## Work Life Expectancy

- Work life expectancy is the length of time an individual is expected to participate in the workforce.

- A person's work life is influenced by a variety of factors including training, educational attainment, health, marital and family responsibilities, economic opportunity, and additional sources of income.

- Work life is also influenced by unemployment and a person's voluntary or involuntary withdrawal from the workforce.

- One measure of work life expectancy is the cohort work life tables based on average labor force participation by gender, age and educational attainment. These tables factor out the probability of death, sickness, child rearing, and leaving the labor force. The work life tables do not account for a person's health, family responsibilities, marital status, economic need, access to and type of retirement savings plan, personal preferences, economic opportunity, and additional sources of income.

- Three probability components are included in the work life calculation:
  a. Probability of life
  b. Probability of labor force participation
  c. Probability of employment

- Each year of potential work is adjusted for the probability of life—that is, the probability that the person will live through that year.

- The probability of life is computed using a conditional probability whereby the number of persons alive at a given age is calculated in relation to the number living through that age to the next year of life.

- Probability of life is developed from data published by the U.S. Department of Health and Human Services, National Center for Health Statistics, Vital Statistics of the United States.

- Labor force participation includes all persons employed or actively seeking employment.

- The probability of employment measures the success rate of workforce participants in finding employment.

- The U.S. Department of Labor published the first U.S. work life tables in 1986. Updates to the 1986 broad cohort work tables have been published in 1995, 1996, 1997, and 2011.

- The 2011 work life tables were referenced to provide a mid-point statistical average of the number of years a person will be working over their remaining total life expectancy.[1]

- For each year of a person's remaining life expectancy, there is a statistical average probability that a person will be alive to work and either seeking work or actively employed.

- The underlying assumption in the work life table is that the entire cohort of persons in a given work life table share a similar level of labor force participation and ability to find employment[2] over their remaining life expectancy.

- For example, a man age 57.5, pre-injury employed with a high school degree, has a life expectancy to approximately age 80.5 years[3] with approximately 8.1 years of remaining work life and 14.9 years of work force inactivity.

- There are two important considerations in interpreting these work life results:

    1) The 8.1 years of remaining work life is the statistical average for all men in the cohort. Approximately half of all men in the cohort will work more than 8.1 years and half will work less.

    2) The decision to exit the work force is dependent on a number of factors, including health and available financial resources to fund retirement. Individuals with company-funded defined benefit retirement plans and adequate personal savings would more be more likely to retire earlier than individuals with no employer retirement benefits and limited savings.

---

[1] James Ciecka , Gary Skoog, and Kurt Krueger, A Markov Process Model of Work Life Expectancies by Educational Attainment. 2011. *Journal Forensic Economics* 22(2), pages 61-82.

[2] Life expectancy is assumed to be the same for all persons in the cohort regardless of employment status.

[3] Life expectancy varies by race.

- Typically, in measuring economic damages, the assumption is that the injured person would continue working at pre-injury work levels, without interruption for the remainder of their expected worklife. If the injured person, pre-injury, worked full-time for extended periods of time, it's unreasonable to assume that but for the injury, they would suddenly have periods of work inactivity. In the above example, it would typically be assumed that a person who worked full-time prior to the injury would, but for the injury, continue to work full time for 8.1 years and then have 14.9 years of inactivity.

- An alternative speculative approach would be to assume the person would spread the 8.1 years of remaining work life over their twenty-three years of remaining life expectancy.

- The work life tables rely on historical statistical averages to measure the probability of someone participating in the workforce and being successful in finding employment.

- The most recent work life tables are based on data for the period from January 2005 and continuing through December 2009. The work life tables do not necessarily reflect current economic reality for employees preparing for retirement. The recent recession has had a devastating effect on real estate values and retirement portfolios and disproportionately impacted the middle and lower income class. Refer to Figure 1 for additional information.

- Thirty-one percent of workers report they had to dip into their savings to pay for basic expenses within the past 12 months.[4]

- These inadequate retirement savings are further diminished by the low interest rate yields on bank savings accounts and certificates of deposit (CDs) relative to inflation that result in an erosion of purchasing power over time.

- The majority of workers and retirees are not financially prepared to provide for their long-term care needs. Refer to Figure 2 for additional information.

- Therefore, in addition to considering work life tables, it's also important to consider a person's post-retirement sources of income in determining their most likely work life expectancy.

---

[4] EBRI, 2013, page 19

*FIGURE 1*
Change in Wealth of American Households[5]

**Table 1. Wealth of American households before and after the Great Recession (in 2013 dollars)**

| | 2003 | 2007 | 2009 | 2013 |
|---|---|---|---|---|
| **Mean** | **337,233** | **423,592** | **411,178** | **308,276** |
| **Percentiles** | | | | |
| 5th | -9,749 | -13,482 | -27,689 | -27,416 |
| 25th | 10,129 | 6,966 | 2,723 | 3,200 |
| **50th (median)** | **87,992** | **98,872** | **70,801** | **56,335** |
| 75th | 302,221 | 367,959 | 302,412 | 260,405 |
| 90th | 736,853 | 934,223 | 819,824 | 763,099 |
| 95th | 1,192,639 | 1,629,133 | 1,420,304 | 1,364,834 |

**Figure 1. Change in wealth since 1984 for various percentiles (in 2013 dollars)**

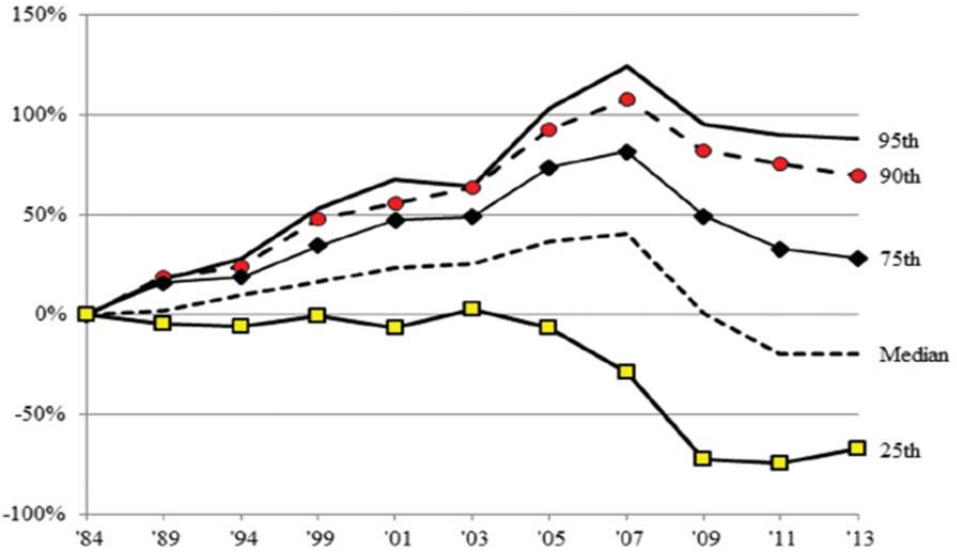



FIGURE 2

[5] Fabian Pfeffer, Sheldon Danziger, and Robert Schoeni, *Wealth Levels, Wealth Inequality, and the Great Recession,* Russell Sage Foundation, June 23, 2014, The recession (2007-2013) *"had a major impact on the net worth of families across the socioeconomic spectrum, it disproportionately affected households at the bottom of the wealth distribution. These households lost the largest share of their total wealth. As a result, wealth inequality in theU.S. us has been significantly exacerbated since the onset of the recession. As of the end of 2013, the authors note that there have been few signs of significant recovery from the downturn."*

## Retirement Savings

Figure 19
**Total Savings and Investment Reported by Workers, Among Those Providing a Response**
(not including value of primary residence or defined benefit plans)

| | 2003 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|
| Less than $1,000 | 55% | 36% | 20% | 27% | 29% | 30% | 28% |
| $1,000 - $9,999 | | | 19 | 16 | 17 | 18 | 18 |
| $10,000 - $24,999 | | 13 | 13 | 11 | 10 | 12 | 11 |
| $25,000 - $49,999 | 15 | 12 | 11 | 12 | 11 | 10 | 9 |
| $50,000 - $99,999 | 11 | 12 | 12 | 11 | 9 | 10 | 10 |
| $100,000 - $249,999 | 11 | 15 | 12 | 11 | 14 | 11 | 12 |
| $250,000 or more | 7 | 12 | 12 | 11 | 10 | 10 | 12 |

Source: Employee Benefit Research Institute and Mathew Greenwald & Associates, Inc., 2003-2013 Retirement Confidence Surveys.

Figure 20
**Total Savings and Investment Reported by Retirees, Among Those Providing a Response**
(not including value of primary residence or defined benefit plans)

| | 2003 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|
| Less than $1,000 | 54% | 51% | 23% | 27% | 28% | 28% | 31% |
| $1,000 - $9,999 | | | 17 | 15 | 14 | 19 | 16 |
| $10,000 - $24,999 | | 9 | 16 | 14 | 12 | 8 | 8 |
| $25,000 - $49,999 | 9 | 9 | 13 | 11 | 6 | 9 | 9 |
| $50,000 - $99,999 | 11 | 6 | 9 | 6 | 11 | 8 | 9 |
| $100,000 - $249,999 | 13 | 13 | 10 | 15 | 12 | 12 | 10 |
| $250,000 or more | 12 | 12 | 12 | 12 | 17 | 15 | 17 |

Source: Employee Benefit Research Institute and Mathew Greenwald & Associates, Inc., 2003-2013 Retirement Confidence Surveys.

- Many persons nearing the end of their work life face the financial necessity to continue working at least until eligible for Social Security benefits.

- Social Security retirement benefits[6] (OASDI) represent the single most important source of income for persons age 65 and older.[7]
  - Individuals age 65 and older with the lowest income, 1st income quartile, rely on Social Security for 88.5% of their total income.
  - The 2nd and 3rd income quartile relies on Social Security for 88.8% and 77.3% of their total income.
  - As income from investments, savings and retirement plans increase, Social Security becomes a smaller percent of total income sources for persons age 65 and older. Persons in the 4th income quartile rely on Social Security for only

[6] OLD AGE, SURVIVORS AND DISABILITY INSURANCE PROGRAM (OASDI) is the official name for social security in the United States. The OASDI is a comprehensive federal benefits program that provides benefits to retirees, disabled people, and their survivors.

[7] Distribution Of Income From All Sources By Income Quartile, Selected Years 1974-2010, Table 7.5, EBRI Databook, Updated November 2011.

47.8% of their income. Social Security represents only 17.1% of income for the top 10% wealthiest individuals age 65 and older.

  - Approximately 46% of all unmarried persons rely on Social Security for 90% or more of their income.[8]

- The average monthly Social Security benefit averages $1,269 per person.[9]

- Nearly nine out of ten individuals age 65 and older receive Social Security benefits.

- According to the rules and formulae of the Social Security Administration the age at which a person is eligible for retirement benefits varies according to one's date of birth.

- Refer to Figure 3 for additional information.

[8] Social Security Administration 2013 Fact Sheet
[9] Social Security Administration 2013 Fact Sheet

FIGURE 3
Social Security Benefits - Normal Retirement Age

**Social Security Benefits - Normal Retirement Age**

| Year of birth | Age |
|---|---|
| 1937 and prior | 65 |
| 1938 | 65 and 2 months |
| 1939 | 65 and 4 months |
| 1940 | 65 and 6 months |
| 1941 | 65 and 8 months |
| 1942 | 65 and 10 months |
| 1943-54 | 66 |
| 1955 | 66 and 2 months |
| 1956 | 66 and 4 months |
| 1957 | 66 and 6 months |
| 1958 | 66 and 8 months |
| 1959 | 66 and 10 months |
| 1960 and later | 67 |

- Over the past twenty years, labor force participation for persons 65 and older has increased, with dramatic increases in the past decade.

- Refer to Figure 4 for additional information.

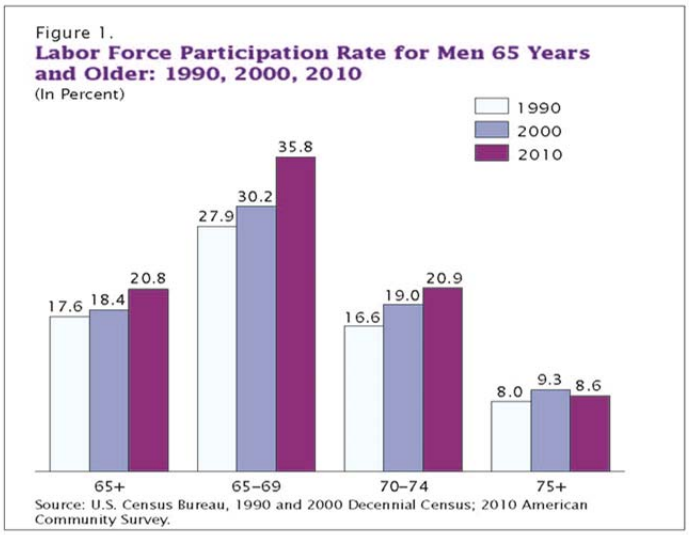
- At the same time, older Americans are living longer with the periods of illness at the end of life growing shorter.[10] This means that older adults who choose to work will have the opportunity for an even more extended work life than in the past.

- In a dramatic trend shift, workers 65 and older now work more full-time jobs as compared to part-time employment.

- Refer to Figure 5 for additional information.

[10] U.S. Life Expectancy Tables and Healthy Life Expectancy

FIGURE 4
Labor Force Participation



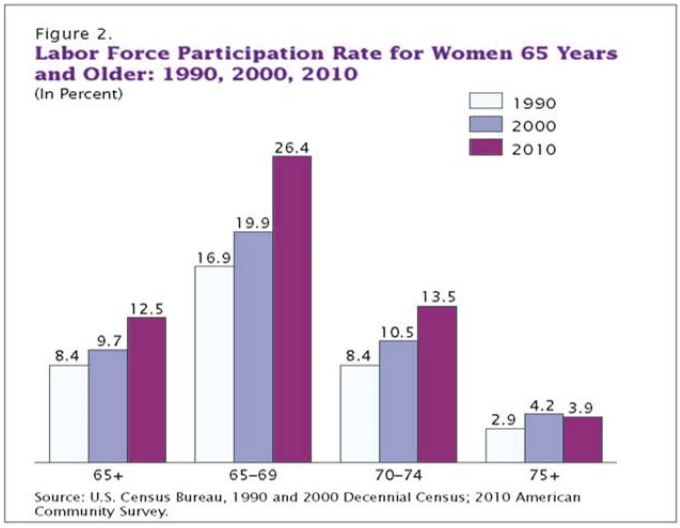
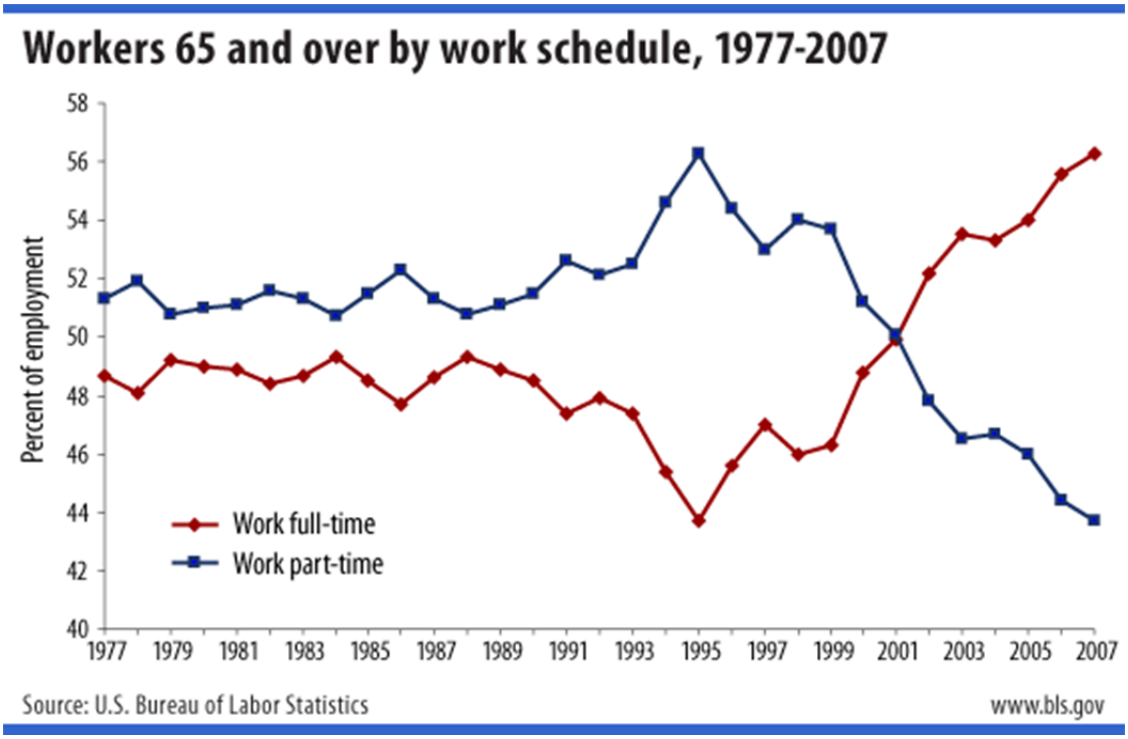



FIGURE 5
Workers 65 and Over by Work Schedule




- Work life tables serve as a benchmark but do not necessarily reflect a specific person's need or desire to continue working.

- Personal preference might be to retire early, but without adequate retirement funds, working as long as one is physically able is the more likely scenario for low- and middle-income persons.

- Plaintiff has less than $1,000 in cash savings, $1,700 in credit card debt, no 401K plan, drives a 1990 Nissan Maxima and owes $72,672 on his residence. He owns two rental properties and has a basic retirement plan that will provide $228 per month plus $1,039 in Social Security benefits at age 66. His monthly mortgage payment is $408/mo. His total income from rental properties, before taxes, totals $7,100 per year.

- Plaintiff has an economic necessity to continue working at least until he qualifies for Social Security retirement at age 66.

- According to the work life tables, Plaintiff has 8.1 years of remaining work life.

- Assuming that he would have continued working full-time, as he was at the time of the collision, he would have completed his work life at age 65.6 years.

- Plaintiff is not eligible for Social Security benefits until age 66.

- If Plaintiff had worked until age 66, he would have had 8.5 years of remaining work life, or five months more than indicated by the work life tables.

- Plaintiff stated in the PI Questionnaire that he intended to work at least to age 67.

- I have conservatively assumed that Plaintiff' will exit the work force at age 66.