.9	23.1

**Detailed Table 2 - Cohort Life Expectancies**

Calendar Year	Unisex		Male		Female	
	At birth	At age 65	At birth	At age 65	At birth	At age 65
1940	72.8	13.8	69.8	12.7	75.8	14.7
1941	73.1	13.9	70.2	12.8	76.1	14.9
1942	73.6	14.0	70.8	12.8	76.6	15.0
1943	73.9	14.1	71.0	12.9	76.9	15.1
1944	74.1	14.2	71.3	12.9	77.1	15.3
1945	74.4	14.3	71.6	13.0	77.3	15.4
1946	74.8	14.4	72.0	13.0	77.7	15.6
1947	75.1	14.5	72.3	13.0	78.1	15.7
1948	75.2	14.6	72.4	13.1	78.2	15.9
1949	75.4	14.7	72.5	13.1	78.3	16.0
1950	75.6	14.7	72.8	13.1	78.5	16.2
1951	75.7	14.8	72.9	13.1	78.7	16.3
1952	75.8	14.8	73.0	13.1	78.8	16.4
1953	76.0	14.9	73.2	13.1	78.9	16.5
1954	76.2	15.0	73.4	13.1	79.1	16.6
1955	76.3	15.1	73.5	13.1	79.2	16.7
1956	76.4	15.1	73.7	13.1	79.3	16.9
1957	76.5	15.2	73.8	13.2	79.3	17.0
1958	76.6	15.3	73.9	13.2	79.4	17.2
1959	76.7	15.4	74.1	13.2	79.5	17.3
1960	76.9	15.5	74.2	13.2	79.6	17.4
1961	77.0	15.6	74.4	13.3	79.8	17.5
1962	77.1	15.7	74.6	13.3	79.9	17.7
1963	77.3	15.7	74.7	13.4	80.0	17.8
1964	77.4	15.8	74.9	13.4	80.1	17.9
1965	77.6	15.9	75.1	13.5	80.2	18.0
1966	77.8	16.0	75.4	13.5	80.4	18.2
1967	78.0	16.1	75.6	13.6	80.5	18.3
1968	78.2	16.2	75.8	13.7	80.7	18.4
1969	78.4	16.3	76.0	13.7	80.8	18.5
1970	78.6	16.4	76.2	13.8	81.0	18.5
1971	78.7	16.4	76.4	13.9	81.2	18.6
1972	78.9	16.5	76.6	14.0	81.3	18.6
1973	79.1	16.6	76.8	14.1	81.4	18.7
1974	79.2	16.6	77.0	14.1	81.6	18.7
1975	79.4	16.7	77.2	14.2	81.7	18.7
1976	79.5	16.7	77.4	14.3	81.8	18.7
1977	79.7	16.7	77.6	14.4	82.0	18.7
1978	79.9	16.8	77.7	14.5	82.1	18.7
1979	80.0	16.8	77.9	14.6	82.3	18.7
1980	80.2	16.9	78.1	14.7	82.4	18.7
1981	80.3	16.9	78.3	14.8	82.5	18.8
1982	80.5	17.0	78.4	14.9	82.6	18.8
1983	80.6	17.1	78.6	15.0	82.7	18.8
1984	80.7	17.1	78.7	15.2	82.8	18.8
1985	80.8	17.2	78.8	15.3	83.0	18.9
1986	81.0	17.3	79.0	15.4	83.1	18.9
1987	81.1	17.3	79.1	15.5	83.2	18.9
1988	81.2	17.4	79.2	15.6	83.2	19.0
1989	81.3	17.5	79.3	15.7	83.3	19.0
1990	81.4	17.5	79.5	15.8	83.5	19.0



**Detailed Table 2 - Cohort Life Expectancies (cont.)**

Calendar Year	Unisex		Male		Female	
	At birth	At age 65	At birth	At age 65	At birth	At age 65
1991	81.5	17.6	79.6	15.9	83.6	19.1
1992	81.7	17.6	79.8	16.0	83.7	19.1
1993	81.8	17.7	79.9	16.1	83.8	19.1
1994	81.9	17.8	80.0	16.2	83.9	19.2
1995	82.0	17.8	80.1	16.3	84.0	19.2
1996	82.1	17.9	80.3	16.5	84.1	19.3
1997	82.2	18.0	80.3	16.6	84.2	19.3
1998	82.3	18.1	80.4	16.7	84.2	19.3
1999	82.4	18.2	80.6	16.8	84.3	19.4
2000	82.5	18.2	80.6	16.9	84.4	19.5
2001	82.6	18.3	80.7	17.0	84.5	19.5
2002	82.6	18.4	80.8	17.1	84.5	19.6
2003	82.7	18.4	80.9	17.2	84.6	19.6
2004	82.8	18.5	81.0	17.2	84.7	19.7
2005	82.9	18.6	81.1	17.3	84.8	19.7
2006	83.0	18.6	81.2	17.4	84.9	19.8
2007	83.1	18.7	81.3	17.5	85.0	19.8
2008	83.2	18.8	81.4	17.6	85.0	19.9
2009	83.3	18.8	81.5	17.6	85.1	20.0
2010	83.4	18.9	81.6	17.7	85.2	20.0
2011	83.4	19.0	81.7	17.8	85.3	20.1
2012	83.5	19.0	81.8	17.8	85.3	20.1
2013	83.6	19.1	81.9	17.9	85.4	20.2
2014	83.7	19.1	82.0	18.0	85.5	20.2
2015	83.8	19.2	82.1	18.0	85.6	20.3
2016	83.9	19.3	82.1	18.1	85.6	20.4
2017	83.9	19.3	82.2	18.2	85.7	20.4
2018	84.0	19.4	82.3	18.2	85.8	20.5
2019	84.1	19.4	82.4	18.3	85.9	20.5
2020	84.2	19.5	82.5	18.3	85.9	20.6
2021	84.2	19.6	82.6	18.4	86.0	20.7
2022	84.3	19.6	82.7	18.5	86.1	20.7
2023	84.4	19.7	82.7	18.5	86.1	20.8
2024	84.5	19.7	82.8	18.6	86.2	20.8
2025	84.5	19.8	82.9	18.6	86.3	20.9
2026	84.6	19.8	83.0	18.7	86.3	20.9
2027	84.7	19.9	83.1	18.8	86.4	21.0
2028	84.8	20.0	83.1	18.8	86.5	21.1
2029	84.8	20.0	83.2	18.9	86.5	21.1
2030	84.9	20.1	83.3	18.9	86.6	21.2
2031	85.0	20.1	83.4	19.0	86.7	21.2
2032	85.0	20.2	83.4	19.1	86.7	21.3
2033	85.1	20.2	83.5	19.1	86.8	21.3
2034	85.2	20.3	83.6	19.2	86.9	21.4
2035	85.3	20.3	83.7	19.2	86.9	21.4
2036	85.3	20.4	83.8	19.3	87.0	21.5
2037	85.4	20.5	83.8	19.3	87.0	21.5
2038	85.5	20.5	83.9	19.4	87.1	21.6
2039	85.5	20.6	84.0	19.4	87.2	21.6
2040	85.6	20.6	84.0	19.5	87.2	21.7