Asset Liability Management —

Focus on CalPERS Prefunding Programs

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Presenters

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Agenda

- Affiliate trusts
- ALM process
- Capital Market Assumptions
- Candidate portfolios
- Program benefits
- Next steps

Affiliate Trusts

- Health Care Fund
- Legislators' Retirement System Fund
- Judges' Retirement System Fund
- Judges' Retirement System II Fund
- California Employers' Retiree Benefit Trust Fund (CERBT)
- California Employers' Pension Prefunding Trust Fund (CEPPT)
- Supplemental Income Plan Funds (457 and SCP)
- Long-Term Care Fund

Employer Prefunding Trusts — Program Overview

California Employers' Retiree Benefit Trust Fund (CERBT)

- Provides employers ability to voluntarily pre-fund non-pension, other post-employment benefits (OPEB). Employers can select from three strategies, depending on risk tolerance.
- Established 2007
- 591 employer participants
- $17.7B invested assets

California Employers' Pension Prefunding Trust Fund (CEPPT)

- Provides employers ability to voluntarily pre-fund required pension contributions. Employers can select from two strategies, depending on risk tolerance.
- Established 2019
- 58 employer participants
- $72M invested assets

Prefunding Program Employers

605 contracting employers (591 CERBT and 58 CEPPT)

State of California

154 cities or towns

10 counties

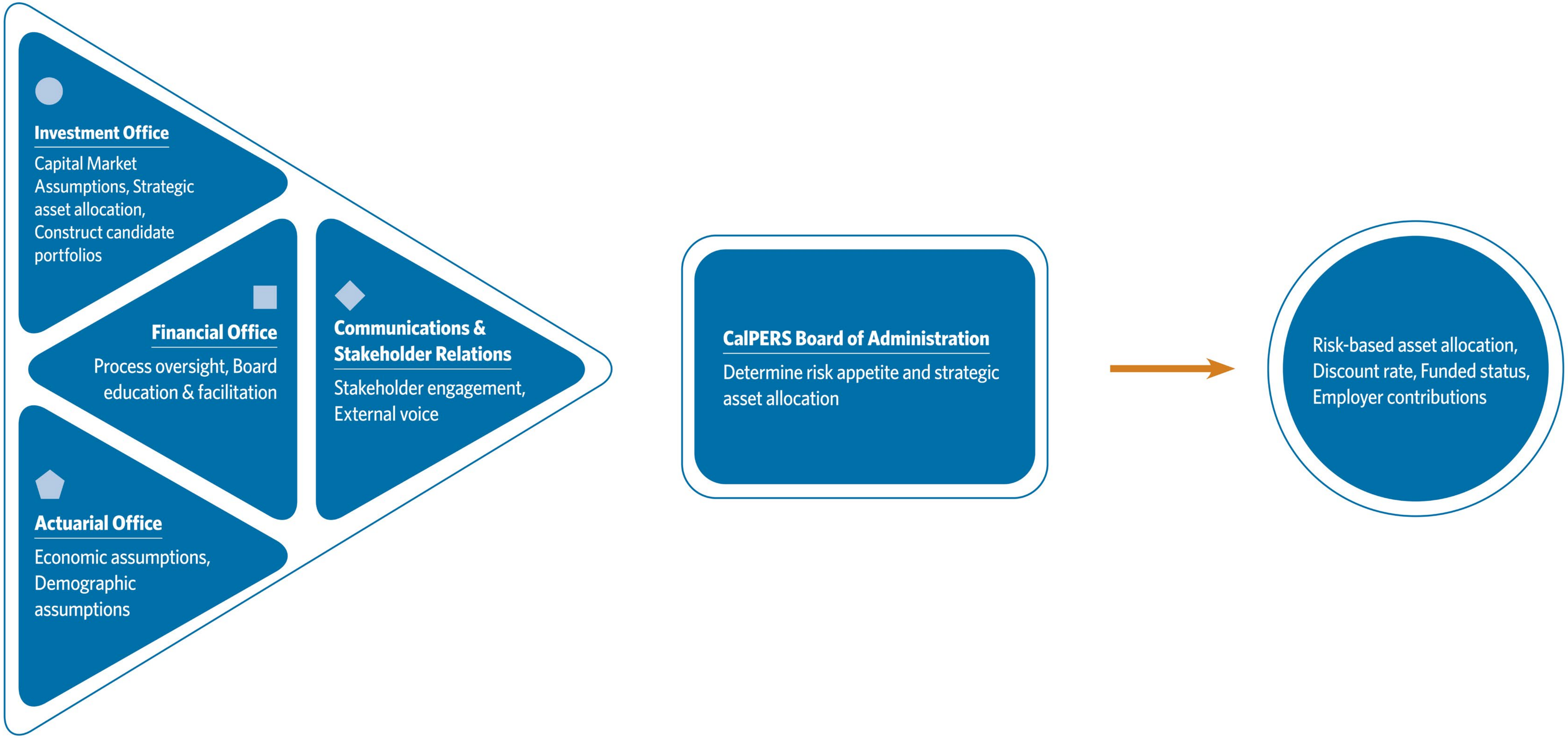
79 school employers

31 courts

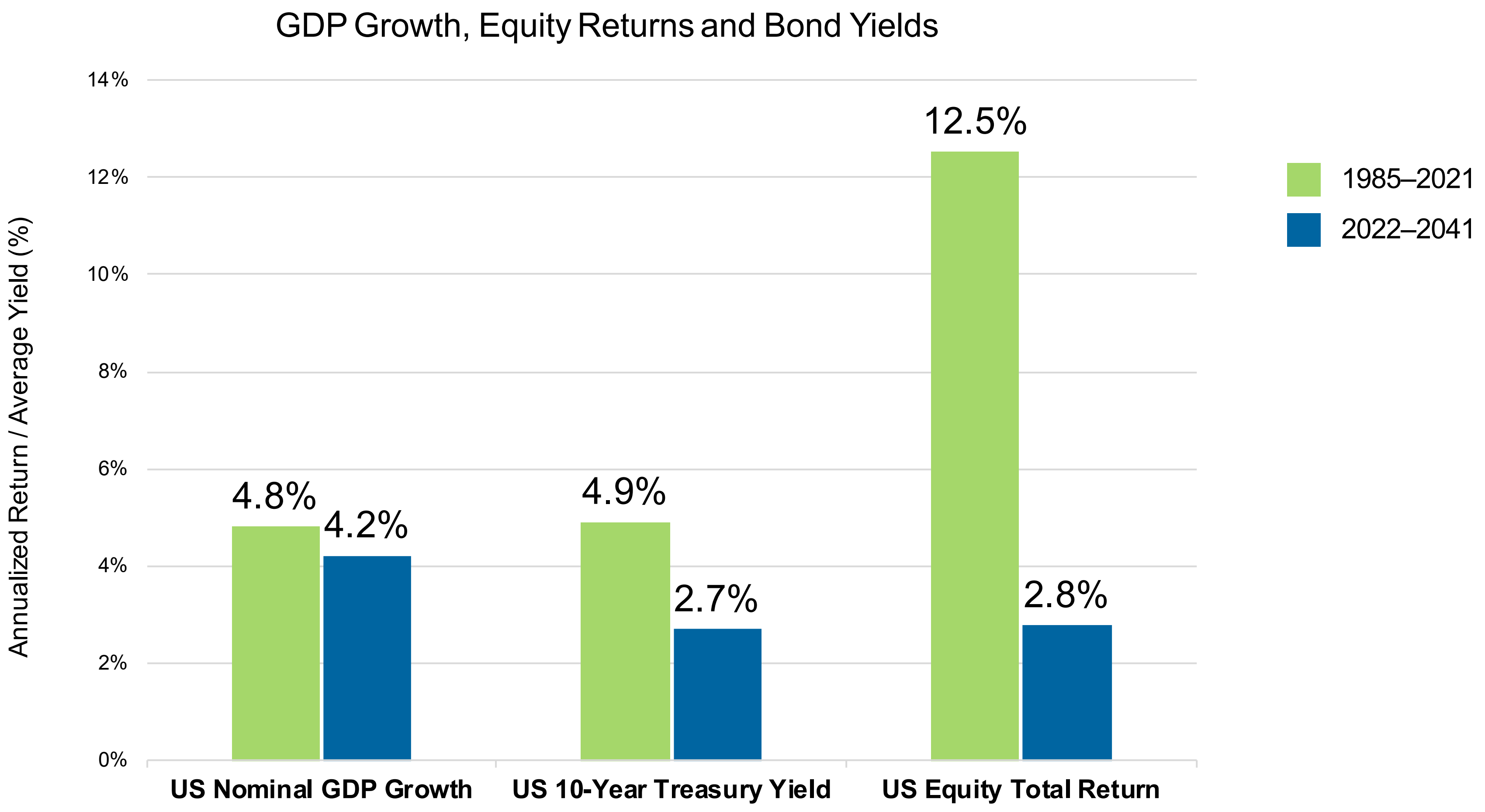
330 special districts & other public agencies

As of 12/31/2021

Key Functions Within the ALM Process



Historic and Projected Growth, Yields, Returns



Source: Oxford Economics. Data are annual. Forecasts based on Oxford Economics Global Economic Model, February 2022 forecast update

Capital Market Assumptions: Returns and Volatility

Asset Class	Asset Segment	5-Year Projected Return	20-Year Projected Return	20-Year Projected Volatility
Growth	Global Public Equity	6.8%	6.8%	17.0%
Income	U.S. Fixed Income Intermediate	0.9%	2.7%	4.5%
	U.S. Fixed Income Long	1.4%	3.7%	8.2%
	U.S. Treasuries Long	0.1%	2.6%	12.4%
	Mortgage-Backed Securities	1.2%	2.8%	3.1%
	Investment Grade Corporates	0.1%	3.9%	8.5%
	High Yield	2.2%	4.7%	9.2%
	Sovereigns	3.2%	4.5%	10.4%
	TIPS	0.6%	2.8%	5.9%
Real Assets	Global REITS	5.4%	6.0%	18.7%
	Commodities	3.2%	3.4%	15.3%
Cash	Liquidity	0.3%	1.7%	0.8%

Investment Focus and Assumption Updates

2022 ALM for CERBT and CEPPT focuses on balancing risk and return, consistent with previous ALM cycles

Fixed Income Benchmark for CERBT — the Long Liability Benchmark weights have been reoptimized.

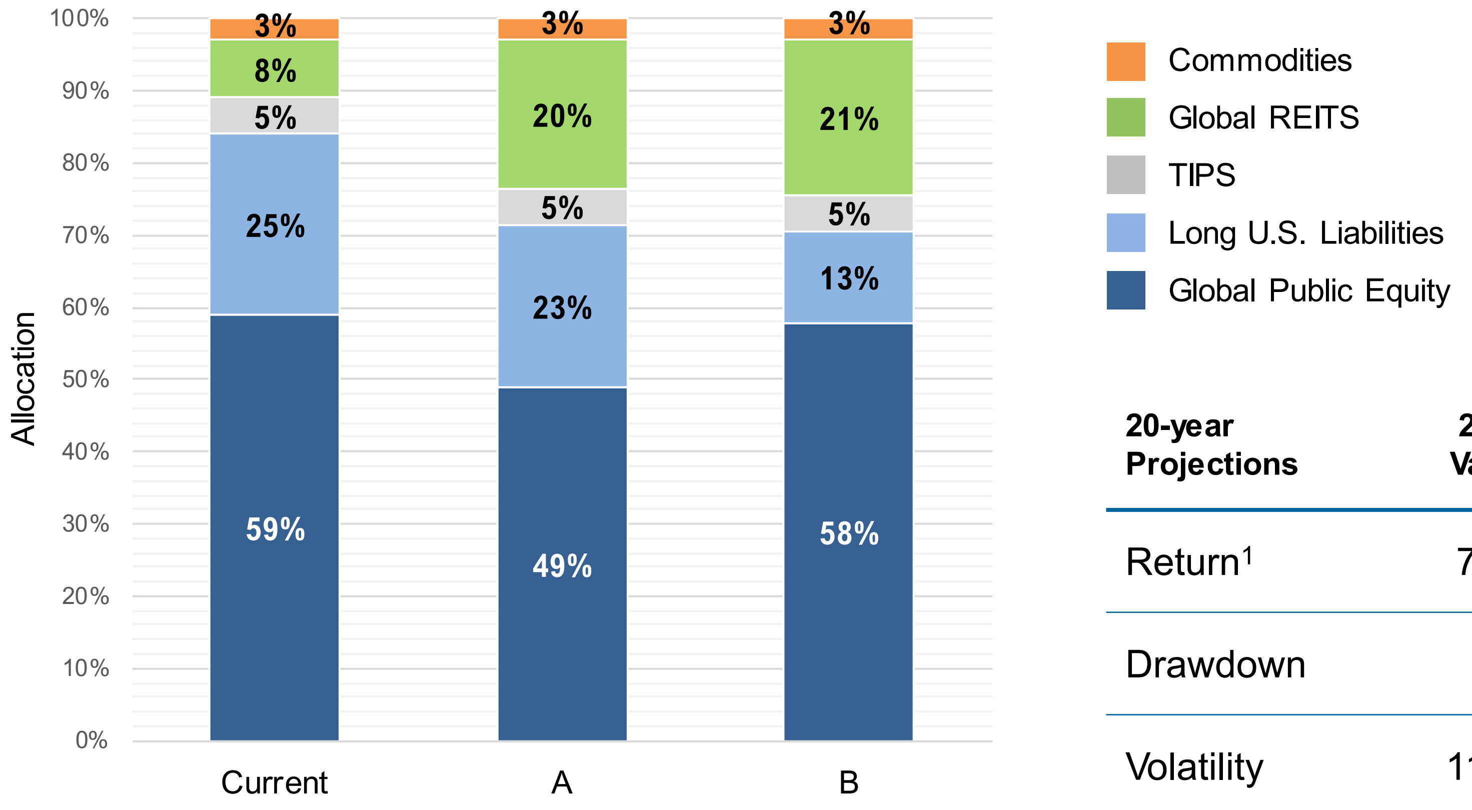
CERBT CMAs: 5 yrs and 20 yrs
2018 CMAs: 10 yrs and 60 yrs

CEPPT CMAs: 10-yrs

Portfolio asset class constraints remain the same as from prior ALM

CERBT Strategy 1 Candidate Portfolios

Candidate portfolios compared to current portfolio:

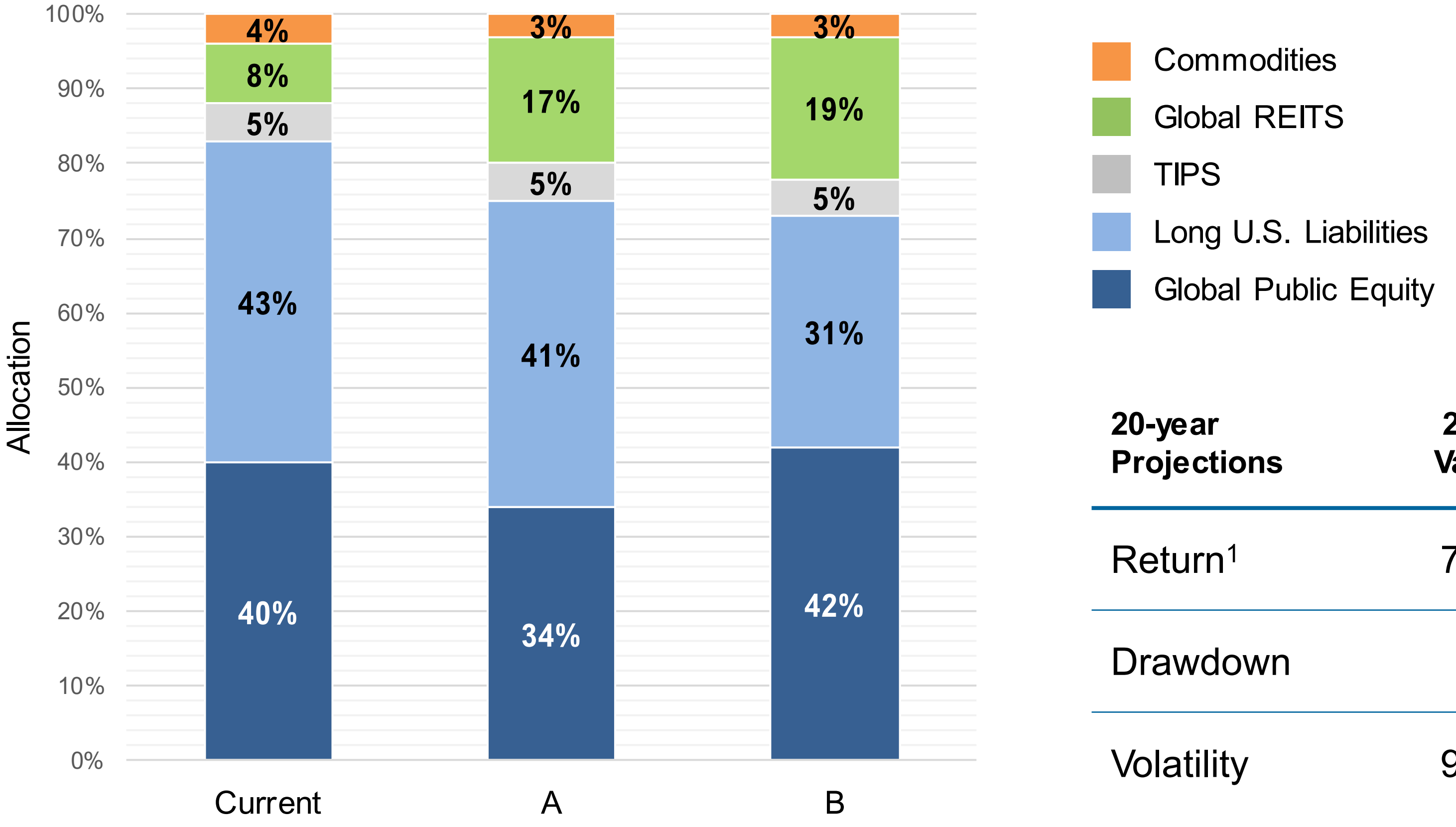


20-year Projections	2018[2] Values	Current Portfolio	Candidate A	Candidate B
Return[1]	7.6%	5.9%	6.0%	6.2%
Drawdown	—	25.8%	25.6%	29.2%
Volatility	11.8%	12.0%	12.1%	13.4%

[1] Returns are geometric and net of expenses of 0.10%.
[2] The 2018 returns were estimated to 60 years, the 2018 10-year estimated return was 5.8%.

CERBT Strategy 2 Candidate Portfolios

Candidate portfolios compared to current portfolio:

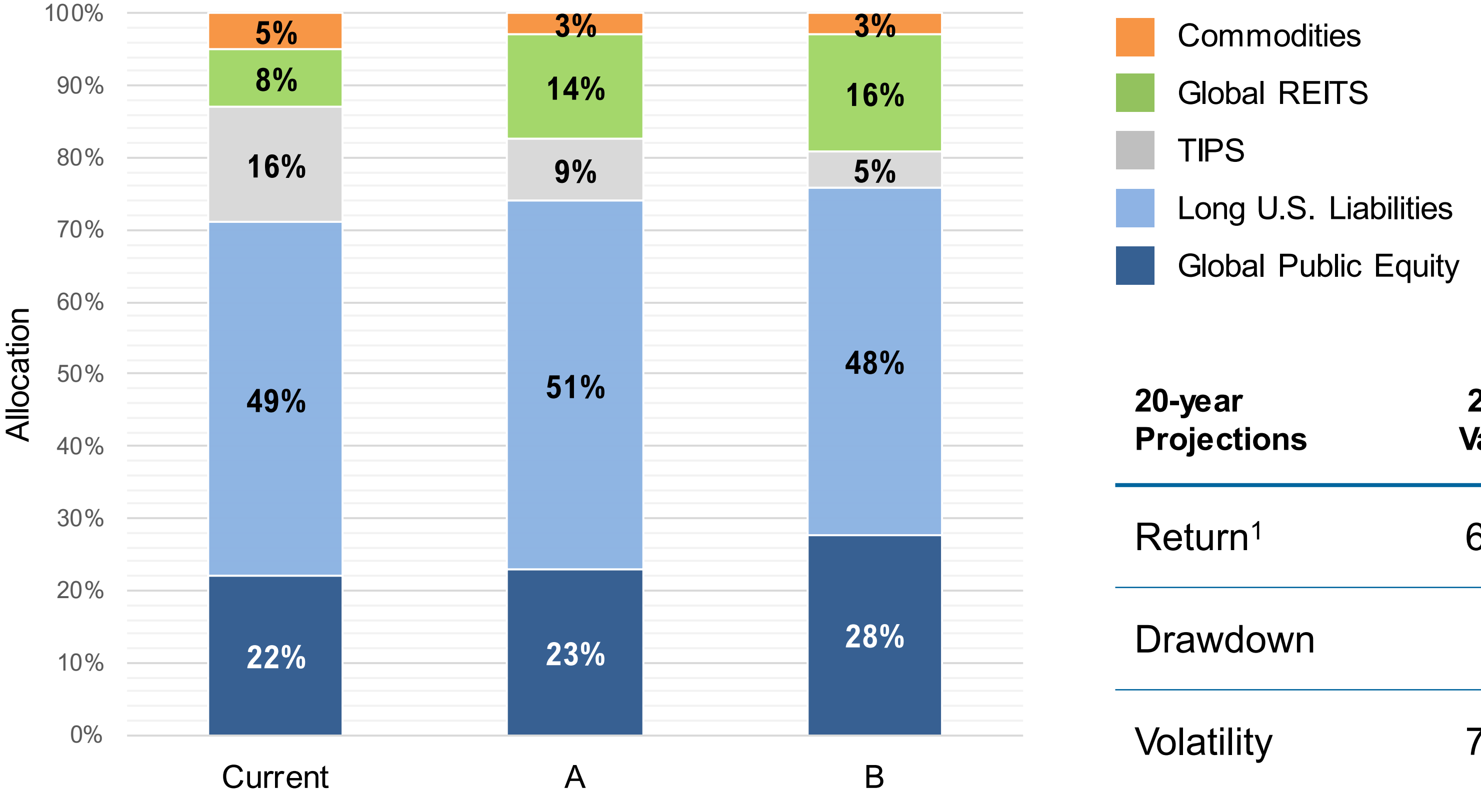


20-year Projections	2018[2] Values	Current Portfolio	Candidate A	Candidate B
Return[1]	7.0%	5.2%	5.5%	5.8%
Drawdown	—	19.5%	19.8%	22.9%
Volatility	9.2%	9.5%	9.9%	11.1%

[1] Returns are geometric and net of expenses of 0.10%.
[2] The 2018 returns were estimated to 60 years, the 2018 10-year estimated return was 5.1%.

CERBT Strategy 3 Candidate Portfolios

Candidate portfolios compared to current portfolio:

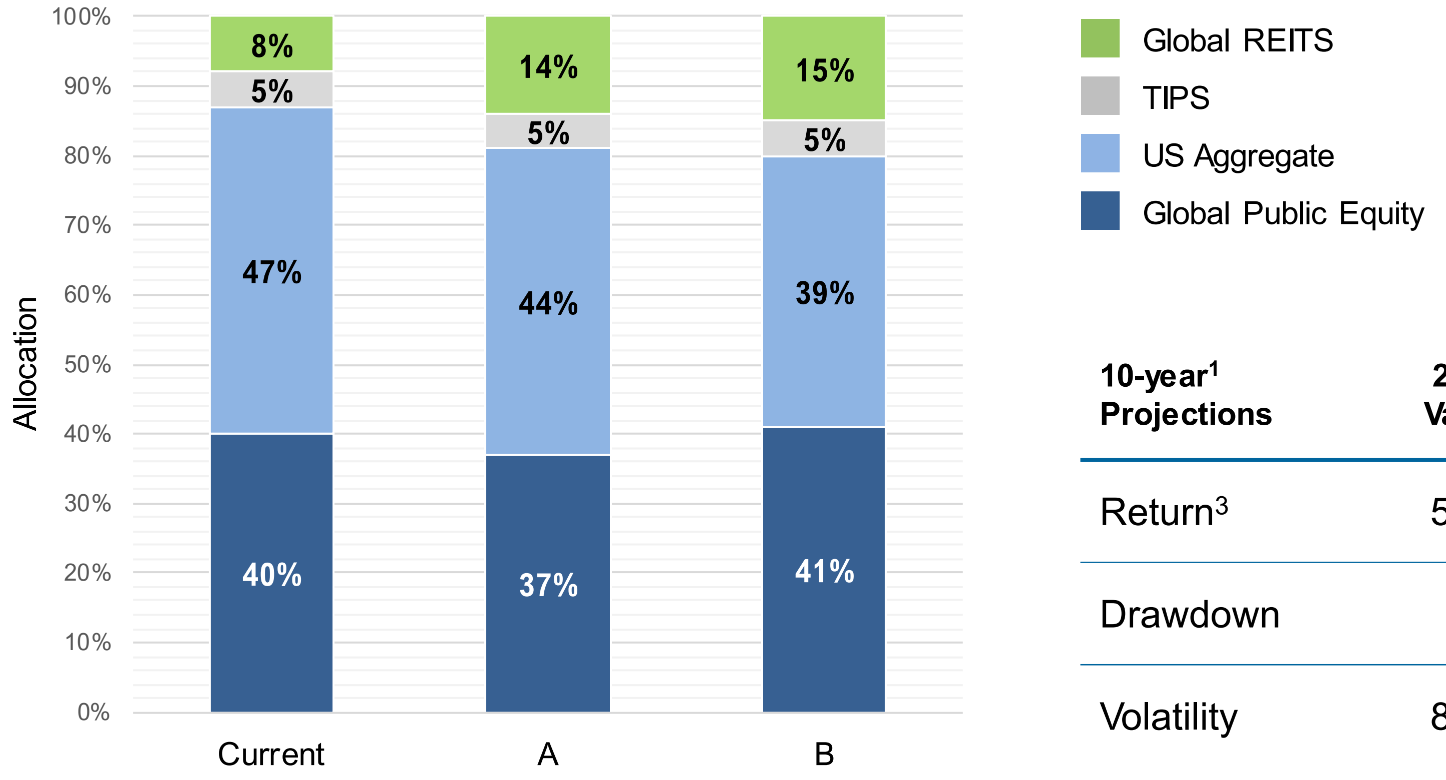


20-year Projections	2018[2] Values	Current Portfolio	Candidate A	Candidate B
Return[1]	6.2%	4.5%	5.0%	5.3%
Drawdown	—	14.2%	15.8%	17.8%
Volatility	7.3%	7.5%	8.4%	9.2%

[1] Returns are geometric and net of expenses of 0.10%.
[2] The 2018 returns were estimated to 60 years, the 2018 10-year estimated return was 4.4%.

CEPPT Strategy 1 Candidate Portfolios

Candidate portfolios compared to current portfolio:



10-year[1] Projections	2019[2] Values	Current Portfolio	Candidate A	Candidate B
Return[3]	5.0%	4.4%	4.5%	4.8%
Drawdown	—	17.6%	18.2%	19.9%
Volatility	8.2%	8.4%	8.8%	9.4%

[1] CEPPT 10-year projections are calculated based on the Board-approved CMA's.
[2] CEPPT was established in 2019.
[3] Returns are geometric and net of expenses of 0.25%.

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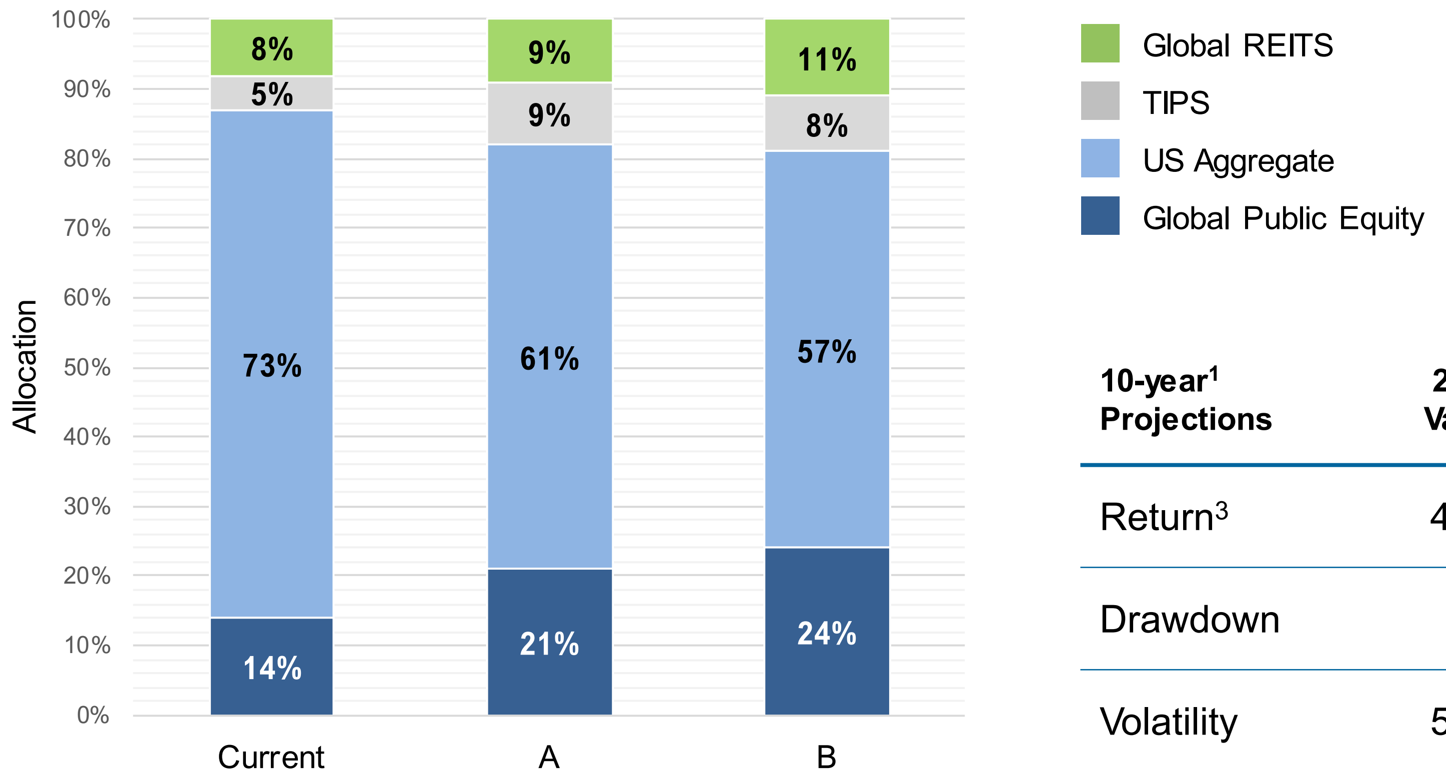
CEPPT Strategy 2 Candidate Portfolios

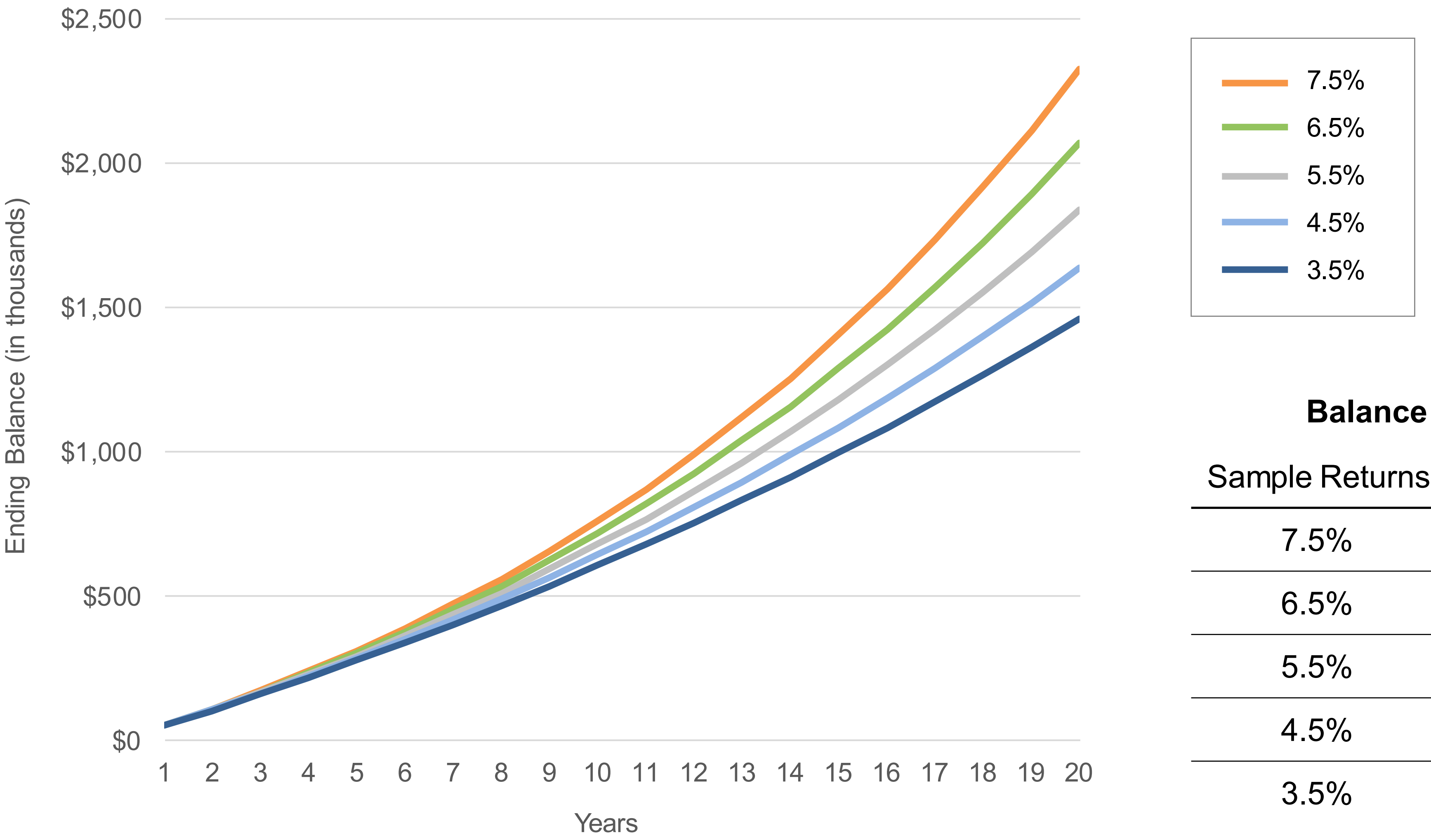
Candidate portfolios compared to current portfolio:



10-year[1] Projections	**2019[2] Values**	**Current Portfolio**	**Candidate A**	**Candidate B**
Return[3]	4.0%	3.1%	3.5%	3.8%
Drawdown	—	9.7%	11.7%	13.1%
Volatility	5.2%	5.3%	6.1%	6.7%

[1] CEPPT 10-year projections are calculated based on the Board-approved CMA's.
[2] CEPPT was established in 2019.
[3] Returns are geometric and net of expenses of 0.25%.

Example: Growth of $50k Annual Contribution for 20 Years



Balance of Principal and Interest*

Sample Returns	At 10 years	At 20 years
7.5%	$760,000	$2,330,000
6.5%	$720,000	$2,070,000
5.5%	$680,000	$1,840,000
4.5%	$640,000	$1,640,000
3.5%	$610,000	$1,460,000

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* Numbers rounded to the nearest $10,000

Program Benefits: Total All-Inclusive Cost of Participation

Combines administrative, custodial, and investment fees

Offers high quality investment vehicles with various risk tolerances

Public market asset classes consistent with various providers

Fee is applied daily to assets under management:

- CERBT 10 basis points
- CEPPT 25 basis points

Next Steps: Recommendation for the Board

Adopt the updated Fixed Income Long Liability benchmark weights for the Affiliate Funds

Adopt the recommended Candidate Portfolio for each Affiliate Trust as the Policy Portfolio

Asset Liability Management Timeline

2021
November

- Board adoption of Affiliate Funds Capital Market Assumptions

2022
January

- Discussion of candidate portfolios with proposed time weighted rates of return

March

- Educational webinar
- Board decision on Affiliate Funds Strategic Asset Allocation

July — September

- Implementation of strategic asset allocation portfolios

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Q&A

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