CalPERS Update League of California Cities

Marcie Frost CalPERS, Chief Executive Officer

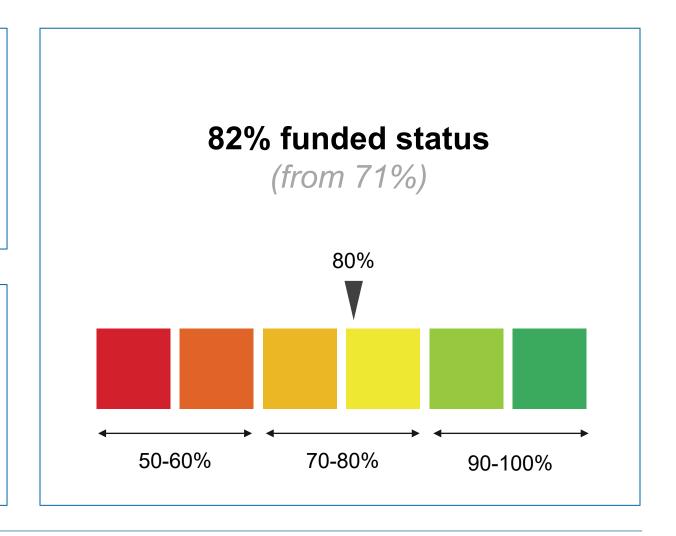
September 22, 2021



Fiscal Year Financial Status (as of 6/30/21)

\$469 billion in assets (from \$389b)

21.3% net return on investments (from 4.7%)





Total Net Investment Returns Over Time

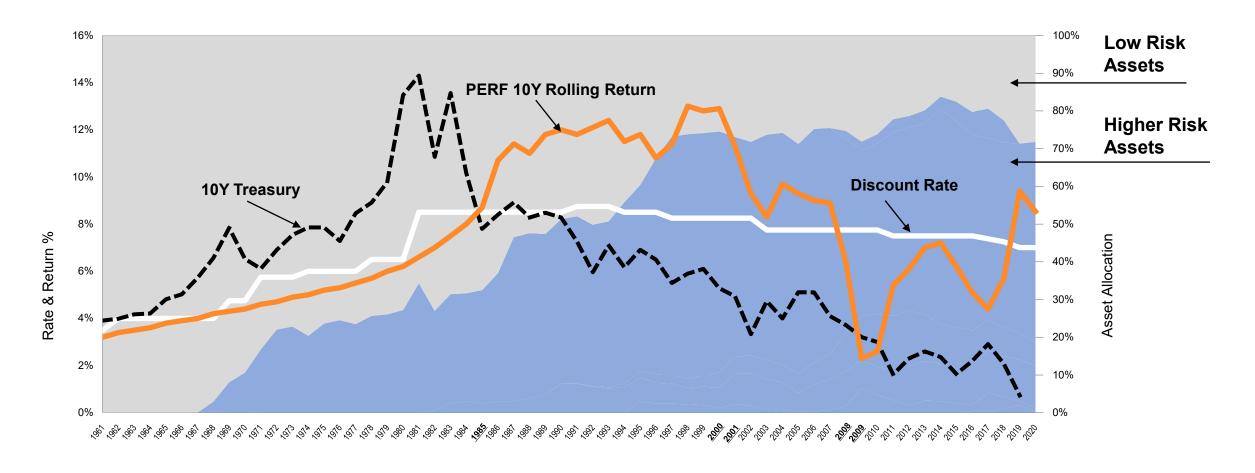
30 year	8.4%
20 year	6.9%
10 year	8.5%
5 year	10.3%
1 year	21.3%

(As of fiscal-year ending 6/30/21)



Challenges to Achieving Target Returns

U.S. Treasury Yields Reduced to Near Zero



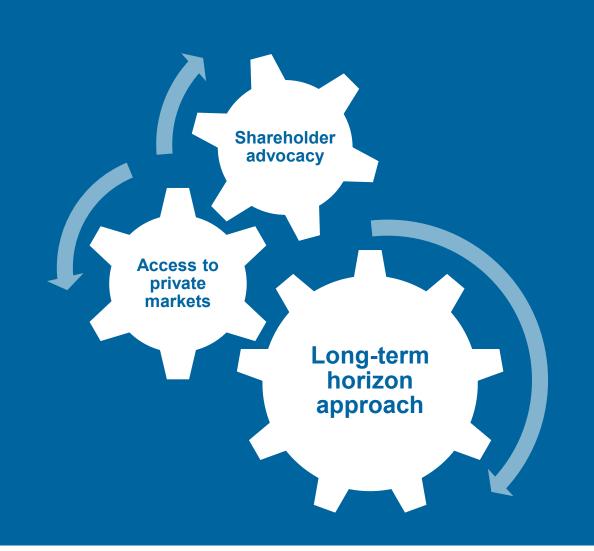


Capital Market Assumptions: Survey Results

	Survey Parameter	2017 ALM	2020 Mid-Cycle ALM Survey Median Value 03/31/20	2021 Second ALM Survey Median Value 03/31/21	
10-Year Expectations	Expected Return	6.1%	5.7%	5.3%	
	Expected Risk	11.4%	10.5%	11.3%	
	Expected Return/Risk	0.54	0.54	0.47	
20-Year Expectations	Expected Return	7.0%	6.6%	6.2%	←
	Expected Risk	11.4%	10.5%	11.3%	
	Expected Return/Risk	0.73	0.63	0.55	



Strategic Investment Approach





Three Key Risks



Investment Risk



Sustainability



Employer Affordability



Purpose of Funding Risk Mitigation Policy

Lowers the discount rate in years of very good investment returns

Lowers investment volatility over time

Provides greater predictability and less volatility in contribution rates for employers



Risk Mitigation Policy Sample Scenarios



If

investment returns outperform discount rate by:

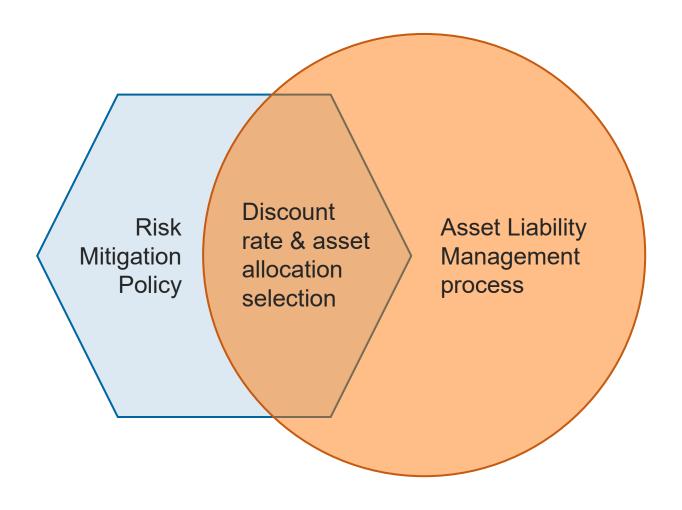


then

resulting discount rate will be:



Risk Mitigation Policy and Asset Liability Management (ALM)





Balancing Risk & Reward

% of Private Assets

% of Leverage

Tolerance for Drawdown Risk

Volatility



Current Portfolio: Status Quo

Necessitated Discount rate: 6.25%, Projected Return: 6.2%

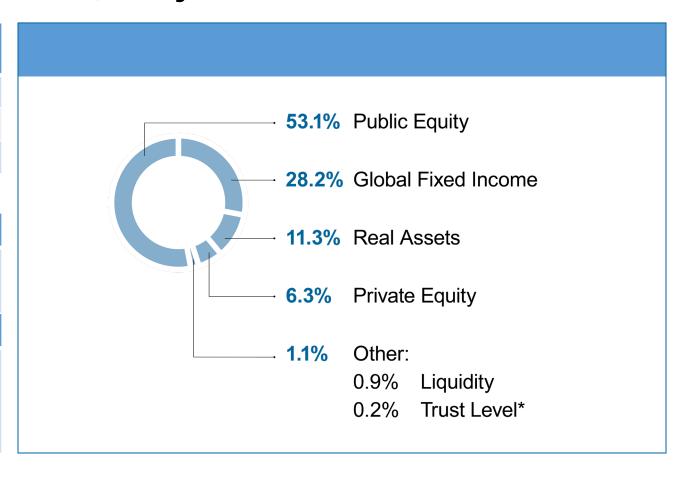
Time Horizon	Projected Return	Drawdown Risk	Volatility
20 Years	6.2%	22.6%	11.2%
Near-term	5.2%	23.6%	10.9%
Long-term	6.6%	22.3%	11.3%

In comparison to other candidate portfolios:

Pros

- No changes, no added complexity
- No policy changes required

- Lowest return for similar risk levels
- · Lower projected returns in near-term horizon
- Lower diversification
- Higher projected contributions





Candidate Portfolio C: higher risk/return, diversified

Discount rate: 6.75%, Projected Return: 6.8%

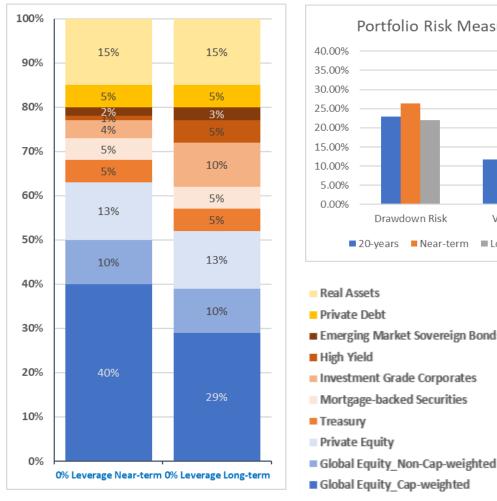
Time Horizon	Projected Return	Drawdown Risk	Volatility
20 Years	6.8%	22.9%	11.8%
Near-term	6.2%	26.3%	12.6%
Long-term	7.0%	22.0%	11.6%

In comparison to other candidate portfolios:

Pros

- Higher returns than current portfolio
- Lower contributions

- Private asset deployment requires policy changes.
- Potential increased exposure to ESG issues
- Higher contribution and funding risk compared to portfolio A and current portfolio









Candidate Portfolio D: higher risk/return, diversified, 5% leverage

Discount rate: 6.75%, Projected Return: 6.8%

Time Horizon	Projected Return	Drawdown Risk	Volatility
20 Years	6.8%	22.1%	11.6%
Near-term	6.4%	27.2%	13.0%
Long-term	7.0%	20.8%	11.1%

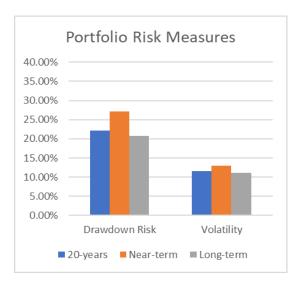
In comparison to other candidate portfolios:

Pros

- Higher returns than current portfolio
- In the long-term, more diversification than unlevered
- Lower contributions

- More complexity with leverage
- Private asset deployment requires policy changes
- Potential increased exposure to ESG issues
- Higher contribution and funding risk compared to portfolio A and current portfolio









Candidate Portfolio E: highest risk/return, diversified, 5% leverage

Discount rate: 7.0%, Projected Return: 7.0%

Time Horizon	Projected Return	Drawdown Risk	Volatility
20 Years	7.0%	24.5%	12.5%
Near-term	6.4%	28.2%	13.4%
Long-term	7.2%	23.6%	12.2%

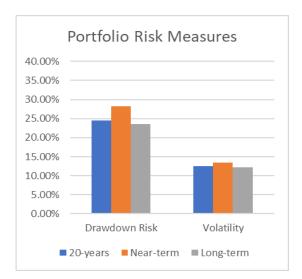
In comparison to other candidate portfolios:

Pros

- Highest projected return at 7.0%
- Highest discount rate
- Lowest projected contributions

- 7.0% return target not feasible without 5% leverage
- Private asset deployment requires policy changes
- Potential increased exposure to ESG issues
- Higher portfolio, contribution and funding risk compared to portfolio A and current portfolio

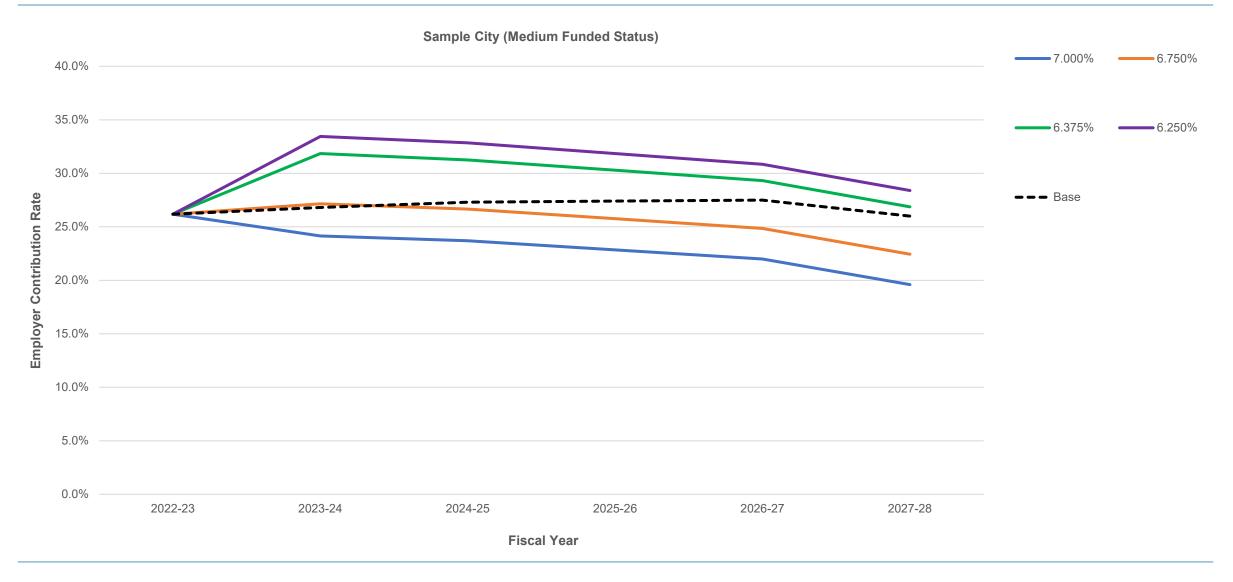






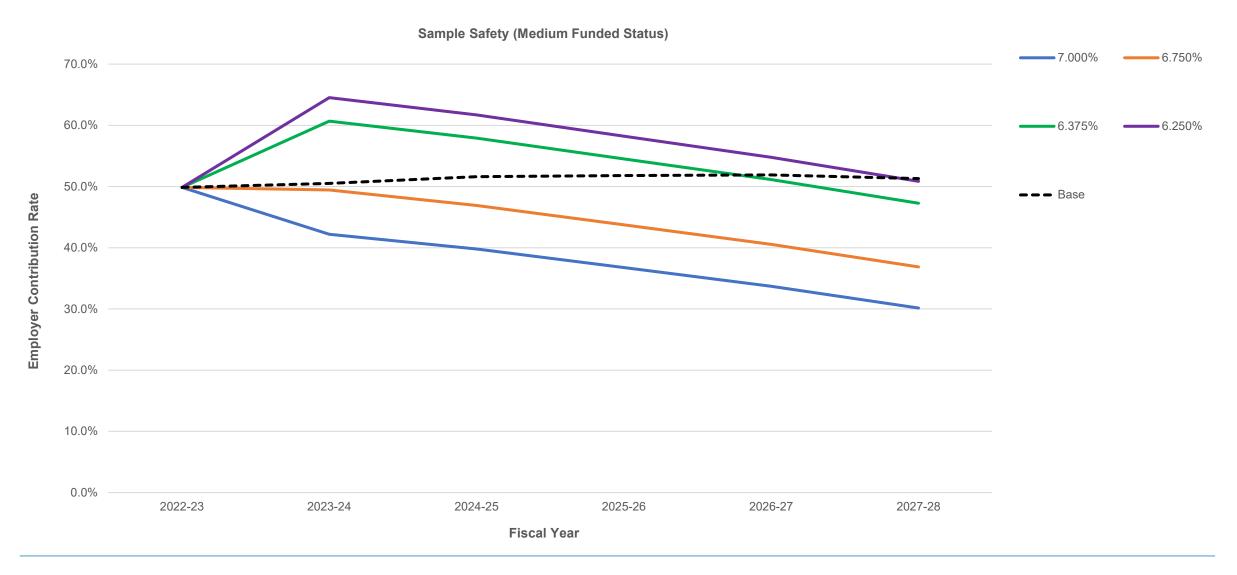


Impact on Employer Contribution Rates: Sample City



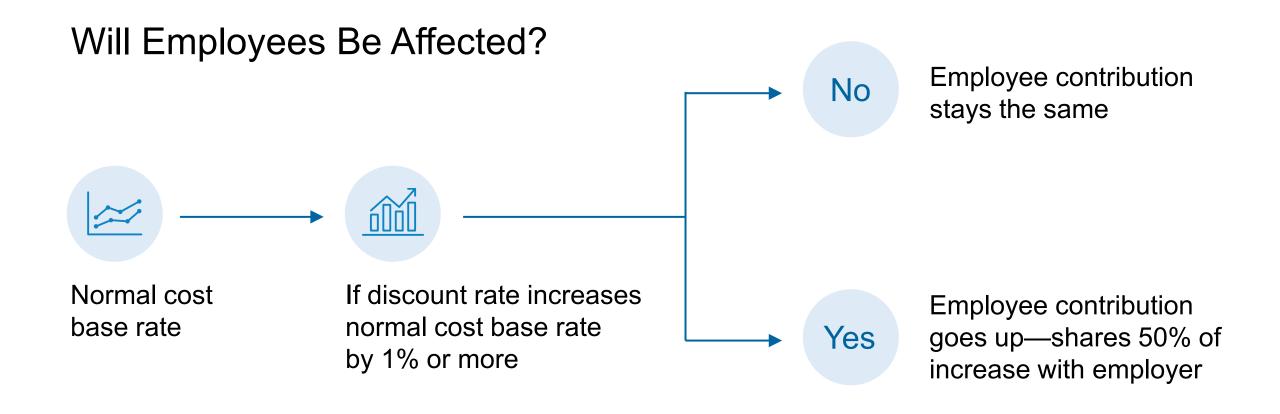


Impact on Employer Contribution Rates: Sample Safety Plan





Potential Impact to PEPRA Contribution Rates





Potential PEPRA Rate Increases

Keys to Remember

- All employees hired after Dec. 31, 2012
- Employees pay 50% of the Normal Cost, with 1% increase threshold
- New MOUs cannot lower 50% cost-share, but can increase it
- Further communication coming when ALM completed
- Contact CalPERS for your plans' specifics



Opportunities for Stakeholder Engagement

2021 February

- Educational sessions:
 - ALM concepts and framework
 - o ALM timeline

June

Review of economic climate

July*

- Capital Market Assumptions
- Educational sessions:
 - ALM process and framework
 - Investment funds risk assessment
 - Gauging the funds' ability to tolerate market risk

September

- Discussion
 of candidate
 portfolios with
 proposed
 discount rates
- Draft Experience study results (first reading)

November

- Experience study results
- Discussion
 of candidate
 portfolios with
 discount rates
- Adopt new actuarial assumptions
- Adopt new economic assumptions
- Final approval of discount rate
- Final approval of strategic asset allocation

2022

July*

 Effective date for strategic asset allocation

* Board offsite

Quarterly stakeholder webinars throughout the ALM process: January 20, April 27, August 3, and October TBD 2021



November Board Preview

- CIO Search
- Health care plan design
- COVID and CalPERS operations
- Diversity, equity, and inclusion framework
- Upcoming public agency election April 2022
- Educational Forum Online October 19-20 free registration now open



Our Commitment to You







Listening to employers



Partnerships



Here for you



Q&A

CalPERS_Stakeholder_Relations@calpers.ca.gov





