

## Life Expectancy – Planning for a very long life

King Tut took the throne at age 9 in 1333 BC and ruled until his death at an estimated age of 19. While this may seem like a short life, it was at a time when the average life expectancy was only about 25. Of course, life expectancy measures are for the population as a whole; in many instances life expectancy varies considerably according to class and gender. Although King Tut should have lived longer, he was the father of several children and effectively a “middle-aged” man at his death.



For most of human history, life expectancy has averaged about 25 years. From 8000 B.C. through the 15<sup>th</sup> century, life expectancy was estimated to have ranged from 20 to 30 years. In the 3000 years from King Tut’s rule to the 15<sup>th</sup> century in Europe, life expectancy lengthened only 5 years. In Medieval times the likelihood of anyone living long enough to get gray hair was very small. People living to the point where they began to get wrinkles and gray hair were often considered in some way cursed – a very different concept of what “old age” means today. Disease, famine, war and other factors all contributed to thirty-somethings dying off at an alarming rate. In fact, very few people lived to see their 40<sup>th</sup> birthday.

Then, in the 16<sup>th</sup> century life expectancy began to accelerate. Over the span of about 400 years, life expectancy increased by about 7 years. So by the end of the 19<sup>th</sup> century, life expectancy in Western Europe was about 37 years. In the 20<sup>th</sup> century life expectancy accelerated dramatically, especially in developed nations. Life expectancy at birth in the United States in 1900 was 47 years. At the end of the century it was 77 years, an increase of 64%. Similar gains have been seen throughout the world. For example, life expectancy in China was around 35 years in 1950. At century's close it had risen to around 71 years. Life expectancy in India at mid-century was around 32, by 2000 it had risen to 64 years.

Today, in the United States the average life expectancy at birth is estimated to be 78; 75 for males and 81 for females. This places the U.S. 46<sup>th</sup> out of 222 countries. Andorra, a small nation only 2 ½ times the size of Washington, D.C. and nestled between France and Spain, leads the way with an estimated life expectancy of 83. On the other hand Swaziland, which recently surpassed Botswana as the country with the world's highest known rates of HIV/AIDS infection, is the country with the lowest estimated life expectancy of only 33 years.

How high life expectancies can go is a question open for much debate and beyond the scope of this Insight. Suffice it to say that the maximum life span for humans has remained about 115–120 years throughout recorded history, despite steady improvements in life expectancy. Perhaps we can learn a thing or two from the pace of the Galapagos Land Tortoise, a reptile with a maximum life span of around 200 years!



**“To me, old age is always 15 years older than I am.” Bernard Baruch**

**“Middle age is when you've met so many people that every new person you meet reminds you of someone else.” Ogden Nash**

Then again, what would the family dynamics be like if you lived a tortoise-like life span to see 6 generations of your family? If a couple had 2 children and they each continued to have 2 children, there would be 64 great, great, great, great grandchildren by the time the couple reached age 180 – that’s a lot of college expenses and weddings to pay for! It would certainly change the nature of financial and investment planning, bringing new meaning to the words “long-term.”

### **UNITED STATES LIFE TABLE**

Current Age	Life Expectancy		
	All	Male	Female
0	78	75	80
10	78	76	81
20	78	76	81
30	79	77	81
40	80	77	82
50	81	79	82
60	82	80	84
70	85	84	86
80	89	88	90
90	95	94	95

Although no one living today will likely enjoy the next 6 generations of their family, living to age 100 is within the range of possibility. The table to the left displays the average life expectancy for people in the United States at various ages. For example, while the life expectancy of a female at birth is 80, it increases as she makes it to various age milestones; rising to 82 at age 40, up to 84 at age 60, etc. The older she gets, the longer she is expected to live. These life expectancies are averages; so half of the population will likely live even longer than these averages.

Source: National Center for Health Statistics, United States Life Tables, 2003.

Today, if someone retires at age 65 in good health they might look forward to living another 25 to 30 years - a period of time equivalent to the life expectancy throughout most of human history. This means that retirement is no longer a short period of time, but rather a new phase of life. In fact, some people are choosing never to retire, but instead are seeking a greater balance between education, work and leisure throughout their lives. So instead of asking “when might I retire?”, perhaps a better question is “how do I visualize my life when I’m in my sixties, seventies, and eighties?”

Rapidly increasing life expectancy also has important implications for investment portfolios and retirement income planning. A longer life means that investment portfolios must support the spending needs of an individual, couple or family for a longer period of time. The risk of running out of money becomes more important than avoiding market volatility in the near-term. Investments that provide for long-term growth, that is, real growth above the rate of inflation, become more important than investments that offer perceived stability. Investments like government bonds offer income and protection against loss of principal, but in the long-term are not likely to offer investors much protection against inflation, let alone a return above inflation. Rules of thumb about asset allocation (i.e., reduce your equity exposure as you get older) may result in portfolios that are not able to keep pace with required spending needs as you age.

At Madison, our approach to investment and retirement income planning factors in improving longevity, even beyond the published government estimates - our clients are a healthy lot compared to the general population! We run financial scenarios using a life expectancy of age 100. We hope that all of our clients reach this milestone happy and healthy, and with investment portfolios that can support their needs. Conservative assumptions about life expectancy and other factors help to produce investment plans that have a high probability of success, even when subjected to market volatility.

**“The quality, not the longevity, of one's life is what is important.” Martin Luther King**