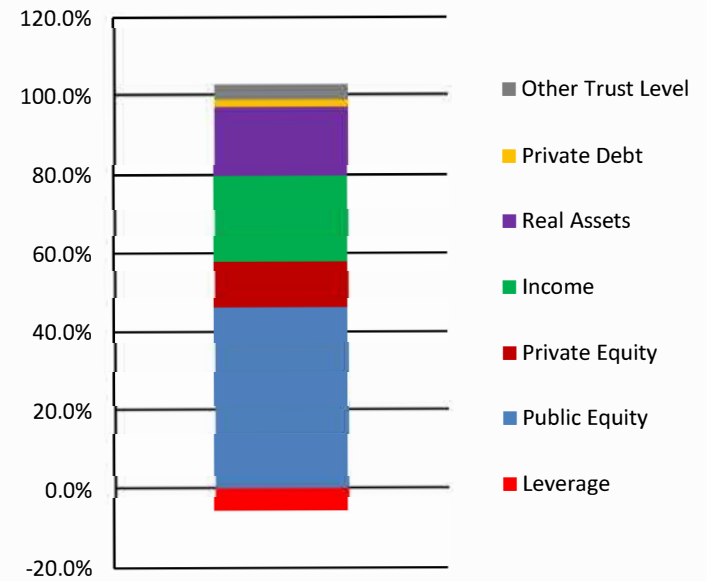


CalPERS Trust Level Quarterly Update - Performance & Risk


Public Employees' Retirement Fund (PERF)
As of December 31, 2022
Asset Allocation

	Ending Asset Value (bil)	Current Allocation (%)	SAA Interim Target Weight (%)	Variance (%)	Policy Range
Public Equity ¹	\$ 210.1	47.5%	52.8%	(5.3%)	± 7%
Private Equity ²	\$ 50.3	11.4%	9.0%	2.4%	± 5%
Income ¹	\$ 105.0	23.7%	24.8%	(1.1%)	± 6%
Real Assets ²	\$ 73.7	16.7%	13.4%	3.3%	± 5%
Private Debt ²	\$ 8.9	2.0%	1.0%	1.0%	± 5%
Other Trust Level	\$ 16.6	3.8%			
Leverage	\$ (22.4)	-5.1%			
Strategic	\$ (5.8)	-1.3%	(1.0%)	(0.3%)	
Active ³	\$ (16.6)	-3.8%			
Total PERF	\$ 442.2	100.0%	100.0%		



TAP	\$ 0.2
PERF Plus TAP	\$ 442.4

Performance Summary

Performance Summary	Ending Asset Value (bil)	10-Yr			5-Yr			3-Yr			1-Yr			FYTD			5-Yr Realized Information Ratio ⁵
		Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	
Public Equity	\$ 210.1	8.5%	8.4%	13	5.3%	5.2%	4	4.1%	3.8%	27	(15.8%)	(16.0%)	18	2.3%	2.2%	8	-
Cap Wtd. ¹	\$ 156.9	8.7%	8.5%	14	5.6%	5.5%	6	4.7%	4.4%	34	(17.9%)	(18.2%)	27	2.7%	2.6%	11	0.2
Factor Wtd.	\$ 53.2	-	-	-	-	-	-	2.2%	2.1%	4	(11.0%)	(10.9%)	(8)	1.8%	1.8%	(2)	-
Private Equity²	\$ 50.3	12.4%	10.8%	154	12.1%	6.5%	565	15.3%	5.7%	959	(2.3%)	(19.6%)	1,728	(6.0%)	(20.6%)	1,462	-
Income	\$ 105.0	1.6%	1.0%	52	(0.1%)	(0.4%)	25	(3.6%)	(3.7%)	17	(18.5%)	(18.4%)	(10)	(3.5%)	(3.4%)	(7)	-
Treasury ¹	\$ 14.7	0.2%	0.2%	(1)	(1.8%)	(1.7%)	(7)	(6.3%)	(6.1%)	(15)	(24.9%)	(24.9%)	0	(8.4%)	(8.4%)	0	-
MBS	\$ 23.6	1.6%	0.8%	84	(0.2%)	(0.4%)	21	(3.0%)	(3.1%)	4	(11.8%)	(11.7%)	(8)	(3.2%)	(3.3%)	4	0.7
IG Corporates	\$ 25.7	2.7%	2.1%	62	0.1%	(0.3%)	44	(4.5%)	(4.8%)	37	(22.8%)	(22.6%)	(24)	(3.1%)	(2.9%)	(14)	1.0
High Yield	\$ 20.3	-	-	-	-	-	-	(0.4%)	(0.4%)	(1)	(10.2%)	(10.2%)	(1)	3.7%	3.7%	(2)	-
EM Sovereign Bonds	\$ 14.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Fund Income	\$ 6.2	-	-	-	-	-	-	-	-	-	(25.3%)	(24.9%)	(31)	(8.7%)	(8.4%)	(38)	-
Real Assets²	\$ 73.7	9.2%	9.5%	(33)	7.9%	9.1%	(120)	9.8%	11.3%	(149)	14.3%	20.9%	(651)	2.7%	4.7%	(194)	-
Private Debt²	\$ 8.9	-	-	-	-	-	-	-	-	-	-	-	-	1.8%	(3.5%)	527	-
Other Trust Level	\$ 16.6																
LLER ⁴	\$ 14.2	-	-	-	2.2%	1.2%	100	1.4%	1.0%	40	0.3%	2.0%	(165)	2.2%	1.6%	67	-
Opportunistic ²	\$ 0.2	-	-	-	-	-	-	-	-	-	(2.8%)	2.0%	(474)	(5.9%)	1.6%	(751)	-
Other	\$ 2.2																
Leverage	\$ (22.4)																
Strategic	\$ (5.8)																
Active ³	\$ (16.6)																
Total PERF	\$ 442.2	7.0%	6.7%	29	5.0%	4.7%	37	4.2%	3.3%	89	(11.2%)	(12.6%)	137	0.1%	(1.5%)	157	-
TAP	\$ 0.2	-	-	-	0.7%	-	-	(2.0%)	-	-	(21.4%)	-	-	(6.0%)	-	-	-

¹ Asset value of Public Equity Cap Weighted and Income Treasury segments includes notional exposure obtained via trust level Synthetic Cap Weighted and Synthetic Treasury portfolios respectively.

² Market exposure of private asset classes reported at NAV.

³ Active leverage may differ from other reporting given amounts do not include leverage taken by specific segments (e.g. – Real Asset Leverage).

⁴ Low Liquidity Enhanced Return (LLER) was historically funded out of Cap Weighted and Treasury so returns are also reflected in the returns of Cap Weighted and Long Treasury through 12/21/2020; but are only recorded once in Total PERF returns. Returns prior to 12/21/2020 are for reference only.

⁵ Information Ratio is excess return divided by realized tracking error. This presents a perspective on risk adjusted performance. The metric is not meaningful for illiquid assets (where realized volatility tends to be muted by valuation based pricing and benchmark issues) or for indexed strategies.

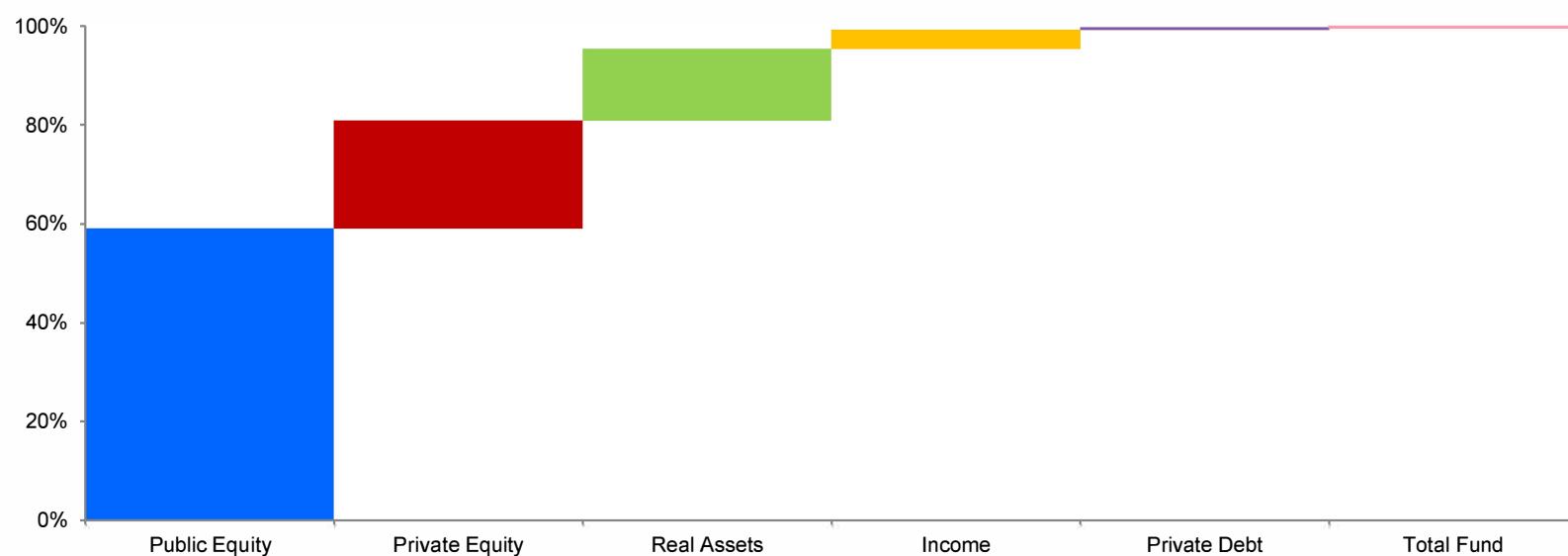
* All performance is reported net of investment expenses. Public Equity benchmarks are net of taxes. Real Assets benchmark is net of fees.

Public Employees' Retirement Fund (PERF)

Total PERF Risk			
Risk Measure	12/30/2022	9/30/2022	Explanation of Risk Measures:
Forecasted Volatility¹			The total (absolute) volatility is the annualized standard deviation of the Portfolio total return distribution and is indicative of the plan's dispersion given the current environment. The metric is model-based and could underestimate potential drawdowns.
Portfolio	13.7%	13.7%	
Benchmark	12.6%	12.5%	
Forecasted Tracking Error (Total Fund)¹			Forecasted tracking error is the annualized standard deviation of the differential return between the portfolio and an equal investment in the benchmark.
Portfolio	1.59%	1.62%	
Forecasted Tracking Error (Actionable)¹			Excludes from the above measure the effect of active exposure from private asset classes (Private Equity, Real Assets and Private Debt) arising from the modeling challenges and the non-investible nature of their benchmarks. This metric focuses on controllable and measurable active exposures and captures all public markets strategies and asset allocation management.
Portfolio	0.10%	0.11%	

December 30, 2022	Volatility		Tracking Error	
Asset Class	Annualized Forecasted (%) ¹	5-Year Realized (%) ²	Annualized Forecasted (%) ¹	5-Year Realized (%) ²
Public Equity	17.4	16.9	0.1	0.5
Cap Weighted	18.7	18.0	0.2	0.3
Factor Weighted	13.8	-	0.1	-
Income	6.5	8.6	0.2	1.2
Treasury	11.2	11.1	0.2	0.6
MBS	6.1	4.7	0.5	0.3
IG Corp	9.5	11.2	0.6	0.4
High Yield	6.9	-	0.3	-
EM Sov Debt	7.9	-	0.4	-
Total Fund Income	11.1	-	0.6	-
Total Fund	2.7	-	2.7	-
LLER	2.9	2.9	2.9	2.9
Opportunistic	4.5	-	4.5	-
Other	3.3	-	3.3	-
Total PERF Actionable			0.10	0.24
Private Equity	27.4	10.7	10.9	13.2
Real Assets	13.5	4.5	4.2	2.5
Private Debt	6.7	-	2.2	-
Total PERF	13.7	9.3	1.59	1.60

Program Contribution to Forecasted Volatility



¹ Forecasted Volatility and Tracking Error are based on Aladdin risk model.

² Realized Volatility and Tracking Error for private asset classes are computed from quarterly net returns.

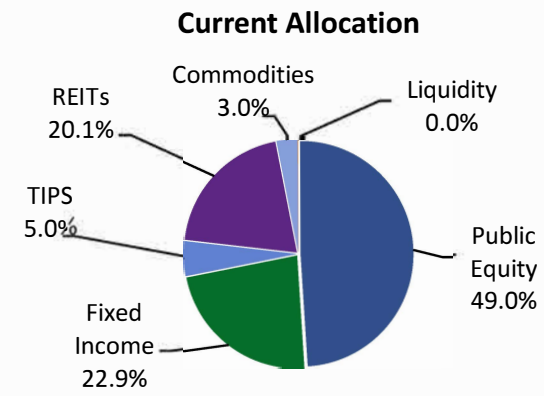
Affiliate Investment Programs

CERBT Strategy 1 Fund (CERBT 1) & CERBT Strategy 2 Fund (CERBT 2)

As of December 31, 2022

Asset Allocation, Performance & Realized Risk Summary - CERBT 1

Asset Allocation	Ending Asset Value (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Public Equity	\$ 6,480.8	49.0%	49.0%	0.0%	± 5%
Fixed Income	\$ 3,022.4	22.9%	23.0%	(0.1%)	± 5%
TIPS	\$ 654.6	5.0%	5.0%	(0.0%)	± 3%
REITs	\$ 2,656.5	20.1%	20.0%	0.1%	± 5%
Commodities	\$ 395.7	3.0%	3.0%	(0.0%)	± 3%
Liquidity	\$ 3.4	0.0%	0.0%	0.0%	+ 2%
Total CERBT 1	\$13,213.5	100.0%	100.0%	0.0%	



Performance Summary ²	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps
Public Equity	8.3%	7.9%	33	5.3%	5.0%	29	4.2%	3.9%	29	(18.1%)	(18.4%)	28	2.7%	2.6%	12
Fixed Income	1.5%	1.0%	43	(0.7%)	(0.7%)	2	(4.6%)	(4.5%)	(8)	(20.2%)	(19.9%)	(23)	(5.3%)	(5.0%)	(30)
TIPS	1.1%	1.1%	(5)	2.1%	2.1%	(4)	1.1%	1.2%	(7)	(12.0%)	(11.8%)	(13)	(3.4%)	(3.2%)	(14)
REITs	3.5%	2.7%	80	0.6%	(0.2%)	85	(4.0%)	(4.9%)	83	(24.6%)	(25.1%)	50	(5.1%)	(5.5%)	38
Commodities	(3.4%)	(3.3%)	(13)	6.4%	6.5%	(4)	10.3%	10.5%	(15)	25.3%	26.0%	(67)	(7.5%)	(7.2%)	(23)
Total CERBT 1	5.9%	5.6%	31	3.7%	3.5%	20	1.9%	1.7%	19	(17.8%)	(17.9%)	8	(0.9%)	(0.9%)	(5)

5-Yr Realized Volatility:

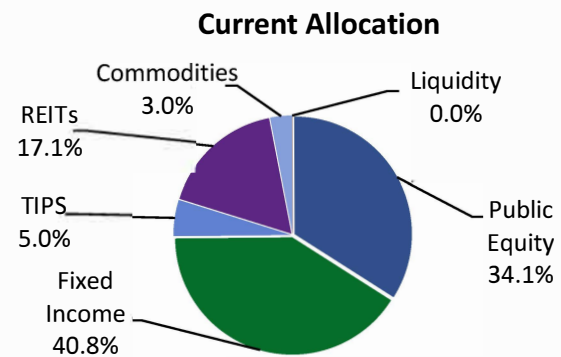
13.3%

5-Yr Realized Tracking Error:

0.1%

Asset Allocation, Performance & Realized Risk Summary - CERBT 2

Asset Allocation	Ending Asset Value (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Public Equity	\$ 573.5	34.1%	34.0%	0.1%	± 5%
Fixed Income	\$ 686.7	40.8%	41.0%	(0.2%)	± 5%
TIPS	\$ 83.5	5.0%	5.0%	(0.0%)	± 3%
REITs	\$ 288.2	17.1%	17.0%	0.1%	± 5%
Commodities	\$ 50.5	3.0%	3.0%	0.0%	± 3%
Liquidity	\$ 0.1	0.0%	0.0%	0.0%	+ 2%
Total CERBT 2	\$ 1,682.6	100.0%	100.0%	0.0%	



Performance Summary ²	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps
Public Equity	8.3%	7.9%	32	5.3%	5.0%	29	4.2%	3.9%	27	(18.1%)	(18.4%)	28	2.7%	2.6%	12
Fixed Income	1.5%	1.0%	43	(0.7%)	(0.7%)	2	(4.6%)	(4.5%)	(9)	(20.2%)	(19.9%)	(23)	(5.3%)	(5.0%)	(30)
TIPS	1.1%	1.1%	(5)	2.1%	2.1%	(3)	1.1%	1.2%	(7)	(12.0%)	(11.8%)	(13)	(3.4%)	(3.2%)	(14)
REITs	3.5%	2.7%	78	0.6%	(0.2%)	84	(4.1%)	(4.9%)	81	(24.6%)	(25.1%)	50	(5.1%)	(5.5%)	38
Commodities	(3.3%)	(3.3%)	(4)	6.5%	6.5%	9	10.3%	10.5%	(15)	25.3%	26.0%	(67)	(7.5%)	(7.2%)	(23)
Total CERBT 2	4.6%	4.4%	27	2.8%	2.7%	14	0.6%	0.5%	10	(17.6%)	(17.6%)	(2)	(2.3%)	(2.2%)	(10)

5-Yr Realized Volatility:

11.0%

5-Yr Realized Tracking Error:

0.1%

¹ Allocations approved by the Board of Administration at the March 2022 Investment Committee Meeting.

² Liquidity is for operational purposes rather than a strategic allocation target and is not included in the performance summary table due to negligible impact on performance. All performance is reported net of investment expenses.

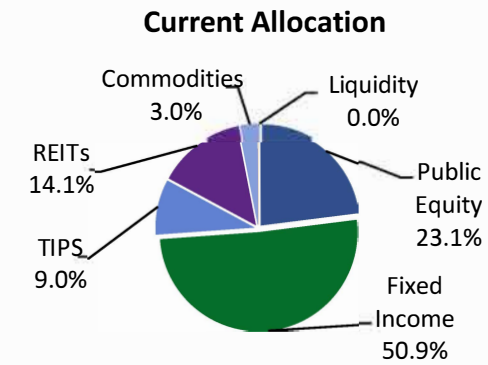
Affiliate Investment Programs

CERBT Strategy 3 Fund (CERBT 3) & Legislators' Retirement System Fund (LRF)

As of December 31, 2022

Asset Allocation, Performance & Realized Risk Summary - CERBT 3

Asset Allocation	Ending Asset Value (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Public Equity	\$ 171.3	23.1%	23.0%	0.1%	± 5%
Fixed Income	\$ 378.1	50.9%	51.0%	(0.1%)	±5%
TIPS	\$ 66.9	9.0%	9.0%	(0.0%)	± 3%
REITs	\$ 104.4	14.1%	14.0%	0.1%	± 5%
Commodities	\$ 22.3	3.0%	3.0%	0.0%	± 3%
Liquidity	\$ 0.1	0.0%	0.0%	0.0%	+ 2%
Total CERBT 3	\$ 743.1	100.0%	100.0%	0.0%	



Performance Summary ²	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps
Public Equity	8.2%	7.9%	30	5.2%	5.0%	28	4.2%	3.9%	27	(18.1%)	(18.4%)	28	2.7%	2.6%	12
Fixed Income	1.4%	1.0%	40	(0.7%)	(0.7%)	2	(4.6%)	(4.5%)	(9)	(20.2%)	(19.9%)	(23)	(5.3%)	(5.0%)	(30)
TIPS	1.1%	1.1%	(3)	2.1%	2.1%	(2)	1.1%	1.2%	(7)	(12.0%)	(11.8%)	(13)	(3.4%)	(3.2%)	(14)
REITs	3.5%	2.7%	76	0.6%	(0.2%)	86	(4.1%)	(4.9%)	80	(24.6%)	(25.1%)	50	(5.1%)	(5.5%)	38
Commodities	(3.2%)	(3.3%)	9	6.7%	6.5%	24	10.3%	10.5%	(16)	25.3%	26.0%	(67)	(7.5%)	(7.2%)	(23)
Total CERBT 3	3.5%	3.3%	26	2.2%	2.1%	9	(0.1%)	(0.2%)	5	(16.4%)	(16.3%)	(7)	(3.1%)	(3.0%)	(11)

5-Yr Realized Volatility:

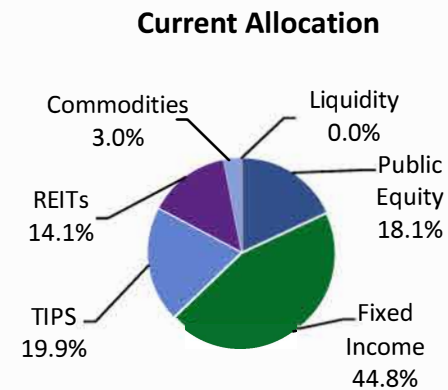
9.0%

5-Yr Realized Tracking Error:

0.1%

Asset Allocation, Performance & Realized Risk Summary - LRF

Asset Allocation	Ending Asset Value (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Public Equity	\$ 17.3	18.1%	18.0%	0.1%	± 5%
Fixed Income	\$ 42.9	44.8%	45.0%	(0.2%)	± 5%
TIPS	\$ 19.1	19.9%	20.0%	(0.1%)	± 3%
REITs	\$ 13.5	14.1%	14.0%	0.1%	± 5%
Commodities	\$ 2.9	3.0%	3.0%	0.0%	± 3%
Liquidity	\$ 0.0	0.0%	0.0%	0.0%	+ 2%
Total LRF	\$ 95.6	100.0%	100.0%	0.0%	



Performance Summary ²	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps
Public Equity	8.5%	8.3%	24	5.4%	5.1%	35	4.3%	3.9%	37	(18.0%)	(18.4%)	37	2.7%	2.6%	16
Fixed Income	1.5%	1.0%	42	(0.7%)	(0.7%)	1	(4.6%)	(4.5%)	(9)	(20.1%)	(19.9%)	(21)	(5.2%)	(5.0%)	(28)
TIPS	1.1%	1.1%	(3)	2.1%	2.1%	(1)	1.2%	1.2%	(5)	(12.0%)	(11.8%)	(13)	(3.4%)	(3.2%)	(15)
REITs	3.9%	3.5%	39	0.7%	(0.0%)	73	(4.1%)	(4.9%)	79	(24.6%)	(25.1%)	45	(5.2%)	(5.5%)	32
Commodities	(3.2%)	(3.3%)	10	6.7%	6.5%	22	10.3%	10.5%	(16)	25.3%	26.0%	(67)	(7.5%)	(7.2%)	(23)
Total LRF	3.6%	3.4%	23	2.2%	2.1%	11	(0.1%)	(0.2%)	7	(16.6%)	(16.5%)	(7)	(3.3%)	(3.2%)	(12)

5-Yr Realized Volatility:

8.9%

5-Yr Realized Tracking Error:

0.1%

¹ Allocations approved by the Board of Administration at the March 2022 Investment Committee Meeting.

² Liquidity is for operational purposes rather than a strategic allocation target and is not included in the performance summary table due to negligible impact on performance. All performance is reported net of investment expenses.

Affiliate Investment Programs

Judges' Retirement Fund (JRF) & Judges' Retirement System Fund II (JRFII)

As of December 31, 2022

Asset Allocation, Performance & Realized Risk Summary - JRF

Asset Allocation	Ending Asset Value (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Cash	\$ 47.6	100.0%	100.0%	0.0%	+ 0%
Total JRF	\$ 47.6	100.0%	100.0%	0.0%	

Current Allocation



Performance Summary	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps
Cash	0.9%	0.8%	10	1.4%	1.3%	11	0.8%	0.7%	11	1.8%	1.5%	35	1.6%	1.3%	26
Total JRF	0.9%	0.8%	10	1.4%	1.3%	11	0.8%	0.7%	11	1.8%	1.5%	35	1.6%	1.3%	26

5-Yr Realized Volatility:

0.3%

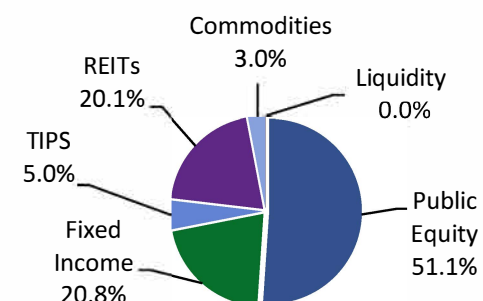
5-Yr Realized Tracking Error:

0.1%

Asset Allocation, Performance & Realized Risk Summary - JRFII

Asset Allocation	Ending Asset Value (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Public Equity	\$ 1,090.0	51.1%	51.0%	0.1%	± 5%
Fixed Income	\$ 444.5	20.8%	21.0%	(0.2%)	± 5%
TIPS	\$ 105.9	5.0%	5.0%	(0.0%)	± 3%
REITs	\$ 429.5	20.1%	20.0%	0.1%	± 5%
Commodities	\$ 64.0	3.0%	3.0%	0.0%	± 3%
Liquidity	\$ 0.0	0.0%	0.0%	0.0%	+ 2%
Total JRFII	\$ 2,134.0	100.0%	100.0%	0.0%	

Current Allocation



Performance Summary ²	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps
Public Equity	8.5%	8.3%	24	5.4%	5.1%	36	4.3%	3.9%	39	(18.0%)	(18.4%)	37	2.7%	2.6%	16
Fixed Income	1.5%	1.0%	45	(0.7%)	(0.7%)	7	(4.6%)	(4.5%)	(2)	(20.0%)	(19.9%)	(5)	(5.0%)	(5.0%)	(9)
TIPS	1.1%	1.1%	(4)	2.1%	2.1%	(3)	1.2%	1.2%	(6)	(12.0%)	(11.8%)	(13)	(3.4%)	(3.2%)	(15)
REITs	3.9%	3.5%	39	0.7%	(0.0%)	74	(4.1%)	(4.9%)	81	(24.6%)	(25.1%)	45	(5.2%)	(5.5%)	31
Commodities	(3.3%)	(3.3%)	(1)	6.4%	6.5%	(3)	10.3%	10.5%	(15)	25.3%	26.0%	(67)	(7.5%)	(7.2%)	(23)
Total JRFII	5.8%	5.5%	25	3.6%	3.4%	25	1.7%	1.5%	25	(17.2%)	(17.3%)	17	(0.5%)	(0.6%)	7

5-Yr Realized Volatility:

12.4%

5-Yr Realized Tracking Error:

0.1%

¹ Allocations approved by the Board of Administration at the March 2022 Investment Committee Meeting.

² Liquidity is for operational purposes rather than a strategic allocation target and is not included in the performance summary table due to negligible impact on performance. All performance is reported net of investment expenses.

Affiliate Investment Programs

Health Care Fund (HCF) & Long-Term Care Fund (LTCF)

As of December 31, 2022

Asset Allocation, Performance & Realized Risk Summary - HCF

Asset Allocation	Ending Asset Value (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Fixed Income	\$ 200.5	100.0%	100.0%	0.0%	+ 0%
Total HCF	\$ 200.5	100.0%	100.0%	0.0%	

Current Allocation



Performance Summary	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps
Fixed Income	1.2%	1.1%	16	(0.0%)	0.0%	(3)	(2.8%)	(2.7%)	(7)	(13.2%)	(13.0%)	(18)	(3.2%)	(3.0%)	(21)
Total HCF	1.2%	1.1%	16	(0.0%)	0.0%	(3)	(2.8%)	(2.7%)	(7)	(13.2%)	(13.0%)	(18)	(3.2%)	(3.0%)	(21)

5-Yr Realized Volatility:

5.1%

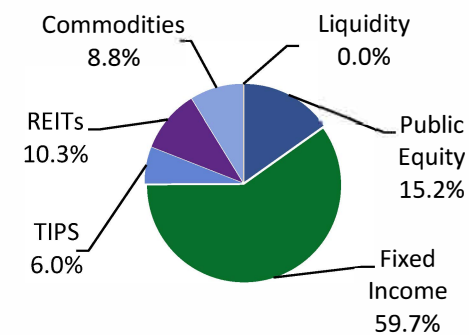
5-Yr Realized Tracking Error:

0.1%

Asset Allocation, Performance & Realized Risk Summary - LTCF

Asset Allocation	Ending Asset Value (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Public Equity	\$ 710.0	15.2%	15.0%	0.2%	± 4%
Fixed Income	\$ 2,793.0	59.7%	60.0%	(0.3%)	± 5%
TIPS	\$ 281.4	6.0%	6.0%	0.0%	± 2%
REITs	\$ 479.6	10.3%	11.0%	(0.7%)	± 4%
Commodities	\$ 410.9	8.8%	8.0%	0.8%	± 2%
Liquidity	\$ 0.2	0.0%	0.0%	0.0%	+ 2%
Total LTCF	\$ 4,675.1	100.0%	100.0%	0.0%	

Current Allocation



Performance Summary ²	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps
Public Equity	8.2%	7.9%	30	5.2%	5.0%	28	4.2%	3.9%	29	(18.1%)	(18.4%)	29	2.7%	2.6%	12
Fixed Income	1.0%	1.0%	(1)	(0.8%)	(0.7%)	(5)	(4.6%)	(4.5%)	(11)	(20.2%)	(19.9%)	(25)	(5.3%)	(5.0%)	(31)
TIPS	1.1%	1.1%	(2)	2.1%	2.1%	(4)	1.1%	1.2%	(6)	(12.0%)	(11.8%)	(13)	(3.3%)	(3.2%)	(14)
REITs	3.5%	2.7%	77	0.6%	(0.2%)	82	(4.1%)	(4.9%)	79	(24.6%)	(25.1%)	48	(5.2%)	(5.5%)	35
Commodities	(3.4%)	(3.3%)	(8)	6.3%	6.5%	(12)	10.3%	10.5%	(17)	25.3%	26.0%	(67)	(7.5%)	(7.2%)	(23)
Total LTCF	2.7%	2.5%	13	1.7%	1.6%	3	(0.7%)	(0.8%)	6	(16.3%)	(16.2%)	(3)	(4.1%)	(4.0%)	(12)

5-Yr Realized Volatility:

9.0%

5-Yr Realized Tracking Error:

0.4%

¹ Allocations approved by the Board of Administration at the March 2022 Investment Committee Meeting.

² Liquidity is for operational purposes rather than a strategic allocation target and is not included in the performance summary table due to negligible impact on performance. All performance is reported net of investment expenses.

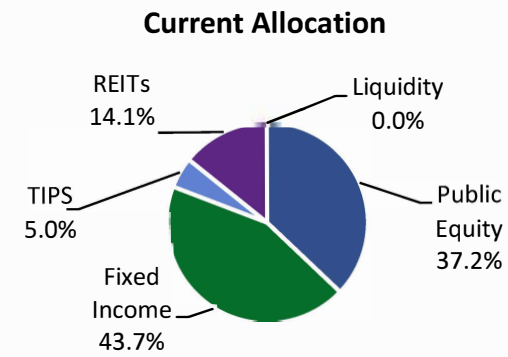
Affiliate Investment Programs

CEPPT Strategy 1 Fund (CEPPT 1) & CEPPT Strategy 2 Fund (CEPPT 2)

As of December 31, 2022

Asset Allocation & Performance Summary - CEPPT 1

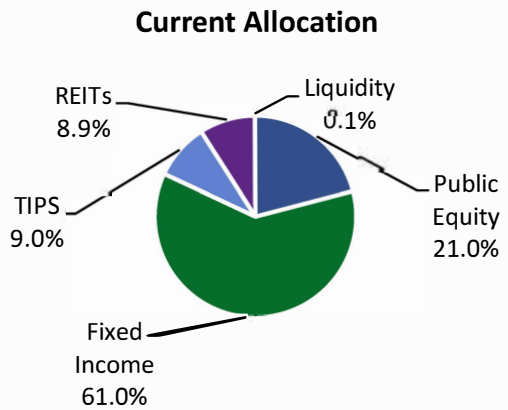
Asset Allocation	Ending Asset Value (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Public Equity	\$ 26.5	37.2%	37.0%	0.2%	± 5%
Fixed Income	\$ 31.2	43.7%	44.0%	(0.3%)	± 5%
TIPS	\$ 3.5	5.0%	5.0%	(0.0%)	± 3%
REITs	\$ 10.1	14.1%	14.0%	0.1%	± 5%
Liquidity	\$ 0.0	0.0%	0.0%	0.0%	+ 2%
Total CEPPT 1	\$ 71.4	100.0%	100.0%	0.0%	



Performance Summary ²	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps
Public Equity	-	-	-	-	-	-	4.1%	3.9%	25	(18.1%)	(18.4%)	27	2.7%	2.6%	11
Fixed Income	-	-	-	-	-	-	(2.8%)	(2.7%)	(5)	(13.1%)	(13.0%)	(13)	(3.1%)	(3.0%)	(18)
TIPS	-	-	-	-	-	-	1.1%	1.2%	(7)	(12.0%)	(11.8%)	(13)	(3.3%)	(3.2%)	(14)
REITs	-	-	-	-	-	-	(4.1%)	(4.9%)	73	(24.6%)	(25.1%)	45	(5.2%)	(5.5%)	31
Total CEPPT 1	-	-	-	-	-	-	0.6%	0.6%	1	(15.8%)	(15.9%)	8	(0.9%)	(0.9%)	(6)

Asset Allocation & Performance Summary - CEPPT 2

Asset Allocation	Ending Asset Value (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Public Equity	\$ 7.0	21.0%	21.0%	0.0%	± 5%
Fixed Income	\$ 20.3	61.0%	61.0%	0.0%	± 5%
TIPS	\$ 3.0	9.0%	9.0%	0.0%	± 3%
REITs	\$ 3.0	8.9%	9.0%	(0.1%)	± 5%
Liquidity	\$ 0.0	0.1%	0.0%	0.1%	+ 2%
Total CEPPT 2	\$ 33.2	100.0%	100.0%	0.0%	



Performance Summary ²	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps
Public Equity	-	-	-	-	-	-	4.1%	3.9%	25	(18.1%)	(18.4%)	27	2.7%	2.6%	11
Fixed Income	-	-	-	-	-	-	(3.0%)	(2.7%)	(28)	(13.1%)	(13.0%)	(13)	(3.1%)	(3.0%)	(18)
TIPS	-	-	-	-	-	-	1.1%	1.2%	(7)	(12.0%)	(11.8%)	(13)	(3.3%)	(3.2%)	(14)
REITs	-	-	-	-	-	-	(4.1%)	(4.9%)	77	(24.6%)	(25.1%)	46	(5.2%)	(5.5%)	33
Total CEPPT 2	-	-	-	-	-	-	(1.1%)	(1.1%)	(1)	(14.2%)	(14.1%)	(10)	(2.0%)	(1.8%)	(17)

¹ Allocations approved by the Board of Administration at the March 2022 Investment Committee Meeting.

² Liquidity is for operational purposes rather than a strategic allocation target and is not included in the performance summary table due to negligible impact on performance. All performance is reported net of investment expenses.

Affiliate Investment Programs

Supplemental Income Plans (SIP)

As of December 31, 2022

Asset Allocation - SIP

Asset Allocation	Ending Asset Value (mil)	Global Equity			US Fixed Income			Real Assets			Cash and Cash Equivalents		
		Actual	Policy ¹	Policy Range	Actual	Policy ¹	Policy Range	Actual	Policy ¹	Policy Range	Actual	Policy ¹	Policy Range
Target Income Fund	\$ 178.8	33.8%	32.0%	± 4%	53.6%	55.0%	± 4%	3.1%	3.0%	± 1%	9.6%	10.0%	± 1%
Target 2020 Fund	\$ 152.8	43.9%	42.0%	± 4%	44.5%	46.0%	± 4%	3.1%	3.0%	± 1%	8.6%	9.0%	± 1%
Target 2025 Fund	\$ 204.8	56.9%	55.0%	± 4%	34.5%	36.0%	± 4%	2.0%	2.0%	± 1%	6.6%	7.0%	± 1%
Target 2030 Fund	\$ 197.1	67.7%	66.0%	± 4%	24.7%	26.0%	± 2%	2.0%	2.0%	± 1%	5.6%	6.0%	± 1%
Target 2035 Fund	\$ 129.2	81.2%	80.0%	± 4%	14.1%	15.0%	± 2%	1.0%	1.0%	± 1%	3.7%	4.0%	+ 0.25%
Target 2040 Fund	\$ 120.0	92.5%	92.0%	± 4%	4.7%	5.0%	± 1%	1.0%	1.0%	± 1%	1.8%	2.0%	+ 0.25%
Target 2045 Fund	\$ 71.5	94.4%	94.0%	± 4%	2.8%	3.0%	± 1%	1.0%	1.0%	± 1%	1.8%	2.0%	+ 0.25%
Target 2050 Fund	\$ 43.5	94.4%	94.0%	± 4%	2.8%	3.0%	± 1%	1.0%	1.0%	± 1%	1.8%	2.0%	+ 0.25%
Target 2055 Fund	\$ 16.1	94.4%	94.0%	± 4%	2.8%	3.0%	± 1%	1.0%	1.0%	± 1%	1.8%	2.0%	+ 0.25%
Target 2060 Fund	\$ 8.5	94.4%	94.0%	± 4%	2.8%	3.0%	± 1%	1.0%	1.0%	± 1%	1.8%	2.0%	+ 0.25%
Target 2065 Fund	\$ 0.3	94.4%	94.0%	± 4%	2.8%	3.0%	± 1%	1.0%	1.0%	± 1%	1.8%	2.0%	+ 0.25%
SSgA STIF	\$ 121.1	-	-	-	-	-	-	-	-	-	100.0%	100.0%	-
SIP US ST Bond Core	\$ 37.8	-	-	-	100.0%	100.0%	-	-	-	-	-	-	-
SIP US Bond Core	\$ 52.3	-	-	-	100.0%	100.0%	-	-	-	-	-	-	-
SIP Real Asset Core	\$ 21.5	-	-	-	-	-	-	100.0%	100.0%	-	-	-	-
SIP Russell All Cap Core	\$ 583.9	100.0%	100.0%	-	-	-	-	-	-	-	-	-	-
SIP Gbl All Cap EX-US	\$ 64.6	100.0%	100.0%	-	-	-	-	-	-	-	-	-	-

Performance Summary - SIP

Performance Summary	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
	Total Return ²	BM Return	Excess Bps	Total Return ²	BM Return	Excess Bps	Total Return ²	BM Return	Excess Bps	Total Return ²	BM Return	Excess Bps	Total Return ²	BM Return	Excess Bps
Target Income Fund	3.2%	3.0%	15	2.4%	2.3%	11	0.7%	0.6%	16	(12.9%)	(12.9%)	2	(0.9%)	(0.8%)	(7)
Target 2020 Fund	4.3%	4.1%	15	3.1%	2.9%	13	1.7%	1.5%	20	(13.7%)	(13.8%)	5	(0.4%)	(0.3%)	(6)
Target 2025 Fund	5.1%	5.0%	18	3.6%	3.4%	15	2.4%	2.2%	23	(14.6%)	(14.7%)	8	0.3%	0.3%	(5)
Target 2030 Fund	5.8%	5.7%	15	4.0%	3.9%	9	3.0%	2.9%	13	(15.4%)	(15.5%)	11	0.9%	0.9%	(3)
Target 2035 Fund	6.5%	6.4%	16	4.4%	4.3%	12	3.6%	3.4%	17	(16.4%)	(16.5%)	14	1.5%	1.6%	(2)
Target 2040 Fund	7.1%	7.0%	18	4.8%	4.7%	12	4.1%	3.9%	17	(17.2%)	(17.3%)	17	2.2%	2.2%	(1)
Target 2045 Fund	7.4%	7.2%	18	4.9%	4.8%	13	4.1%	4.0%	17	(17.0%)	(17.2%)	18	2.4%	2.4%	(0)
Target 2050 Fund	7.4%	7.2%	17	4.9%	4.8%	13	4.1%	4.0%	17	(17.0%)	(17.2%)	18	2.4%	2.4%	(0)
Target 2055 Fund	-	-	-	4.9%	4.8%	13	4.1%	4.0%	17	(17.0%)	(17.2%)	18	2.4%	2.4%	(0)
Target 2060 Fund	-	-	-	-	-	-	4.1%	4.0%	13	(17.0%)	(17.2%)	18	2.4%	2.4%	(0)
Target 2065 Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SSgA STIF	0.9%	0.8%	13	1.4%	1.3%	17	0.8%	0.7%	12	1.8%	1.5%	36	1.6%	1.3%	27
SIP US ST Bond Core	-	-	-	0.9%	0.9%	(6)	(0.4%)	(0.3%)	(5)	(3.7%)	(3.7%)	(6)	(0.6%)	(0.6%)	(3)
SIP US Bond Core	-	-	-	0.0%	0.0%	(1)	(2.7%)	(2.7%)	(3)	(13.1%)	(13.0%)	(11)	(3.1%)	(3.0%)	(16)
SIP Real Asset Core	-	-	-	6.3%	6.3%	5	8.8%	8.7%	14	3.1%	3.2%	(6)	1.2%	1.3%	(6)
SIP Russell All Cap Core	-	-	-	8.8%	8.8%	2	7.1%	7.1%	5	(19.1%)	(19.2%)	12	2.4%	2.4%	1
SIP Gbl All Cap EX-US	-	-	-	1.1%	0.8%	23	0.4%	0.2%	24	(16.3%)	(16.6%)	29	3.1%	3.1%	(2)

¹ Allocations approved by the Board of Administration at the June 2022 Investment Committee Meeting.

² Performance is net of the average investment management fees & expenses incurred by the 457/SCP plans.

Affiliate Investment Programs

Supplemental Income Plans (SIP)

As of December 31, 2022

Realized Risk - SIP

Realized Risk	Annualized 5-Yr Realized Volatility	Tracking Error ¹
Target Income Fund	7.5%	0.2%
Target 2020 Fund	9.7%	0.2%
Target 2025 Fund	11.6%	0.2%
Target 2030 Fund	13.5%	0.2%
Target 2035 Fund	15.5%	0.2%
Target 2040 Fund	17.0%	0.2%
Target 2045 Fund	17.0%	0.2%
Target 2050 Fund	17.0%	0.2%
Target 2055 Fund	17.0%	0.2%
Target 2060 Fund	-	-
Target 2065 Fund	-	-
SSgA STIF	0.4%	0.2%
SIP US ST Bond Core	1.6%	0.0%
SIP US Bond Core	5.1%	0.1%
SIP Real Asset Core	13.2%	0.3%
SIP Russell All Cap Core	19.2%	0.1%
SIP Gbl All Cap EX-US	17.9%	0.4%

¹ Due to the impact of Fair Value Pricing adjustment, the tracking error is based on a rolling 12 month calculation.

CalPERS Trust Level

Trust Level Benchmarks

As of December 31, 2022

Public Employees' Retirement Fund and Affiliate Investment Programs Policy Benchmarks

Trust	Asset Class	Policy Benchmark
Public Employees' Retirement Fund	Public Equity - Cap Weighted	CalPERS Custom FTSE All World, All Cap Equity Benchmark
	Public Equity - Factor Weighted	CalPERS Custom MSCI ACWI Factor Weighted Index
	Private Equity	CalPERS Custom FTSE Global Benchmark + 150 bps, Quarter Lag
	Income - Treasury	Custom Bloomberg Government
	Income - MBS	Custom Bloomberg Mortgage
	Income - IG Corporate	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)
	Private Debt	S&P/LSTA U.S. Leverage Loan 100 Index + 125 bps, Quarter Lag
	Strategic Leverage	ICE BofA US 3-Month Treasury Bill Index + 50 bps
Judges' Retirement System Fund	Cash	91-day Treasury Bill
Judges' Retirement System II Fund	Global Equity	MSCI ACWI IMI (Net)
	U.S. Fixed Income	Bloomberg Long Liability Index
	TIPS	Bloomberg U.S. TIPS Index, Series L
	Commodities	S&P GSCI Total Return Daily
	REITs	FTSE EPRA/NAREIT Developed Index
Legislators' Retirement System Fund	Global Equity	MSCI ACWI IMI (Net)
	U.S. Fixed Income	Bloomberg Long Liability Index
	TIPS	Bloomberg U.S. TIPS Index, Series L
	Commodities	S&P GSCI Total Return Daily
	REITs	FTSE EPRA/NAREIT Developed Index
Public Employees' Health Care Fund	U.S. Fixed Income	Bloomberg U.S. Aggregate Bond Index
Long-Term Care Fund	Global Equity	MSCI ACWI IMI (Net)
	U.S. Fixed Income	Bloomberg Long Liability Index
	TIPS	Bloomberg U.S. TIPS Index, Series L
	Commodities	S&P GSCI Total Return Daily
	REITs	FTSE EPRA/NAREIT Developed Index
California Employers' Retiree Benefit Trust (CERBT) Funds 1, 2 & 3	Global Equity	MSCI ACWI IMI (Net)
	U.S. Fixed Income	Bloomberg Long Liability Index
	TIPS	Bloomberg U.S. TIPS Index, Series L
	Commodities	S&P GSCI Total Return Daily
	REITs	FTSE EPRA/NAREIT Developed Index
California Employers' Pension Prefunding Trust (CEPPT) Funds 1 & 2	Global Equity	MSCI ACWI IMI (Net)
	U.S. Fixed Income	Bloomberg U.S. Aggregate Bond Index
	TIPS	Bloomberg U.S. TIPS Index, Series L
	REITs	FTSE EPRA/NAREIT Developed Index

CalPERS Trust Level

Trust Level Benchmarks

As of December 31, 2022

Supplemental Income Plans Policy Benchmarks

Policy Weights							
Supplemental Income Plans	Global Equity	US Equity	Int'l Equity	US Income		Real Assets	Cash & Cash Equivalents
	Russell 3000 / MSCI ACWI ex US	Russell 3000 Index	MSCI ACWI ex US IMI Index (Net)	Bloomberg U.S. Aggregate Bond Index	Bloomberg U.S. 1-3 Year Govt/Credit Bond Index	SSGA Real Asset	BofA Merrill Lynch 3-Month Treasury Bill Index
Target Income Fund	32.0%	19.0%	13.0%	55.0%	-	3.0%	10.0%
Target 2020 Fund	42.0%	25.0%	17.0%	46.0%	-	3.0%	9.0%
Target 2025 Fund	55.0%	33.0%	22.0%	36.0%	-	2.0%	7.0%
Target 2030 Fund	66.0%	39.0%	27.0%	26.0%	-	2.0%	6.0%
Target 2035 Fund	80.0%	48.0%	32.0%	15.0%	-	1.0%	4.0%
Target 2040 Fund	92.0%	55.0%	37.0%	5.0%	-	1.0%	2.0%
Target 2045 Fund	94.0%	56.0%	38.0%	3.0%	-	1.0%	2.0%
Target 2050 Fund	94.0%	56.0%	38.0%	3.0%	-	1.0%	2.0%
Target 2055 Fund	94.0%	56.0%	38.0%	3.0%	-	1.0%	2.0%
Target 2060 Fund	94.0%	56.0%	38.0%	3.0%	-	1.0%	2.0%
Target 2065 Fund	94.0%	56.0%	38.0%	3.0%	-	1.0%	2.0%
SSGA STIF	-	-	-	-	-	-	100.0%
SIP US ST Bond Core	-	-	-	-	100.0%	-	-
SIP US Bond Core	-	-	-	100.0%	-	-	-
SIP Real Asset Core	-	-	-	-	-	100.0%	-
SIP Russell All Cap Core	100.0%	100.0%	-	-	-	-	-
SIP Global All Cap ex US	100.0%	-	100.0%	-	-	-	-