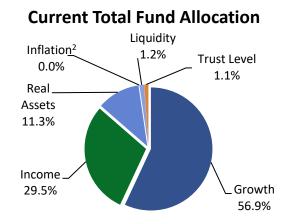
CalPERS Trust Level Monthly Update - Performance & Risk



Public Employees Retirement Fund (PERF) As of May 31, 2019

Asset Allocation

Asset Allocation	EMV (bil)	Current Allocation (%)	Interim Policy Weight (%) ¹	Variance (%)	Policy Range
Growth	\$ 203.5	56.9%	58.0%	(1.1%)	
Public Equity	\$ 176.8	49.5%	50.0%	(0.5%)	± 7%
Private Equity	\$ 26.7	7.5%	8.0%	(0.5%)	± 4%
Income	\$ 105.3	29.5%	28.0%	1.5%	± 6%
Real Assets	\$ 40.3	11.3%	13.0%	(1.7%)	± 5%
Inflation ²	\$ 0.0	0.0%	0.0%	0.0%	+ 3%/ 0%
Liquidity	\$ 4.3	1.2%	1.0%	0.2%	+ 3%/ - 6%
Trust Level ³	\$ 3.9	1.1%	-	1.1%	-
Total PERF	\$ 357.4	100.0%	100.0%	0.0%	



TAP ³	\$ 0.2
Total PERF Plus TAP	\$ 357.5

Performance Summary

		10-Yr			5-Yr			3-Yr			1-Yr			FYTD		5-Yr Realized
Performance Summary	Net Return	BM Return	Excess Bps	Infomation Ratio ⁵												
Growth	11.0%	11.5%	(52)	6.5%	6.8%	(31)	10.3%	11.2%	(93)	0.7%	0.2%	46	1.2%	1.0%	26	-
Public Equity	10.4%	10.2%	23	5.9%	6.0%	(6)	9.9%	10.1%	(16)	(0.5%)	(0.3%)	(20)	0.3%	0.3%	(6)	(0.2)
Private Equity	13.6%	16.3%	(270)	9.7%	10.2%	(53)	12.6%	16.5%	(386)	8.4%	1.1%	727	7.8%	2.8%	495	-
Income	6.6%	5.2%	147	3.7%	3.2%	58	3.7%	3.1%	63	7.3%	7.0%	29	7.5%	7.2%	28	1.3
Real Assets	2.4%	7.6%	(515)	8.8%	8.8%	(2)	6.4%	6.9%	(54)	3.2%	7.1%	(389)	1.9%	5.3%	(337)	-
Inflation ²	NM	NM	NM	-												
Liquidity	1.1%	1.2%	(9)	1.2%	1.1%	8	1.6%	1.3%	36	2.6%	2.1%	48	2.4%	2.0%	42	-
Trust Level ³	-	-	-	ı	-	-	-	-	-	-	-	-	-	-	-	-
Total PERF	8.6%	9.0%	(49)	5.5%	5.6%	(8)	7.7%	8.1%	(44)	2.7%	3.0%	(31)	2.9%	3.2%	(35)	-
TAP ⁴	-	-	-	3.6%	-	-	3.3%	-	-	6.7%	-	-	6.2%	-	-	-

¹ Interim policy weight reflects the weights in effect at the beginning of the first day of the subsequent month.

² As of February 2019, the Inflation program has been liquidated and subsequently linked historical returns are no longer meaningful.

³ Trust Level includes Multi Asset Class, Completion Overlay, Risk Mitigation, Absolute Return Strategies, Plan Level Transition and other Total Fund level portfolios.

⁴ Terminated Agency Pool (TAP) funded in July 2013 and exists to provide benefit payments to members who are employees of agencies that have terminated their contract with CalPERS.

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.

Public Employees Retirement Fund (PERF) As of May 31, 2019

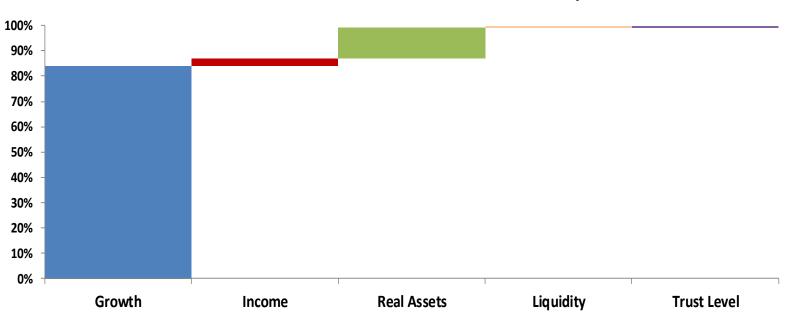
Total PERF Risk

Risk Measure	5/31/2019	4/30/2019	Explanation of Risk Measures:			
Forecast Volatility			The total (absolute) volatility is the annualized standard deviation of the			
Portfolio	7.8%	8.0%	PERF's total return distribution and is indicative of the plan's short-term			
Benchmark	nchmark 7.9% 8.0%		return dispersion given the current environment. The metric is model-bas and could underestimate potential drawdowns.			
Forecast Tracking En	rror		Forecast tracking error is the annualized standard deviation of the			
Portfolio	0.5%	0.5%	differential return between the portfolio and an equal investment in the benchmark.			

	Portfolio	Volatility	Tracking	g Error
May 31, 2019	Projected	Realized	Projected	Realized
Asset Class	Annualized Projected Volatility (%)	5-Year Realized Volatility (%) ¹	Annualized Projected Tracking Error (%)	5-Year Realized Tracking Error (%) ¹
Growth	11.8%	9.6%	0.6%	1.6%
Public Equity	11.4%	11.3%	0.2%	0.3%
Private Equity	17.0%	4.3%	4.1%	7.7%
Income	4.7%	4.6%	0.2%	0.5%
Real Assets	11.1%	4.4%	2.0%	4.3%
Liquidity	0.0%	0.7%	0.0%	0.4%
Trust Level	5.8%		3.0%	
Total PERF	7.8%	6.0%	0.5%	1.1%

 $^{^1}$ Realized Volatility and Tracking Error for private asset classes are computed from quarterly net returns

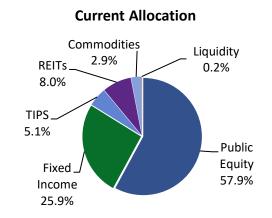
Contribution to Total PERF Volatility



CERBT Strategy 1 Fund (CERBT 1) & CERBT Strategy 2 Fund (CERBT 2) As of May 31, 2019

Asset Allocation, Performance & Realized Risk Summary - CERBT 1

Asset Allocation	EMV (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Public Equity	\$ 4,321.3	57.9%	59%	(1.1%)	± 5%
Fixed Income	\$ 1,935.8	25.9%	25%	0.9%	±5%
TIPS	\$ 384.4	5.1%	5%	0.1%	± 3%
REITs	\$ 594.6	8.0%	8%	(0.0%)	± 5%
Commodities	\$ 213.5	2.9%	3%	(0.1%)	± 3%
Liquidity	\$ 13.9	0.2%	0%	0.2%	+ 2%
Total CERBT 1	\$ 7,463.6	100.0%	100.0%	0.0%	



	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
Performance Summary ²	Net Return	BM Return	Excess Bps												
Public Equity	10.0%	9.7%	23	5.5%	5.2%	36	9.2%	8.9%	38	(2.1%)	(2.3%)	28	(1.5%)	(1.8%)	28
Fixed Income	6.8%	5.6%	120	4.3%	3.7%	56	3.9%	3.3%	58	8.1%	8.1%	(2)	8.2%	8.2%	(1)
TIPS	-	-	-	1.6%	1.6%	(3)	2.5%	2.5%	2	4.4%	4.4%	(1)	3.9%	3.9%	(3)
REITs	10.8%	10.5%	30	5.3%	4.5%	83	5.7%	4.9%	86	9.2%	8.2%	102	7.4%	6.5%	94
Commodities	i	-	-	(13.7%)	(13.7%)	1	0.2%	0.1%	6	(14.1%)	(14.1%)	(1)	(15.3%)	(15.2%)	(1)
Total CERBT 1	8.9%	8.6%	28	4.5%	4.1%	40	6.9%	6.5%	41	1.4%	1.2%	22	1.6%	1.4%	21

5-Yr Realized Volatility:

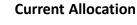
7.9%

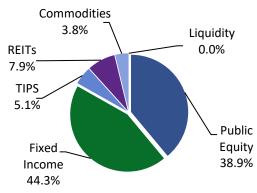
5-Yr Realized Tracking Error:

0.1%

Asset Allocation, Performance & Realized Risk Summary - CERBT 2

Asset Allocation	EMV (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Public Equity	\$ 478.3	38.9%	40%	(1.1%)	± 5%
Fixed Income	\$ 543.6	44.3%	43%	1.3%	±5%
TIPS	\$ 62.8	5.1%	5%	0.1%	± 3%
REITs	\$ 97.1	7.9%	8%	(0.1%)	± 5%
Commodities	\$ 46.4	3.8%	4%	(0.2%)	± 3%
Liquidity	\$ 0.1	0.0%	0%	0.0%	+ 2%
Total CERBT 2	\$ 1,228.2	100.0%	100.0%	0.0%	





	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
Performance Summary ²	Net Return	BM Return	Excess Bps												
Public Equity	-	-	-	5.5%	5.2%	34	9.2%	8.9%	37	(2.0%)	(2.3%)	30	(1.5%)	(1.8%)	28
Fixed Income	-	-	-	4.3%	3.7%	56	3.9%	3.3%	59	8.1%	8.1%	(4)	8.2%	8.2%	(1)
TIPS	-	-	-	1.6%	1.6%	(4)	2.5%	2.5%	5	4.4%	4.4%	8	4.0%	3.9%	6
REITs	-	-	-	5.3%	4.5%	82	5.7%	4.9%	88	9.2%	8.2%	108	7.5%	6.5%	99
Commodities	-	-	-	(13.6%)	(13.7%)	16	0.5%	0.1%	34	(13.6%)	(14.1%)	54	(14.7%)	(15.2%)	55
Total CERBT 2	-	-	-	4.1%	3.7%	36	6.0%	5.6%	41	3.2%	3.1%	18	3.3%	3.1%	15

5-Yr Realized Volatility:

6.2%

5-Yr Realized Tracking Error:

0.2%

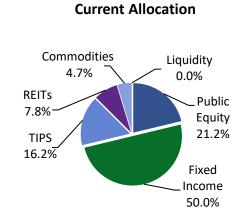
 $^{^{\}rm 1}$ Allocations approved by the Board at the May 2018 IC Meeting

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

CERBT Strategy 3 Fund (CERBT 3) & Legislators' Retirement System Fund (LRF) As of May 31, 2019

Asset Allocation, Performance & Realized Risk Summary - CERBT 3

Asset Allocation	EMV (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Public Equity	\$ 132.1	21.2%	22%	(0.8%)	± 5%
Fixed Income	\$ 310.9	50.0%	49%	1.0%	±5%
TIPS	\$ 100.9	16.2%	16%	0.2%	± 3%
REITs	\$ 48.8	7.8%	8%	(0.2%)	± 5%
Commodities	\$ 29.2	4.7%	5%	(0.3%)	± 3%
Liquidity	\$ 0.0	0.0%	0%	0.0%	+ 2%
Total CERBT 3	\$ 621.9	100.0%	100.0%	0.0%	



	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
Performance	Net	вм	Excess	Net	вм	Excess	Net	вм	Excess	Net	вм	Excess	Net	вм	Excess
Summary ²	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps
Public Equity	-	-	-	5.5%	5.2%	34	9.2%	8.9%	35	(2.0%)	(2.3%)	30	(1.5%)	(1.8%)	30
Fixed Income	-	-	-	4.2%	3.7%	50	3.9%	3.3%	54	8.1%	8.1%	(5)	8.2%	8.2%	(4)
TIPS	-	-	-	1.6%	1.6%	0	2.5%	2.5%	5	4.4%	4.4%	8	4.0%	3.9%	6
REITs	-	-	-	5.3%	4.5%	81	5.7%	4.9%	81	9.3%	8.2%	116	7.6%	6.5%	108
Commodities	-	-	-	(13.3%)	(13.7%)	41	0.8%	0.1%	70	(12.9%)	(14.1%)	116	(14.1%)	(15.2%)	114
Total CERBT 3	-	-	-	3.6%	3.3%	34	5.0%	4.7%	35	4.4%	4.3%	10	4.4%	4.2%	12

5-Yr Realized Volatility:

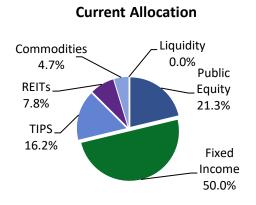
5.0%

5-Yr Realized Tracking Error:

0.2%

Asset Allocation, Performance & Realized Risk Summary - LRF

Asset Allocation	EMV (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Public Equity	\$ 23.8	21.3%	22%	(0.7%)	± 5%
Fixed Income	\$ 56.0	50.0%	49%	1.0%	±5%
TIPS	\$ 18.2	16.2%	16%	0.2%	± 3%
REITs	\$ 8.8	7.8%	8%	(0.2%)	± 5%
Commodities	\$ 5.3	4.7%	5%	(0.3%)	± 3%
Liquidity	\$ 0.0	0.0%	0%	0.0%	+ 2%
Total LRF	\$ 112.0	100.0%	100.0%	0.0%	



10-Yr		5-Yr			3-Yr			1-Yr			FYTD				
Performance Summary ²	Net Return	BM Return	Excess Bps												
Public Equity	10.2%	10.1%	11	5.7%	5.6%	17	9.6%	9.4%	20	(1.9%)	(2.3%)	39	(1.4%)	(1.8%)	39
Fixed Income	6.8%	5.6%	119	4.3%	3.7%	55	3.9%	3.3%	57	8.0%	8.1%	(8)	8.2%	8.2%	(6)
TIPS	3.5%	3.6%	(6)	1.6%	1.6%	(1)	2.5%	2.5%	5	4.4%	4.4%	8	4.0%	3.9%	6
REITs	-	-	-	5.8%	5.6%	16	6.3%	6.0%	29	9.0%	8.1%	86	7.4%	6.5%	86
Commodities	-	-	-	(13.3%)	(13.7%)	41	0.8%	0.1%	70	(13.0%)	(14.1%)	107	(14.2%)	(15.2%)	105
Total LRF	7.5%	7.0%	54	3.7%	3.5%	26	5.2%	4.9%	32	4.6%	4.3%	23	4.5%	4.2%	24

5-Yr Realized Volatility:

5.0%

5-Yr Realized Tracking Error:

0.2%

 $^{^{\}rm 1}$ Allocations approved by the Board at the May 2018 IC 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

Judges' Retirement Fund (JRF) & Judges Retirement System Fund II (JRF II) As of May 31, 2019

Asset Allocation, Performance & Realized Risk Summary - JRF

Asset Allocation	EMV (mil)	Current Allocation (%)	Policy Weight (%)	Variance (%)	Policy Range
Cash	\$ 29.4	100.0%	100%	0.0%	± 0%
Total JRF	\$ 29.4	100.0%	100%	0.0%	

Current Allocation



	10-Yr		5-Yr			3-Yr				1-Yr		FYTD			
Performance	Net	вм	Excess												
Summary	Return	Return	Bps												
Cash	0.6%	0.5%	9	1.0%	0.8%	15	1.5%	1.3%	17	2.4%	2.3%	14	2.2%	2.1%	14
Total JRF	0.6%	0.5%	9	1.0%	0.8%	15	1.5%	1.3%	17	2.4%	2.3%	14	2.2%	2.1%	14

5-Yr Realized Volatility:

0.2%

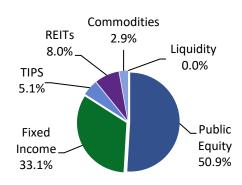
5-Yr Realized Tracking Error:

0.0%

Asset Allocation, Performance Realized Risk Summary - JRF II

Asset Allocation	EMV (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Public Equity	\$ 826.8	50.9%	52%	(1.1%)	± 5%
Fixed Income	\$ 537.3	33.1%	32%	1.1%	± 5%
TIPS	\$ 83.4	5.1%	5%	0.1%	± 3%
REITs	\$ 129.1	8.0%	8%	(0.0%)	± 5%
Commodities	\$ 46.3	2.9%	3%	(0.1%)	± 3%
Liquidity	\$ 0.0	0.0%	0%	0.0%	+ 2%
Total JRF II	\$ 1,623.0	100.0%	100.0%	0.0%	

Current Allocation



	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
Performance Summary ²	Net Return	BM Return	Excess Bps												
Public Equity	10.1%	10.0%	11	5.7%	5.6%	16	9.6%	9.4%	20	(1.9%)	(2.3%)	39	(1.4%)	(1.8%)	39
Fixed Income	6.8%	5.6%	120	4.3%	3.7%	56	3.9%	3.3%	59	8.1%	8.1%	(0)	8.3%	8.2%	2
TIPS	-	-	-	1.6%	1.6%	(3)	2.5%	2.5%	3	4.4%	4.4%	1	3.9%	3.9%	(0)
REITs	11.3%	11.4%	(9)	5.8%	5.6%	16	6.3%	6.0%	29	9.0%	8.1%	88	7.4%	6.5%	88
Commodities	-	-	-	(13.5%)	(13.7%)	22	0.4%	0.1%	30	(14.0%)	(14.1%)	6	(15.2%)	(15.2%)	6
Total JRF II	9.0%	8.7%	32	4.5%	4.3%	26	6.9%	6.5%	36	2.4%	2.0%	37	2.5%	2.1%	35

5-Yr Realized Volatility:

7.2%

5-Yr Realized Tracking Error:

0.2%

 $^{^{\}rm 1}$ Allocations approved by the Board at the May 2018 IC 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

Health Care Fund (HCF) & Long-Term Care Fund (LTCF) As of May 31, 2019

Asset Allocation, Performance & Realized Risk Summary - HCF

Asset Allocation	EMV (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Fixed Income	\$ 472.2	100.0%	100%	0.0%	± 0%
Total HCF	\$ 472.2	100.0%	100%	0.0%	

Current Allocation



	10-Yr		5-Yr		3-Yr			1-Yr			FYTD				
Performance Summary	Net Return	BM Return	Excess Bps												
Fixed Income	4.4%	3.8%	57	2.9%	2.7%	16	2.5%	2.5%	4	6.4%	6.4%	(0)	6.5%	6.5%	(0)
Total HCF	4.4%	3.8%	57	2.9%	2.7%	16	2.5%	2.5%	4	6.4%	6.4%	(0)	6.5%	6.5%	(0)

5-Yr Realized Volatility:

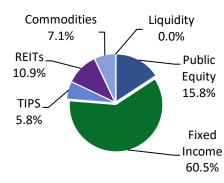
2.9%

5-Yr Realized Tracking Error: 0.2%

Asset Allocation, Performance & Realized Risk Summary - LTCF

Asset Allocation	EMV (mil)	Current Allocation (%)	Policy Weight (%) ¹	Variance (%)	Policy Range
Public Equity	\$ 733.6	15.8%	15%	0.8%	± 4%
Fixed Income	\$ 2,818.8	60.5%	60%	0.5%	± 5%
TIPS	\$ 269.6	5.8%	6%	(0.2%)	± 2%
REITs	\$ 506.6	10.9%	11%	(0.1%)	± 4%
Commodities	\$ 328.3	7.1%	8%	(0.9%)	± 2%
Liquidity	\$ 0.1	0.0%	0%	0.0%	± 2%
Total LTCF	\$ 4,657.0	100.0%	100.0%	0.0%	

Current Allocation



	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
Performance Summary ²	Net Return	BM Return	Excess Bps												
Public Equity	10.0%	9.9%	19	5.5%	5.2%	31	9.2%	8.9%	31	(2.1%)	(2.3%)	28	(1.5%)	(1.8%)	28
Fixed Income	6.4%	5.6%	73	3.7%	3.7%	1	3.3%	3.3%	1	8.1%	8.1%	(6)	8.2%	8.2%	(1)
TIPS	3.5%	3.6%	(6)	1.6%	1.6%	(0)	2.5%	2.5%	(1)	4.3%	4.4%	(2)	3.9%	3.9%	(1)
REITs	10.8%	10.5%	32	5.3%	4.5%	80	5.7%	4.9%	83	9.2%	8.2%	102	7.4%	6.5%	94
Commodities	-	-	-	(13.7%)	(13.7%)	(1)	(0.0%)	0.1%	(16)	(14.2%)	(14.1%)	(6)	(15.3%)	(15.2%)	(2)
Total LTCF	6.8%	6.4%	31	3.0%	2.9%	12	4.1%	4.1%	2	4.5%	4.7%	(15)	4.4%	4.5%	(12)

5-Yr Realized Volatility:

5.0%

5-Yr Realized Tracking Error:

 $^{^{\}rm 1}$ Allocations approved by the Board at the June 2018 IC 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

Supplemental Income Plan (SIP) As of May 31, 2019

Asset Allocation - SIP

		Gl	obal Equi	ty	USI	ixed Inco	me	F	Real Asset	s	Cash an	d Cash Eq	uivalents
	EMV			Policy			Policy			Policy			Policy
Asset Allocation	(mil)	Actual	Policy	Range	Actual	Policy	Range	Actual	Policy	Range	Actual	Policy	Range
Target Income Fund	\$ 99.3	29.2%	30.0%	± 4%	60.9%	60.0%	± 4%	4.9%	5.0%	± 1%	5.0%	5.0%	± 1%
Target 2015 Fund	\$ 86.9	36.1%	37.0%	± 4%	55.0%	54.0%	± 4%	4.9%	5.0%	± 1%	4.0%	4.0%	± 1%
Target 2020 Fund	\$ 160.2	49.1%	50.0%	± 4%	44.0%	43.0%	± 4%	3.9%	4.0%	± 1%	3.0%	3.0%	± 1%
Target 2025 Fund	\$ 160.9	61.1%	62.0%	± 4%	32.9%	32.0%	± 4%	3.9%	4.0%	± 1%	2.0%	2.0%	± 1%
Target 2030 Fund	\$ 136.8	74.4%	75.0%	± 4%	20.7%	20.0%	± 2%	4.0%	4.0%	± 1%	1.0%	1.0%	± 1%
Target 2035 Fund	\$ 79.3	86.6%	87.0%	± 4%	10.4%	10.0%	± 2%	3.0%	3.0%	± 1%	0.0%	0.0%	± 0.25%
Target 2040 Fund	\$ 70.9	91.8%	92.0%	± 4%	5.2%	5.0%	± 1%	3.0%	3.0%	± 1%	0.0%	0.0%	± 0.25%
Target 2045 Fund	\$ 37.2	91.8%	92.0%	± 4%	5.2%	5.0%	± 1%	3.0%	3.0%	± 1%	0.0%	0.0%	± 0.25%
Target 2050 Fund	\$ 18.7	91.8%	92.0%	± 4%	5.2%	5.0%	± 1%	3.0%	3.0%	± 1%	0.0%	0.0%	± 0.25%
Target 2055 Fund	\$ 7.9	91.8%	92.0%	± 4%	5.2%	5.0%	± 1%	3.0%	3.0%	± 1%	0.0%	0.0%	± 0.25%
Target 2060 Fund	\$ 1.8	91.8%	92.0%	± 4%	5.2%	5.0%	± 1%	3.0%	3.0%	± 1%	0.0%	0.0%	± 0.25%
SSgA STIF	\$ 103.4	0.0%	0.0%	-	0.0%	0.0%	-	0.0%	0.0%	-	100.0%	100.0%	-
SIP US ST Bond Core	\$ 35.1	0.0%	0.0%	-	100.0%	100.0%	-	0.0%	0.0%	-	0.0%	0.0%	-
SIP US Bond Core	\$ 58.1	0.0%	0.0%	-	100.0%	100.0%	-	0.0%	0.0%	-	0.0%	0.0%	-
SIP Real Asset Core	\$ 7.1	0.0%	0.0%	-	0.0%	0.0%	-	100.0%	100.0%	-	0.0%	0.0%	-
SIP Russell All Cap Core	\$ 524.3	100.0%	100.0%	-	0.0%	0.0%	-	0.0%	0.0%	-	0.0%	0.0%	-
SIP Glbl All Cap EX-US	\$ 64.2	100.0%	100.0%	-	0.0%	0.0%	-	0.0%	0.0%	-	0.0%	0.0%	-

Performance Summary - SIP

		10-Yr			5-Yr			3-Yr			1-Yr			FYTD	
Performance	Net	ВМ	Excess												
Summary	Return	Return	Bps												
Target Income Fund	5.2%	5.3%	(12)	2.8%	2.6%	12	3.5%	3.4%	12	3.3%	3.2%	14	3.5%	3.4%	14
Target 2015 Fund	6.2%	6.4%	(16)	2.6%	2.5%	12	3.3%	3.1%	12	2.6%	2.4%	14	2.7%	2.6%	14
Target 2020 Fund	6.7%	6.8%	(12)	2.5%	2.4%	12	3.4%	3.3%	11	1.3%	1.1%	14	1.5%	1.3%	14
Target 2025 Fund	7.4%	7.5%	(9)	3.0%	2.9%	13	4.4%	4.3%	12	0.3%	0.1%	16	0.6%	0.4%	15
Target 2030 Fund	8.1%	8.2%	(11)	3.1%	3.0%	12	5.0%	4.9%	11	(1.1%)	(1.2%)	14	(0.7%)	(0.9%)	13
Target 2035 Fund	8.6%	8.7%	(17)	3.4%	3.3%	12	5.7%	5.6%	10	(2.2%)	(2.4%)	13	(1.8%)	(1.9%)	12
Target 2040 Fund	9.0%	9.1%	(14)	3.8%	3.6%	12	6.7%	6.6%	9	(2.6%)	(2.7%)	13	(2.1%)	(2.2%)	12
Target 2045 Fund	9.3%	9.4%	(15)	4.3%	4.2%	13	7.6%	7.5%	10	(2.4%)	(2.5%)	13	(1.7%)	(1.9%)	12
Target 2050 Fund	9.3%	9.4%	(16)	4.3%	4.2%	13	7.6%	7.5%	10	(2.4%)	(2.5%)	13	(1.7%)	(1.9%)	12
Target 2055 Fund	-	-	-	4.3%	4.2%	14	7.6%	7.5%	9	(2.4%)	(2.5%)	12	(1.8%)	(1.9%)	11
Target 2060 Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SSgA STIF	-	-	-	1.0%	0.8%	19	1.6%	1.3%	25	2.6%	2.3%	39	2.5%	2.1%	38
SIP US ST Bond Core	-	-	-	1.2%	1.3%	(12)	1.5%	1.6%	(11)	3.6%	3.7%	(7)	3.6%	3.7%	(6)
SIP US Bond Core	-	-	-	2.8%	2.7%	6	2.5%	2.5%	3	6.4%	6.4%	5	6.6%	6.5%	4
SIP Real Asset Core	-	-	-	(0.7%)	(0.6%)	(9)	4.1%	4.2%	(11)	(2.1%)	(2.0%)	(6)	(1.9%)	(1.9%)	(4)
SIP Russell All Cap Core	-	-	-	9.3%	9.2%	3	11.5%	11.5%	(1)	2.5%	2.5%	3	1.9%	1.8%	3
SIP Glbl All Cap EX-US	-	-	-	1.7%	1.5%	21	6.7%	6.5%	23	(6.9%)	(7.1%)	23	(5.0%)	(5.2%)	25

Supplemental Income Plan (SIP) As of May 31, 2019

Realized Risk - SIP

Realized Risk	Annualized 5-Yr Realized Volatility	Tracking Error ¹
Target Income Fund	3.2%	0.1%
Target 2015 Fund	3.6%	0.1%
Target 2020 Fund	4.7%	0.1%
Target 2025 Fund	6.1%	0.1%
Target 2030 Fund	7.4%	0.1%
Target 2035 Fund	8.7%	0.2%
Target 2040 Fund	9.8%	0.2%
Target 2045 Fund	10.2%	0.2%
Target 2050 Fund	10.2%	0.2%
Target 2055 Fund	10.2%	0.2%
Target 2060 Fund	-	-
SSgA STIF	0.3%	0.1%
SIP US ST Bond Core	0.9%	0.0%
SIP US Bond Core	2.9%	0.1%
SIP Real Asset Core	8.4%	0.2%
SIP Russell All Cap Core	12.0%	0.1%
SIP Glbl All Cap EX-US	12.2%	0.3%

 $^{^{1}}$ 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 May 31, 2019

Public Employee's Retirement Fund and Affiliate Investment Program Policy Benchmarks

Trust	Asset Class Benchmark	k Policy Benchmark			
Public Employees Retirement Fund	Public Equity	CalPERS Custom Global Equity Benchmark			
	Private Equity	CalPERS Custom FTSE All World, All Cap Equity, +150 bps, 1 Qtr Lag			
	Income	CalPERS Custom Global Fixed Income Benchmark			
	Real Assets	MSCI Investment Property Databank US Core - Fund Level			
	Inflation	Custom Inflation Assets Benchmark			
	Liquidity	30-Day Treasury Bill			
Judge's Retirement System Fund	Cash	91-day Treasury Bill			
	Global Equity	MSCI ACWI IMI (Net)			
	U.S. Fixed Income	Bloomberg Barclays Long Liability Index			
Judge's Retirement System II Fund	TIPS	Bloomberg Barclays U.S. TIPs Index, Series L			
	Commodities	S&P GSCI Total Return Daily			
	REITs	FTSE EPRA/NAREIT Developed Liquid (Net)			
Legislators' Retirement System Fund	Global Equity	MSCI ACWI IMI (Net)			
	U.S. Fixed Income	Bloomberg Barclays Long Liability Index			
	TIPS	Bloomberg Barclays U.S. TIPs Index, Series L			
	Commodities	S&P GSCI Total Return Daily			
	REITs	FTSE EPRA/NAREIT Developed Liquid (Net)			
Public Employees' Health Care Fund	U.S. Fixed Income	Bloomberg Barclays U.S. Aggregate Bond Index			
Long-Term Care Fund	Global Equity	MSCI ACWI IMI (Net)			
	U.S. Fixed Income	Bloomberg Barclays Long Liability Index			
	TIPS	Bloomberg Barclays U.S. Treasury Inflation Protected Securities (TIPS) Index			
	Commodities	S&P GSCI Total Return Daily			
	REITs	FTSE EPRA/NAREIT Developed Liquid (Net)			
California Employers' Retiree Benefit Trust (CERBT) Funds 1, 2 & 3	Global Equity	MSCI ACWI IMI (Net)			
	U.S. Fixed Income	Bloomberg Barclays Long Liability Index			
	TIPS	Bloomberg Barclays U.S. TIPS Index, Series L			
	Commodities	S&P GSCI Total Return Daily			
	REITs	FTSE EPRA/NAREIT Developed Liquid (Net)			

CalPERS Trust Level

Trust Level Benchmarks As of May 31, 2019

Supplemental Income Plan Policy Benchmarks

Policy Weights									
	Global Equity	US Equity	In'l Equity	US Income		Real Assets	Cash & Cash Equivalents		
Supplemental Income Plan	Russell 3000 / MSCI ACWI ex US	Russell 3000	MSCI ACWI ex US	Bloomberg Barclays US Ag Bond Index	Bloomberg Barclays US 1-3 Year Govt/Credit Bond Index	SSGA Real Asset	BofA ML 3 mo T-bill		
Target Income Fund	30.0%	16.0%	14.0%	60.0%	-	5.0%	5.0%		
Target 2015 Fund	37.0%	20.0%	17.0%	54.0%	-	5.0%	4.0%		
Target 2020 Fund	50.0%	27.0%	23.0%	43.0%	-	4.0%	3.0%		
Target 2025 Fund	62.0%	33.0%	29.0%	32.0%	-	4.0%	2.0%		
Target 2030 Fund	75.0%	40.0%	35.0%	20.0%	-	4.0%	1.0%		
Target 2035 Fund	87.0%	46.0%	41.0%	10.0%	-	3.0%	-		
Target 2040 Fund	92.0%	49.0%	43.0%	5.0%	-	3.0%	-		
Target 2045 Fund	92.0%	49.0%	43.0%	5.0%	-	3.0%	-		
Target 2050 Fund	92.0%	49.0%	43.0%	5.0%	-	3.0%	-		
Target 2055 Fund	92.0%	49.0%	43.0%	5.0%	-	3.0%	-		
Target 2060 Fund	92.0%	49.0%	43.0%	5.0%	-	3.0%	-		
SSgA STIF	-	-	-	1	-	ī	100.0%		
SIP US ST Bond Core	-	-	-	1	100.0%	ī	-		
SIP US Bond Core	-	-	-	100.0%	-	i	-		
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%	-	-	-	-		