

DATA POINT

February 13, 2025

HHS Standard Values for Regulatory Analysis, 2025

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Key Points

- This Data Point updates several standard monetary values used in regulatory impact analyses developed by the U.S. Department of Health and Human Services. All estimates are reported in constant 2024 dollars unless otherwise noted.
- HHS's current central estimate of the value per statistical life is \$13.6 million.
- This Data Point also reports HHS's full range of current and future estimates of the value per statistical life and related estimates including the value per statistical life year and value per quality-adjusted life year.
- HHS's current default estimate of the hourly value of time for unpaid activities is \$19.75.
- The current monetary threshold associated with the requirements of the Unfunded Mandates Reform Act is about \$187 million.
- This Data Point and its recommendations will be updated annually or in response to any revisions to guidance on regulatory analysis.

Background

The U.S. Department of Health and Human Services (HHS) analyzes the benefits, costs, and other impacts of significant proposed and final rulemakings, consistent with the requirements of several executive orders and statutes. HHS develops these analyses according to technical guidance published by the U.S. Office of Management and Budget (OMB)² covering all Federal agencies and HHS *Guidelines* developed and maintained by the Office of the Assistant Secretary for Planning and Evaluation (ASPE). 3

Each year, ASPE updates its default recommendations for several key inputs commonly used in HHS regulatory impact analyses (RIAs). This Data Point updates and reports HHS's estimates of the value per statistical life (VSL), other values derived from the VSL estimates, and an estimate of the hourly value of time for unpaid activities. This Data Point also updates the monetary threshold used for determinations related to the Unfunded Mandates Reform Act of 1995. All estimates are reported in constant 2024 dollars unless otherwise noted. Unrounded estimates are available in a supplemental table to this Data Point.⁴

¹ This Data Point focuses on the analytic requirements of <u>Executive Order 12866 on Regulatory Planning and Review</u>, <u>Executive Order 13563 on Improving Regulation and Regulatory Review</u>, <u>Executive Order 14192 on Unleashing Prosperity Through Deregulation</u>, and the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4).

² U.S. Office of Management and Budget. 2003. <u>Circular A-4, Regulatory Analysis</u>.

³ U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. 2016. <u>Guidelines for</u> Regulatory Impact Analysis.

⁴ Please refer to the landing page of this Data Point for a link to the most recent version of the supplementary table. Kearsley, A. <u>HHS Standard Values for Regulatory Analysis, 2025</u>. Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. February 2025.

Estimates of the Value per Statistical Life

The HHS *Guidelines* discuss an approach to valuing mortality risk reductions based on estimates of individual willingness to pay, commonly referred to as the value per statistical life. HHS's VSL estimates are based on a criteria-driven literature review commissioned by ASPE to identify values that are suitable for use in its regulatory impact analyses.⁵ The *Guidelines* and an appendix published subsequently⁶ provide background information on the VSL estimates, including technical guidance on applying the estimates and the process for updating these values.

The VSL estimates reported in the literature review correspond to a 2013 base year. We update these values to a 2024 base year by adjusting for inflation and changes in real income. These adjustments increase the VSL estimates in nominal terms by about 49% compared to 2013. From the 2024 base-year VSL estimates, we report estimates for 2025 and future years. The VSL estimates increase over time in real terms, consistent with a long-term annual growth rate for real earnings of 1.1% and an assumption that the VSL income elasticity is 1.0. For mortality risk changes occurring in 2025, we adopt \$6.3 million, \$13.6 million, and \$20.7 million for the low, central, and high estimates of VSL, respectively. For impacts in other years, including the base year, please refer to Table 1 or the unrounded estimates available in a supplemental table to this Data Point.

Year	Low Estimate	Central Estimate	High Estimate	
2024 (base year)	\$6.3 million	\$13.4 million	\$20.4 million	
2025	\$6.3 million	\$13.6 million	\$20.7 million	
2026	\$6.4 million	\$13.7 million	\$20.9 million	
2027	\$6.5 million	\$13.9 million	\$21.1 million	
2028	\$6.5 million	\$14.0 million	\$21.4 million	
2029	\$6.6 million	\$14.2 million	\$21.6 million	
2030	\$6.7 million	\$14.3 million	\$21.8 million	
2031	\$6.8 million	\$14.5 million	\$22.1 million	
2032	\$6.8 million \$14.7 million		\$22.3 million	
2033	\$6.9 million	\$14.8 million	\$22.6 million	
2034	\$7.0 million	\$15.0 million	\$22.8 million	

Table 1. VSL Estimates by Year (constant 2024 dollars)

⁵ Robinson, L.A. and Hammitt, J.K., 2016. "Valuing reductions in fatal illness risks: Implications of recent research." *Health Economics*, 25(8), pp. 1039-1052.

⁶ U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. 2021. <u>Appendix D: Updating Value per Statistical Life (VSL) Estimates for Inflation and Changes in Real Income</u>.

⁷ The literature review provides population-average values in 2013 dollars at 2013 income levels, which range from \$4.2 million to \$13.7 million with a mid-point of \$9.0 million. HHS uses these values as the basis of its low, high, and central VSL estimates, respectively.

⁸ U.S. Bureau of Labor Statistics. Consumer Price Index for All Urban Consumers (CPI-U), Not Seasonally Adjusted. Series ID: <u>CUURO000SAO</u>. Annual figures for 2013 to 2024.

⁹ U.S. Bureau of Labor Statistics. Weekly and hourly earnings data from the Current Population Survey, Not Seasonally Adjusted. Series ID: LEU0252881600. Annual figures for 2013 to 2024.

¹⁰ Congressional Budget Office. March 2024. <u>The Long-Term Budget Outlook: 2024 to 2054</u>. Table C-1. Average Annual Values for Additional Economic Variables That Underlie CBO's Extended Baseline Projections: Growth of Real Earnings per Worker, Overall, 2024-2054.

Estimates Derived from the Value Per Statistical Life

Value per Statistical Life Year

The HHS *Guidelines* outline HHS's approach to estimating the Value per Statistical Life Year (VSLY), which is used in analyses that monetize changes to life expectancy measured in years. This approach is designed to be consistent with the VSL estimates, life expectancy data, and the approach to discounting used in regulatory analysis. HHS computes VSLY by dividing VSL by an estimate of discounted future life years. For the denominator, we calculate the expected present value of remaining life years for an individual 40 years of age, consistent with the average age reported in the literature review of VSL studies, accounting for age-specific survival probabilities. According to the most recent life expectancy data, ¹¹ an individual 40 years of age has a remaining life expectancy of 38.8 years. When applying a 3% discount rate, the present value of remaining life expectancy is 22.5 years; and for a 7% discount rate, 13.5 years. Table 2, below, reports the intermediate calculation of expected life years (LY), and Table 3 reports the range of VSLY estimates, which apply the measure of expected LYs to the full range of VSL estimates. ¹² For impacts occurring in 2025 that will result in changes to life expectancy measured in years, we adopt \$604,000 as the central estimate of VSLY for analyses using a 3% discount rate, and \$1,006,000 for analyses using a 7% discount rate.

Value per Quality-Adjusted Life Year

The HHS *Guidelines* discuss several approaches to valuing morbidity risk reductions. One approach uses quality-adjusted life years (QALYs), a nonmonetary measure that integrates the duration and severity of illness. QALYs are derived by multiplying the amount of time an individual spends in a health state by a measure of the health-related quality of life associated with that state. To quantify benefits using this approach, analysts multiply estimates of the change in QALYs by a monetary value per QALY (VQALY). HHS computes VQALY similar to VSLY, except this metric incorporates measurements of age-varying, but otherwise population-average, health-related quality-of-life scores. Based on these scores and the data and other assumptions used to compute remaining life expectancy, we calculate that an individual 40 years of age has an expected 32.2 remaining QALYs. When applying 3% and 7% discount rates, this is a present value of 18.9 QALYs and 11.6 QALYs, respectively. Table 2, below, reports the intermediate calculation of future QALYs, and Table 3 reports the range of VQALY estimates, which apply the measure of future QALYs to the full range of VSL estimates. For morbidity risk or other health-related quality-of-life changes occurring in 2025, we adopt \$717,000 as the central estimate of VQALY for analyses using a 3% discount rate, and \$1,175,000 for analyses using a 7% discount rate.

Summary of Estimates and Sensitivity Analyses of Alternative Discount Rates

Table 3 presents estimates of the range of VQALY and VSLY estimates for impacts occurring in 2024 using 3% and 7% discount rates. For impacts in future years, analysts should adjust these estimates by 1.1% per year, consistent with projected real earnings, ¹⁴ or apply the unrounded estimates available in a supplemental table to this Data Point.

¹¹ Centers for Disease Control and Prevention. November 7, 2023. <u>United States Life Tables, 2021</u>. National Vital Statistics Reports, Vol. 72, No. 12. Table 1. Life table for the total population: United States, 2021.

 $^{^{12}}$ As one example calculation, \$513,000 \approx \$13.5 million / 26.5, where \$13.5 million is the central estimate of VSL in 2025 and 26.5 is the expected present value of remaining life years at age 40.

¹³ Hamner, J., W.F. Lawrence, J.P. Anderson, R.M. Kaplan, and D.G. Fryback. 2006. "Report of Nationally Representative Values for the Noninstitutionalized US Adult Population for 7 Health-Related Quality-of-Life Scores." *Medical Decision Making* 26(4), pp. 391-400.

¹⁴ For example, VQALY_{year} = VQALY₂₀₂₅ * (1 + 1.1%)^{year-2025}, where VQALY₂₀₂₅ is reported in Table 3.

Table 2. Expected Present Value (PV) of LYs and QALYs at Age 40

Discount Rate	PV LY	PV QALY
Undiscounted	38.8	32.2
3%	22.5	18.9
7%	13.5	11.6

Table 3. VSLY and VQALY Estimates for 2025 (constant 2024 dollars)

Estimate	VSLY		VQALY	
Discount Rate	3%	7%	3%	7%
Low	\$282,000	\$469,000	\$335,000	\$549,000
Central	\$604,000	\$1,006,000	\$717,000	\$1,175,000
High	\$920,000	\$1,531,000	\$1,091,000	\$1,789,000

Estimates of the Value of Time

While developing the HHS *Guidelines*, ASPE commissioned research on methods for valuing time in HHS RIAs. One outcome of this effort was a report that examined the conceptual framework and general approach for monetization, considered contemporaneously available research and methods used by other U.S. regulatory agencies, and refined the approach for valuing changes in time use discussed in the HHS *Guidelines*. The report recommends applying a value of time based on compensation-based measures, such as hourly wages or annual salaries, with default assumptions for adjustments to these measures that vary depending on whether the impacts affect time spent on paid activities, or unpaid activities.

Value of Time, Paid Activities

Many regulatory actions impose or alleviate costs on regulated entities that can be quantified using estimates of the incremental time spent on regulatory activities, such as reviewing the new regulations, developing protocols for compliance, collecting and reporting data, and training staff on implementation. When valuing changes in time use for on-the-job activities, the HHS *Guidelines* recommend applying compensation-based measures that account for taxes and benefits, as well as indirect costs not associated with production of a particular good or provision of a specific service. These indirect costs include overhead costs such as space rental and utilities, and other costs such as office supplies and administrative oversight. As a default assumption when industry- or program-specific data are not readily available, analysts may assume that the sum of these additional costs are equal to pre-tax wages, and calculate a fully loaded wage rate by multiplying measurements of pre-tax wages by 2. For example, if a regulatory action will result in additional time spent drafting legal documents, an analyst might identify a median pre-tax hourly wage for lawyers of \$72.15, ¹⁶ double this value to produce a fully loaded wage rate of \$144.29 per hour, and monetize the impact by multiplying the fully loaded wage rate by the hours spent on these activities. For rules requiring substantial amounts of labor, such as the hiring of additional employees, analysts might instead estimate the number of new employees needed and perform a similar calculation using annual salaries instead of hourly wages.

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¹⁵ U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. 2017. <u>Valuing Time in U.S. Department of Health and Human Services Regulatory Impact Analyses: Conceptual Framework and Best Practices.</u>

¹⁶ Bureau of Labor Statistics. Occupational Employment and Wage Statistics. <u>Occupational Employment and Wages, May 2023, 23-1011</u> <u>Lawyers</u>. \$70.08 hourly wage converted to 2024 constant dollars using CPI-U and reported with rounding. Unrounded inflationadjusted hourly wage used in the subsequent calculation.

Value of Time, Unpaid Activities

Regulatory actions can also increase or decrease the time spent on certain activities by the general public outside of a work setting. For example, a regulatory action could affect the amount of time individuals spend filling out forms to receive government benefits, or the time consumers spend reading information contained on product labels. Such impacts can be quantified in regulatory impact analyses using a value of time that is based on the opportunity cost of foregone leisure. The HHS *Guidelines* recommend an hourly value of time based on after-tax wages to monetize changes in time use for unpaid activities. For this calculation, we start with median pre-tax hourly wage, measured across all occupations, of \$23.79.¹⁷ We adjust this hourly rate downwards by an estimate of the effective tax rate for median income households of about 17%, resulting in a post-tax hourly wage rate of \$19.75, and adopt this as our default estimate of the hourly value of time for changes in time use for unpaid activities.

Unfunded Mandates Reform Act Threshold

The Unfunded Mandates Reform Act of 1995 (UMRA) "generally requires that each agency conduct a cost-benefit analysis; identify and consider a reasonable number of regulatory alternatives; and select the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule (or explain why it does not do so) before promulgating any proposed or final rule that includes a Federal mandate that may result in expenditures of more than \$100 million (approximately \$200 million with the inflation adjustment) in at least one year by State, local, and Tribal governments, in the aggregate, or by the private sector. Each agency issuing a rule with relevant effects over that threshold must also seek input from State, local, and Tribal governments." Every year, HHS updates the UMRA monetary threshold for inflation using the gross domestic product implicit price deflator. We compare the index values for the most recent full year of data (2024) to the index for 1995. The index values used are 125.220 for 2024 and 66.939 for 1995, from which we compute a multiplier of 1.87. This multiplier, combined with the base-year threshold of \$100 million, results in an inflation-adjusted monetary threshold of \$187 million, reported in 2024 dollars.

¹⁷ Bureau of Labor Statistics. Occupational Employment and Wage Statistics. <u>May 2023 National Occupational Employment and Wage Estimates</u>. 00-0000 All Occupations. \$23.11 hourly wage converted to 2023 constant dollars using CPI-U.

¹⁸ U.S. Office of Management and Budget, Office of Information and Regulatory Affairs. January 15, 2025. Report to Congress on the Benefits and Costs of Federal Regulations and Agency Compliance with the Unfunded Mandates Reform Act, FY 2023.

¹⁹ Bureau of Economic Analysis. National Income and Product Accounts. <u>Table 1.1.9. Implicit Price Deflators for Gross Domestic Product.</u> Accessed Thursday, January 30, 2025.

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