Asset Liability Management — Focus on CalPERS Prefunding Programs

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Presenters



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



- 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

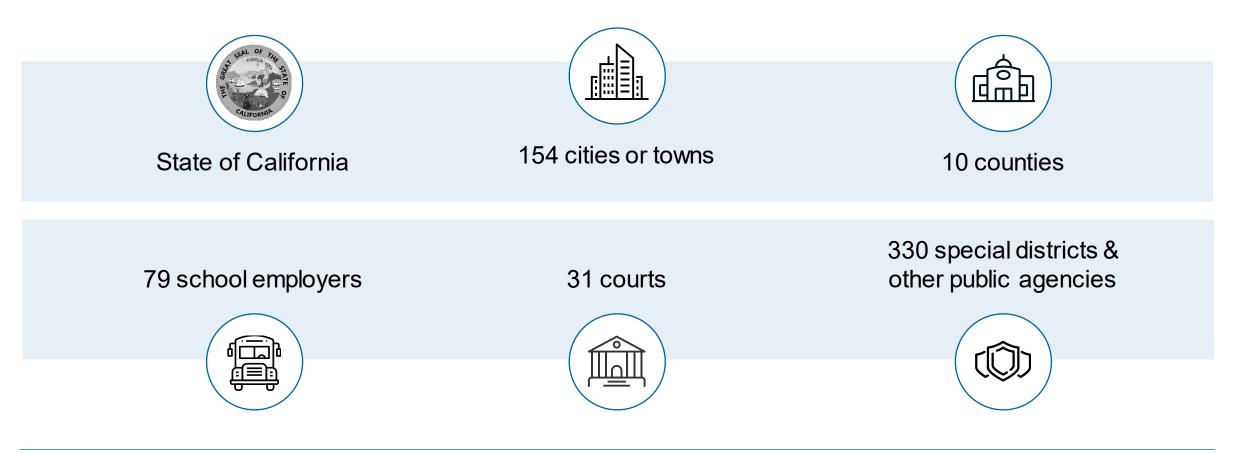
California Employers' Pension Prefunding Trust Fund (CEPPT)

- 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



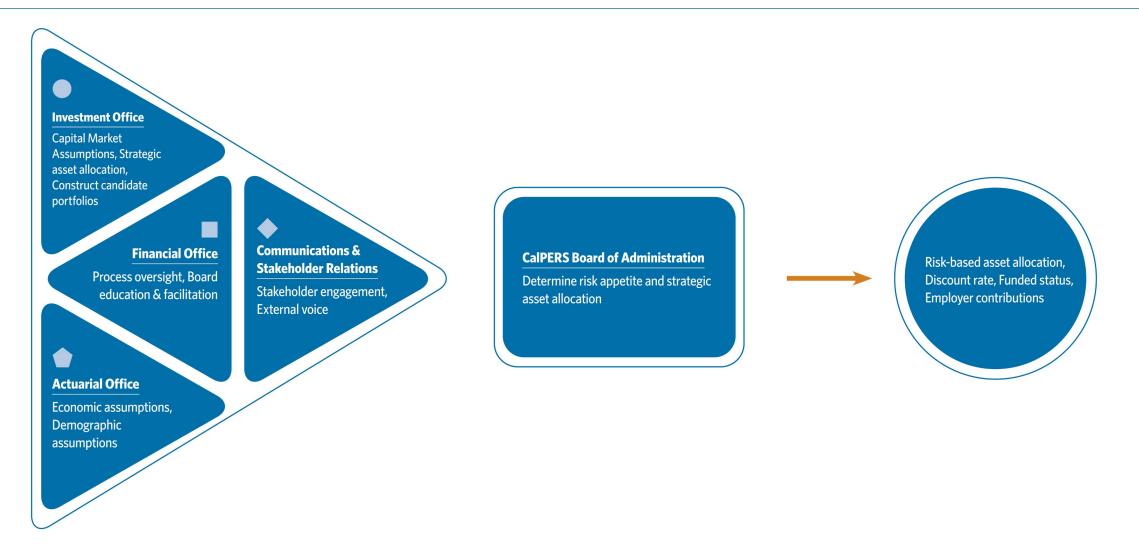
Prefunding Program Employers

605 contracting employers (591 CERBT and 58 CEPPT)



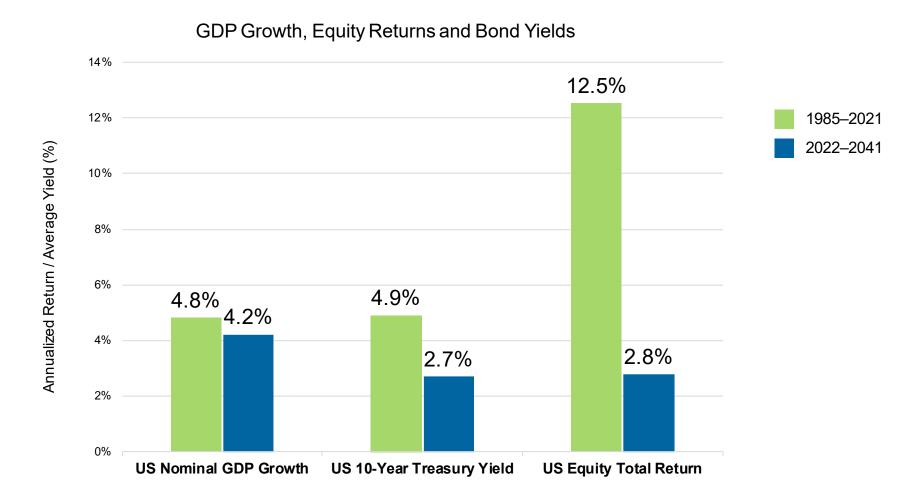


Key Functions Within the ALM Process





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

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

CEPPT CMAs: 10-yrs

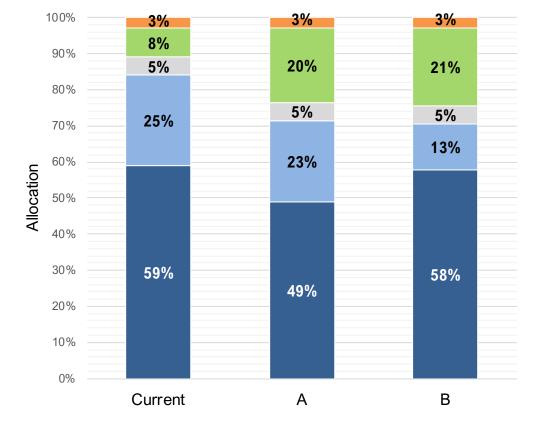
Fixed Income Benchmark for CERBT — the Long Liability Benchmark weights have been reoptimized.

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%

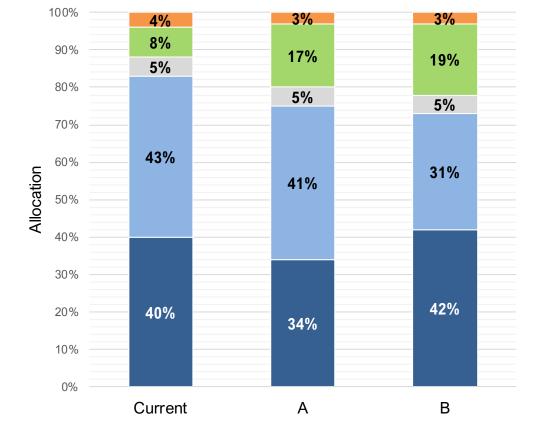


¹Returns are geometric and net of expenses of 0.10%.

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%

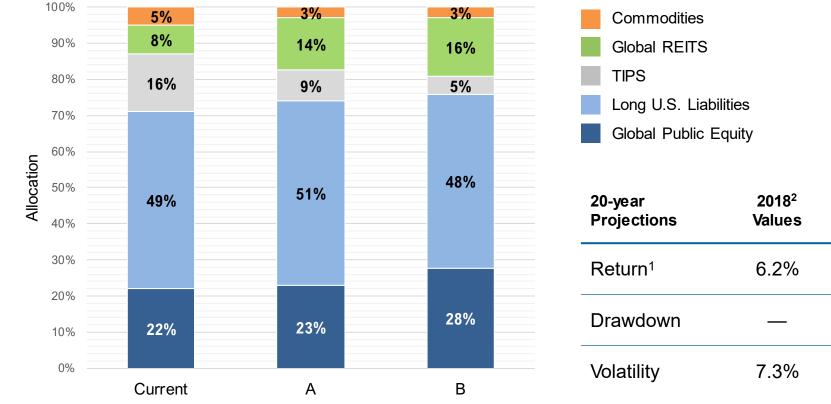


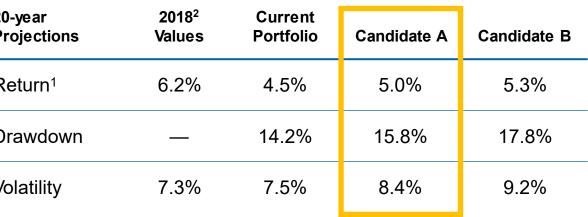
¹ Returns are geometric and net of expenses of 0.10%.

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:





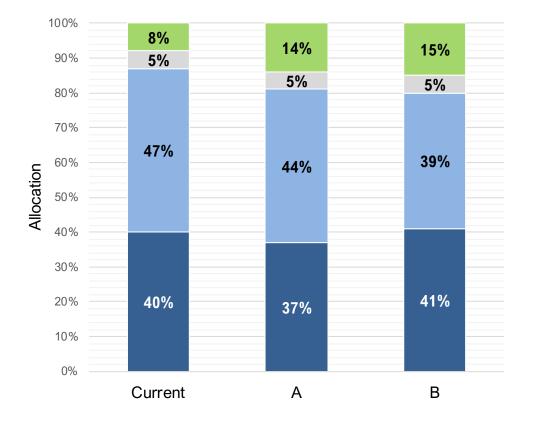


¹ Returns are geometric and net of expenses of 0.10%.

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%



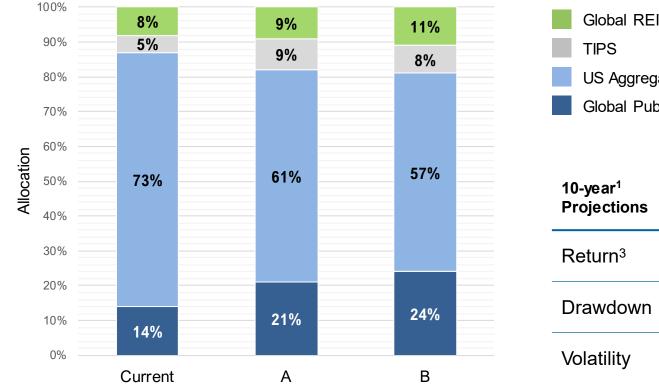
¹CEPPT 10-year projections are calculated based on the Board-approved CMA's.

² CEPPT was established in 2019.

³Returns are geometric and net of expenses of 0.25%.

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%

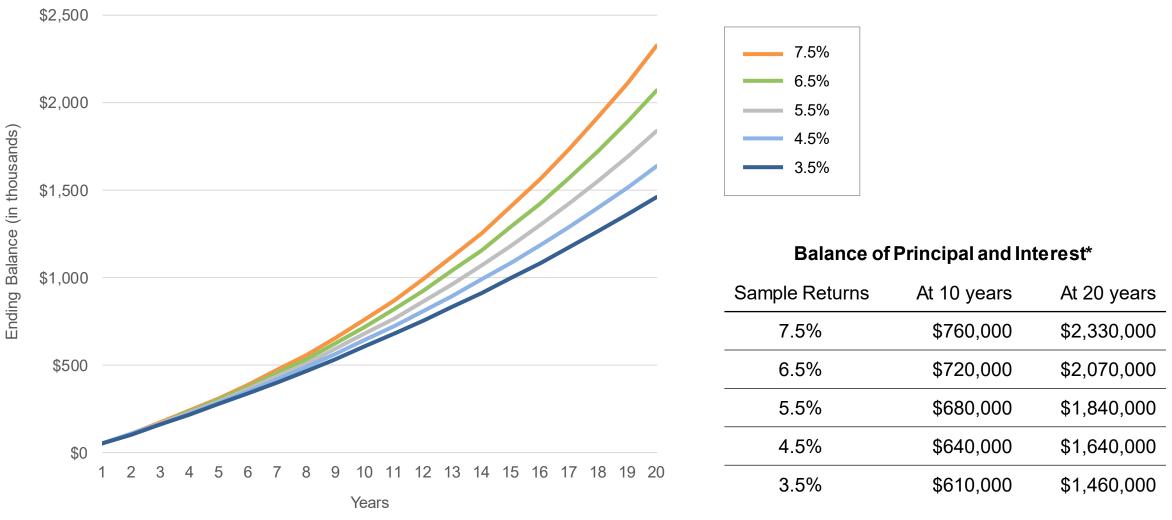


¹CEPPT 10-year projections are calculated based on the Board-approved CMA's.

² CEPPT was established in 2019.

³Returns are geometric and net of expenses of 0.25%.

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



Program Benefits: Total All-Inclusive Cost of Participation

Combines administrative, custodial, and investment fees

Offers high quality investment vehicles with various risk tolerances

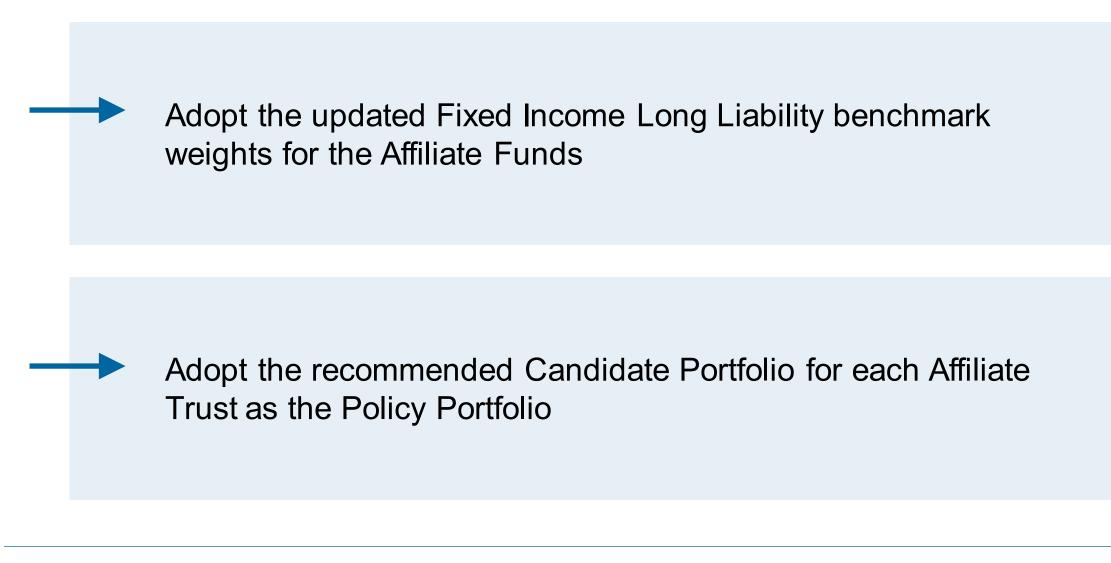
Public market asset classes consistent with various providers

Fee is applied daily to assets under management:

- CERBT 10 basis points
- CEPPT 25 basis points









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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