

CalPERS Trust Level Quarterly Update - Performance & Risk

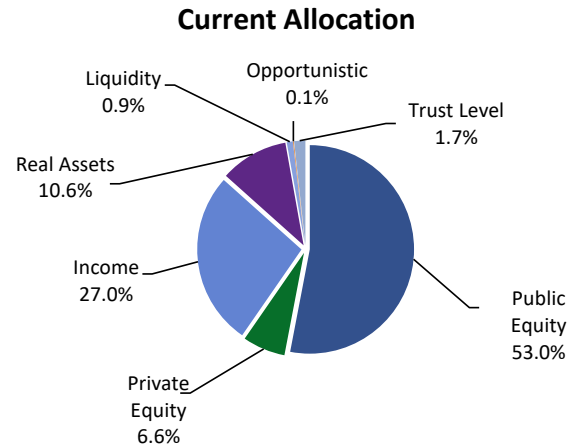


Public Employees' Retirement Fund (PERF)

As of September 30, 2020

Asset Allocation

| Asset Allocation | EMV (bil) | Current Allocation (%) | Policy Target Weight (%) | Variance (%) | Policy Range |
|--------------------------------|-----------|------------------------|--------------------------|--------------|--------------|
| Public Equity | \$ 216.3 | 53.0% | 50.0% | 3.0% | ± 7% |
| Cap Wtd. | \$ 154.5 | 37.9% | 35.0% | 2.9% | |
| Factor Wtd. | \$ 61.8 | 15.1% | 15.0% | 0.1% | |
| Private Equity | \$ 27.0 | 6.6% | 8.0% | (1.4%) | ± 4% |
| Income | \$ 110.1 | 27.0% | 28.0% | (1.0%) | ± 6% |
| Long Spread | \$ 60.8 | 14.9% | 15.0% | (0.1%) | |
| Long Treasury | \$ 37.0 | 9.1% | 10.0% | (0.9%) | |
| High Yield | \$ 12.3 | 3.0% | 3.0% | 0.0% | |
| Real Assets | \$ 43.1 | 10.6% | 13.0% | (2.4%) | ± 5% |
| Liquidity | \$ 3.8 | 0.9% | 1.0% | (0.1%) | +3%/-6% |
| Opportunistic | \$ 0.5 | 0.1% | - | 0.1% | |
| Trust Level¹ | \$ 7.1 | 1.7% | - | 1.7% | |
| Total PERF | \$ 408.0 | 100.0% | 100.0% | | |



| | |
|------------------|----------|
| TAP ² | \$ 0.2 |
| PERF Plus TAP | \$ 408.2 |

Performance Summary

| Performance Summary | 10-Yr | | | 5-Yr | | | 3-Yr | | | 1-Yr | | | FYTD | | | 5-Yr Realized Information Ratio ³ |
|--------------------------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|--|
| | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | |
| Public Equity | 9.0% | 8.8% | 14 | 10.3% | 10.3% | 1 | 6.6% | 6.7% | (11) | 7.4% | 7.1% | 32 | 7.3% | 7.3% | (3) | - |
| Cap Wtd. | 9.1% | 8.9% | 13 | 10.6% | 10.6% | (1) | 7.0% | 7.1% | (14) | 10.3% | 10.1% | 29 | 8.2% | 8.2% | (0) | (0.0) |
| Factor Wtd. | - | - | - | - | - | - | - | - | - | 0.1% | 0.1% | 7 | 5.0% | 5.1% | (12) | - |
| Private Equity | 11.3% | 13.5% | (226) | 7.8% | 9.4% | (152) | 7.2% | 8.2% | (98) | 2.3% | 3.2% | (93) | 9.2% | 20.7% | (1,145) | - |
| Income | 5.5% | 4.9% | 62 | 6.5% | 5.9% | 54 | 7.4% | 7.1% | 35 | 10.1% | 9.8% | 28 | 1.5% | 1.3% | 21 | - |
| Long Spread | - | - | - | - | - | - | - | - | - | 7.6% | 6.6% | 100 | 1.6% | 1.4% | 21 | 2.2 |
| Long Treasury | - | - | - | - | - | - | - | - | - | 13.7% | 14.3% | (56) | 0.2% | 0.2% | 5 | - |
| High Yield | - | - | - | - | - | - | - | - | - | 2.2% | 2.4% | (17) | 4.7% | 4.6% | 12 | - |
| Real Assets | 8.7% | 8.9% | (19) | 5.3% | 6.0% | (68) | 4.0% | 4.6% | (62) | 1.0% | 1.2% | (24) | (1.8%) | (1.8%) | 7 | - |
| Liquidity | 1.3% | 1.3% | (5) | 1.4% | 1.1% | 31 | 1.9% | 1.5% | 36 | 1.0% | 0.8% | 21 | 0.0% | 0.0% | 2 | - |
| Opportunistic | - | - | - | - | - | - | - | - | - | - | - | - | 1.7% | 1.7% | (2) | - |
| Trust Level¹ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total PERF | 8.2% | 8.3% | (10) | 8.4% | 8.6% | (21) | 6.9% | 7.2% | (36) | 7.8% | 7.9% | (12) | 4.6% | 5.3% | (68) | - |

| | | | | | | | | | | | | | | | | |
|------------------|---|---|---|------|---|---|------|---|---|-------|---|---|------|---|---|---|
| TAP ² | - | - | - | 6.8% | - | - | 9.0% | - | - | 14.8% | - | - | 2.8% | - | - | - |
|------------------|---|---|---|------|---|---|------|---|---|-------|---|---|------|---|---|---|

¹ Trust Level includes Multi Asset Class, Completion Overlay, Absolute Return Strategies (Direct Investments only), Plan Level Transition, Total Fund Fixed Income and other Total Fund level portfolios.

² 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.

³ 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)

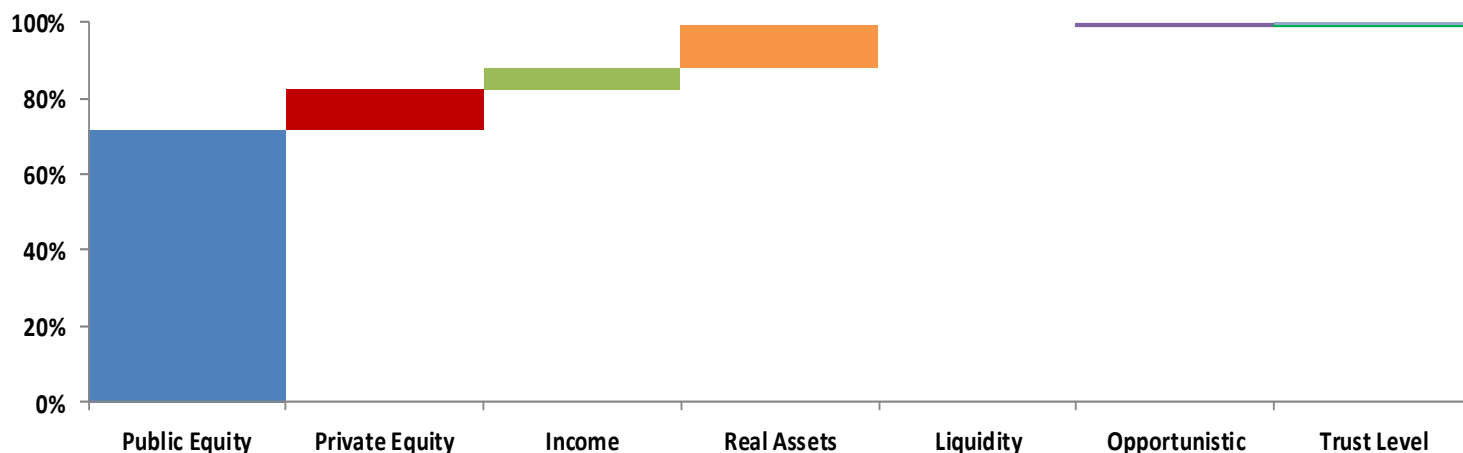
As of September 30, 2020

Total PERF Volatility and Tracking Error

| Risk Measure | 9/29/2020 | 7/1/2020 | Explanation of Risk Measures: |
|---|-----------|----------|---|
| Forecasted Volatility¹ | | | |
| Portfolio | 11.5% | 11.5% | 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. |
| Benchmark | 11.1% | 11.1% | |
| Forecasted Tracking Error¹ | | | |
| Portfolio | 1.10% | 1.05% | 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)¹ | | | |
| Portfolio | 0.27% | 0.24% | 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. |

| September 29, 2020 | Volatility | | Tracking Error | |
|-----------------------|--|----------------------------------|--|----------------------------------|
| | Annualized Forecasted (%) ¹ | 5-Year Realized (%) ² | Annualized Forecasted (%) ¹ | 5-Year Realized (%) ² |
| Asset Class | | | | |
| Public Equity | 15.9 | 13.9 | 0.1 | 0.3 |
| Cap Weighted | 17.0 | 14.7 | 0.1 | 0.3 |
| Factor Weighted | 13.5 | - | 0.2 | - |
| Private Equity | 22.4 | 7.7 | 13.5 | 11.6 |
| Income | 7.0 | 5.2 | 0.7 | 0.3 |
| Long Spread | 6.2 | - | 0.5 | - |
| Long Treasury | 12.3 | - | 0.2 | - |
| High Yield | 7.9 | - | 0.2 | - |
| Real Assets | 15.7 | 2.6 | 4.1 | 2.3 |
| Liquidity | 0.3 | 0.3 | 0.3 | 0.1 |
| Opportunistic | 9.8 | - | 9.8 | - |
| Trust Level | N/A | - | N/A | - |
| Total PERF | 11.5 | 7.2 | 1.1 | 1.3 |

Contribution to Forecasted Volatility



¹ Forecasted Volatility and Tracking Error based on Barra 301XL model.

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

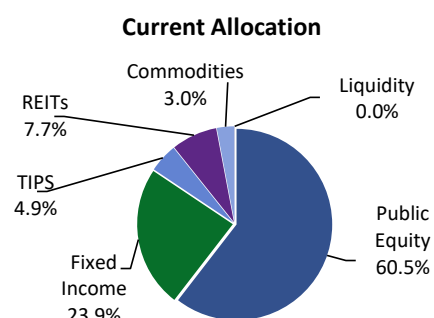
Affiliate Investment Programs

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

As of September 30, 2020

Asset Allocation, Performance & Realized Risk Summary - CERBT 1

| Asset Allocation | EMV (mil) | Current Allocation (%) | Policy Weight (%) ¹ | Variance (%) | Policy Range |
|----------------------|--------------------|------------------------|--------------------------------|--------------|--------------|
| Public Equity | \$ 6,224.2 | 60.5% | 59.0% | 1.5% | ± 5% |
| Fixed Income | \$ 2,461.3 | 23.9% | 25.0% | (1.1%) | ± 5% |
| TIPS | \$ 502.6 | 4.9% | 5.0% | (0.1%) | ± 3% |
| REITs | \$ 797.3 | 7.7% | 8.0% | (0.3%) | ± 5% |
| Commodities | \$ 306.0 | 3.0% | 3.0% | (0.0%) | ± 3% |
| Liquidity | \$ 1.1 | 0.0% | 0.0% | 0.0% | + 2% |
| Total CERBT 1 | \$ 10,292.5 | 100.0% | 100.0% | 0.0% | |



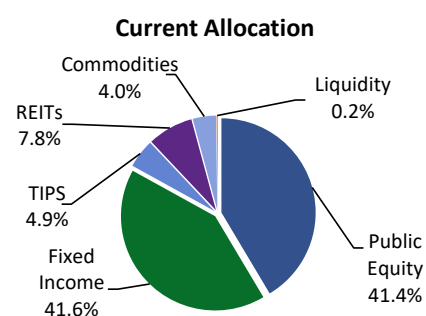
| Performance Summary ² | 10-Yr | | | 5-Yr | | | 3-Yr | | | 1-Yr | | | FYTD | | |
|----------------------------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|
| | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps |
| Public Equity | 9.1% | 8.9% | 27 | 10.3% | 10.0% | 36 | 6.8% | 6.5% | 29 | 9.8% | 9.6% | 24 | 8.1% | 8.1% | 4 |
| Fixed Income | 5.9% | 5.3% | 58 | 6.6% | 6.1% | 48 | 7.6% | 7.4% | 20 | 9.9% | 9.8% | 7 | 0.9% | 0.9% | (2) |
| TIPS | - | - | - | 4.6% | 4.6% | (2) | 5.8% | 5.8% | (3) | 10.0% | 10.1% | (13) | 3.0% | 3.0% | (4) |
| REITs | 5.2% | 4.6% | 57 | 2.4% | 1.6% | 80 | (0.6%) | (1.3%) | 77 | (17.7%) | (18.3%) | 60 | 2.4% | 2.1% | 28 |
| Commodities | - | - | - | (8.0%) | (7.9%) | (8) | (9.5%) | (9.5%) | (3) | (28.0%) | (27.8%) | (21) | 4.6% | 4.6% | 1 |
| Total CERBT 1 | 7.6% | 7.3% | 28 | 8.2% | 7.9% | 38 | 6.5% | 6.2% | 27 | 7.9% | 7.5% | 36 | 5.5% | 5.5% | 3 |

5-Yr Realized Volatility: **10.1%**

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 | \$ 618.4 | 41.4% | 40.0% | 1.4% | ± 5% |
| Fixed Income | \$ 620.4 | 41.6% | 43.0% | (1.4%) | ± 5% |
| TIPS | \$ 73.7 | 4.9% | 5.0% | (0.1%) | ± 3% |
| REITs | \$ 116.9 | 7.8% | 8.0% | (0.2%) | ± 5% |
| Commodities | \$ 59.8 | 4.0% | 4.0% | 0.0% | ± 3% |
| Liquidity | \$ 3.0 | 0.2% | 0.0% | 0.2% | + 2% |
| Total CERBT 2 | \$ 1,492.1 | 100.0% | 100.0% | 0.0% | |



| Performance Summary ² | 10-Yr | | | 5-Yr | | | 3-Yr | | | 1-Yr | | | FYTD | | |
|----------------------------------|------------|-----------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|
| | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps |
| Public Equity | - | - | - | 10.3% | 10.0% | 35 | 6.8% | 6.5% | 30 | 9.8% | 9.6% | 24 | 8.1% | 8.1% | 3 |
| Fixed Income | - | - | - | 6.6% | 6.1% | 48 | 7.6% | 7.4% | 18 | 9.9% | 9.8% | 6 | 0.9% | 0.9% | (2) |
| TIPS | - | - | - | 4.6% | 4.6% | (0) | 5.8% | 5.8% | 0 | 10.0% | 10.1% | (11) | 3.0% | 3.0% | (4) |
| REITs | - | - | - | 2.4% | 1.6% | 78 | (0.6%) | (1.3%) | 75 | (17.8%) | (18.3%) | 48 | 2.3% | 2.1% | 24 |
| Commodities | - | - | - | (7.8%) | (7.9%) | 8 | (9.3%) | (9.5%) | 21 | (28.0%) | (27.8%) | (16) | 4.6% | 4.6% | (1) |
| Total CERBT 2 | - | - | - | 7.5% | 7.2% | 35 | 6.6% | 6.4% | 23 | 7.7% | 7.5% | 24 | 4.2% | 4.1% | 3 |

5-Yr Realized Volatility: **7.8%**

5-Yr Realized Tracking Error: **0.1%**

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.

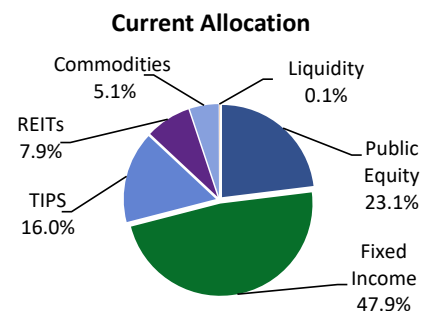
Affiliate Investment Programs

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

As of September 30, 2020

Asset Allocation, Performance & Realized Risk Summary - CERBT 3

| Asset Allocation | EMV (mil) | Current Allocation (%) | Policy Weight (%) ¹ | Variance (%) | Policy Range |
|----------------------|-----------------|------------------------|--------------------------------|--------------|--------------|
| Public Equity | \$ 173.8 | 23.1% | 22.0% | 1.1% | ± 5% |
| Fixed Income | \$ 361.2 | 47.9% | 49.0% | (1.1%) | ±5% |
| TIPS | \$ 120.4 | 16.0% | 16.0% | (0.0%) | ± 3% |
| REITs | \$ 59.7 | 7.9% | 8.0% | (0.1%) | ± 5% |
| Commodities | \$ 38.2 | 5.1% | 5.0% | 0.1% | ± 3% |
| Liquidity | \$ 0.4 | 0.1% | 0.0% | 0.1% | + 2% |
| Total CERBT 3 | \$ 753.7 | 100.0% | 100.0% | 0.0% | |



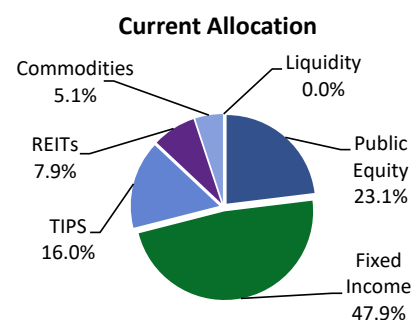
| Performance Summary ² | 10-Yr | | | 5-Yr | | | 3-Yr | | | 1-Yr | | | FYTD | | |
|----------------------------------|------------|-----------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|
| | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps |
| Public Equity | - | - | - | 10.3% | 10.0% | 32 | 6.7% | 6.5% | 26 | 9.7% | 9.6% | 13 | 8.1% | 8.1% | 2 |
| Fixed Income | - | - | - | 6.5% | 6.1% | 45 | 7.6% | 7.4% | 18 | 9.9% | 9.8% | 6 | 0.9% | 0.9% | (2) |
| TIPS | - | - | - | 4.6% | 4.6% | 0 | 5.8% | 5.8% | 1 | 10.0% | 10.1% | (10) | 3.0% | 3.0% | (4) |
| REITs | - | - | - | 2.4% | 1.6% | 74 | (0.6%) | (1.3%) | 77 | (17.8%) | (18.3%) | 49 | 2.3% | 2.1% | 20 |
| Commodities | - | - | - | (7.6%) | (7.9%) | 26 | (9.1%) | (9.5%) | 37 | (28.1%) | (27.8%) | (27) | 4.6% | 4.6% | (3) |
| Total CERBT 3 | - | - | - | 6.6% | 6.3% | 29 | 6.3% | 6.2% | 18 | 7.2% | 7.0% | 20 | 3.1% | 3.1% | 2 |

5-Yr Realized Volatility: **6.0%**

5-Yr Realized Tracking Error: **0.1%**

Asset Allocation, Performance & Realized Risk Summary - LRF

| Asset Allocation | EMV (mil) | Current Allocation (%) | Policy Weight (%) ¹ | Variance (%) | Policy Range |
|------------------|-----------------|------------------------|--------------------------------|--------------|--------------|
| Public Equity | \$ 26.7 | 23.1% | 22.0% | 1.1% | ± 5% |
| Fixed Income | \$ 55.6 | 47.9% | 49.0% | (1.1%) | ± 5% |
| TIPS | \$ 18.5 | 16.0% | 16.0% | (0.0%) | ± 3% |
| REITs | \$ 9.2 | 7.9% | 8.0% | (0.1%) | ± 5% |
| Commodities | \$ 5.9 | 5.1% | 5.0% | 0.1% | ± 3% |
| Liquidity | \$ 0.0 | 0.0% | 0.0% | 0.0% | + 2% |
| Total LRF | \$ 116.0 | 100.0% | 100.0% | 0.0% | |



| Performance Summary ² | 10-Yr | | | 5-Yr | | | 3-Yr | | | 1-Yr | | | FYTD | | |
|----------------------------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|
| | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps |
| Public Equity | 9.3% | 9.2% | 15 | 10.5% | 10.3% | 23 | 6.9% | 6.7% | 27 | 9.8% | 9.6% | 24 | 8.1% | 8.1% | 4 |
| Fixed Income | 5.9% | 5.3% | 57 | 6.5% | 6.1% | 46 | 7.6% | 7.4% | 17 | 9.9% | 9.8% | 4 | 0.9% | 0.9% | (2) |
| TIPS | 3.5% | 3.6% | (3) | 4.6% | 4.6% | 2 | 5.8% | 5.8% | 3 | 10.0% | 10.1% | (4) | 3.0% | 3.0% | (4) |
| REITs | - | - | - | 3.0% | 2.6% | 35 | (0.5%) | (1.1%) | 52 | (17.8%) | (18.3%) | 50 | 2.3% | 2.1% | 20 |
| Commodities | - | - | - | (7.5%) | (7.9%) | 42 | (9.1%) | (9.5%) | 36 | (28.0%) | (27.8%) | (20) | 4.6% | 4.6% | (4) |
| Total LRF | 6.3% | 6.0% | 26 | 6.7% | 6.4% | 25 | 6.4% | 6.2% | 20 | 7.2% | 7.0% | 25 | 3.1% | 3.1% | 2 |

5-Yr Realized Volatility: **6.0%**

5-Yr Realized Tracking Error: **0.1%**

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.

Affiliate Investment Programs

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

As of September 30, 2020

Asset Allocation, Performance & Realized Risk Summary - JRF

| Asset Allocation | EMV (mil) | Current Allocation (%) | Policy Weight (%) | Variance (%) | Policy Range |
|------------------|----------------|------------------------|-------------------|--------------|--------------|
| Cash | \$ 49.8 | 100.0% | 100.0% | 0.0% | + 0% |
| Total JRF | \$ 49.8 | 100.0% | 100% | 0.0% | |

Current Allocation



| Performance Summary | 10-Yr | | | 5-Yr | | | 3-Yr | | | 1-Yr | | | FYTD | | |
|---------------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|
| | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps |
| Cash | 0.7% | 0.6% | 7 | 1.3% | 1.2% | 12 | 1.8% | 1.7% | 7 | 1.1% | 1.1% | (2) | 0.1% | 0.0% | 1 |
| Total JRF | 0.7% | 0.6% | 7 | 1.3% | 1.2% | 12 | 1.8% | 1.7% | 7 | 1.1% | 1.1% | (2) | 0.1% | 0.0% | 1 |

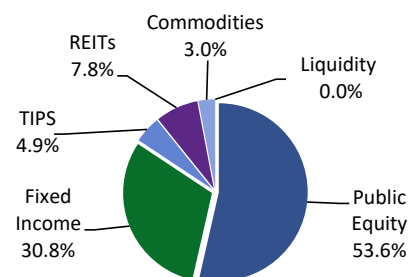
5-Yr Realized Volatility: **0.2%**

5-Yr Realized Tracking Error: **0.1%**

Asset Allocation, Performance & Realized Risk Summary - JRF II

| Asset Allocation | EMV (mil) | Current Allocation (%) | Policy Weight (%) ¹ | Variance (%) | Policy Range |
|---------------------|------------------|------------------------|--------------------------------|--------------|--------------|
| Public Equity | \$1,058.5 | 53.6% | 52.0% | 1.6% | ± 5% |
| Fixed Income | \$ 607.8 | 30.8% | 32.0% | (1.2%) | ± 5% |
| TIPS | \$ 97.0 | 4.9% | 5.0% | (0.1%) | ± 3% |
| REITs | \$ 153.9 | 7.8% | 8.0% | (0.2%) | ± 5% |
| Commodities | \$ 59.1 | 3.0% | 3.0% | (0.0%) | ± 3% |
| Liquidity | \$ 0.0 | 0.0% | 0.0% | 0.0% | + 2% |
| Total JRF II | \$1,976.3 | 100.0% | 100.0% | 0.0% | |

Current Allocation



| Performance Summary ² | 10-Yr | | | 5-Yr | | | 3-Yr | | | 1-Yr | | | FYTD | | |
|----------------------------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|
| | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps |
| Public Equity | 9.2% | 9.1% | 16 | 10.6% | 10.3% | 26 | 7.0% | 6.7% | 33 | 10.0% | 9.6% | 43 | 8.2% | 8.1% | 5 |
| Fixed Income | 5.9% | 5.3% | 58 | 6.6% | 6.1% | 48 | 7.6% | 7.4% | 20 | 9.9% | 9.8% | 5 | 0.9% | 0.9% | (2) |
| TIPS | - | - | - | 4.6% | 4.6% | (1) | 5.8% | 5.8% | (1) | 10.0% | 10.1% | (9) | 3.0% | 3.0% | (4) |
| REITs | 5.6% | 5.4% | 15 | 2.9% | 2.6% | 30 | (0.6%) | (1.1%) | 47 | (17.9%) | (18.3%) | 36 | 2.3% | 2.1% | 26 |
| Commodities | - | - | - | (7.9%) | (7.9%) | 3 | (9.7%) | (9.5%) | (27) | (28.7%) | (27.8%) | (85) | 4.6% | 4.6% | 0 |
| Total JRF II | 7.7% | 7.5% | 19 | 8.2% | 7.9% | 31 | 6.7% | 6.4% | 29 | 8.1% | 7.7% | 39 | 5.0% | 5.0% | 5 |

5-Yr Realized Volatility: **9.2%**

5-Yr Realized Tracking Error: **0.1%**

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.

Affiliate Investment Programs

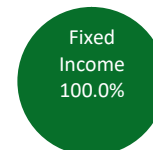
Health Care Fund (HCF) & Long-Term Care Fund (LTCF)

As of September 30, 2020

Asset Allocation, Performance & Realized Risk Summary - HCF

| Asset Allocation | EMV (mil) | Current Allocation (%) | Policy Weight (%) ¹ | Variance (%) | Policy Range |
|------------------|-----------------|------------------------|--------------------------------|--------------|--------------|
| Fixed Income | \$ 523.5 | 100.0% | 100.0% | 0.0% | + 0% |
| Total HCF | \$ 523.5 | 100.0% | 100.0% | 0.0% | |

Current Allocation



| Performance Summary | 10-Yr | | | 5-Yr | | | 3-Yr | | | 1-Yr | | | FYTD | | |
|---------------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|
| | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps |
| Fixed Income | 4.0% | 3.6% | 38 | 4.2% | 4.2% | 3 | 5.3% | 5.2% | 5 | 7.1% | 7.0% | 7 | 0.6% | 0.6% | (1) |
| Total HCF | 4.0% | 3.6% | 38 | 4.2% | 4.2% | 3 | 5.3% | 5.2% | 5 | 7.1% | 7.0% | 7 | 0.6% | 0.6% | (1) |

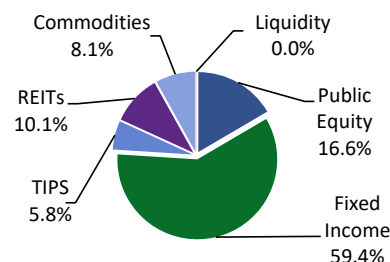
5-Yr Realized Volatility: **3.2%**

5-Yr Realized Tracking Error: **0.1%**

Asset Allocation, Performance & Realized Risk Summary - LTCF

| Asset Allocation | EMV (mil) | Current Allocation (%) | Policy Weight (%) ¹ | Variance (%) | Policy Range |
|-------------------|-------------------|------------------------|--------------------------------|--------------|--------------|
| Public Equity | \$ 831.9 | 16.6% | 15.0% | 1.6% | ± 4% |
| Fixed Income | \$ 2,985.3 | 59.4% | 60.0% | (0.6%) | ± 5% |
| TIPS | \$ 292.6 | 5.8% | 6.0% | (0.2%) | ± 2% |
| REITs | \$ 506.9 | 10.1% | 11.0% | (0.9%) | ± 4% |
| Commodities | \$ 405.6 | 8.1% | 8.0% | 0.1% | ± 2% |
| Liquidity | \$ 0.1 | 0.0% | 0.0% | 0.0% | + 2% |
| Total LTCF | \$ 5,022.5 | 100.0% | 100.0% | 0.0% | |

Current Allocation



| Performance Summary ² | 10-Yr | | | 5-Yr | | | 3-Yr | | | 1-Yr | | | FYTD | | |
|----------------------------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|
| | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps |
| Public Equity | 9.2% | 9.0% | 22 | 10.3% | 10.0% | 32 | 6.8% | 6.5% | 29 | 9.9% | 9.6% | 28 | 8.2% | 8.1% | 4 |
| Fixed Income | 5.4% | 5.3% | 12 | 6.1% | 6.1% | 0 | 7.5% | 7.4% | 5 | 9.9% | 9.8% | 7 | 0.9% | 0.9% | (2) |
| TIPS | 3.5% | 3.6% | (4) | 4.6% | 4.6% | (2) | 5.8% | 5.8% | (2) | 10.0% | 10.1% | (6) | 3.0% | 3.0% | (4) |
| REITs | 5.2% | 4.6% | 56 | 2.4% | 1.6% | 78 | (0.6%) | (1.3%) | 77 | (17.7%) | (18.3%) | 58 | 2.3% | 2.1% | 21 |
| Commodities | - | - | - | (7.9%) | (7.9%) | (1) | (9.5%) | (9.5%) | (3) | (27.8%) | (27.8%) | 7 | 4.6% | 4.6% | (4) |
| Total LTCF | 5.1% | 5.0% | 10 | 5.5% | 5.5% | (4) | 5.4% | 5.5% | (12) | 4.6% | 5.0% | (36) | 2.6% | 2.5% | 4 |

5-Yr Realized Volatility: **6.2%**

5-Yr Realized Tracking Error: **0.4%**

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.

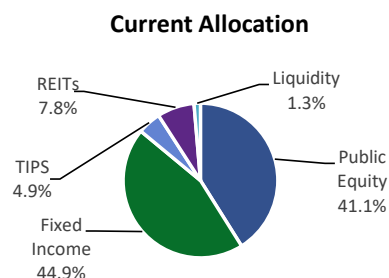
Affiliate Investment Programs

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

As of September 30, 2020

Asset Allocation & Performance Summary - CEPPT 1

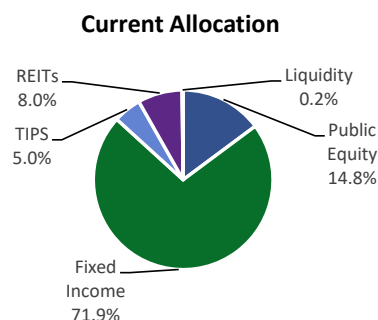
| Asset Allocation | EMV (mil) | Current Allocation (%) | Policy Weight (%) ¹ | Variance (%) | Policy Range |
|----------------------|---------------|------------------------|--------------------------------|--------------|--------------|
| Public Equity | \$ 3.9 | 41.1% | 40.0% | 1.1% | ± 5% |
| Fixed Income | \$ 4.2 | 44.9% | 47.0% | (2.1%) | ±5% |
| TIPS | \$ 0.5 | 4.9% | 5.0% | (0.1%) | ± 3% |
| REITs | \$ 0.7 | 7.8% | 8.0% | (0.2%) | ± 5% |
| Liquidity | \$ 0.1 | 1.3% | 0.0% | 1.3% | + 2% |
| Total CEPPT 1 | \$ 9.4 | 100.0% | 100.0% | 0.0% | |



| Performance Summary ² | 10-Yr | | | 5-Yr | | | 3-Yr | | | 1-Yr | | | FYTD | | |
|----------------------------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|------------|
| | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps |
| Public Equity | - | - | - | - | - | - | - | - | - | 9.8% | 9.6% | 20 | 8.1% | 8.1% | 3 |
| Fixed Income | - | - | - | - | - | - | - | - | - | 7.1% | 7.0% | 7 | 0.6% | 0.6% | (0) |
| TIPS | - | - | - | - | - | - | - | - | - | 10.1% | 10.1% | (2) | 3.0% | 3.0% | (4) |
| REITs | - | - | - | - | - | - | - | - | - | (17.5%) | (18.3%) | 72 | 2.4% | 2.1% | 29 |
| Total CEPPT 1 | - | - | - | - | - | - | - | - | - | 7.2% | 7.5% | (29) | 3.9% | 3.9% | 2 |

Asset Allocation & Performance Summary - CEPPT 2

| Asset Allocation | EMV (mil) | Current Allocation (%) | Policy Weight (%) ¹ | Variance (%) | Policy Range |
|----------------------|---------------|------------------------|--------------------------------|--------------|--------------|
| Public Equity | \$ 0.4 | 14.8% | 14.0% | 0.8% | ± 5% |
| Fixed Income | \$ 1.9 | 71.9% | 73.0% | (1.1%) | ± 5% |
| TIPS | \$ 0.1 | 5.0% | 5.0% | 0.0% | ± 3% |
| REITs | \$ 0.2 | 8.0% | 8.0% | 0.0% | ± 5% |
| Liquidity | \$ 0.0 | 0.2% | 0.0% | 0.2% | + 2% |
| Total CEPPT 2 | \$ 2.6 | 100.0% | 100.0% | - | |



| Performance Summary ² | 10-Yr | | | 5-Yr | | | 3-Yr | | | 1-Yr | | | FYTD | | |
|----------------------------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|-------------|-------------|------------|
| | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps | Net Return | BM Return | Excess Bps |
| Public Equity | - | - | - | - | - | - | - | - | - | - | - | - | 8.2% | 8.1% | 5 |
| Fixed Income | - | - | - | - | - | - | - | - | - | - | - | - | 0.6% | 0.6% | (1) |
| TIPS | - | - | - | - | - | - | - | - | - | - | - | - | 3.0% | 3.0% | (4) |
| REITs | - | - | - | - | - | - | - | - | - | - | - | - | 2.3% | 2.1% | 24 |
| Total CEPPT 2 | - | - | - | - | - | - | - | - | - | - | - | - | 2.0% | 1.9% | 5 |

¹ Allocations approved by the Board at the June 2019 IC Meeting.

² CEPPT 1 has an inception date of Oct 1, 2019 and CEPPT 2 has an inception date of Jan 1, 2020. 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.

Affiliate Investment Programs

Supplemental Income Plans (SIP)

As of September 30, 2020

Asset Allocation - SIP

| Asset Allocation | EMV (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 | \$ 117.8 | 31.5% | 30.0% | ± 4% | 58.6% | 60.0% | ± 4% | 5.0% | 5.0% | ± 1% | 4.9% | 5.0% | ± 1% |
| Target 2015 Fund | \$ 95.0 | 35.6% | 34.0% | ± 4% | 54.5% | 56.0% | ± 4% | 5.0% | 5.0% | ± 1% | 4.8% | 5.0% | ± 1% |
| Target 2020 Fund | \$ 177.6 | 48.8% | 47.0% | ± 4% | 43.4% | 45.0% | ± 4% | 4.0% | 4.0% | ± 1% | 3.8% | 4.0% | ± 1% |
| Target 2025 Fund | \$ 190.5 | 60.7% | 59.0% | ± 4% | 32.5% | 34.0% | ± 4% | 4.0% | 4.0% | ± 1% | 2.9% | 3.0% | ± 1% |
| Target 2030 Fund | \$ 170.5 | 72.4% | 71.0% | ± 4% | 21.8% | 23.0% | ± 2% | 3.9% | 4.0% | ± 1% | 1.9% | 2.0% | ± 1% |
| Target 2035 Fund | \$ 102.2 | 84.9% | 84.0% | ± 4% | 11.3% | 12.0% | ± 2% | 2.9% | 3.0% | ± 1% | 0.9% | 1.0% | + 0.25% |
| Target 2040 Fund | \$ 93.2 | 92.4% | 92.0% | ± 4% | 4.7% | 5.0% | ± 1% | 2.9% | 3.0% | ± 1% | - | - | + 0.25% |
| Target 2045 Fund | \$ 51.6 | 92.4% | 92.0% | ± 4% | 4.7% | 5.0% | ± 1% | 2.9% | 3.0% | ± 1% | - | - | + 0.25% |
| Target 2050 Fund | \$ 28.1 | 92.4% | 92.0% | ± 4% | 4.7% | 5.0% | ± 1% | 2.9% | 3.0% | ± 1% | - | - | + 0.25% |
| Target 2055 Fund | \$ 11.4 | 92.4% | 92.0% | ± 4% | 4.7% | 5.0% | ± 1% | 2.9% | 3.0% | ± 1% | - | - | + 0.25% |
| Target 2060 Fund | \$ 4.3 | 92.4% | 92.0% | ± 4% | 4.7% | 5.0% | ± 1% | 2.9% | 3.0% | ± 1% | - | - | + 0.25% |
| SSgA STIF | \$ 120.1 | - | - | - | - | - | - | - | - | - | 100.0% | 100.0% | - |
| SIP US ST Bond Core | \$ 42.9 | - | - | - | 100.0% | 100.0% | - | - | - | - | - | - | - |
| SIP US Bond Core | \$ 74.8 | - | - | - | 100.0% | 100.0% | - | - | - | - | - | - | - |
| SIP Real Asset Core | \$ 7.2 | - | - | - | - | - | - | 100.0% | 100.0% | - | - | - | - |
| SIP Russell All Cap Core | \$ 587.7 | 100.0% | 100.0% | - | - | - | - | - | - | - | - | - | - |
| SIP Gbl All Cap EX-US | \$ 65.8 | 100.0% | 100.0% | - | - | - | - | - | - | - | - | - | - |

Performance Summary - SIP

| Performance Summary | 10-Yr | | | 5-Yr | | | 3-Yr | | | 1-Yr | | | FYTD | | |
|--------------------------|-------------------------|-----------|------------|-------------------------|-----------|------------|-------------------------|-----------|------------|-------------------------|-----------|------------|-------------------------|-----------|------------|
| | Net Return ² | BM Return | Excess Bps | Net Return ² | BM Return | Excess Bps | Net Return ² | BM Return | Excess Bps | Net Return ² | BM Return | Excess Bps | Net Return ² | BM Return | Excess Bps |
| Target Income Fund | 5.0% | 4.9% | 18 | 5.3% | 5.1% | 16 | 5.7% | 5.5% | 20 | 8.7% | 8.2% | 51 | 3.0% | 3.0% | (2) |
| Target 2015 Fund | 5.7% | 5.6% | 9 | 5.2% | 5.1% | 16 | 5.6% | 5.4% | 21 | 9.0% | 8.4% | 52 | 3.3% | 3.3% | (2) |
| Target 2020 Fund | 6.1% | 6.0% | 11 | 5.6% | 5.4% | 16 | 5.6% | 5.4% | 23 | 9.7% | 9.1% | 60 | 4.2% | 4.3% | (2) |
| Target 2025 Fund | 6.7% | 6.6% | 10 | 6.5% | 6.4% | 17 | 5.8% | 5.6% | 24 | 10.0% | 9.3% | 63 | 5.1% | 5.1% | (3) |
| Target 2030 Fund | 7.2% | 7.1% | 5 | 7.1% | 7.0% | 10 | 5.7% | 5.5% | 13 | 9.8% | 9.5% | 28 | 6.0% | 6.1% | (3) |
| Target 2035 Fund | 7.6% | 7.6% | 1 | 7.7% | 7.6% | 12 | 5.7% | 5.5% | 15 | 9.9% | 9.6% | 33 | 7.0% | 7.0% | (4) |
| Target 2040 Fund | 8.0% | 8.0% | 0 | 8.4% | 8.3% | 11 | 5.8% | 5.6% | 13 | 9.7% | 9.4% | 26 | 7.6% | 7.6% | (4) |
| Target 2045 Fund | 8.3% | 8.3% | (0) | 9.1% | 9.0% | 11 | 6.1% | 6.0% | 14 | 9.7% | 9.4% | 27 | 7.6% | 7.6% | (4) |
| Target 2050 Fund | 8.3% | 8.3% | (1) | 9.1% | 9.0% | 11 | 6.1% | 6.0% | 13 | 9.7% | 9.4% | 26 | 7.6% | 7.6% | (4) |
| Target 2055 Fund | - | - | - | 9.1% | 9.0% | 11 | 6.1% | 6.0% | 13 | 9.7% | 9.4% | 26 | 7.6% | 7.6% | (4) |
| Target 2060 Fund | - | - | - | - | - | - | - | - | - | 9.6% | 9.4% | 15 | 7.5% | 7.6% | (7) |
| SSgA STIF | 0.7% | 0.6% | 9 | 1.4% | 1.2% | 18 | 1.9% | 1.7% | 17 | 1.1% | 1.1% | (2) | 0.0% | 0.0% | 1 |
| SIP US ST Bond Core | - | - | - | 2.0% | 2.1% | (10) | 2.8% | 2.8% | (7) | 3.7% | 3.7% | (3) | 0.2% | 0.2% | (3) |
| SIP US Bond Core | - | - | - | 4.2% | 4.2% | 4 | 5.3% | 5.2% | 6 | 7.1% | 7.0% | 13 | 0.6% | 0.6% | (1) |
| SIP Real Asset Core | - | - | - | 3.5% | 3.5% | (0) | 0.5% | 0.4% | 16 | (3.8%) | (4.4%) | 61 | 3.9% | 3.9% | (5) |
| SIP Russell All Cap Core | - | - | - | 13.7% | 13.7% | (2) | 11.6% | 11.6% | (4) | 14.9% | 15.0% | (11) | 9.2% | 9.2% | (0) |
| SIP Gbl All Cap EX-US | - | - | - | 6.6% | 6.3% | 28 | 1.4% | 1.1% | 29 | 3.9% | 3.5% | 40 | 6.7% | 6.8% | (9) |

¹ Allocations approved by the Board at the April 2018 IC 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 September 30, 2020

Realized Risk - SIP

| Realized Risk | Annualized 5-Yr Realized Volatility | Tracking Error ¹ |
|--------------------------|--|--------------------------------|
| Target Income Fund | 4.7% | 0.1% |
| Target 2015 Fund | 5.3% | 0.1% |
| Target 2020 Fund | 6.8% | 0.2% |
| Target 2025 Fund | 8.5% | 0.2% |
| Target 2030 Fund | 10.3% | 0.1% |
| Target 2035 Fund | 12.1% | 0.2% |
| Target 2040 Fund | 13.3% | 0.2% |
| Target 2045 Fund | 13.5% | 0.2% |
| Target 2050 Fund | 13.5% | 0.2% |
| Target 2055 Fund | 13.5% | 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 | 10.4% | 0.3% |
| SIP Russell All Cap Core | 15.5% | 0.1% |
| SIP Gbl All Cap EX-US | 14.8% | 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 September 30, 2020

Public Employees' Retirement Fund and Affiliate Investment Programs Policy Benchmarks

| Trust | Asset Class | Policy Benchmark |
|--|---------------------------------|--|
| Public Employees' Retirement Fund | 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 |
| | 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 |
| Judges' Retirement System II 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 Index (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 Index (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. TIPS Index, Series L |
| | Commodities | S&P GSCI Total Return Daily |
| | REITs | FTSE EPRA/NAREIT Developed Index (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 Index (Net) |
| California Employers' Pension Prefunding Trust (CEPPT) Funds 1 & 2 | Global Equity | MSCI ACWI IMI (Net) |
| | U.S. Fixed Income | Bloomberg Barclays U.S. Aggregate Bond Index |
| | TIPS | Bloomberg Barclays U.S. TIPS Index, Series L |
| | REITs | FTSE EPRA/NAREIT Developed Index (Net) |

CalPERS Trust Level

Trust Level Benchmarks

As of September 30, 2020

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 | 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% | 16.0% | 14.0% | 60.0% | - | 5.0% | 5.0% |
| Target 2015 Fund | 34.0% | 19.0% | 15.0% | 56.0% | - | 5.0% | 5.0% |
| Target 2020 Fund | 47.0% | 26.0% | 21.0% | 45.0% | - | 4.0% | 4.0% |
| Target 2025 Fund | 59.0% | 32.0% | 27.0% | 34.0% | - | 4.0% | 3.0% |
| Target 2030 Fund | 71.0% | 39.0% | 32.0% | 23.0% | - | 4.0% | 2.0% |
| Target 2035 Fund | 84.0% | 46.0% | 38.0% | 12.0% | - | 3.0% | 1.0% |
| Target 2040 Fund | 92.0% | 50.0% | 42.0% | 5.0% | - | 3.0% | 0.0% |
| Target 2045 Fund | 92.0% | 50.0% | 42.0% | 5.0% | - | 3.0% | 0.0% |
| Target 2050 Fund | 92.0% | 50.0% | 42.0% | 5.0% | - | 3.0% | 0.0% |
| Target 2055 Fund | 92.0% | 50.0% | 42.0% | 5.0% | - | 3.0% | 0.0% |
| Target 2060 Fund | 92.0% | 50.0% | 42.0% | 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 | - | - | - | - | - | 100.0% | - |
| SIP Russell All Cap Core | 100.0% | 100.0% | - | - | - | - | - |
| SIP Global All Cap ex US | 100.0% | - | 100.0% | - | - | - | - |