WARPSimLab Monte Carlo Risk Report

warpsimlab.org

Generated: 2026-08-22T20:14:21

Projection Period: 2026-2056 (30 Years)

Report Basis: Real Dollars (Inflation Adjusted)

Report ID: 2026-08-22_20_14_21

Executive Summary

This section summarizes the main risk results from the selected analysis method.

Scenario Count

1,000

Years Simulated

30

Simulated Shortfall Rate

87.40%

10th Percentile Ending Portfolio

$0

Median Ending Portfolio

$0

90th Percentile Ending Portfolio

$19,093

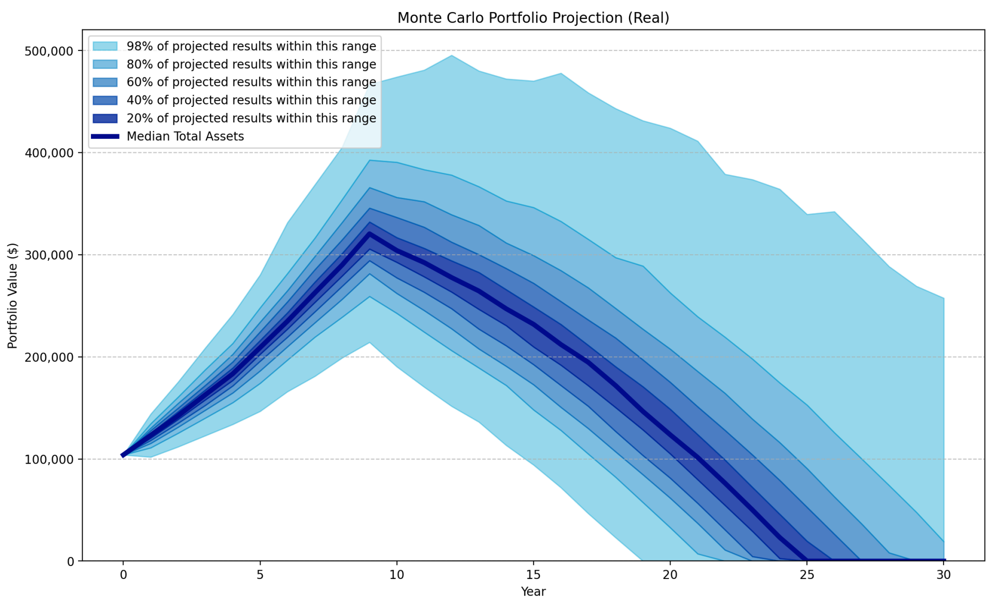
Method Explanation

Monte Carlo Analysis evaluates your financial plan across many simulated market paths. Investment returns are generated from your selected market assumptions rather than replaying one specific historical period.

This method helps illustrate how your financial plan may perform across a broad range of possible future market conditions, including return sequences that have not occurred in the historical record.

Portfolio Projection Across Simulated Market Scenarios

This chart summarizes portfolio outcomes generated from simulated market paths. Each scenario represents one possible sequence of investment returns using the configured inflation assumption, illustrating a range of potential outcomes rather than replaying actual market history.



Portfolio Sustainability Analysis

This section summarizes how often the modeled portfolio was depleted before the end of the projection period across the Monte Carlo paths.

Scenario Count	1,000
Portfolio Survived Count	126
Portfolio Depleted Count	874
Portfolio Survival Rate	12.60%
Simulated Shortfall Rate	**87.40%**
Earliest Portfolio Depletion Year	**2043**
Median Portfolio Depletion Year	**2051**
Latest Portfolio Depletion Year	**2056**

Monte Carlo Insights

Monte Carlo Run Settings

Sampling Method	Path-Based Annual Sampling
Correlated Returns	Yes
Sequence Risk	No
Random Seed	12,345

Sequence-of-Returns Risk

Monte Carlo paths naturally include sequence-of-returns effects because each path contains an ordered series of annual investment returns. Losses that occur early in retirement can reduce the portfolio while withdrawals continue, leaving a smaller portfolio to participate in later market recoveries.

WARPSimLab's optional Sequence Risk feature adds a deliberate downturn pattern to the generated market path. When enabled, the configured downturn replaces sampled equity, bond, and real-estate returns for the affected years while leaving cash returns unchanged.

Monte Carlo Outcome Summary

87.4% of the analyzed Monte Carlo paths depleted the portfolio before the end of the projection period.

Percentile Portfolio Table

This table summarizes how portfolio values varied across all simulated scenarios during each year of the projection. Each row represents one projection year, while the percentile columns show the distribution of portfolio values across the simulations at that point in time.

For example, the 10th percentile is the portfolio value below which approximately 10% of simulations fell at that point in the projection. The median represents the middle simulated outcome, while the 90th percentile represents a stronger simulated outcome.

Year	Less Favorable Market		Median	More Favorable Market	
	10th Percentile	25th Percentile		75th Percentile	90th Percentile
2026	$104,000	$104,000	$104,000	$104,000	$104,000
2027	$111,040	$116,847	$123,176	$129,257	$134,604
2028	$125,310	$133,376	$142,298	$151,833	$160,666
2029	$140,229	$150,497	$162,926	$174,782	$187,653
2030	$155,285	$168,543	$183,417	$198,727	$213,268
2031	$174,203	$191,193	$209,090	$229,738	$248,147
2032	$197,024	$214,588	$234,980	$259,793	$281,746
2033	$219,387	$239,718	$262,661	$291,956	$316,370
2034	$238,991	$262,799	$290,036	$321,841	$354,234
2035	$259,314	$287,317	$320,564	$357,091	$392,835
2036	$242,700	$269,593	$304,195	$348,795	$390,683
2037	$224,359	$254,500	$292,408	$337,972	$383,438
2038	$206,243	$237,263	$277,788	$324,519	$378,156
2039	$189,218	$217,807	$264,531	$311,066	$366,759
2040	$172,091	$201,263	$247,125	$299,269	$352,798
2041	$148,125	$183,670	$231,945	$284,824	$346,344
2042	$128,070	$162,026	$212,129	$268,880	$332,747
2043	$104,912	$138,724	$194,669	$248,668	$315,204
2044	$82,202	$117,425	$171,941	$233,335	$297,294

Year	Less Favorable Market		Median	More Favorable Market	
	10th Percentile	25th Percentile		75th Percentile	90th Percentile
2045	$57,437	$95,219	$146,577	$209,903	$289,021
2046	$32,681	$69,565	$123,643	$190,632	$262,655
2047	$7,159	$45,165	$101,560	$168,244	$239,384
2048	$0	$18,891	$76,378	$147,784	$219,367
2049	$0	$0	$50,195	$123,869	$198,034
2050	$0	$0	$23,147	$99,425	$174,637
2051	$0	$0	$0	$73,259	$152,866
2052	$0	$0	$0	$47,011	$125,766
2053	$0	$0	$0	$18,738	$100,092
2054	$0	$0	$0	$0	$74,122
2055	$0	$0	$0	$0	$47,785
2056	$0	$0	$0	$0	$19,093

Generated by WARPSimLab on 2026-08-22T20:14:21.