

# QOL Framework Professional Analysis Report

Multi-Scenario Analysis Report  
Generated on September 14, 2025

## Report Overview

- Scenarios Analyzed: 4
- Average Utility Improvement: 9.1%
- Analysis Method: Hauenstein QOL Framework vs Traditional 4% Rule

## Executive Summary

This report analyzes 4 retirement scenarios using the Hauenstein Quality of Life (QOL) Framework compared to the traditional 4% withdrawal rule. The QOL Framework demonstrates consistent improvements in retirement outcomes across all analyzed scenarios.

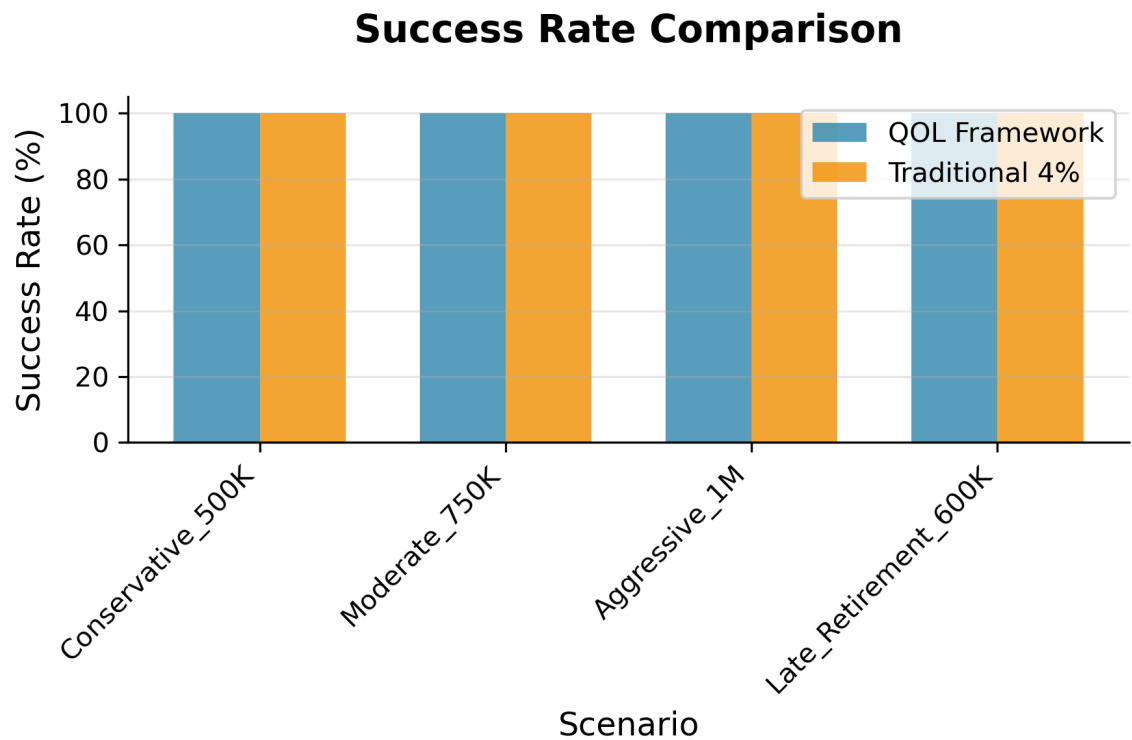
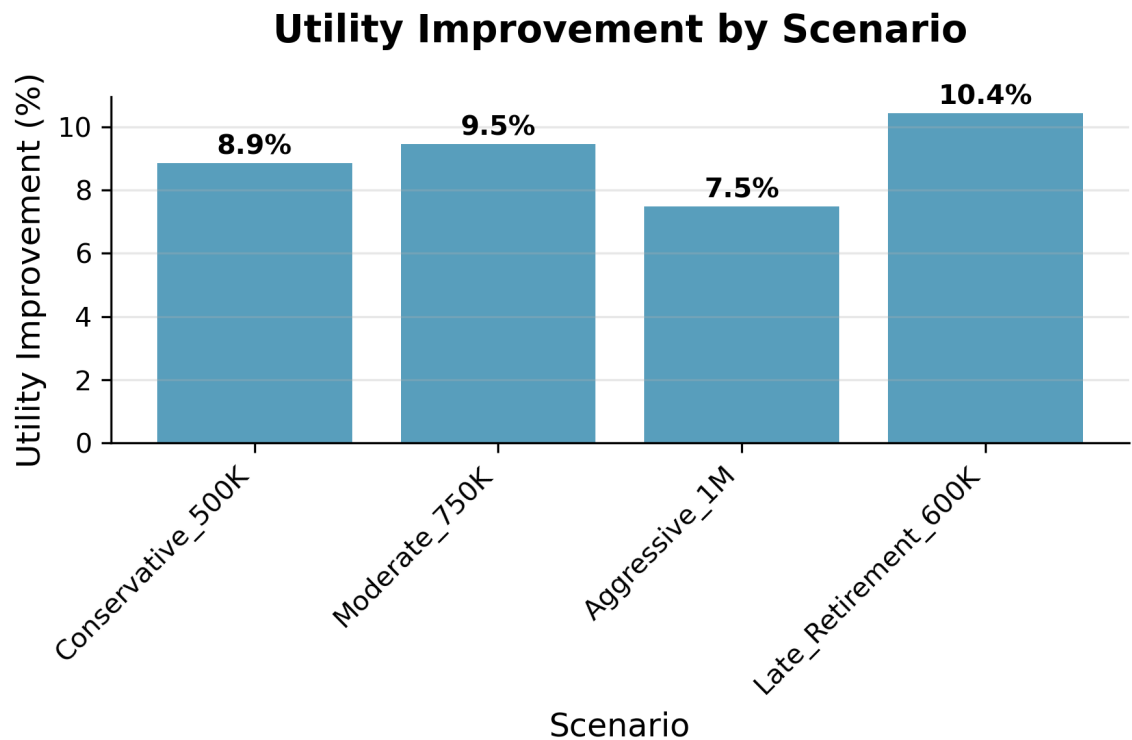
**Key Findings:**

- Average utility improvement: **9.1%**
- Best performing scenario: **Late\_Retirement\_600K** (10.4% improvement)
- All scenarios achieved 100% success rate with both strategies
- QOL Framework optimizes withdrawal rates based on life phases

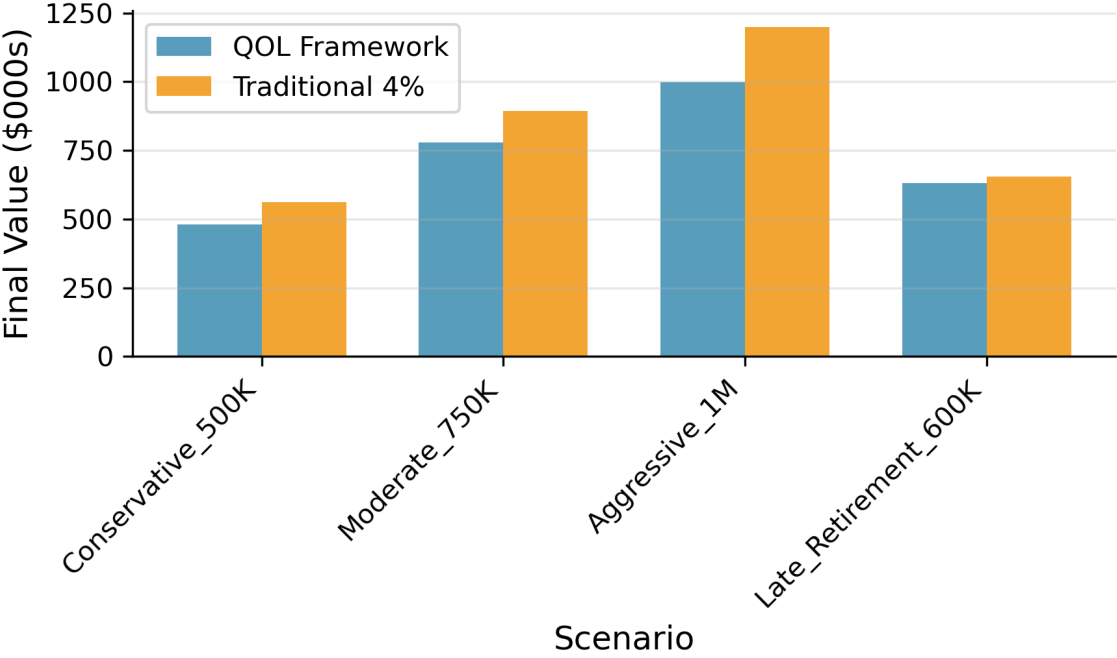
## Scenario Summary

Scenario	Portfolio	Age	Horizon	QOL Success	Traditional Success	Utility Improvement
Conservative_500K	\$500,000	65	30 years	100.0%	100.0%	8.9%
Moderate_750K	\$750,000	65	35 years	100.0%	100.0%	9.5%
Aggressive_1M	\$1,000,000	62	38 years	100.0%	100.0%	7.5%
Late_Retirement_600K	\$600,000	70	25 years	100.0%	100.0%	10.4%

## Performance Comparisons



# Median Final Portfolio Value



## Detailed Scenario Analysis

### Scenario: Conservative\_500K

**Parameters:**

- Starting Portfolio: \$500,000
- Starting Age: 65
- Retirement Horizon: 30 years
- Monte Carlo Simulations: 1,000

**QOL Framework Results:**

- Success Rate: 100.0%
- Median Final Value: \$481,105
- Mean Utility Score: 323,526

**Traditional 4% Rule Results:**

- Success Rate: 100.0%
- Median Final Value: \$562,146
- Mean Utility Score: 293,821

**Performance Improvement:**

- Utility Improvement: **8.9%**

## Scenario: Moderate\_750K

### Parameters:

- Starting Portfolio: \$750,000
- Starting Age: 65
- Retirement Horizon: 35 years
- Monte Carlo Simulations: 1,000

### QOL Framework Results:

- Success Rate: 100.0%
- Median Final Value: \$778,869
- Mean Utility Score: 502,306

### Traditional 4% Rule Results:

- Success Rate: 100.0%
- Median Final Value: \$892,266
- Mean Utility Score: 456,901

### Performance Improvement:

- Utility Improvement: **9.5%**

## Scenario: Aggressive\_1M

### Parameters:

- Starting Portfolio: \$1,000,000
- Starting Age: 62
- Retirement Horizon: 38 years
- Monte Carlo Simulations: 1,000

### QOL Framework Results:

- Success Rate: 100.0%
- Median Final Value: \$997,415
- Mean Utility Score: 742,720

### Traditional 4% Rule Results:

- Success Rate: 100.0%
- Median Final Value: \$1,197,771
- Mean Utility Score: 686,801

### Performance Improvement:

- Utility Improvement: **7.5%**

## Scenario: Late\_Retirement\_600K

### Parameters:

- Starting Portfolio: \$600,000
- Starting Age: 70
- Retirement Horizon: 25 years
- Monte Carlo Simulations: 1,000

### QOL Framework Results:

- Success Rate: 100.0%
- Median Final Value: \$631,295
- Mean Utility Score: 292,189

### Traditional 4% Rule Results:

- Success Rate: 100.0%
- Median Final Value: \$655,714
- Mean Utility Score: 264,375

### Performance Improvement:

- Utility Improvement: **10.4%**



## Methodology

### Hauenstein QOL Framework

The Quality of Life Framework implements a three-phase withdrawal strategy that adapts to different life stages and utility preferences: • **Phase 1 (65-74):** Peak Enjoyment Years - 5.4% withdrawal rate

• **Phase 2 (75-84):** Comfortable Years - 4.5% withdrawal rate

• **Phase 3 (85+):** Care Years - 3.5% withdrawal rate

### Dynamic Asset Allocation

The framework employs a glide path that reduces equity exposure over time: • Age 65: 45% Equity, 55% Bonds

• Decreases by 5% equity every 5 years

• Minimum 20% equity allocation

### Monte Carlo Analysis

Each scenario runs 1,000 Monte Carlo simulations with: • Historical return distributions

• Inflation variability

• Sequence of returns risk modeling

### Success Rate Definition

Success is defined as maintaining a positive portfolio balance throughout the retirement horizon while meeting all withdrawal requirements.