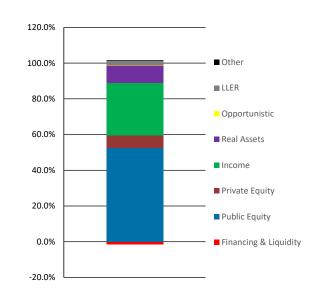


# Public Employees' Retirement Fund (PERF) As of December 31, 2020

#### **Asset Allocation**

Asset Allocation	ling Asset	Current Allocation (%)	Policy Target Weight (%)	Variance (%)	Policy Range
Public Equity <sup>1</sup>	\$ 232.8	52.6%	50.0%	2.6%	± 7%
Private Equity <sup>2</sup>	\$ 30.8	7.0%	8.0%	(1.0%)	± 4%
Income <sup>1,3</sup>	\$ 129.6	29.3%	28.0%	1.3%	± 6%
Real Assets <sup>2</sup>	\$ 44.3	10.0%	13.0%	(3.0%)	± 5%
Total Fund	\$ 12.2	2.8%	0.0%	2.8%	
Opportunistic	\$ 0.9	0.2%	0.0%	0.2%	
LLER <sup>4</sup>	\$ 11.1	2.5%	0.0%	2.5%	
Other <sup>5</sup>	\$ 0.3	0.1%	0.0%	0.1%	
Financing & Liquidity	\$ (7.1)	(1.6%)			
Trust Level Financing <sup>6</sup>	\$ (17.4)	(3.9%)	0.0%	(3.9%)	
Liquidity <sup>6</sup>	\$ 10.3	2.3%	1.0%	1.3%	-6% to +3%
Total PERF	\$ 442.7	100.0%	100.0%		



TAP <sup>7</sup>	\$ 0.2
PERF Plus TAP	\$ 442.9

#### **Performance Summary**

				10-Yr			5-Yr			3-Yr			1-Yr			FYTD		5-Yr Realized
Performance	Endi	ng Asset	Total	ВМ	Excess	Total	вм	Excess	Total	вм	Excess	Total	ВМ	Excess	Total	ВМ	Excess	Information
Summary	Val	ue (bil)	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps	Ratio <sup>8</sup>
Public Equity	\$	232.8	9.4%	9.3%	10	12.1%	12.1%	4	9.2%	9.3%	(9)	13.7%	13.3%	37	22.2%	22.2%	4	-
Cap Weighted <sup>1</sup>	\$	166.0	9.7%	9.6%	10	12.8%	12.8%	3	10.3%	10.4%	(11)	17.4%	17.0%	42	25.6%	25.5%	10	0.1
Factor Weighted	\$	66.8	-	-	-	-	-	-	-	-	-	4.6%	4.4%	11	14.0%	14.1%	(10)	-
Private Equity <sup>2</sup>	\$	30.8	11.5%	13.2%	(165)	10.4%	13.2%	(280)	9.2%	9.0%	20	12.5%	11.7%	82	20.4%	31.0%	(1,062)	-
Income	\$	129.6	5.8%	5.2%	56	6.9%	6.3%	63	7.4%	6.9%	44	11.7%	11.2%	55	2.7%	2.1%	53	-
Long Spread	\$	66.0	-	-	-	-	-	-	-	-	-	9.2%	8.2%	103	4.3%	3.8%	41	2.5
Long Treasury <sup>1</sup>	\$	43.7	6.1%	6.1%	(9)	6.6%	6.6%	2	8.3%	8.4%	(13)	14.5%	15.0%	(54)	(2.2%)	(2.3%)	14	-
Total Fund Income <sup>3</sup>	\$	6.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
High Yield	\$	13.2	-	-	-	-	-	-	-	-	-	5.1%	5.2%	(10)	10.6%	10.4%	17	-
Real Assets <sup>2</sup>	\$	44.3	8.5%	8.5%	(6)	4.9%	5.4%	(51)	3.4%	4.1%	(69)	(0.1%)	0.4%	(50)	(1.3%)	(1.6%)	35	-
Total Fund	\$	12.2																
Opportunistic	\$	0.9	-	-	-	-	-	-	-	-	-	-	-	-	2.9%	3.5%	(51)	-
LLER <sup>4</sup>	\$	11.1	-	-	-	3.1%	0.9%	222	3.0%	1.1%	181	2.0%	0.4%	160	2.9%	0.1%	286	-
Other <sup>5</sup>	\$	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Financing & Liquidity	\$	(7.1)																
Trust Level Financing <sup>6</sup>	\$	(17.4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Liquidity <sup>6</sup>	\$	10.3	1.2%	1.3%	(5)	1.4%	1.1%	31	1.8%	1.4%	35	0.5%	0.4%	10	0.1%	0.0%	3	-
Total PERF	\$	442.7	8.4%	8.5%	(7)	9.7%	10.0%	(30)	8.4%	8.7%	(30)	12.4%	12.4%	(4)	13.4%	13.9%	(48)	-
								, and the second		•							•	
TAP <sup>7</sup>	\$	0.2	-	-	-	7.1%	-	-	8.4%	-	-	16.0%	-	-	3.0%	-	-	-

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> Market exposure of private asset classes reported at NAV.

<sup>&</sup>lt;sup>3</sup> Total Fund Income does not have a FYTD return as the strategy incepted in October 2020; however, the return impact is included in the PERF return.

<sup>&</sup>lt;sup>4</sup> 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.

<sup>&</sup>lt;sup>5</sup> Other includes Multi Asset Class, Completion Overlay, Absolute Return Strategies (Direct Investments only), Plan Level Transition and other Total Fund level portfolios.

<sup>&</sup>lt;sup>6</sup> Liquidity reflects net asset value of the Liquidity Segment. Trust Level Financing reflects derivatives financing and repo borrowing in trust level Synthetic Cap Weighted and Synthetic Treasury portfolios.

<sup>&</sup>lt;sup>7</sup> 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.

<sup>&</sup>lt;sup>8</sup> 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. Information Ratio for Long Spread segment includes the history of Global Fixed Income portfolios prior to July 2018. Long Treasury and High Yield portfolios are managed in an index-like approach without an active return target.

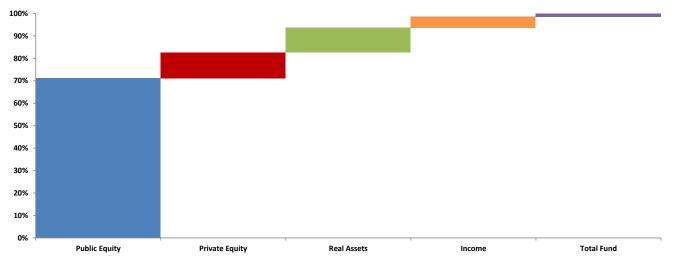
# Public Employees' Retirement Fund (PERF)

#### **Total PERF Risk**

Risk Measure	1/4/2021	9/29/2020	Explanation of Risk Measures:
Forecasted Volatility <sup>1</sup> Portfolio Benchmark	11.5% 11.0%	11.5% 11.1%	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.
Forecasted Tracking Error <sup>1</sup> Portfolio	1.10%	1.10%	Forecasted tracking error is the annualized standard deviation of the differential return between the portfolio and an equal investment in the benchmark.
Forecasted Tracking Error (Actionable) <sup>1</sup> Portfolio	0.26%	0.27%	Excludes from the above measure the effect of active exposure from private asset classes (Private Equity and Real Assets) 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.

anuary 4, 2021	Volat	ility	Tracking	Error
Asset Class	Annualized Forecasted (%) <sup>1</sup>	5-Year Realized (%) <sup>2</sup>	Annualized Forecasted (%) <sup>1</sup>	5-Year Realized (%) <sup>2</sup>
Public Equity	16.2	14.5	0.2	0.3
Cap Weighted	17.3	15.5	0.1	0.3
Factor Weighted	13.4	-	0.0	-
Income	8.4	5.2	1.2	0.3
Long Spread	6.5	-	0.5	-
Long Treasury	12.0	8.4	0.2	0.4
Total Fund Income	11.8	-	1.7	-
High Yield	7.1	-	0.2	-
Total Fund	N/A	-	N/A	-
Opportunistic	9.6	-	9.6	-
LLER	4.3	2.8	4.3	2.8
Liquidity	0.3	0.3	0.2	0.1
Total PERF Actionable			0.26	0.23
Private Equity	22.4	8.3	13.1	11.2
Real Assets	15.8	2.5	3.4	2.3
Total PERF	11.5	7.7	1.10	1.29

#### **Contribution to Forecasted Volatility**



 $<sup>^{\</sup>rm 1}$  Forecasted Volatility and Tracking Error based on Barra 301XL model.

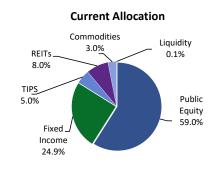
 $<sup>^2\,\</sup>text{Realized Volatility and Tracking Error for private asset classes are computed from quarterly net returns.}$ 

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

As of December 31, 2020

Asset Allocation, Performance & Realized Risk Summary - CERBT 1

Asset Allocation	Ending Asset llue (mil)	Current Allocation (%)	Policy Weight (%) <sup>1</sup>	Variance (%)	Policy Range
Public Equity	\$ 6,840.3	59.0%	59.0%	(0.0%)	± 5%
Fixed Income	\$ 2,888.2	24.9%	25.0%	(0.1%)	± 5%
TIPS	\$ 578.1	5.0%	5.0%	0.0%	± 3%
REITs	\$ 930.4	8.0%	8.0%	0.0%	± 5%
Commodities	\$ 351.3	3.0%	3.0%	0.0%	± 3%
Liquidity	\$ 6.9	0.1%	0.0%	0.1%	+ 2%
Total CERBT 1	\$ 11,595.2	100.0%	100.0%	0.0%	



	10-Yr 5-Yr				3-Yr			1-Yr			FYTD				
Performance Summary <sup>2</sup>	Total Return	BM Return	Excess Bps												
Public Equity	9.8%	9.5%	28	12.5%	12.1%	36	10.0%	9.7%	31	16.6%	16.3%	31	25.2%	25.1%	12
Fixed Income	6.2%	5.6%	51	6.9%	6.3%	52	7.3%	7.1%	18	11.2%	11.1%	13	1.4%	1.4%	2
TIPS	-	-	-	5.1%	5.1%	(0)	5.9%	5.9%	(1)	11.0%	11.0%	(4)	4.7%	4.7%	(3)
REITs	6.0%	5.3%	63	4.3%	3.4%	89	2.5%	1.6%	93	(7.8%)	(8.8%)	100	16.2%	15.6%	55
Commodities	-	-	-	(1.8%)	(1.9%)	5	(8.1%)	(8.2%)	14	(23.5%)	(23.7%)	19	19.7%	19.8%	(4)
Total CERBT 1	8.0%	7.8%	27	10.0%	9.6%	39	8.7%	8.4%	27	13.4%	13.0%	39	17.1%	17.0%	9

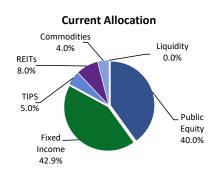
5-Yr Realized Volatility:

10.7%

5-Yr Realized Tracking Error:

#### Asset Allocation, Performance & Realized Risk Summary - CERBT 2

Asset Allocation	Ending Asset lue (mil)	Current Allocation (%)	Policy Weight (%) <sup>1</sup>	Variance (%)	Policy Range
Public Equity	\$ 670.0	40.0%	40.0%	0.0%	± 5%
Fixed Income	\$ 717.6	42.9%	43.0%	(0.1%)	± 5%
TIPS	\$ 83.5	5.0%	5.0%	0.0%	± 3%
REITs	\$ 134.4	8.0%	8.0%	0.0%	± 5%
Commodities	\$ 67.7	4.0%	4.0%	0.0%	± 3%
Liquidity	\$ 0.0	0.0%	0.0%	0.0%	+ 2%
Total CERBT 2	\$ 1,673.3	100.0%	100.0%	0.0%	



	10-Yr		5-Yr			3-Yr			1-Yr			FYTD			
Performance	Total	BM	Excess	Total	вм	Excess	Total	BM	Excess	Total	BM	Excess	Total	BM	Excess
Summary <sup>2</sup>	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps
Public Equity	-	-	-	12.5%	12.1%	34	10.0%	9.7%	30	16.5%	16.3%	27	25.2%	25.1%	10
Fixed Income	-	-	-	6.9%	6.3%	52	7.3%	7.1%	16	11.2%	11.1%	12	1.4%	1.4%	2
TIPS	-	-	-	5.1%	5.1%	1	5.9%	5.9%	2	10.9%	11.0%	(5)	4.7%	4.7%	(2)
REITs	-	-	-	4.3%	3.4%	89	2.5%	1.6%	92	(7.9%)	(8.8%)	95	16.1%	15.6%	48
Commodities	-	-	-	(1.7%)	(1.9%)	20	(7.9%)	(8.2%)	34	(23.5%)	(23.7%)	19	19.7%	19.8%	(4)
Total CERBT 2	-	-	-	9.0%	8.6%	37	8.2%	7.9%	22	12.3%	12.0%	27	12.8%	12.7%	9

5-Yr Realized Volatility:

8.3%

5-Yr Realized Tracking Error: 0.1%

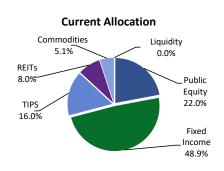
 $<sup>^{\</sup>rm 1}$  Allocations approved by the Board at the May 2018 IC Meeting.

<sup>&</sup>lt;sup>2</sup> 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 reported net of investment expenses.

# CERBT Strategy 3 Fund (CERBT 3) & Legislators' Retirement System Fund (LRF) As of December 31, 2020

Asset Allocation, Performance & Realized Risk Summary - CERBT 3

Asset Allocation	nding Asset ue (mil)	Current Allocation (%)	Policy Weight (%) <sup>1</sup>	Variance (%)	Policy Range
Public Equity	\$ 176.7	22.0%	22.0%	0.0%	± 5%
Fixed Income	\$ 392.2	48.9%	49.0%	(0.1%)	±5%
TIPS	\$ 128.2	16.0%	16.0%	(0.0%)	± 3%
REITs	\$ 64.5	8.0%	8.0%	0.0%	± 5%
Commodities	\$ 40.6	5.1%	5.0%	0.1%	± 3%
Liquidity	\$ 0.0	0.0%	0.0%	0.0%	+ 2%
Total CERBT 3	\$ 802.2	100.0%	100.0%	0.0%	



	10-Yr		5-Yr			3-Yr			1-Yr			FYTD			
Performance Summary <sup>2</sup>	Total Return	BM Return	Excess Bps												
Public Equity	-	-	-	12.5%	12.1%	33	10.0%	9.7%	29	16.5%	16.3%	25	25.2%	25.1%	8
Fixed Income	-	-	-	6.8%	6.3%	49	7.3%	7.1%	17	11.2%	11.1%	12	1.4%	1.4%	2
TIPS	-	-	-	5.1%	5.1%	1	5.9%	5.9%	2	10.9%	11.0%	(5)	4.7%	4.7%	(2)
REITs	-	-	-	4.3%	3.4%	85	2.5%	1.6%	94	(7.9%)	(8.8%)	93	16.1%	15.6%	43
Commodities	-	-	-	(1.4%)	(1.9%)	43	(7.7%)	(8.2%)	54	(23.6%)	(23.7%)	17	19.7%	19.8%	(4)
Total CERBT 3	-	-		7.7%	7.3%	31	7.3%	7.1%	17	10.8%	10.5%	23	9.1%	9.0%	6

5-Yr Realized Volatility:

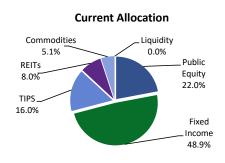
6.4%

5-Yr Realized Tracking Error:

0.1%

#### Asset Allocation, Performance & Realized Risk Summary - LRF

Asset Allocation	1	nding Asset ue (mil)	Current Allocation (%)	Policy Weight (%) <sup>1</sup>	Variance (%)	Policy Range
Public Equity	\$	26.6	22.0%	22.0%	0.0%	± 5%
Fixed Income	\$	59.1	48.9%	49.0%	(0.1%)	± 5%
TIPS	\$	19.3	16.0%	16.0%	0.0%	± 3%
REITs	\$	9.7	8.0%	8.0%	0.0%	± 5%
Commodities	\$	6.1	5.1%	5.0%	0.1%	± 3%
Liquidity	\$	0.0	0.0%	0.0%	0.0%	+ 2%
Total LRF	\$	120.8	100.0%	100.0%	0.1%	



	10-Yr			5-Yr			3-Yr		1-Yr			FYTD			
Performance	Total	BM	Excess	Total	ВМ	Excess	Total	ВМ	Excess	Total	ВМ	Excess	Total	ВМ	Excess
Summary <sup>2</sup>	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps
Public Equity	9.9%	9.8%	17	12.7%	12.5%	27	10.2%	9.9%	33	16.6%	16.3%	37	25.2%	25.1%	12
Fixed Income	6.1%	5.6%	50	6.9%	6.3%	50	7.3%	7.1%	15	11.2%	11.1%	9	1.4%	1.4%	2
TIPS	3.8%	3.8%	(1)	5.1%	5.1%	3	6.0%	5.9%	4	11.0%	11.0%	1	4.7%	4.7%	(3)
REITs	-	-	-	4.8%	4.3%	46	2.6%	1.8%	73	(7.9%)	(8.8%)	91	16.0%	15.6%	41
Commodities	-	-	-	(1.4%)	(1.9%)	44	(7.7%)	(8.2%)	51	(23.5%)	(23.7%)	18	19.7%	19.8%	(5)
Total LRF	6.6%	6.4%	21	7.8%	7.5%	28	7.4%	7.2%	20	10.8%	10.5%	28	9.1%	9.0%	6

5-Yr Realized Volatility: 6.3%

5-Yr Realized Tracking Error: 0.1%

 $<sup>^{\</sup>rm 1}$  Allocations approved by the Board at the May 2018 IC Meeting.

<sup>&</sup>lt;sup>2</sup> 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 reported net of investment expenses.

# Judges' Retirement Fund (JRF) & Judges' Retirement System Fund II (JRF II) As of December 31, 2020

Asset Allocation, Performance & Realized Risk Summary - JRF

Asset Allocation	А	nding sset se (mil)	Current Allocation (%)	Policy Weight (%)	Variance (%)	Policy Range
Cash	\$	55.4	100.0%	100.0%	0.0%	+ 0%
Total JRF	\$	55.4	100.0%	100%	0.0%	





		10-Yr			5-Yr			3-Yr			1-Yr			FYTD	
Performance Summary	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps		BM Return	Excess Bps	Total Return	BM Return	Excess Bps
Cash	0.7%	0.6%	6	1.3%	1.2%	12	1.7%	1.6%	6	0.6%	0.7%	(5)	0.1%	0.1%	1
Total JRF	0.7%	0.6%	6	1.3%	1.2%	12	1.7%	1.6%	6	0.6%	0.7%	(5)	0.1%	0.1%	1

5-Yr Realized Volatility:

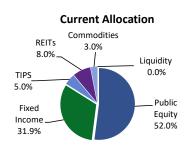
0.2%

5-Yr Realized Tracking Error:

0.1%

#### Asset Allocation, Performance & Realized Risk Summary - JRF II

Asset Allocation	Ending Asset lue (mil)	Current Allocation (%)	Policy Weight (%) <sup>1</sup>	Variance (%)	Policy Range
Public Equity	\$ 1,138.7	52.0%	52.0%	0.0%	± 5%
Fixed Income	\$ 698.2	31.9%	32.0%	(0.1%)	± 5%
TIPS	\$ 109.2	5.0%	5.0%	0.0%	± 3%
REITs	\$ 175.8	8.0%	8.0%	0.0%	± 5%
Commodities	\$ 66.4	3.0%	3.0%	0.0%	± 3%
Liquidity	\$ 0.0	0.0%	0.0%	0.0%	+ 2%
Total JRF II	\$ 2,188.2	100.0%	100.0%	0.0%	



		10-Yr			5-Yr			3-Yr			1-Yr			FYTD	
Performance	Total	BM	Excess	Total	BM	Excess	Total	BM	Excess	Total	BM	Excess	Total	BM	Excess
Summary <sup>2</sup>	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps
Public Equity	9.8%	9.7%	17	12.7%	12.5%	27	10.2%	9.9%	35	16.7%	16.3%	42	25.2%	25.1%	14
Fixed Income	6.2%	5.6%	50	6.9%	6.3%	52	7.3%	7.1%	18	11.2%	11.1%	11	1.4%	1.4%	2
TIPS	-	-	-	5.1%	5.1%	1	5.9%	5.9%	1	11.0%	11.0%	(1)	4.7%	4.7%	(3)
REITs	6.4%	6.1%	23	4.8%	4.3%	48	2.6%	1.8%	76	(7.9%)	(8.8%)	98	16.1%	15.6%	51
Commodities	-	-	-	(1.6%)	(1.9%)	20	(8.1%)	(8.2%)	16	(23.5%)	(23.7%)	18	19.7%	19.8%	(4)
Total JRF II	8.2%	8.0%	18	9.8%	9.5%	34	8.7%	8.4%	30	13.2%	12.8%	42	15.5%	15.3%	12

5-Yr Realized Volatility: 9.8%

5-Yr Realized Tracking Error: 0.1%

 $<sup>^{\</sup>rm 1}$  Allocations approved by the Board at the May 2018 IC Meeting.

<sup>&</sup>lt;sup>2</sup> 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 reported net of investment expenses.

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

As of December 31, 2020

Asset Allocation, Performance & Realized Risk Summary - HCF

Asset Allocation	ļ	nding Asset ue (mil)	Current Allocation (%)	Policy Weight (%) <sup>1</sup>	Variance (%)	Policy Range
Fixed Income	\$	527.0	100.0%	100.0%	0.0%	+ 0%
Total HCF	\$	527.0	100.0%	100.0%	0.0%	





		10-Yr			5-Yr			3-Yr			1-Yr			FYTD	
Performance Summary	Total Return	BM Return	Excess Bps												
Fixed Income	4.1%	3.8%	29	4.5%	4.4%	3	5.4%	5.3%	5	7.6%	7.5%	7	1.3%	1.3%	(3)
Total HCF	4.1%	3.8%	29	4.5%	4.4%	3	5.4%	5.3%	5	7.6%	7.5%	7	1.3%	1.3%	(3)

5-Yr Realized Volatility:

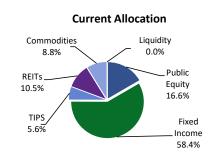
3.2%

5-Yr Realized Tracking Error:

0.1%

#### Asset Allocation, Performance & Realized Risk Summary - LTCF

Asset Allocation	Ending Asset Ilue (mil)	Current Allocation (%)	Policy Weight (%) <sup>1</sup>	Variance (%)	Policy Range
Public Equity	\$ 878.7	16.6%	15.0%	1.6%	± 4%
Fixed Income	\$ 3,083.4	58.4%	60.0%	(1.6%)	± 5%
TIPS	\$ 297.4	5.6%	6.0%	(0.4%)	± 2%
REITs	\$ 555.3	10.5%	11.0%	(0.5%)	± 4%
Commodities	\$ 464.2	8.8%	8.0%	0.8%	± 2%
Liquidity	\$ 0.1	0.0%	0.0%	0.0%	+ 2%
Total LTCF	\$ 5,279.0	100.0%	100.0%	0.0%	



		10-Yr			5-Yr			3-Yr			1-Yr			FYTD	
Performance	Total	BM	Excess	Total	BM	Excess	Total	BM	Excess	Total	BM	Excess	Total	BM	Excess
Summary <sup>2</sup>	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps	Return	Return	Bps
Public Equity	9.8%	9.6%	23	12.5%	12.1%	32	10.0%	9.7%	29	16.6%	16.3%	30	25.2%	25.1%	12
Fixed Income	5.7%	5.6%	4	6.4%	6.3%	2	7.2%	7.1%	7	11.2%	11.1%	11	1.4%	1.4%	1
TIPS	3.8%	3.8%	(1)	5.1%	5.1%	(1)	5.9%	5.9%	(1)	11.0%	11.0%	(1)	4.7%	4.7%	(3)
REITs	5.9%	5.3%	60	4.3%	3.4%	86	2.5%	1.6%	90	(7.9%)	(8.8%)	92	16.0%	15.6%	40
Commodities	-	-	-	(1.8%)	(1.9%)	3	(8.2%)	(8.2%)	3	(23.6%)	(23.7%)	16	19.7%	19.8%	(9)
Total LTCF	5.2%	5.2%	8	6.7%	6.7%	(5)	6.3%	6.4%	(8)	8.4%	8.6%	(21)	8.2%	8.0%	18

5-Yr Realized Volatility: 6.6%

5-Yr Realized Tracking Error: 0.4%

 $<sup>^{\</sup>rm 1}$  Allocations approved by the Board at the June 2018 IC Meeting.

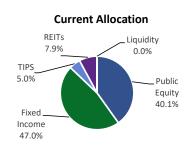
<sup>&</sup>lt;sup>2</sup> Liquidity is for operational purposes rather than a strategic allocation target and is not included in the performance summary table due to negligible impact on performance. All performance reported net of investment expenses.

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

As of December 31, 2020

#### Asset Allocation & Performance Summary - CEPPT 1

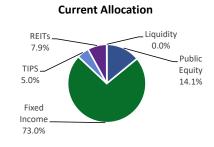
Asset Allocation <sup>1</sup>	A	nding sset ue (mil)	Current Allocation (%)	Policy Weight (%) <sup>2</sup>	Variance (%)	Policy Range
Public Equity	\$	6.1	40.1%	40.0%	0.1%	± 5%
Fixed Income	\$	7.2	47.0%	47.0%	(0.0%)	±5%
TIPS	\$	0.8	5.0%	5.0%	0.0%	± 3%
REITs	\$	1.2	7.9%	8.0%	(0.1%)	± 5%
Liquidity	\$	0.0	0.0%	0.0%	0.0%	+ 2%
Total CEPPT 1	\$	15.3	100.0%	100.0%	0.0%	



		10-Yr			5-Yr			3-Yr		1-Yr			FYTD		
Performance Summary <sup>3</sup>	Total Return	BM Return	Excess Bps	7.77	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps	Total Return	BM Return	Excess Bps
Public Equity	-	-	-	-	-	-	-	-		16.5%	16.3%	21	25.2%	25.1%	8
Fixed Income	-	-	-	-	-	-	-	-	-	7.6%	7.5%	7	1.3%	1.3%	(3)
TIPS	-	-	-	-	-	-	-	-	-	10.9%	11.0%	(5)	4.6%	4.7%	(7)
REITs	-	-	-	-	-	-	-		-	(8.0%)	(8.8%)	80	16.1%	15.6%	49
Total CEPPT 1	-	-	-	-	-	-	-	-	-	11.4%	11.5%	(7)	12.0%	11.9%	15

#### Asset Allocation & Performance Summary - CEPPT 2

Asset Allocation <sup>1</sup>	As	ding set e (mil)	Current Allocation (%)	Policy Weight (%) <sup>2</sup>	Variance (%)	Policy Range
Public Equity	\$	1.1	14.1%	14.0%	0.1%	± 5%
Fixed Income	\$	5.8	73.0%	73.0%	(0.0%)	± 5%
TIPS	\$	0.4	5.0%	5.0%	(0.0%)	± 3%
REITs	\$	0.6	7.9%	8.0%	(0.1%)	± 5%
Liquidity	\$	0.0	0.0%	0.0%	0.0%	+ 2%
Total CEPPT 2	\$	8.0	100.0%	100.0%	0.0%	



	10-Yr		5-Yr		3-Yr		1-Yr			FYTD					
Performance	Total	BM	Excess	Total	BM	Excess	Total	ВМ	Excess	Total	ВМ	Excess	Total	BM	Excess
Summary <sup>3</sup>	Return	Return	Bps												
Public Equity	-	-	-	-	-	-	-	-	-	16.4%	16.3%	20	25.2%	25.1%	9
Fixed Income	-	-	-	-	-	-	-	-	-	6.8%	7.5%	(70)	1.3%	1.3%	(2)
TIPS	-	-	-	-	-	-	-	-	-	10.9%	11.0%	(5)	4.7%	4.7%	(3)
REITs	-	-	-	-	-	-	-	-	-	(7.9%)	(8.8%)	91	16.0%	15.6%	42
Total CEPPT 2	-	-	-	-	-	-	-	-	-	8.7%	8.7%	4	5.9%	5.8%	7

<sup>&</sup>lt;sup>1</sup> Current asset allocation asset values and percentages are based on 1/5/2021 asset market values due to a significant employer contribution that was received in the fund on 12/31/2020 and not fully reflected in the asset allocation until 1/5/2021

 $<sup>^{\</sup>rm 2}$  Allocations approved by the Board at the June 2019 IC Meeting.

<sup>&</sup>lt;sup>3</sup> 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 reported net of investment expenses.

# Supplemental Income Plans (SIP) As of December 31, 2020

Asset Allocation - SIP

	Ending Asset Global Equity			ty	US Fixed Income			Real Assets			Cash and Cash Equivalents		
Asset Allocation	Value (mil)	Actual	Policy <sup>1</sup>	Policy Range	Actual	Policy <sup>1</sup>	Policy Range	Actual	Policy <sup>1</sup>	Policy Range	Actual	Policy <sup>1</sup>	Policy Range
Target Income Fund	\$ 120.6	32.9%	30.0%	± 4%	57.1%	60.0%	± 4%	5.3%	5.0%	± 1%	4.7%	5.0%	± 1%
Target 2015 Fund	\$ 99.2	35.0%	32.0%	± 4%	55.1%	58.0%	± 4%	5.3%	5.0%	± 1%	4.7%	5.0%	± 1%
Target 2020 Fund	\$ 188.7	47.3%	44.0%	± 4%	43.8%	47.0%	± 4%	5.2%	5.0%	± 1%	3.7%	4.0%	± 1%
Target 2025 Fund	\$ 209.8	60.2%	57.0%	± 4%	33.0%	36.0%	± 4%	4.1%	4.0%	± 1%	2.7%	3.0%	± 1%
Target 2030 Fund	\$ 190.6	71.6%	69.0%	± 4%	22.6%	25.0%	± 2%	4.0%	4.0%	± 1%	1.8%	2.0%	± 1%
Target 2035 Fund	\$ 116.3	83.7%	82.0%	± 4%	12.4%	14.0%	± 2%	2.9%	3.0%	± 1%	0.9%	1.0%	+ 0.25%
Target 2040 Fund	\$ 108.1	92.7%	92.0%	± 4%	4.4%	5.0%	± 1%	2.9%	3.0%	± 1%	-	-	+ 0.25%
Target 2045 Fund	\$ 59.8	92.7%	92.0%	± 4%	4.4%	5.0%	± 1%	2.9%	3.0%	± 1%	-	-	+ 0.25%
Target 2050 Fund	\$ 33.3	92.7%	92.0%	± 4%	4.4%	5.0%	± 1%	2.9%	3.0%	± 1%	-	-	+ 0.25%
Target 2055 Fund	\$ 12.4	92.7%	92.0%	± 4%	4.4%	5.0%	± 1%	2.9%	3.0%	± 1%	-	-	+ 0.25%
Target 2060 Fund	\$ 5.3	92.7%	92.0%	± 4%	4.4%	5.0%	± 1%	2.9%	3.0%	± 1%	-	-	+ 0.25%
SSgA STIF	\$ 119.8	-	-	-	-	-	-	-	-	-	100.0%	100.0%	-
SIP US ST Bond Core	\$ 44.7	-	-	-	100.0%	100.0%	-	-	-	-	-	-	-
SIP US Bond Core	\$ 74.3	-	-	-	100.0%	100.0%	-	-	-	-	-	-	-
SIP Real Asset Core	\$ 8.1	-	-	-	-	-	-	100.0%	100.0%	-	-	-	-
SIP Russell All Cap Core	\$ 656.0	100.0%	100.0%	-	-	-	-	-	-	-	-	-	-
SIP GIbl All Cap EX-US	\$ 75.6	100.0%	100.0%	-	-	-	-	-	-	-	-	-	-

#### **Performance Summary - SIP**

	10-Yr			5-Yr			3-Yr			1-Yr			FYTD		
Performance	Total	вм	Excess												
Summary	Return <sup>2</sup>	Return	Bps												
Target Income Fund	5.3%	5.1%	13	6.3%	6.1%	16	7.2%	7.0%	19	11.4%	10.9%	51	8.8%	8.9%	(6)
Target 2015 Fund	5.6%	5.6%	4	6.3%	6.1%	16	7.2%	7.0%	19	11.7%	11.2%	51	9.5%	9.5%	(6)
Target 2020 Fund	6.1%	6.1%	6	7.0%	6.8%	17	7.7%	7.5%	21	13.1%	12.5%	59	12.3%	12.4%	(8)
Target 2025 Fund	6.9%	6.8%	4	8.2%	8.0%	19	8.2%	8.0%	22	14.2%	13.6%	61	15.2%	15.3%	(10)
Target 2030 Fund	7.4%	7.4%	(1)	8.9%	8.8%	12	8.4%	8.3%	10	14.7%	14.5%	23	18.2%	18.3%	(13)
Target 2035 Fund	8.0%	8.0%	(5)	9.9%	9.7%	14	8.8%	8.7%	12	15.5%	15.2%	28	21.2%	21.3%	(15)
Target 2040 Fund	8.5%	8.5%	(5)	10.8%	10.7%	13	9.2%	9.1%	10	16.0%	15.8%	19	23.5%	23.6%	(17)
Target 2045 Fund	8.8%	8.8%	(6)	11.4%	11.3%	14	9.3%	9.2%	11	16.0%	15.8%	20	23.5%	23.6%	(17)
Target 2050 Fund	8.8%	8.8%	(6)	11.4%	11.3%	14	9.3%	9.2%	11	16.0%	15.8%	19	23.5%	23.6%	(17)
Target 2055 Fund	-	-	-	11.4%	11.3%	14	9.3%	9.2%	10	16.0%	15.8%	20	23.5%	23.6%	(17)
Target 2060 Fund	-	-	-	-	-	-	-	-	-	15.9%	15.8%	7	23.4%	23.6%	(21)
SSgA STIF	0.7%	0.6%	9	1.4%	1.2%	17	1.8%	1.6%	16	0.6%	0.7%	(4)	0.1%	0.1%	1
SIP US ST Bond Core	-	-	-	2.1%	2.2%	(10)	2.9%	3.0%	(7)	3.3%	3.3%	(2)	0.4%	0.4%	(5)
SIP US Bond Core	-	-	-	4.5%	4.4%	4	5.4%	5.3%	6	7.7%	7.5%	15	1.3%	1.3%	(0)
SIP Real Asset Core	-	-	-	6.2%	6.2%	(1)	2.9%	2.7%	14	3.2%	2.6%	56	15.5%	15.7%	(18)
SIP Russell All Cap Core	-	-	-	15.4%	15.4%	(3)	14.4%	14.5%	(5)	20.8%	20.9%	(9)	25.2%	25.2%	(1)
SIP Glbl All Cap EX-US	-	-	-	9.3%	9.0%	35	5.0%	4.8%	21	11.3%	11.1%	19	24.8%	25.2%	(40)

 $<sup>^{\</sup>rm 1}$  Allocations approved by the Board at the April 2018 IC Meeting.

<sup>&</sup>lt;sup>2</sup> Performance is net of the average investment management fees & expenses incurred by the 457/SCP plans.

# Supplemental Income Plans (SIP) As of December 31, 2020

Realized Risk - SIP

Realized Risk	Annualized 5-Yr Realized Volatility	Tracking Error <sup>1</sup>
Target Income Fund	5.1%	0.2%
Target 2015 Fund	5.7%	0.2%
Target 2020 Fund	7.3%	0.2%
Target 2025 Fund	9.1%	0.2%
Target 2030 Fund	11.0%	0.1%
Target 2035 Fund	12.8%	0.2%
Target 2040 Fund	14.1%	0.2%
Target 2045 Fund	14.3%	0.2%
Target 2050 Fund	14.3%	0.2%
Target 2055 Fund	14.3%	0.2%
Target 2060 Fund	-	-
SSgA STIF	0.3%	0.1%
SIP US ST Bond Core	1.0%	0.0%
SIP US Bond Core	3.2%	0.0%
SIP Real Asset Core	10.8%	0.3%
SIP Russell All Cap Core	16.0%	0.1%
SIP Glbl All Cap EX-US	15.7%	0.3%

 $<sup>^{1}</sup>$  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, 2020

Public Employees' Retirement Fund and Affiliate Investment Programs Policy Benchmarks

Trust	Asset Class	Policy Benchmark				
	Public Equity - Cap Weighted	Custom FTSE All World, All Cap Equity				
	Public Equity - Factor Weighted	MSCI ACWI Select Factor Weighted Index				
	Private Equity	Custom FTSE All World, All Cap Equity + 150 bps, Quarter Lag				
	Income - Long Spread	Custom Bloomberg Barclays Long Spread				
Public Employees' Retirement Fund	Income - Long Treasury	Custom Bloomberg Barclays Long Government				
	Income - High Yield	Custom Bloomberg Barclays High Yield				
	Real Assets	MSCI/PREA U.S. ACOE Quarterly Property Fund Index (Unfrozen)				
	Liquidity	30-day Treasury Bill				
Judges' Retirement System Fund	Cash	91-day Treasury Bill				
	Global Equity	MSCI ACWI IMI (Net)				
	U.S. Fixed Income	Bloomberg Barclays Long Liability Index				
Judges' 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 Index				
	Global Equity	MSCI ACWI IMI (Net)				
	U.S. Fixed Income	Bloomberg Barclays Long Liability Index				
Legislators' Retirement System Fund	TIPS	Bloomberg Barclays 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 Barclays U.S. Aggregate Bond Index				
	Global Equity	MSCI ACWI IMI (Net)				
	U.S. Fixed Income	Bloomberg Barclays Long Liability Index				
Long-Term Care Fund	TIPS	Bloomberg Barclays U.S. TIPs Index, Series L				
	Commodities	S&P GSCI Total Return Daily				
	REITs	FTSE EPRA/NAREIT Developed (Net)				
	Global Equity	MSCI ACWI IMI (Net)				
California Employers' Retiree Benefit Trust	U.S. Fixed Income	Bloomberg Barclays Long Liability Index				
(CERBT) Funds 1, 2 & 3	TIPS	Bloomberg Barclays U.S. TIPs Index, Series L				
, , , , , , , , , , , , , , , , , , , ,	Commodities	S&P GSCI Total Return Daily				
	REITs	FTSE EPRA/NAREIT Developed (Net)				
	Global Equity	MSCI ACWI IMI (Net)				
California Employers' Pension Prefunding Trust (CEPPT) Funds 1 & 2	U.S. Fixed Income	Bloomberg Barclays U.S. Aggregate Bond Index				
irust (CEFF I) Fullus I & Z	REITs	Bloomberg Barclays U.S. TIPs Index, Series L  FTSE EPRA/NAREIT Developed (Net)				

# **CalPERS Trust Level**

# Trust Level Benchmarks As of December 31, 2020

**Supplemental Income Plans Policy Benchmarks** 

Policy Weights									
	Global Equity	US Equity	Int'l Equity	US Inc	ome	Real Assets	Cash & Cash Equivalents		
Supplemental Income Plans	Russell 3000 / MSCI ACWI ex US	Russell 3000	MSCI ACWI ex US IMI Index (Net)	Bloomberg Barclays U.S. Aggregate Bond Index	Bloomberg Barclays U.S. 1-3 Year Govt/Credit Bond Index	SSGA Real Asset	BofA Merrill Lynch 3- Month Treasury Bill Index		
Target Income Fund	30.0%	17.0%	13.0%	60.0%	-	5.0%	5.0%		
Target 2015 Fund	32.0%	18.0%	14.0%	58.0%	-	5.0%	5.0%		
Target 2020 Fund	44.0%	25.0%	19.0%	47.0%	-	5.0%	4.0%		
Target 2025 Fund	57.0%	32.0%	25.0%	36.0%	-	4.0%	3.0%		
Target 2030 Fund	69.0%	39.0%	30.0%	25.0%	-	4.0%	2.0%		
Target 2035 Fund	82.0%	47.0%	35.0%	14.0%	-	3.0%	1.0%		
Target 2040 Fund	92.0%	52.0%	40.0%	5.0%	-	3.0%	0.0%		
Target 2045 Fund	92.0%	52.0%	40.0%	5.0%	-	3.0%	0.0%		
Target 2050 Fund	92.0%	52.0%	40.0%	5.0%	1	3.0%	0.0%		
Target 2055 Fund	92.0%	52.0%	40.0%	5.0%	1	3.0%	0.0%		
Target 2060 Fund	92.0%	52.0%	40.0%	5.0%	-	3.0%	0.0%		
SSgA STIF	-	-	-	-	-	-	100.0%		
SIP US ST Bond Core	-	-	-	-	100.0%	-	-		
SIP US Bond Core	-	-	-	100.0%	-	-	-		
SIP Real Asset Core	-	-	-	-	ī	100.0%	-		
SIP Russell All Cap Core	100.0%	100.0%	-	-	-	-	-		
SIP Global All Cap ex US	100.0%	-	100.0%	-	-	-	-		