Executive Summary: Strategic Asset Allocation Review Results

- The current portfolio expected return of approximately 4.00% falls short of the 4.75% discount rate.

- A comprehensive asset allocation study to review several portfolio options has been conducted.

- Candidate Portfolios 1 & 2 are presented for consideration, each with the following attributes:

  - Expected returns meet the 4.75% discount rate with expected risk below the 9.50% threshold.
  - Asset allocations utilize current asset classes, with no allocation to private assets or use of leverage.
  - Active management strategies may contribute excess return above benchmark.
  - Asset liability management services and active management will result in higher fees than the current portfolio.

- Candidate Portfolios 1 & 2 also have key differences that result in and support the recommendation.

- Recommendation: Select the strategic asset allocation of Candidate Portfolio 1, with expected return of 4.97% and expected risk of 8.29%.

Expected Risk/Return and Allocation: Current Portfolio

Expected Risk/Return

Asset Allocation

Legend:
- Fixed Income — 60%
- Public Equity — 15%
- REITs — 11%
- Commodities — 8%
- TIPS — 6%
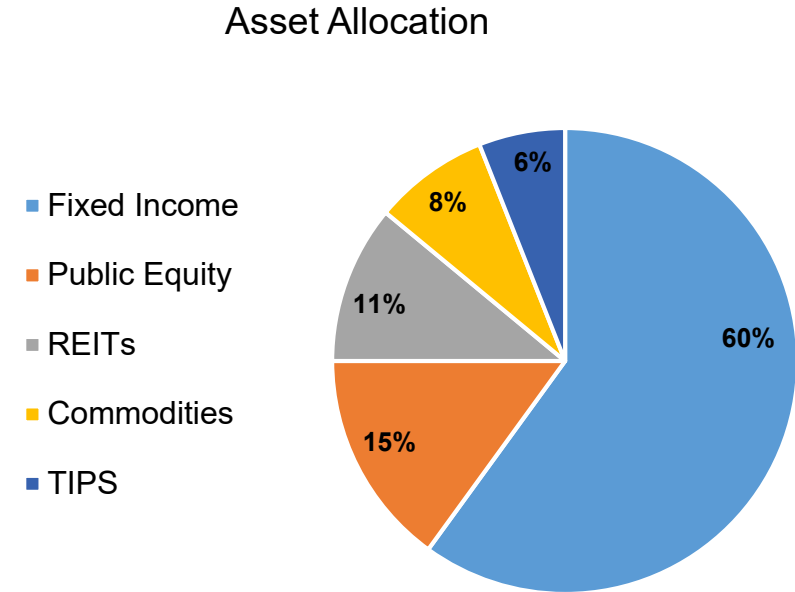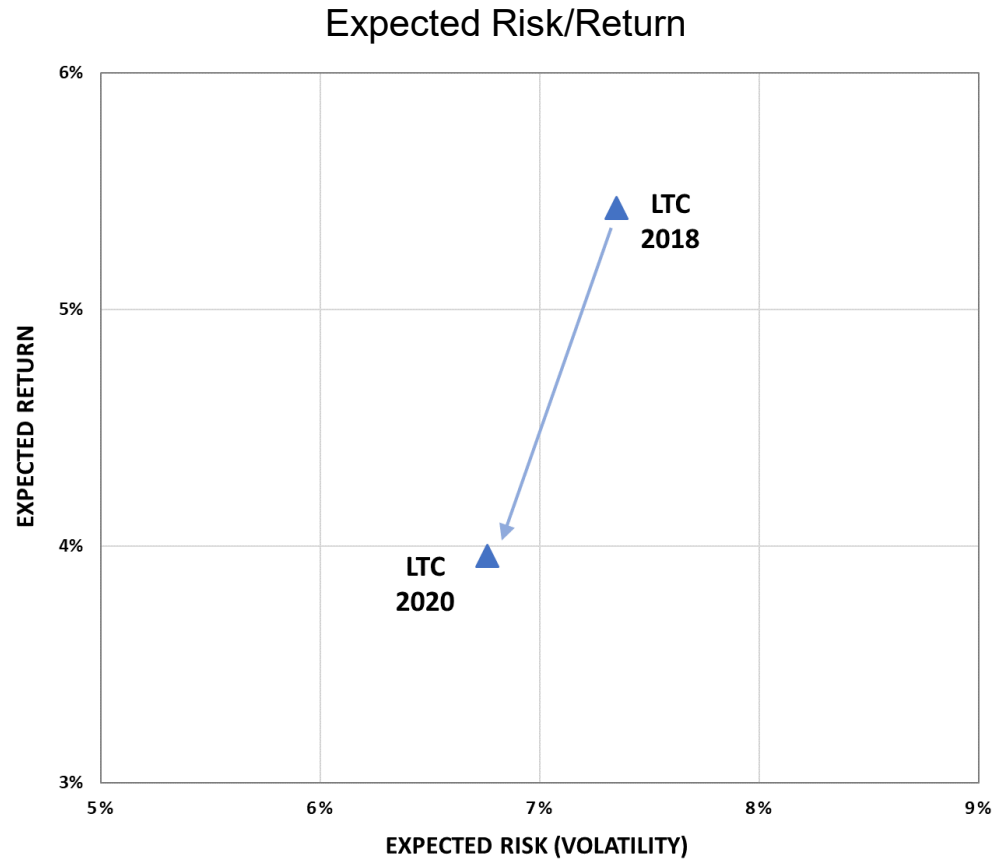
The expected return of the current portfolio allocation has dropped from 5.43% in 2018 to 3.96% in 2020.

Portfolio Evaluation Process
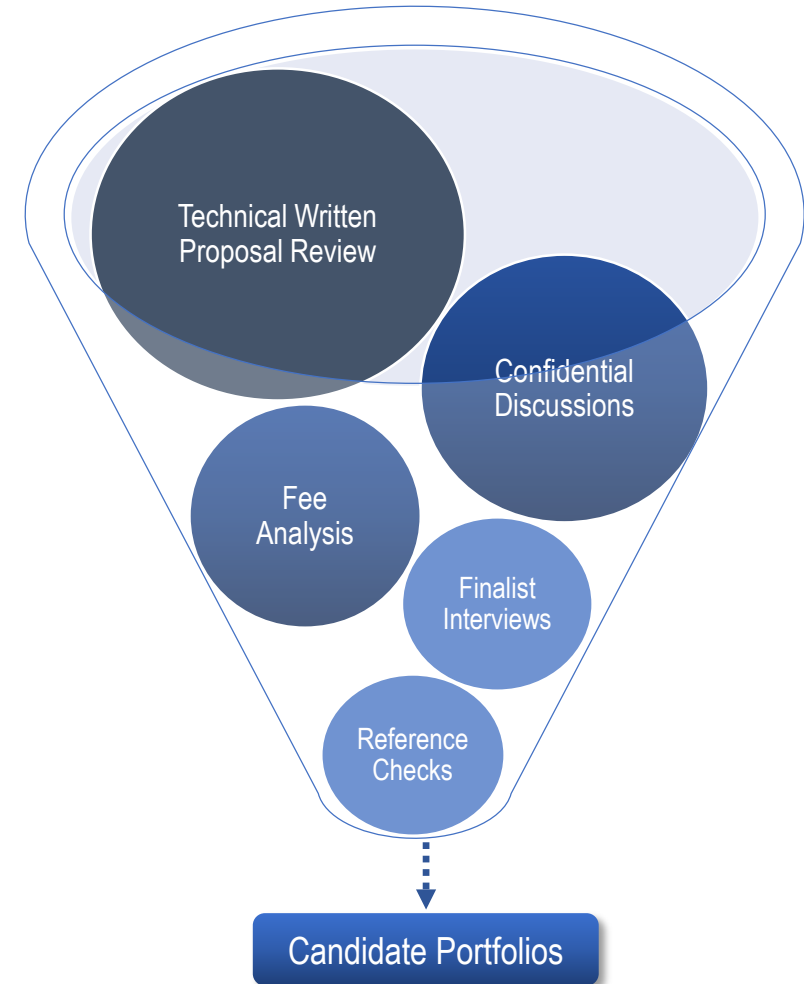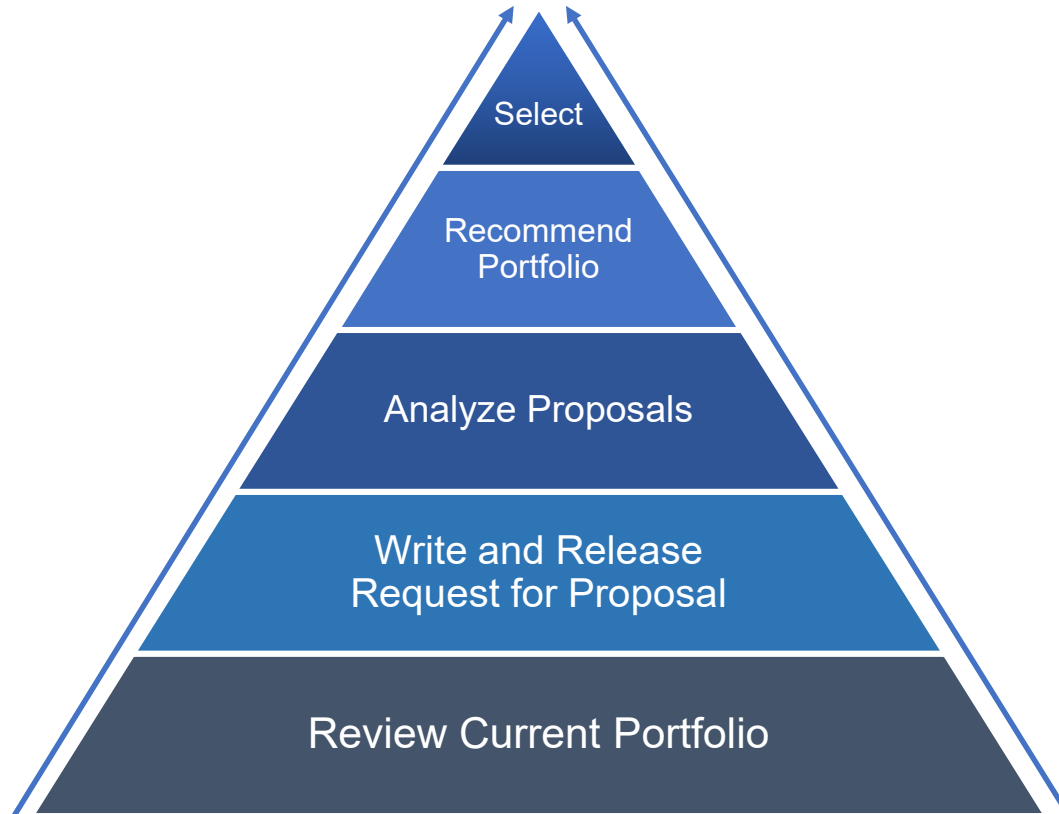
A comprehensive review has been conducted by the Investment Office, Actuarial Office, and Health Policy Division.

Strategic Asset Allocation: Current and Candidate Portfolios

Asset Class	Current Portfolio	Candidate Portfolio 1	Candidate Portfolio 2
Global Equities	15%	30%	45%
Fixed Income	60%	54%	50%
U.S. TIPS[1]	6%	6%	5%
Global REITs[2]	11%	7%	-
Commodities	8%	3%	-

Each Candidate Portfolio is constructed using current asset classes, with no inclusion of private assets or leverage.

Note 1: U.S. TIPS are Treasury Inflation Protected Securities.
Note 2: REITs are Real Estate Investment Trusts.

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Benchmark Composition: Current and Candidate Portfolios

Asset Classes/ Sub-Asset Classes	Current Portfolio	Candidate Portfolio 1	Candidate Portfolio 2
Global Equities	15%		45%
U.S. Large Cap Equities		12%	
Developed Large Cap ex-US Equities		12%	
Emerging Equities		6%	
U.S. Treasuries – Intermediate			10%
U.S. Treasuries – Long	24%		15%
U.S. Agency MBS	18%	3.4%	
U.S. CMBS		2.5%	
U.S. CMBS Sub		2.5%	
U.S. IG Corporates – Intermediate			5%
U.S. IG Credit – Long	14%	18.9%	15%
U.S. IG Credit BBB – Long		4.7%	
U.S. High Yield	2%	11%	5%
Global IG Bonds ex-EM	2%		
EM Bonds (in USD)		11%	
U.S. TIPS[1]	6%		
U.S. TIPS[1] – Long		6%	5%
Global REITs[2]	11%	7%	
Commodities	8%	3%	

- Candidate Portfolio benchmarks will be built using the asset classes / sub-asset classes shown.

- Candidate Portfolio benchmark weights shown are approximate. The weights, ranges, and rebalancing frequency will be confirmed during contract discussions and presented for approval at the June Investment Committee meeting.

Note 1: U.S. TIPS are Treasury Inflation Protected Securities.
Note 2: REITs are Real Estate Investment Trusts.

Expected Risk/Return: Current and Candidate Portfolios:
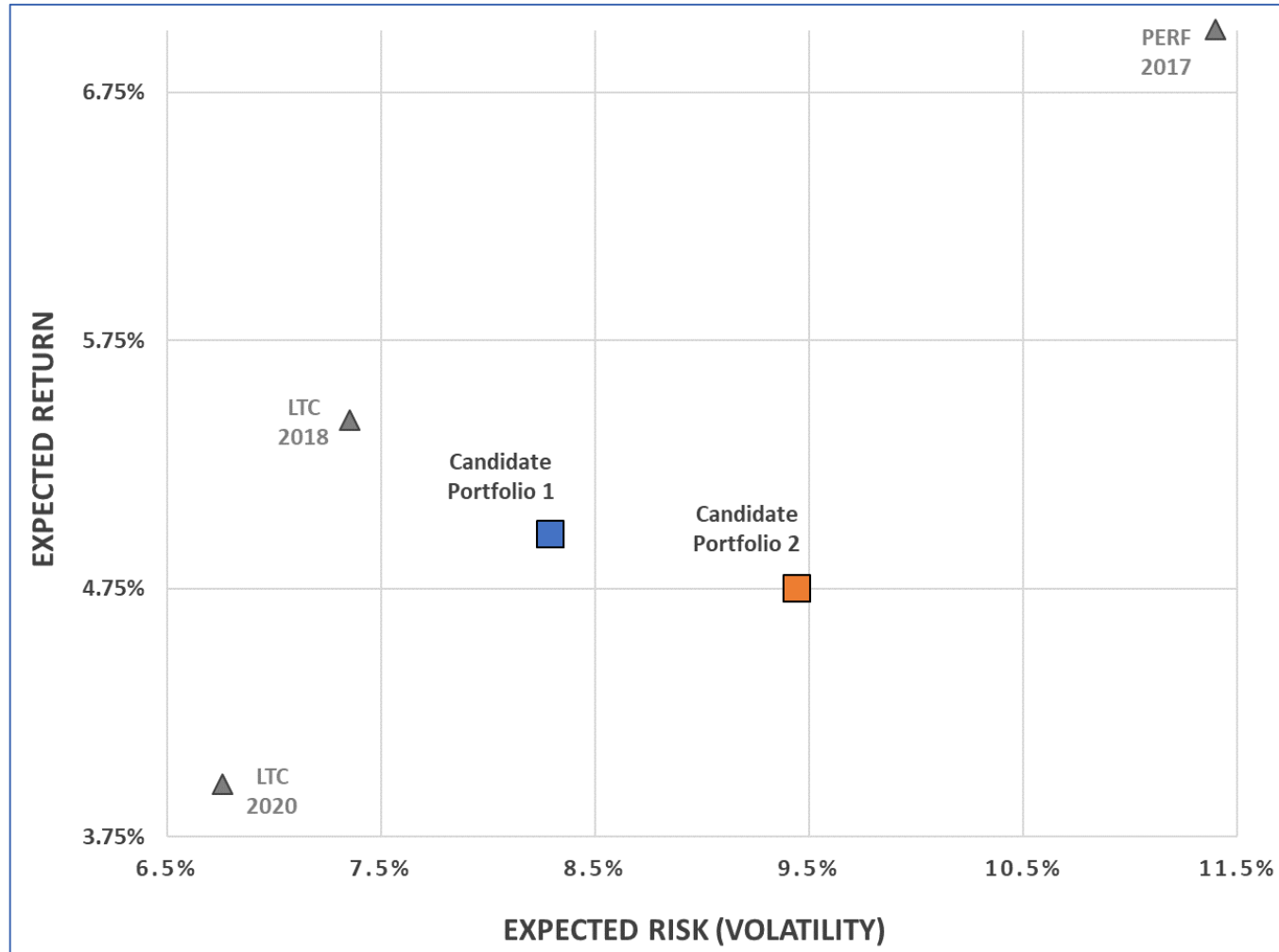
Expected risk/return for the Candidate Portfolios was evaluated using a common set of capital market assumptions with the following results:

- Each Candidate Portfolio maintains expected risk below the 9.50% threshold (adopted at November IC) and increases expected return by more than .75% over the current portfolio.

- Candidate Portfolio 1
    Expected Return = 4.97%
    Expected Risk = 8.29%

- Candidate Portfolio 2
    Expected Return = 4.75%
    Expected Risk = 9.45%

Data: 2017/2018 portfolio expected risk/return values calculated using CalPERS analytical framework and CalPERS CMAs adopted in the 2017/18 ALM process.
2020 portfolio expected risk/return values calculated using CalPERS analytical framework and Wilshire Capital Market Assumptions as of 09/30/20.

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Detailed Attributes: Current and Candidate Portfolios

Attribute	Current Portfolio	Candidate Portfolio 1	Candidate Portfolio 2
Expected Return[1]	3.96%	4.97%	4.75%
Expected Risk[1]	6.76%	8.29%	9.45%
Expected Return/Risk	0.59	0.60	0.50
Cash Yield	2.19%	3.39%	2.41%

Candidate Portfolio 1 expected return exceeds Candidate Portfolio 2 by .22%, while risk is lower by 1.16%

Note 1: Portfolio expected risk/return values calculated using CalPERS analytical framework and Wilshire Capital Market Assumptions as of 09/30/20.

Simulated Historical Excess Return: Candidate Portfolios

	1 YR	3 YR	5 YR	7 YR	10 YR
Candidate Portfolio 1 Excess	0.70%	0.48%	0.49%	0.45%	0.51%
Candidate Portfolio 2 Excess	0.22%	0.29%	0.43%	0.46%	0.40%
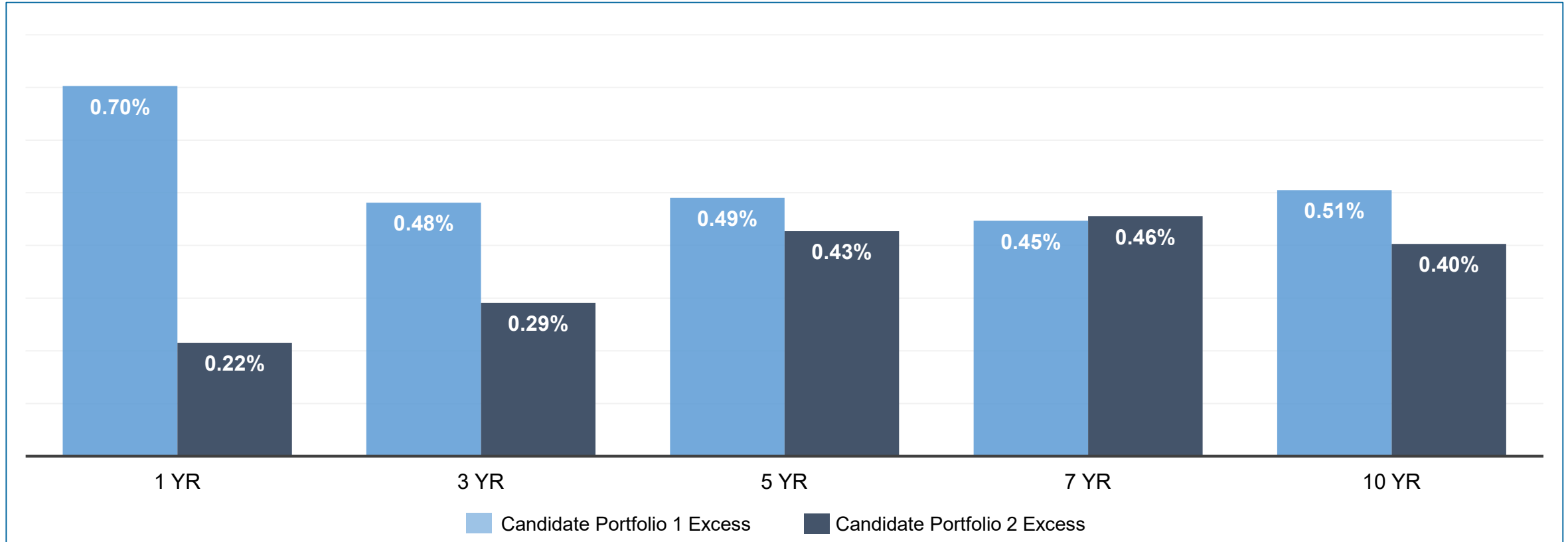
Across several time periods tested, the simulated historical returns for the Candidate Portfolios are above their respective benchmarks. The excess returns are primarily the result of active management strategies in fixed income.

Recommendation: Candidate Portfolio 1

For the Long-Term Care Fund, select the strategic asset allocation of Candidate Portfolio 1, to be implemented when contracting with the external manager is complete.

Strategic Asset Allocation - Candidate Portfolio 1	
Asset Class	**Asset Class Weights**
Global Equities	30%
Fixed Income	54%
U.S. TIPS	6%
Global REITs	7%
Commodities	3%

Portfolio Attribute	Value
Expected Return	4.97%
Expected Risk	8.29%

Next Steps

Manager Selection Announcement	March 2021
Contracting Discussions Implementation Planning Investment Policy Updates	March – June 2021
Investment Committee	June 2021
Contract Completion	June/July 2021 (estimated)
Asset Allocation Implementation	After Investment Policy approval and completion of contracting.

Appendix

Market Stress Scenarios: Candidate Portfolios

Scenario	Candidate Portfolio 1	Candidate Portfolio 2
Global Financial Crisis (2008-09)	-26.94%	-24.88%
European Bond Crisis (2010)	-1.77%	-1.84%
COVID-19 Pandemic (Feb 19 - Mar 23, 2020)	-26.52%	-20.23%

Candidate Portfolio 1 is more sensitive to some historical market shock scenarios than Candidate Portfolio 2, although the long-term expected risk of Candidate Portfolio 1 is lower at 8.29% compared to Candidate Portfolio 2 at 9.45%.

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Asset Allocation Timeline

Milestone	2020									2021						
	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J
Evaluate Current Portfolio	▓	▓	▓													
Conduct Research			▓	▓												
Draft & Release RFP					▓	▓										
Receive Proposals							▓									
Evaluate Proposals							▓	▓	▓							
Approve Discount Rate (Nov IC)								▓								
Prepare Allocation Recommendation											▓					
Adopt Asset Allocation (March IC)												▓				
Contracting & Planning													▓	▓		
Approve Investment Policy (June IC)															▓	
Sign Contract and Begin Implementation																▓

The Investment Policy, with benchmarks, ranges, and rebalancing will be brought to the June Investment Committee.