



Economic Valuation of

Dan Smith

Produced on:

January 3, 2025

Juris Economics, Inc.

A Fintech Company

12555 High Bluff Dr., Suite 150
San Diego, CA 92130
(858) 477-9537
CustomerService@Juriseconomics.com

Methodologies & Executive Summary

This economic assessment has been prepared utilizing the demographics of Dan Smith to generate a representative life model. The enclosed report depicts the anticipated economic contributions provided from October 15, 2024 to December 12, 2052. Results are provided in discounted present value amounts.

Statistical information is derived from demographics on the statistical date of valuation. Financial information is derived from calculations based upon the financial date of valuation. Base values, growth rates, and discount rates are separately stated in each section where appropriate. In this report, the statistical date of valuation is October 15, 2024 and the financial date of valuation is January 3, 2025.

The change in value over time for any particular item is commonly referred to as the growth rate. Increasing a known value by the growth rate provides the expected value at a future point in time in undiscounted terms. Future value is the amount one will pay in the future.¹

$$FV = PV(1 + r)^n$$

In order to determine the value today of a future value amount, the discount rate is used. The discount rate is the expected return on an investment or set of investments over time. In the legal context, a risk free rate is generally utilized. When the discount rate is applied to a future amount, the present value is found. Present value is the amount one will pay today for the item in the future.²

$$PV = FV \frac{1}{(1 + r)^n}$$

The life model of Dan Smith is for a Male born on October 15, 1974. Life Tables are published by the *Centers for Disease Control, National Vital Statistics Reports*. Here, *National Vital Statistic Reports, Vol. 72, No. 12, (2021)* provides life expectancy in the United States and yields a 28.159 year life expectancy. A Statistical life expectancy of 28.159 years has been utilized in this report. This results in an end of life expectancy occurring on December 12, 2052.³

The total present value of economic contributions and medical needs from October 15, 2024 to December 12, 2052 amounts to \$2,109,874.27. Periodic values are provided in the following sections.

¹ Abbreviations: Present Value (PV), Future Value (FV), growth rate (g), and Number of Periods (n)

² Abbreviations: Present Value (PV), Future Value (FV), discount rate (d), and Number of Periods (n)

³ The term “statistical” is used when a particular datapoint derives from a study or set of studies. The term “custom” is used when a datapoint has been selected by the user. Where a custom datapoint it utilized, information to support the assumption may be gathered from the user.

ECONOMIC VALUATION SUMMARY PRESENT VALUES

EARNINGS & INCOME

Past	(10/15/2024 - 1/03/2025)	\$22,521.16
Future	(1/03/2025 - 12/12/2052)	\$1,461,127.43
Total	(10/15/2024 - 12/12/2052)	\$1,483,648.59

HOUSEHOLD SERVICES

Past	(10/15/2024 - 1/03/2025)	\$4,395.03
Future	(1/03/2025 - 12/12/2052)	\$621,830.65
Total	(10/15/2024 - 12/12/2052)	\$626,225.68

TOTAL

\$2,109,874.27

DEMOGRAPHICS & STATISTICAL INFORMATION

DEMOGRAPHICS

Name:	Dan Smith
Date of Birth:	10/15/1974
Marital Status:	Married
Number of Children:	0
Level of Education:	Bachelors Degree
Level of Employment:	Employed Full-Time

STATISTICAL INFORMATION⁴

Statistical Date of Valuation:	10/15/2024
Financial Date of Valuation:	1/03/2025
Worklife Expectancy (Years):	15.010
Statistical Retirement Date:	10/19/2039
Life Expectancy (Years):	28.159
Statistical End of Life Expectancy:	12/12/2052
Life Expectancy Model:	<i>United States Life Tables, 2021 Nat. Vit. Stat. Rep., Vol. 72, No. 12.</i>

⁴ Statistical Information is derived from demographics on the Statistical Date of Valuation.

Earnings & Income Summary

This section looks at the value of financial contributions of Dan Smith over time. Financial contributions may be inclusive of employment earnings, which occur while an individual is active in the workforce, and passive income streams such as retirement plans or social security, that occur after leaving the workforce. Employment benefits such as health insurance, retirement contributions, or vacation benefits may also be included in the calculation of total compensation.

Worklife expectancy measures the number of additional years an individual is expected to remain in the workforce. Worklife expectancy has been calculated using an average from reports as described in the *References* section. A 50 year old Male, Employed Full-Time, whose educational level is Bachelors Degree, has a statistical worklife expectancy of 15.01 years. A Statistical worklife expectancy of 15.01 years has been utilized in this report.⁵

Employment and retirement income is derived from statistical and/or individual references. For statistical references, the *Bureau of Labor Statistics* and *Social Security Administration* have been consulted.^{6,7} For individual references, please consult with the individual generating this report. If there are multiple sources of financial contributions, those have been identified separately below. Period values provide the summary of all financial contributions during the period.

Rates

Source	Discount Rate	Growth Rate	Net Discount Rate
Insurance Underwriters	3.50%	2.75%	0.75%

Base Values

Source	Period Start	Period End	Annual Income	Income @ Date
Insurance Underwriters	6/01/2016	10/19/2039	\$97,030.00	5/01/2022

⁵ The term “statistical” is used when a particular datapoint derives from a study or set of studies. The term “custom” is used when a datapoint has been selected by the user. Where a custom datapoint it utilized, information to support the assumption may be gathered from the user.

⁶ Bureau of Labor Statistics, Occupational Employment and Wage Statistics, May 2022.

⁷ <https://www.ssa.gov/OACT/quickcalc/>

Earnings & Income Summary

Period Values

Period Start	Period End	Periodic Present Value
10/15/2024	1/03/2025	\$22,521.16
1/03/2025	10/14/2029	\$490,169.74
10/15/2029	10/14/2036	\$686,994.43
10/15/2036	10/14/2039	\$283,195.41
10/15/2039	10/18/2039	\$767.86

Household Services Summary

Household Services measure the value of contributions that are provided within the family unit. The Bureau of Labor Statistics, American Time Use Survey (ATUS) measures the amount of time people spend doing various activities. The ATUS provides estimates of how, where, and with whom Americans spend their time and provides data on nonmarket activities such as childcare. The ATUS has been used to measure the value of unpaid work, specifically household activities. Those findings have been produced in various articles and reports.

Statistical reports on the value of household production have been used to quantify the value of household services provided by Dan Smith. The amount of household services provided vary based upon employment status and household demographics. Where applicable, it is assumed that children leave the home on their 18th birthday. With regard to the value of household services, regional wage adjustments have been made for the state of California.

Rates

Period Start	Period End	Discount Rate	Growth Rate	Net Discount Rate
10/15/2024	12/12/2052	3.50%	2.75%	0.75%

Household Services Summary

Statistical Values

Period Start	Period End	Weekly Hours	Base Hourly Rate	Hourly Rate ⁸	State Adj. ⁹
10/15/2024	10/15/2024	16.47	22.03	23.58	1.14
10/15/2024	1/03/2025	16.47	22.03	23.58	1.14
1/03/2025	1/03/2025	16.47	22.03	23.72	1.14
1/03/2025	10/15/2029	16.47	22.03	23.72	1.14
10/15/2029	10/15/2036	16.02	22.05	22.90	1.14
10/15/2036	10/15/2039	16.02	22.05	21.73	1.14
10/15/2039	10/19/2039	16.02	22.05	21.25	1.14
10/19/2039	10/20/2039	16.02	22.05	21.25	1.14
10/20/2039	10/15/2049	25.74	21.95	21.15	1.14
10/15/2049	12/12/2052	21.23	22.07	19.73	1.14

⁸ Hourly rate in discounted present value terms.

⁹ The state adjustment factor is applied to correct base values for regional wage differences.

Household Services Summary

Period Values

Period Start	Period End	Periodic Present Value
10/15/2024	1/03/2025	\$4,395.03
1/03/2025	10/15/2029	\$95,657.19
10/15/2029	10/15/2036	\$130,559.39
10/15/2036	10/15/2039	\$53,847.81
10/15/2039	10/19/2039	\$194.49
10/19/2039	10/20/2039	\$48.62
10/20/2039	10/15/2049	\$273,291.59
10/15/2049	12/12/2052	\$68,231.56

References & Statistical Resources

Arias, E., Xu, J., and Kochanek, K., et al. United States Life Tables 2021. *National Vital Statistics Reports*; Vol. 72, No. 12. Hyattsville, MD: National Center for Health Statistics. 2023.

Expectancy Data, *The Dollar Value of a Day: 2022 Dollar Valuation*, Prairie Village, Kansas, 2024.

Kurt V. Krueger. 2015. "Personal Consumption by Family Type and Household Income," *Journal of Forensic Economics* 25(2): pp. 2003-2020.

Daniel L. Millimet, Michael Nieswiadomy, Hang Ryu, and Daniel Slottje. 2003. "Estimating worklife expectancy: an econometric approach," *Journal of Econometrics* 113: pp. 83-113.

Hugh Richards, M.S. and Michael Donaldson, Ph.D. *Life and Worklife Expectancies*. Tucson, Arizona. 2010.

Michael R. Ruble, Robert T. Patton, and David M. Nelson. 2019. "Patton-Nelson Personal Consumption Tables 2016-17," *Journal of Legal Economics* 25(1-2): pp. 75-89.

Gary R. Skoog, James E. Ciecka, and Kurt V. Krueger. "The Markov Process Model of Labor Force Activity: Extended Tables of Central Tendency, Shape, Percentile Points, and Bootstrap Standard Errors," *Journal of Forensic Economics* 22(2), 2011.

Gary R. Skoog, James E. Ciecka, and Kurt V. Krueger. "The Markov Model of Labor Force Activity 2012-17: Extended Tables of Central Tendency, Shape, Percentile Points, and Bootstrap Standard Errors," *Journal of Forensic Economics* 28(1-2), 2019.