

HOW THE RISE SCORE™ SEEKS TO HELP ANSWER THE CRITICAL QUESTION ALL AMERICANS WILL FACE - DO I HAVE ENOUGH MONEY SAVED FOR RETIREMENT?

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2024 marks the largest surge of Americans turning 65 in U.S. history - Peak 65[®]. More than 4.1 million Americans will retire each year (11,200+ every day) through 2027, but very few people have a true sense of where they stand when it comes to making sure they have enough money to fund their lifestyle in retirement.¹ Journalists and researchers try to help by suggesting targeted savings amounts needed for retirement, but often this causes even more confusion. Is \$1.46 million the right amount of savings needed to retire comfortably?² Will having 10x your income by age 67 be enough?³ Add jargony terms like "Monte Carlo analysis" and scary words like "mortality" and it is no wonder people become paralyzed and unable to answer this important question.⁴ The Retirement Income Security Evaluation (RISE) Score™ (Exhibit A) was created to help solve this problem by modeling retirement readiness to look like a credit score, something familiar to everyone.⁵ With just 10 simple inputs and in less than 10 minutes, RISE empowers people to either make changes to their retirement planning if they are not on track, or instill confidence if they are. As Lao Tzu said, "The journey of a thousand miles begins with one step." RISE can be that first step towards a more positive financial retirement outcome.



- 1. https://www.protectedincome.org/peak65/
- $2.\ https://www.wsj.com/personal-finance/retirement/retirement-savings-needed-increased-2024-9f7c01e0$
- ${\tt 3.\ https://www.fidelity.com/viewpoints/retirement/how-much-do-i-need-to-retirement/how-much-d$
- $4.\ https://www.morningstar.ca/ca/news/185443/monte-carlos-role-in-retirement-planning.aspx$
- 5. https://www.protectedincome.org/rise-calculator/

Exhibit B: Milliman's RISE Score™

Score focuses on retirement security. The calculation takes into account how the securities market might perform over time, how interest rates may change, how inflation impacts living expenses and healthcare expenses differently, and how long you may live and need retirement income. Using mathematical methods, we compare results over all market scenarios and the worst 10% of market scenarios, then we consider how withdrawal patterns in various market conditions may impact your retirement portfolio over time. It also takes into account the many guaranteed income options available to workers today... Since RISE was launched in early 2018, we have run almost one million proposals, delivering on our mission to help our clients protect the health and financial well-being of people everywhere. In addition, we have included the RISE ScoreTM to enhance financial readiness for participants on Milliman's own retirement plan administration platform at MillimanBenefits.com.

MILLIMAN'S RISE SCORE™ WHITEPAPER IS AVAILABLE HERE.

RISE is an education tool, not advice. More information can be found at: https://www.therisescore.com/

THE EDUCATION AND INCOME GAP

Most Americans receive very little or no financial education in school.⁶ The Council for Economic Education's 2024 Survey of the States reported that only 35 states require a course in personal finance and just 27 states require a course in economics to graduate High School.⁷ Is it any wonder that people feel ill equipped to determine what many economists call one of the hardest calculations in finance? The good news regarding this knowledge gap is that there are many free, trustworthy sources to help uncover financial gaps and many dedicated financial professionals skilled at helping clients plan for a safe and secure retirement.

Peak 65® Americans also face an additional challenge-unlike prior generations, only 4% of private sector workers have a defined benefit pension plan (i.e. a paycheck for life). And only 24%, if you include state and local employees. Without this additional guaranteed income combined with social security, many Americans may be unprepared to meet their basic living expenses. According to The Peak Boomers Impact Study, the median annual benefit for the public defined benefit pensions is \$25,450 and the median benefit for private sector pension plans is \$17,640. The median annual Social Security benefit is \$28,400 for men

and \$21,400 for women.8 Fortunately, <u>The Alliance for Lifetime Income</u> (ALI) was founded to help consumers learn more about ways they can create their *own* protected income from personal annuities. ALI has a wealth of <u>free educational materials</u> to help prepare people for this phase of life.

BRING IN THE ACTUARIES

What makes the question, "do I have enough money saved," so challenging is one, big, missing piece of information - life expectancy. If we knew how many years we needed our money to last, this would be a pretty straight forward math problem. Absent this number, we have to do our best to analyze probabilities. And who better than an actuary to crunch these numbers?

According to the IRS, "actuaries assess the financial consequences of risks and use mathematics, statistics and financial theory to analyze and determine the financial impact of uncertain future events." In practical terms- actuaries work in a space where "numbers and real life (even life-and-death) intersect." Thankfully, the world's largest private independent actuarial consulting firm, Milliman, rose to this retirement planning challenge and created the RISE Score™. They then made it available to all Americans for free on the ALI website. (Exhibit B)

^{6.} https://www.protectedincome.org/wp-content/uploads/2023/12/RP-24_Lusardi_v2.pdf

 $^{7.\} https://www.councilforeconed.org/policy-advocacy/survey-of-the-states/$

 $^{8.\} https://www.protectedincome.org/peak65-economic-impact-forum/$

 $^{9.\} https://www.irs.gov/retirement-plans/what-is-an-actuary-a-brief-overview$

^{10.} https://www.soa.org/

Exhibit C

Planning model	Input/output	Limitation
Monte Carlo simulation	Stochastic modeling with numerous inputs (e.g., 1,000 market returns for different asset classes) to obtain a distribution of results. In financial planning, often displayed as a "probability of success."	Output only as good as the input. Also, depending on the model chosen or how output is aggregated, may not be a good predictor of left tail markets events. Binary answer to, "Do I have enough money?"
Replacement ratio	Used to identify the percentage of pre-retirement income needed to produce retirement income. Rule of thumb- less than 100%.	Retirement spending can be dynamic versus static. Clients may overspend or underspend; they may conserve their savings during market turmoil or have more perceived excess savings income during market booms.
Reliance rate	Percentage of your retirement income coming from your savings to help measure your sensitivity to your retirement strategy.	Limited ability to include guaranteed income sources; pension, social security, annuity income, etc.
Withdrawal rate	Percentage of your overall savings used to generate income. Rule of thumb 3% to 4%.	A static number could be negatively affected by sequence of returns risk and is contingent on how other risks, such as longevity and inflation, unfold over time for a particular investor.

Source: The Milliman RISE™ Score: An easy way to measure retirement income security https://www.milliman.com/en/insight/the-milliman-rise-scorean-easy-way-to-measure-retirement-income-security

The RISE <u>financial engine</u> seeks to incorporate more nuanced calculations related to longevity and inflation than other probability based models (e.g., success measured at a 90% chance of at least \$1 remains at a determined date).11 (Exhibit C) It also includes annuities, specifically those that provide lifetime income such as variable annuities, fixed indexed annuities, and deferred and single premium immediate annuities. And, with the passing of SECURE Act and SECURE 2.0 Act, the ability for more Americans to measure the impact of having access to protected income has become even more important. Think of RISE as a starting point for retirement planning - additive to popular planning software tools, not a replacement. People who require more holistic, goals-based planning benefit greatly from comprehensive financial plans.

RISE INPUTS AND OUTPUTS

After a consumer inputs their <u>information</u> (Exhibit D), the <u>RISE financial engine</u> goes to work using sophisticated modeling which includes these key features:¹³

1. A proprietary **stochastic simulation generator**, which models **interest rates, inflation, equities, and fixed income returns** holistically using Milliman's own capital market assumptions and model-

Exhibit D

The RISE Score™ uses 10 consumer inputs:12

- · Current age
- Anticipated retirement age
- Gender
- Health status (poor, average, above average, excellent)
- Current savings and retirement amount(s)
- Annual contribution amount to saving
- Asset Allocation
- Income sources in retirement: social security, pension, annuity, other
- Estimated basic <u>living expenses</u> in retirement (average provided)
- Estimated medical expenses in retirement (average provided)

Milliman's Global Data Privacy Statement can be found here: https://www.milliman.com/en/privacy-policy

^{11.} https://www.therisescore.com/education/methodology

¹² Ibid

^{13.} Ibid

- ing methodology for each asset class. Each simulation represents a projected future market path.
- 2. The stochastic simulation generator also incorporates **stochastic inflation** rather than a single deterministic inflation rate. Separately **projected medical and non-medical inflation** is more realistic when generated stochastically, rather than deterministically, such that inflation will not unreasonably be over- or under-representative in any given simulation along a future path. It is projected in concert with other asset class returns.
- 3. A **distribution of longevity** simulations.
- 4. A sophisticated, **dynamic withdrawal algorithm** determines the amount a retiree would withdraw each year from their portfolio. Considerations include age at the time of withdrawal, the level of their current portfolio, recent market performance, inflation, and expected future expenses. This process is designed to reflect how a retiree would typically conserve savings during retirement. In other words, they may not always withdraw the maximum amount needed to cover expenses in a given year if it meant they would not have enough to cover expenses in the future.
- 5. The dynamic withdrawal algorithm also captures **different health statuses** if indicated by the user because the algorithm considers current age and standard deviation of mortality.
- 6. Incorporates **annuity products**, specifically those that provide lifetime income such as variable annuities, fixed indexed annuities, and deferred and single premium immediate annuities.
- Contemporary cloud computing technology to project and evaluate outcomes under tens of thousands of scenarios in a matter of seconds.

Similar to a credit reporting score, the resulting RISE score will fall between 0 and 750+:¹⁴

Over 750: Excellent
700-750: Very Good
650-700: Good
550-650: Fair

• **350-550:** Needs Improvement • **Less than 350:** Requires Attention

RISE is also a dynamic tool that allows users to make changes as many times as they need to see how they can improve their score. Typical adjustments include: 15

- Delay retirement age.
- Increase in retirement assets (current savings amount) for the same overall asset allocation.
- Decrease in annual expenses.
- Increase in other income items (Social Security, pension, annuity income, etc.).
- Change in asset allocation such that there is an increase in net return on assets for a given unit of market risk.
- Change in asset allocation and lifetime income solution allocation such that there is an increase in income generated across all longevity scenarios for a given unit of market risk.

CONCLUSION

Americans face many challenges when it comes to planning for, and living in, retirement. The best way for them to manage these challenges is to provide a clear picture, today, on their financial preparedness. The topics of money and morality can be paralyzing for many Americans. RISE helps people by offering a free, intuitive score to help them begin to take action towards their retirement savings and income goals. And by making this process easy, people are less likely to succumb to avoidance behaviors. Remember- the only way to chart a course to a destination is by knowing your *current* location. Only then can you take a meaningful step towards a secure future.

^{14.} Ibid

^{15.} Ibid