

Trust Level Review

As of March 31, 2025

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Section I. PERF Summary

As of March 31, 2025

Public Employees' Retirement Fund (PERF) Metrics

\$527.3bn

Assets Under
Management

+6.7%

10-Yr
Total Return

+5.6%

Fiscal Year-to-Date
Total Return

\$1.0bn

5-Yr Cumulative
Value Added

\$0.2bn

Fiscal Year to-Date
Value Added

12.8%

Forecasted
Volatility

12bps

Forecasted
Actionable
Tracking Error

34.5%

Allocation to
Private Assets

2.0x

30-Day Tier 1
Stress Liquidity
Coverage Ratio¹

63.4%

Allocation to
Actively Managed
Assets

Quarter-End Highlights

Capital Markets

- Capital markets experienced a volatile start to 2025, characterized by sharp fluctuations in investor sentiment and asset prices. Growing concerns over tariff policies, inflationary pressures, slowing growth and a weakening corporate earnings outlook have contributed to heightened uncertainty.
- The GPE portfolio delivered a gain of 0.48% in Q1 2025, outperforming its benchmark by +34bps. As of the end of Q1, 28% of the GPE portfolio is allocated to active strategies. The team remains committed to identifying and evaluating new active equity strategies as part of an ongoing effort to strategically deploy additional active investments.
- Credit spreads remained near multi-year tights early in the quarter, though underperformed government bonds as the risk sentiment turned; risk-off positioning within the IG corporate portfolio provided a tailwind to performance.

Private Markets

- Private Assets' absolute returns had strong positive contributions from Private Debt (+13.5%), Private Equity (+11.3%) and Infrastructure (+9.7%), with a marginal drag from Real Estate.
- Infrastructure and Private Debt had strong relative performance, outperforming their benchmarks by +1184 bps and +343 bps respectively.
- The team continued actively scaling our mature Private Equity and younger Private Debt and Infrastructure programs, with Private Equity currently at approximately half of overall private assets.

Total Fund Risk

- Market and liquidity risk levels remain in line with expectations given portfolio strategy. All key metrics remain within tolerances and formal policy limits.
- We were able to maintain consistent portfolio management processes during the market turbulence in April (after the as-of date of this report), and liquidity and cash reserves remained stable.

Investment Process

- The recruitment for the Deputy Chief Investment Officer, Capital Markets, has initiated.
- Progression of the FY 2024-25 Initiatives of Talent & Culture, Data & Technology, Portfolio Resilience/ ALM & Sustainable Investments continues to remain on track.
- Identification of the FY 2025-26 Initiatives is underway, focusing on strategic priorities, risk mitigation, and organizational capacity and capability.

All performance reported net of investment expenses and annualized for periods greater than 1-Yr unless noted as cumulative

¹As of 4/2/25

Section II. Performance Tables

As of March 31, 2025

PERF Returns

PERF returned + 7.1% for the trailing 1-Yr and + 8.7% for the trailing 5-Yr

- All asset classes have positive total returns for all periods except for Income 5-Yr total return
- Private Equity relative returns are a significant driver of PERF excess across most periods
- Real Assets relative returns continue to be a meaningful driver of PERF excess over shorter periods

	End Value (B)	20-Yr	10-Yr	5-Yr	1-Yr	FYTD	1-Qtr
Total PERF	\$ 527.3	6.5%	6.7%	8.7%	7.1%	5.6%	1.4%
Benchmark		7.1%	6.7%	8.6%	7.5%	5.6%	1.0%
Excess		(51) bps	(1) bps	9 bps	(38) bps	3 bps	48 bps
Cumulative Value Added (B)		\$ (20.0)	\$ (0.8)	\$ 1.0	\$ (1.8)	\$ 0.2	\$ 2.5
Public Equity	\$ 205.3	7.7%	8.8%	14.7%	8.3%	6.0%	0.5%
Benchmark		7.9%	8.7%	14.4%	7.8%	5.7%	0.1%
Excess		(12) bps	13 bps	26 bps	45 bps	28 bps	34 bps
Cumulative Value Added (B)		\$ 0.1	\$ 2.3	\$ 2.5	\$ 0.9	\$ 0.5	\$ 0.7
Income	\$ 156.2	4.4%	2.0%	(0.6)%	4.7%	4.8%	2.8%
Benchmark		3.8%	1.7%	(0.8)%	4.5%	4.6%	2.8%
Excess		53 bps	30 bps	22 bps	22 bps	17 bps	5 bps
Cumulative Value Added (B)		\$ 5.3	\$ 2.5	\$ 1.4	\$ 0.3	\$ 0.2	\$ 0.1
Private Equity	\$ 92.2	12.0%	11.3%	12.8%	11.3%	7.6%	1.8%
Benchmark		13.4%	11.8%	11.9%	18.8%	9.5%	(0.8)%
Excess		(137) bps	(47) bps	88 bps	(746) bps	(192) bps	258 bps
Cumulative Value Added (B)		\$ (17.6)	\$ (9.2)	\$ (6.8)	\$ (5.4)	\$ (1.5)	\$ 2.5
Real Assets	\$ 70.4	3.8%	5.4%	2.8%	1.0%	1.8%	0.4%
Benchmark		6.7%	4.7%	2.0%	(2.2)%	0.4%	1.0%
Excess		(292) bps	67 bps	82 bps	313 bps	146 bps	(57) bps
Cumulative Value Added (B)		\$ (10.7)	\$ 2.8	\$ 1.9	\$ 2.1	\$ 1.0	\$ (0.4)
Private Debt	\$ 19.4	-	-	-	13.5%	7.8%	1.7%
Benchmark		-	-	-	10.0%	7.6%	2.8%
Excess		-	-	-	343 bps	25 bps	(113) bps
Cumulative Value Added (B)		-	-	-	\$ 0.3	\$ (0.0)	\$ (0.2)
Net Financing	\$ (28.2)	-	-	-	-	-	-
Other Trust Level	\$ 12.0	-	-	-	-	-	-

Exhibit 2.1

All performance reported net of investment expenses and annualized for periods greater than 1-Yr unless noted as cumulative.

Section II. Performance Tables

As of March 31, 2025

PERF Capital Market Returns

Capital Market segments performance positive for shorter periods

- Performance is positive for all Capital Market segments for the FYTD and 1-Yr periods
- 5-Yr performance continues to be mixed with positive performance for the Public Equity segments, IG Corporates, and High Yield while Treasury and MBS experienced negative performance
- The Cap Weighted segment's excess in recent periods is the result of strong relative performance from active strategies

	End Value (B)	20-Yr	10-Yr	5-Yr	1-Yr	FYTD	1-Qtr
Cap Weighted	\$ 152.2	8.0%	9.2%	16.0%	7.3%	4.5%	(1.0)%
Benchmark		8.1%	9.1%	15.7%	6.7%	4.1%	(1.5)%
Excess		(11) bps	15 bps	35 bps	57 bps	39 bps	47 bps
Cumulative Value Added (B)		\$ (0.1)	\$ 2.0	\$ 2.3	\$ 0.8	\$ 0.6	\$ 0.7
Factor Weighted	\$ 53.1	-	-	11.1%	11.1%	10.3%	4.8%
Benchmark		-	-	11.0%	11.0%	10.4%	4.8%
Excess		-	-	4 bps	6 bps	(6) bps	(3) bps
Cumulative Value Added (B)		-	-	\$ 0.1	\$ 0.0	\$ (0.0)	\$ (0.0)
Treasury	\$ 38.6	-	(0.2)%	(6.2)%	2.3%	3.6%	4.4%
Benchmark		-	(0.2)%	(6.2)%	2.3%	3.6%	4.4%
Excess		-	(3) bps	4 bps	0 bps	0 bps	(0) bps
Cumulative Value Added (B)		-	\$ (0.2)	\$ 0.1	\$ 0.0	\$ 0.0	\$ (0.0)
MBS	\$ 28.1	3.6%	1.6%	(0.3)%	5.9%	5.6%	3.0%
Benchmark		3.0%	1.2%	(0.5)%	5.5%	5.3%	3.0%
Excess		65 bps	37 bps	21 bps	40 bps	23 bps	3 bps
Cumulative Value Added (B)		\$ 1.3	\$ 0.6	\$ 0.3	\$ 0.1	\$ 0.1	\$ 0.0
IG Corporates	\$ 33.9	5.3%	2.6%	0.5%	3.5%	4.7%	2.6%
Benchmark		4.7%	2.3%	0.5%	3.3%	4.5%	2.5%
Excess		55 bps	34 bps	6 bps	24 bps	26 bps	16 bps
Cumulative Value Added (B)		\$ 1.3	\$ 0.6	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.1
High Yield	\$ 27.6	-	-	6.5%	6.9%	5.5%	1.1%
Benchmark		-	-	6.5%	6.8%	5.5%	1.1%
Excess		-	-	(2) bps	16 bps	7 bps	6 bps
Cumulative Value Added (B)		-	-	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
EM Sovereign Bonds	\$ 27.9	-	-	-	5.3%	4.9%	2.3%
Benchmark		-	-	-	5.0%	4.6%	2.4%
Excess		-	-	-	24 bps	23 bps	(9) bps
Cumulative Value Added (B)		-	-	-	\$ 0.1	\$ 0.1	\$ (0.0)

Exhibit 2.2

All performance reported net of investment expenses and annualized for periods greater than 1-Yr unless noted as cumulative.

Section II. Performance Tables

As of March 31, 2025

PERF Private Market Returns

All Private Markets have positive returns over longer periods

- Private assets have positive performance over the 5-Yr, 10-Yr, and 20-Yr trailing periods
- Private Equity excess performance can fluctuate rapidly over short periods with mark to market changes in its public benchmark
- Infrastructure continues to outperform Real Estate over long-term periods

	End Value (B)	20-Yr	10-Yr	5-Yr	1-Yr	FYTD	1-Qtr
Private Equity	\$ 92.2	12.0%	11.3%	12.8%	11.3%	7.6%	1.8%
Benchmark		13.4%	11.8%	11.9%	18.8%	9.5%	(0.8)%
Excess		(137) bps	(47) bps	88 bps	(746) bps	(192) bps	258 bps
Cumulative Value Added (B)		\$ (17.6)	\$ (9.2)	\$ (6.8)	\$ (5.4)	\$ (1.5)	\$ 2.5
Private Debt	\$ 19.4	-	-	-	13.5%	7.8%	1.7%
Benchmark		-	-	-	10.0%	7.6%	2.8%
Excess		-	-	-	343 bps	25 bps	(113) bps
Cumulative Value Added (B)		-	-	-	\$ 0.3	\$ (0.0)	\$ (0.2)
Infrastructure	\$ 19.7	-	9.3%	6.5%	9.7%	6.9%	(1.1)%
Benchmark		-	3.9%	2.0%	(2.2)%	0.4%	1.0%
Excess		-	547 bps	454 bps	1,184 bps	651 bps	(210) bps
Cumulative Value Added (B)		-	\$ 5.2	\$ 4.0	\$ 1.9	\$ 1.1	\$ (0.4)
Real Estate	\$ 50.4	3.2%	4.9%	1.6%	(1.9)%	0.0%	1.0%
Benchmark		7.1%	4.9%	2.0%	(2.2)%	0.4%	1.0%
Excess		(394) bps	(4) bps	(37) bps	24 bps	(35) bps	(2) bps
Cumulative Value Added (B)		\$ (15.6)	\$ (1.6)	\$ (2.0)	\$ 0.1	\$ (0.2)	\$ (0.0)
Forestland	\$ 0.3	-	0.8%	5.5%	11.2%	11.7%	12.0%
Benchmark		-	3.1%	2.0%	(2.2)%	0.4%	1.0%
Excess		-	(232) bps	355 bps	1,333 bps	1,134 bps	1,102 bps
Cumulative Value Added (B)		-	\$ (0.8)	\$ (0.1)	\$ 0.0	\$ 0.0	\$ 0.0

Exhibit 2.3

All performance reported net of investment expenses and annualized for periods greater than 1-Yr unless noted as cumulative.

Section II. Performance Tables

As of March 31, 2025

Affiliate Investments Returns

Affiliate returns were in line with respective asset allocations

- Affiliate funds are passively managed strategies, except for Long-Term Care Fund, with realized returns and volatility in line with the assigned asset allocation and benchmarks
- Positive excess returns are largely due to structural tax advantages of public equity and real estate investment trusts (REITs) funds vs their respective benchmarks

Defined Benefit, Health, and OPEB Plans	End Value (M)	20-Yr	10-Yr	5-Yr	1-Yr	FYTD	1-Qtr
Judges' Retirement Fund	\$ 61.6	1.8%	2.0%	2.8%	5.2%	3.8%	1.1%
Benchmark		1.7%	1.9%	2.6%	5.0%	3.6%	1.0%
Excess		16 bps	17 bps	24 bps	21 bps	17 bps	10 bps
Judges' Retirement System Fund II	\$ 2,785.0	6.4%	6.0%	8.9%	5.9%	5.0%	0.9%
Benchmark		6.2%	5.7%	8.6%	5.5%	4.8%	0.8%
Excess		17 bps	27 bps	28 bps	34 bps	22 bps	8 bps
Legislators' Retirement System Fund	\$ 91.2	5.1%	3.8%	4.2%	5.2%	5.1%	3.0%
Benchmark		4.9%	3.6%	4.1%	5.1%	5.1%	3.0%
Excess		21 bps	14 bps	8 bps	8 bps	5 bps	1 bps
Health Care Fund	\$ 76.3	3.3%	1.4%	(0.6)%	3.9%	3.7%	1.1%
Benchmark		3.1%	1.3%	(0.6)%	3.7%	3.6%	1.0%
Excess		13 bps	1 bps	0 bps	22 bps	11 bps	8 bps
Long-Term Care Fund	\$ 4,513.3	4.6%	3.5%	4.6%	6.2%	5.4%	1.2%
Benchmark		4.5%	3.5%	4.5%	6.6%	5.9%	1.2%
Excess		13 bps	(1) bps	13 bps	(39) bps	(49) bps	(8) bps
CERBT Strategy 1 Fund	\$20,217.1	-	6.0%	9.3%	5.7%	5.0%	0.6%
Benchmark		-	5.8%	9.1%	5.4%	4.8%	0.6%
Excess		-	29 bps	21 bps	31 bps	20 bps	8 bps
CERBT Strategy 2 Fund	\$ 2,136.1	-	4.8%	6.5%	5.3%	5.0%	1.3%
Benchmark		-	4.6%	6.3%	5.1%	4.8%	1.3%
Excess		-	23 bps	16 bps	26 bps	16 bps	5 bps
CERBT Strategy 3 Fund	\$ 801.5	-	3.8%	4.5%	5.1%	5.0%	1.9%
Benchmark		-	3.7%	4.4%	4.9%	4.8%	1.9%
Excess		-	18 bps	12 bps	21 bps	12 bps	3 bps
CEPPT Strategy 1 Fund	\$ 219.3	-	-	6.5%	5.5%	4.9%	1.1%
Benchmark		-	-	6.4%	5.5%	4.8%	1.1%
Excess		-	-	11 bps	7 bps	5 bps	2 bps
CEPPT Strategy 2 Fund	\$ 73.6	-	-	3.0%	5.4%	5.0%	1.9%
Benchmark		-	-	3.0%	5.3%	4.9%	1.9%
Excess		-	-	5 bps	9 bps	8 bps	2 bps

Exhibit 2.4

All performance reported net of investment expenses and annualized for periods greater than 1-Yr.

Section II. Performance Tables

As of March 31, 2025

Affiliate Investments Returns

Target Date Fund excess returns related to benchmark valuation timing

- Target Date Funds' 1-Qtr excess is largely due to an end of quarter valuation difference vs the benchmark that is expected to offset the following quarter

Supplemental Income Plans (457/SCP Plan)		End Value (M)	20-Yr	10-Yr	5-Yr	1-Yr	FYTD	1-Qtr
Target Income Fund		\$ 186.9	-	3.9%	5.3%	5.9%	4.8%	1.5%
Benchmark			-	3.8%	5.2%	5.7%	4.7%	1.4%
Excess			-	12 bps	11 bps	19 bps	13 bps	12 bps
Target 2020 Fund		\$ 166.6	-	4.6%	7.3%	6.1%	4.9%	1.4%
Benchmark			-	4.4%	7.2%	5.9%	4.7%	1.3%
Excess			-	13 bps	14 bps	21 bps	14 bps	14 bps
Target 2025 Fund		\$ 235.1	-	5.5%	9.2%	6.4%	4.9%	0.8%
Benchmark			-	5.4%	9.1%	6.2%	4.7%	0.6%
Excess			-	15 bps	16 bps	23 bps	16 bps	18 bps
Target 2030 Fund		\$ 280.2	-	6.2%	11.0%	6.6%	4.8%	0.5%
Benchmark			-	6.1%	10.8%	6.3%	4.6%	0.2%
Excess			-	12 bps	18 bps	27 bps	20 bps	23 bps
Target 2035 Fund		\$ 208.2	-	7.0%	12.9%	6.9%	4.9%	0.1%
Benchmark			-	6.9%	12.7%	6.6%	4.6%	(0.2)%
Excess			-	14 bps	21 bps	30 bps	23 bps	26 bps
Target 2040 Fund		\$ 196.6	-	7.8%	14.5%	7.1%	4.8%	(0.5)%
Benchmark			-	7.7%	14.3%	6.7%	4.5%	(0.8)%
Excess			-	14 bps	24 bps	34 bps	26 bps	31 bps
Target 2045 Fund		\$ 125.7	-	8.2%	14.7%	7.1%	4.7%	(0.8)%
Benchmark			-	8.0%	14.5%	6.8%	4.5%	(1.1)%
Excess			-	14 bps	24 bps	35 bps	28 bps	33 bps
Target 2050 Fund		\$ 81.0	-	8.2%	14.7%	7.1%	4.7%	(0.8)%
Benchmark			-	8.0%	14.5%	6.8%	4.5%	(1.1)%
Excess			-	14 bps	24 bps	35 bps	28 bps	33 bps
Target 2055 Fund		\$ 33.7	-	8.2%	14.7%	7.1%	4.7%	(0.8)%
Benchmark			-	8.0%	14.5%	6.8%	4.5%	(1.1)%
Excess			-	14 bps	24 bps	35 bps	28 bps	33 bps
Target 2060 Fund		\$ 14.7	-	-	14.7%	7.1%	4.7%	(0.8)%
Benchmark			-	-	14.5%	6.8%	4.5%	(1.1)%
Excess			-	-	24 bps	36 bps	28 bps	33 bps
Target 2065 Fund¹		\$ 5.5	-	-	-	7.1%	4.7%	(0.8)%
Benchmark			-	-	-	6.8%	4.5%	(1.1)%
Excess			-	-	-	35 bps	27 bps	33 bps

Exhibit 2.5

All performance reported net of investment expenses and annualized for periods greater than 1-Yr.

Section II. Performance Tables

As of March 31, 2025

Affiliate Investments Returns

Core Fund returns were generally in line with benchmarks

- The SIP Global All Cap Ex-US' 1-Qtr excess is largely due to an end of quarter valuation difference vs the benchmark that is expected to offset the following quarter

Supplemental Income Plans (457/SCP Plan) (cont.)		End Value (M)	20-Yr	10-Yr	5-Yr	1-Yr	FYTD	1-Qtr
SSgA STIF		\$ 119.4	-	2.1%	2.8%	5.2%	3.8%	1.1%
Benchmark			-	1.9%	2.6%	5.0%	3.6%	1.0%
Excess			-	21 bps	25 bps	24 bps	19 bps	11 bps
SIP US Short Term Bond Core		\$ 40.2	-	1.7%	1.5%	5.6%	4.6%	1.6%
Benchmark			-	1.7%	1.6%	5.6%	4.6%	1.6%
Excess			-	(7) bps	(4) bps	1 bps	1 bps	2 bps
SIP US Bond Core		\$ 54.3	-	1.5%	(0.4)%	5.0%	4.8%	2.8%
Benchmark			-	1.5%	(0.4)%	4.9%	4.8%	2.8%
Excess			-	2 bps	1 bps	10 bps	3 bps	(1) bps
SIP Real Asset Core		\$ 18.4	-	5.1%	12.4%	9.7%	8.1%	6.2%
Benchmark			-	5.1%	12.3%	9.6%	8.0%	6.1%
Excess			-	2 bps	2 bps	14 bps	13 bps	11 bps
SIP Russell All Cap Core		\$ 803.7	-	11.8%	18.2%	7.2%	3.9%	(4.7)%
Benchmark			-	11.8%	18.2%	7.2%	3.9%	(4.7)%
Excess			-	2 bps	4 bps	(0) bps	1 bps	1 bps
SIP Global All Cap EX-US		\$ 80.6	-	5.3%	11.6%	6.5%	5.3%	5.5%
Benchmark			-	5.0%	11.0%	5.5%	4.5%	4.6%
Excess			-	30 bps	54 bps	96 bps	75 bps	95 bps

Exhibit 2.6

All performance reported net of investment expenses and annualized for periods greater than 1-Yr.

Section III. Markets and Economy

As of March 31, 2025

Macroeconomic Drivers and Outlook

Q1 returns respectable; April events shift the cyclical and secular outlook

- Over the first quarter of 2025, asset returns moved in different directions for different reasons. Overall returns were respectable, despite the uncertain economic and policy outlook, heightened geopolitical concerns, and stretched valuations in asset classes such as US equities and corporate credit.
- In April, financial market prices swiftly declined following the US Administration's Liberation Day Executive Orders, which imposed a minimum 10% tariff on many imports into the US. Tariffs are a supply shock, pushing up prices and depressing economic activity. Notably, both equities and bonds moved in the same direction in early April (down), as market repriced rapidly (circle in chart below).
- Equities and bonds have largely recovered, in part because the tariff implementation was delayed; in part on anticipation of a potential reduction in their severity, and in part a result of front-loading behavior, supporting near-term data outturns. However, inflation expectations continue to rise and the Q1 depreciation of the US dollar extended into Q2.
- There is a cyclical and a structural element to the new Administration's approach.
- From a cyclical perspective, economists expect the brunt of the economic impact to be felt in Q3 this year, but the extent of the slowdown is not obvious. The US economy is in a modest starting point, with the US shifting to a more closed economy (offset by fiscal largesse) complicating growth prospects; the labor market outlook is mixed, influenced by lower immigration (less supply) and expectations for weakening growth (less demand); while inflation is expected to be higher, with the tariff impact partially offset by weakening oil prices and continued housing disinflation. The FOMC faces a difficult trade-off and consequently has indicated it will keep policy in a wait-and-see mode.
- Looking further out, the US and global zeitgeist are changing. Financial market pricing do not appear to have fully priced in global policy and geopolitical uncertainty; which we believe present downside risks to the outlook. That said, US asset markets continue to have tailwinds; for example, the depth of market, the US reserve currency status, and strength of private sector balance sheets.

FOMC participant's risk bias

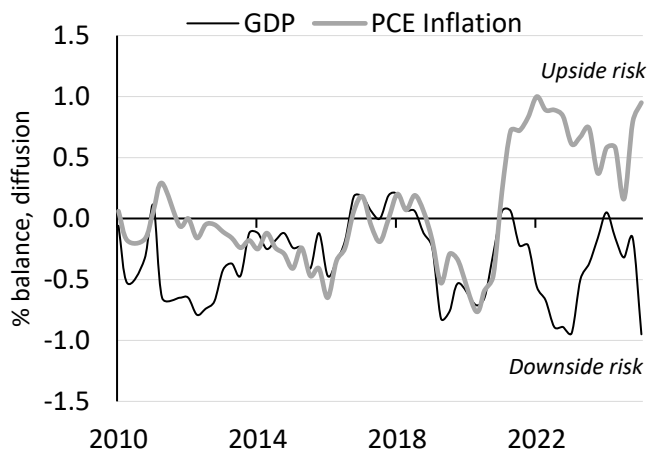


Exhibit 3.1

Source: Haver Analytics, Bloomberg Financial L.P., CalPERS calculations.

S&P500 and US 10-year Treasury yield changes

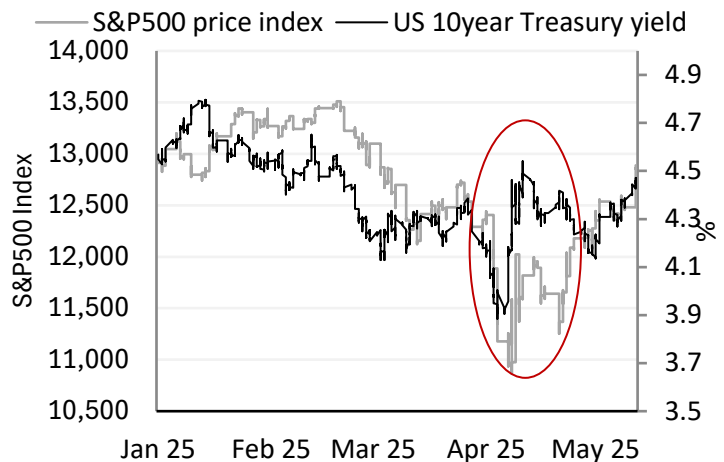


Exhibit 3.2

Section IV. PERF Allocation

As of March 31, 2025

Strategic Asset Allocation

Allocation remains within policy bands

Interim Targets and Policy Bands

- The Board's General Pension Consultant, in consultation with the Investment Committee and staff, establishes Interim Allocation Targets to roughly reflect expected pacing towards the long-term SAA
- The charts below show current positioning versus current interim targets
- Illiquid Private allocations cannot be precisely targeted and fluctuate significantly due to public vs. private valuation changes. The policy bands exist in part to allow for a reasonable level of variation over time

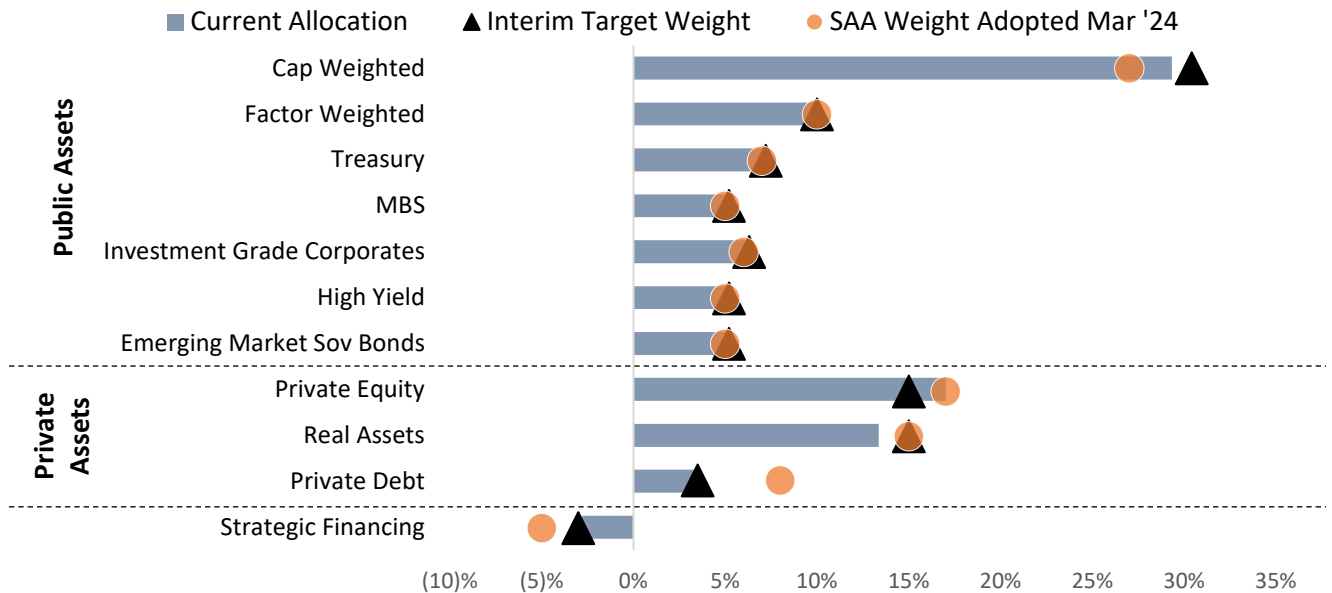


Exhibit 4.1

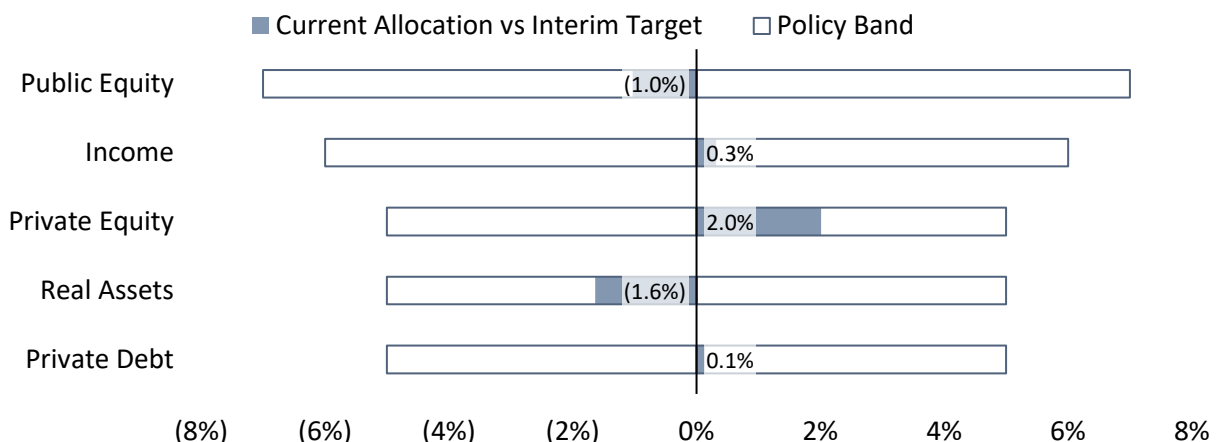


Exhibit 4.2

¹ Income current allocation does not include Tactical Fixed Income.

Section V. Risk Detail

As of March 31, 2025

Volatility

Total portfolio volatility has been in line with expectations

Current Levels

- Actionable Tracking Error has been stable for the past year. Total Fund Volatility and Total Fund Tracking Error have decreased, due to risk modeling changes for private equity.
- The Actionable Tracking Error metric captures deviations from benchmarks for all public market programs, out-of-benchmark opportunistic investments, and asset allocation. The current level of 12 basis points relative to the Policy Limit of 100 basis points indicates available leeway to increase active management in these spheres. There is no equivalent quantitative metric for private programs due to inherent limitations in modeling, measurement, and benchmarking

	Policy Limit	Current 3/31/2025	Last Qtr 12/31/2024	Last Year 3/31/2024
Total Fund Volatility (%)	-	12.8	13.7	14.0
Policy Benchmark Volatility (%)	-	12.3	12.0	12.5
Tracking Error (%)				
Actionable	< 1.00	0.12	0.15	0.14
Total Fund	-	1.28	2.21	1.95
Allocation	-	0.00	0.02	0.01

Exhibit 5.1

Section V. Risk Detail

As of March 31, 2025

Risk Decomposition

Growth oriented asset classes dominate overall risk

Contribution to Total Portfolio Volatility

- Growth-oriented assets dominate Total Fund Volatility: public and private equities contribute approximately 81% and the remaining asset classes have also significant growth component. For Income, diversification benefits offset much of the inherent volatility

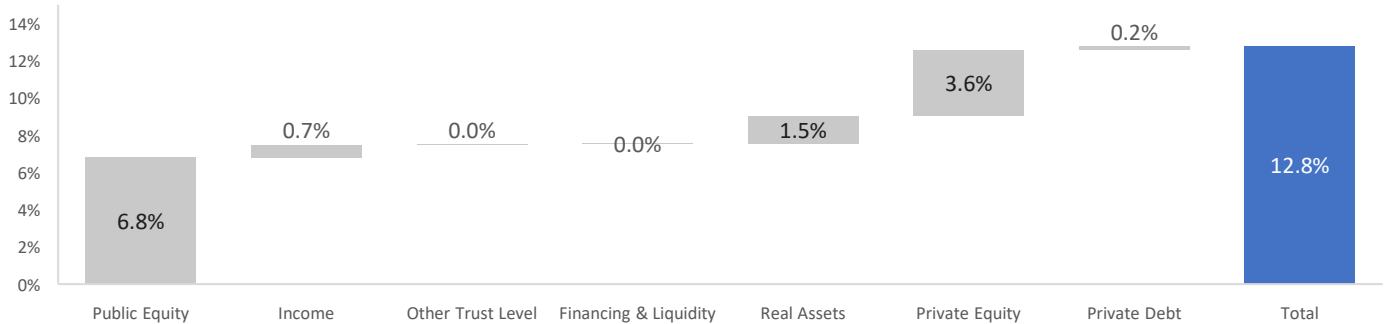


Exhibit 5.2

Asset Class	Market Value ¹ (\$ Millions)	Total Forecasted Volatility (%)	% Contribution to Total Volatility	5-Year Realized Volatility (%)
Public Asset Classes				
Public Equity	204,711	17.9	53.1	14.5
Cap Weighted	151,712	19.0	41.7	15.8
Factor Weighted	52,998	14.9	11.4	11.9
Income	156,142	6.4	5.5	9.0
Treasury	38,537	10.5	-0.1	11.6
IG Corp	33,928	9.5	1.6	12.4
MBS	28,143	5.7	0.4	6.6
EM Sov Debt	27,933	7.6	2.1	-
High Yield	27,600	5.2	1.5	7.7
Other Trust Level	11,968	2.8	0.3	-
LLER	11,563	2.8	0.2	1.7
Opportunistic	225	0.0	0.0	-
Other	180	13.2	0.0	-
Financing & Liquidity	(29,442)	0.2	0.0	-
Liquidity	13,332	0.0	0.0	0.0
Trust Level Financing	(42,775)	0.1	0.0	-
Private Asset Classes				
Private Equity	92,051	21.2	27.9	10.4
Real Assets	70,376	12.4	11.6	6.1
Private Debt	19,442	6.8	1.7	-
TOTAL PERF	525,247	12.8	100.0	8.9

Exhibit 5.3

¹ Data source: Blackrock's Aladdin; Some differences with State Street primarily due to timing of recording some cash flows; Some strategies are proxied

Section V. Risk Detail

Risk Decomposition (cont.)

Active equities and LLER are the largest contributors to Actionable TE

% Contribution to Actionable Tracking Error

- Total Fund Actionable Tracking Error (TE) is at 12 basis points vs. a policy limit of 100 basis points
- The primary contributors are external public equity managers; other meaningful contributors are the Low Liquidity Enhanced Return (LLER) program and EM Sovereign Debt

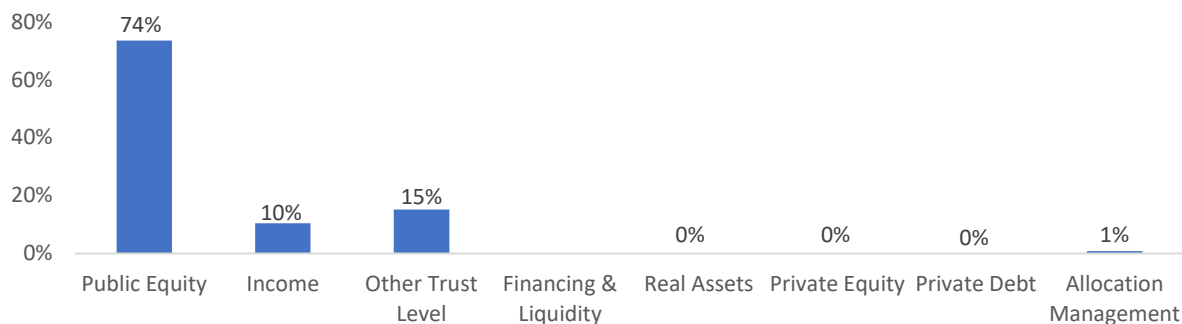


Exhibit 5.4

Asset Class	Forecasted Tracking Error (basis points)	% Contribution to Actionable TE	5-Year Realized TE (basis points)
Public Equity	29	74	20
Cap Weighted	39	74	27
Factor Weighted	10	-1	12
Income	20	10	15
Treasury	8		8
		0	
IG Corp	39	2	32
MBS	53	3	28
EM Sov Debt	52	6	-
High Yield	49	0	27
Other Trust Level	276	15	-
LLER	281	15	162
Opportunistic	17	0	-
Other	-	0	-
Financing & Liquidity	-	0	-
Liquidity	18	1	-
Trust Level Financing	18	0	-
Allocation Management	0	1	-
TOTAL PERF Actionable	12	100	15
Private Equity	608		1,341
Real Assets	371		291
Private Debt	435		-
TOTAL PERF	128		175

Exhibit 5.5

Appendix 1: PERF Benchmarks

<u>Asset Class</u>	<u>Policy Benchmark</u>
Public Equity – Cap Weighted	Custom FTSE All World, All Cap Equity
Public Equity – Factor Weighted	Custom FTSE Factor Weighted Index
Private Equity	Custom FTSE All World, All Cap Equity + 150 basis points, Quarter Lag
Income - Treasury	Custom Bloomberg Government
Income - MBS	Custom Bloomberg Mortgage
Income - IG Corporates	Custom Bloomberg Corporate ex Sov
Income - High Yield	Custom Bloomberg High Yield
Income - EM Sovereign Bonds	Custom JP Morgan EMBIG Diversified
Real Assets	MSCI/PREA U.S. ACOE Quarterly Property Fund Index (Unfrozen), Quarter Lag
Private Debt	Morningstar LSTA U.S. Leveraged Loan 100 Index + 125 bps, Quarter Lag
Strategic Leverage	ICE BofA US 3-Month Treasury Bill Index +50 bps

Appendix 2: Definitions

<u>Term</u>	<u>Definition</u>
10 Year U.S. Treasury	The 10-Yr Treasury note (bond) is a debt obligation issued by the United States government with a maturity of 10 years upon initial issuance. A 10-Yr Treasury note pays interest at a fixed rate once every six months and pays the face value to the holder at maturity. The “10-Yr” is viewed as a sign of investor sentiment about the economy. A rising yield for the 10-Yr indicates falling demand for Treasury bonds, which means investors prefer higher-risk, higher-reward investments. A falling yield suggests the opposite.
Annual average percent change (aapc)	The change in a variable between one entire year and the prior entire year. This differs to an annual percent change, which looks at one point in time compared with the same point in time a year earlier.
Actionable Tracking Error	Investment Policy definition of the Total Fund tracking error that excludes the effect of active exposure from private asset classes arising from the modeling challenges and the non-investible nature of their benchmarks.
Active Leverage	The portion of Total Fund leverage that is controlled by staff and used to fund exposures incremental to the Strategic Asset Allocation.
Alpha	The measure of the return of an investment relative to an appropriate benchmark.
Basis Point (BP)	1 basis point is 1/100 of a percent or 0.01.
Beta	A statistical measure of investment or portfolio return sensitivity to the market where the market is typically defined by a market index. A beta of 1.0 means the investment moves in synch with the market. A beta of 0.5 means the investment moves 50 as much as the market. A beta of 1.5 means the investment moves 150 as much as the market. For example, a portfolio with a beta of 0.8 is expected to have an 8 return when the market returns 10.
Benchmark	A collection of assets to compare against the portfolio’s assets. These are typically market indices (e.g., SP500 or Bloomberg Barclays Global Aggregate). Benchmarks can be a useful tool to evaluate performance and risk.
Central Banks	The principal monetary authority of a nation, a central bank performs several key functions, including issuing currency and regulating the supply of credit in the economy. The Federal Reserve is the central bank of the United States.

<u>Term</u>	<u>Definition</u>
Consensus Economics	Consensus Economics is a global macroeconomic survey firm that polls more than 700 economists monthly for their forecasts for over 2,000 macroeconomic indicators in 115 countries. The company is headquartered in London, United Kingdom.
Consumer Prices Index (CPI)	An index which measures changes in the prices of a (weighted average) basket of goods and services. This basket is representative of aggregate U.S. consumer spending and is a common reference point for inflation.
Counterparty	The legal entity that holds the other side of a contract or financial transaction.
Economic Activity	Any action that involves producing, distributing, or consuming products or services is an economic activity. Used synonymously with real GDP growth.
Event Risk	Refers to any future potential occurrence that can cause losses for investors or other stakeholders in a company or investment.
Excess Return	The portfolio return minus the portfolio benchmark return. Time-weighted excess return is not affected by the amount of capital invested.
Federal Reserve Open Market Committee (FOMC)	A twelve-member committee made up of the seven members of the Board of Governors; the president of the Federal Reserve Bank of New York; and, on a rotating basis, the presidents of four other Reserve Banks. The FOMC meets eight times a year to set Federal Reserve guidelines regarding the purchase and sale of government securities in the open market and the policy (overnight) interest rate as a means of influencing the volume of bank credit and money in the economy.
Financial Market Pricing	Current price at which an asset or service can be bought or sold. The market price of an asset or service is determined by the forces of supply and demand and, when traded in real time on global financial markets, can be influenced by (unrealized) expectations around the future.
Future Commission Merchant (FCM)	Highly regulated entities that accept orders for exchange traded contracts in Central Counterparty Clearing House (CCPs). Collateral posted at the FCM is mostly used to meet the margin requirements at the CCPs. The collateral in the counterparty section has been provided to the FCM to post at the CCPs on behalf of CalPERS and bridging operational timing and processing gaps in collateral transfer.
High Yield (HY)	Compared to Investment Grade, these bonds have a lower credit rating meaning they have a relatively higher risk of default. Due to their higher probability of default, they pay a higher yield to compensate investors for the additional risk.

<u>Term</u>	<u>Definition</u>
Inflation	A rate of increase in the general price level of goods and services. The general term 'inflation' usually refers to the change in the CPI index over one year.
International Monetary Fund (IMF)	An international organization with 146 members, including the United States. The main functions of the IMF are to lend funds to member nations to finance temporary balance of payments problems, to facilitate the expansion and balanced growth of international trade, and to promote international monetary cooperation among nations. The IMF also creates special drawing rights (SDR's), which provide member nations with a source of additional reserves. Member nations are required to subscribe to a Fund quota, paid mainly in their own currency. The IMF grew out of the Bretton Woods Conference of 1944.
International Swaps and Derivatives Association (ISDA)	A trade organization of market participants that facilitates standardization of contractual agreements to trade over-the-counter derivative contracts. CalPERS enters into ISDA agreements to trade derivatives; for example, FX forwards, total return and interest rate swaps.
Investment Grade (IG)	Bonds with a higher credit rating meaning they have a relatively low risk of default.
Liquidity Coverage Ratio	Metric refers to the proportion of liquid assets to meet short term obligations under a stress scenario (within 30 days). The ratio divides Sources of Liquidity by Uses of Liquidity.
Liquidity (sources of)	Includes: Cash Equivalents, Pension Contributions & Other Inflows, Internal Funding and Liquidity on Demand.
Liquidity (uses of)	Includes: Pension Benefits, Private Asset Funding, Contingent uses and Maturing Derivatives/Repos & Others.
Macroeconomics	A branch of economics that studies how an overall economy (markets, businesses, consumers, and governments) behave. Macroeconomics examines economy-wide phenomena such as inflation, price levels, rate of economic growth, national income, gross domestic product (GDP), and changes in unemployment.
Master Repurchase Agreement (MRA)	The bilateral agreement that governs the collateralized loans of securities. CalPERS uses this contract to enter into forward purchase/repurchase of US Treasuries and Mortgage securities and to post/receive collateral in return (also known as Repo and Reverse Repo).

<u>Term</u>	<u>Definition</u>
Master Securities Forward Transaction Agreement (MFSTA)	The bilateral agreement that CalPERS uses to enter into forward purchase or sale of mortgage bonds and "TBA" instruments.
Net Asset Value (NAV)	The value of an investment fund's assets less its liabilities.
Net Return	Performance net of internal and external investment office management expenses. CalPERS' performance uses a daily Modified-Dietz methodology which is geometrically linked to produce time-weighted returns for longer periods.
	<p>Daily Rate of Return Formula</p> <ul style="list-style-type: none"> • 6/30/2016 & Prior: Dollar Value Added / (Beginning Market Value + Net Cash Flows) • 7/1/2016 to Present: Dollar Value Added / Beginning Market Value • Dollar Value Added = Gains/losses due to price appreciation and income <p>Daily returns are geometrically linked to produce longer period returns.</p>
Unfunded Commitments	A legally binding commitment to a private asset investment fund/vehicle for which the capital has not yet been drawn.
Oil (Brent)	A crude oil blend commonly referred to as Brent Blend, London Brent, or Brent petroleum. It is the main global benchmark for oil prices.
Oil (WTI)	West Texas Intermediate is also crude oil blend. It serves as the main US benchmark for oil prices.
Over the Counter (OTC)	A decentralized market where participants trade stocks, bonds, currencies, or derivatives without a centralized exchange or broker.
Public Employee's Retirement Fund (PERF)	An investment fund created under California state statute and exclusively controlled by the CalPERS Board. The fund is managed with the expressed purpose of paying retirement benefits to participating members.
Policy Rate	The policy interest rate is that at which the central bank will pay or charge commercial banks for their deposits or loans. This rate affects the interest rate that commercial banks apply with their customers, both borrowers and depositors, and more generally, impacts on the general price (rate) of credit in the economy.

<u>Term</u>	<u>Definition</u>
Portfolio Market Value	<p>The sum of the underlying investment values +/- any open receivables or payables (uninvested assets), consistent with the Net Asset Value or Total Net Assets reported in accounting.</p> <ul style="list-style-type: none"> • Public Asset Market Values are calculated as units held x price per unit + accrued income. • Private Asset Market Values represent an opinion of value as of a certain date as stated by either the investment advisor or independent appraiser. Market value differs from amount funded or net investment in that the value includes unrealized gains or losses during the holding period.
Real Gross Domestic Product (GDP)	Measures the total economic output of a country over a specified period (often a year) adjusted for changes in price. The total economic output refers to the volume of all goods and services produced by an economy. It is often referred to as constant-price GDP or constant dollar GDP.
SLA/Sec Lending	Refers to the Securities Lending Agreement ("SLA") under which CalPERS lends securities and receives either cash or other securities as collateral.
Supply-Chain	A network of individuals and companies who are involved in creating a product and delivering it to the consumer. Links on the chain begin with the producers of the raw materials and end when the finished product is delivered to the end user.
Supplemental Income Plans (SIP)	Refers to the combined program for the Public Employees' Deferred Compensation Fund and the Supplemental Contributions Program.
Tracking Error	Standard deviation of the differential return between the portfolio and an equal investment in the benchmark.
Uncertainty	The range of possible values or paths. These are unknown.
Value Added	The incremental gain or loss in dollars resulting from portfolio implementation, active management, and imperfectly investible benchmarks. Over shorter time horizons, the benchmark component can create significant variability in outcomes. Unlike a time-weighted excess return which does not account for the size of the investment, value added will vary with the amount of capital invested. Also referred to as "Dollar Value Added".
Volatility	A measure of the distribution of portfolio returns (or a given security). It is typically defined as the statistical standard deviation of returns, annualized.

<u>Term</u>	<u>Definition</u>
Wage Growth	Wages are the compensation paid to employees for the work or services they perform over a specified period. In the US it is often described as average hourly earnings. Wage growth typically refers to the annual change in wages.
Yield Curve	A yield curve is a line that plots yields (interest rates) of bonds having equal credit quality but differing maturity dates. The slope of the yield curve gives an idea of future interest rate changes and economic activity. There are three main yield curve shapes: normal (upward sloping curve), inverted (downward sloping curve), and flat.