CalPERS Trust Level Review
Trust Summary: Public Employees’ Retirement Fund (PERF)
June 30, 2016

Investment Belief 6: Strategic asset allocation is the dominant determinant of portfolio risk and return. CalPERS strategic asset allocation process transforms the fund’s targeted rate of return to the market exposures that staff will manage. CalPERS will aim to diversify its overall portfolio across distinct risk factors and return drivers.

PERF Objective
CalPERS’ general investment goals are broad in nature. The overall objective of CalPERS’ investment program is to provide members and beneficiaries with benefits as required by law. CalPERS has generated strong long-term returns by effectively managing investments to achieve the highest possible return at an acceptable level of risk. The CalPERS portfolio is diversified into several asset classes. A well-diversified portfolio helps reduce investment risk to the extent that losses in one area may be offset by gains in another.

The starting point and most important element of CalPERS’ investment is our asset allocation - our diversification among stocks, bonds, cash and other investments. Asset allocation is not an asset-only or liability-only decision. All factors, including liabilities, benefit payments, operating expenses, and employer and member contributions are taken into account in determining the appropriate asset allocation mix. Our goal is to maximize returns at a prudent level of risk - an ever-changing balancing act between market volatility and long-term goals.

PERF Characteristics
Chief Investment Officer: Theodore Eliopoulos

Assets: $295.1 Billion

- Investments span domestic and international markets
- Invest ~9% of CalPERS' total assets in California
- Utilize multiple asset classes to diversify investments
  - Global Equity
  - Private Equity
  - Income
  - Liquidity
  - Inflation Assets
  - Real Assets

Actual Asset Allocation

* Inflation, Liquidity and Real Assets were created on July 1, 2011 from existing portfolios; therefore historical values are being represented for prior years.

** Trust Level includes Absolute Return Strategies (ARS), Multi-Asset Class (MAC), and Overlay, Transition and Plan Level Portfolios
### PERF Attribution

**Total Fund Attribution: For the Year Ending June 30, 2016**

<table>
<thead>
<tr>
<th>Program Contributions*</th>
<th>Average Weight %</th>
<th>Returns %</th>
<th>Contribution to Plan Excess (bps)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Excess Return (bps)</strong></td>
<td></td>
<td></td>
<td>(41)</td>
</tr>
<tr>
<td><strong>Public Equity</strong></td>
<td>52.9%</td>
<td>-3.4%</td>
<td>-4.0%</td>
</tr>
<tr>
<td><strong>Private Equity</strong></td>
<td>9.5%</td>
<td>1.7%</td>
<td>-0.8%</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td>19.4%</td>
<td>9.3%</td>
<td>9.3%</td>
</tr>
<tr>
<td><strong>Real Estate</strong></td>
<td>9.2%</td>
<td>7.1%</td>
<td>12.6%</td>
</tr>
<tr>
<td><strong>Forestland</strong></td>
<td>0.7%</td>
<td>-9.6%</td>
<td>2.9%</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td>0.8%</td>
<td>9.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td><strong>Inflation</strong></td>
<td>5.3%</td>
<td>-3.6%</td>
<td>-5.0%</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td>1.4%</td>
</tr>
<tr>
<td><strong>Allocation Impact</strong></td>
<td></td>
<td></td>
<td>(20)</td>
</tr>
<tr>
<td><strong>Private Asset Class &quot;Proxy&quot; Shortfall</strong></td>
<td>(21)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other/Residual</strong></td>
<td></td>
<td></td>
<td>(3)</td>
</tr>
</tbody>
</table>

1. Contribution figures are calculated on a monthly basis and aggregated over the respective period.
2. Impact of not obtaining full desired interim policy exposure to private asset classes and proxying these with public assets. Includes the impact of lagged reporting of private asset benchmarks relative to current month reporting of public proxies.

* Contribution from MAC and ARS Programs are included in Allocation Impact.
JRF II Objective

The JRF II was established to provide retirement, death, health and disability benefits for State Supreme and Appellate Court justices, Superior Court judges, and Municipal Court judges appointed or elected on or after November 9, 1994. Funds are allocated across five asset classes, with global equities comprising the predominant share of invested assets.

The Fund is actively managed by CalPERS staff.
Asset Liability Management Expectations
Per the current CalPERS Judges’ Retirement System II Fund Statement of Investment Policy.

JRF II RISK AND RETURN

JRF II 3-Year Realized Risk and Return

- Global Equity
- Fixed Income
- TIPS
- Commodities
- REITs
- TOTAL

3-Year Net Return
Annual Expected Return
3-Year Standard Deviation
Expected Standard Deviation

JRF II 3-Year Realized Risk and Return

- Global Equity
- Fixed Income
- TIPS
- Commodities
- REITs
- TOTAL

3-Year Net Return
Annual Expected Return
3-Year Standard Deviation
Expected Standard Deviation

JRF II 3-Year Realized Risk and Return

- Global Equity
- Fixed Income
- TIPS
- Commodities
- REITs
- TOTAL

3-Year Net Return
Annual Expected Return
3-Year Standard Deviation
Expected Standard Deviation

JRF II 3-Year Realized Risk and Return

- Global Equity
- Fixed Income
- TIPS
- Commodities
- REITs
- TOTAL

3-Year Net Return
Annual Expected Return
3-Year Standard Deviation
Expected Standard Deviation

JRF II 3-Year Realized Risk and Return

- Global Equity
- Fixed Income
- TIPS
- Commodities
- REITs
- TOTAL

3-Year Net Return
Annual Expected Return
3-Year Standard Deviation
Expected Standard Deviation

JRF II 3-Year Realized Risk and Return

- Global Equity
- Fixed Income
- TIPS
- Commodities
- REITs
- TOTAL

3-Year Net Return
Annual Expected Return
3-Year Standard Deviation
Expected Standard Deviation
### JRF II PERFORMANCE SUMMARY

#### 1-YEAR EXCESS AND ROLLING 3-YEAR EXCESS RETURNS

<table>
<thead>
<tr>
<th>Regions</th>
<th>1-Year Excess Return</th>
<th>3-Year Excess Return</th>
<th>5-Year Excess Return</th>
<th>10-Year Excess Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Equity</td>
<td>(3.83) (3.97) 14</td>
<td>6.63 6.54 9</td>
<td>6.13 6.06 7</td>
<td>4.47 4.41 5</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>9.65 9.58 7</td>
<td>6.90 6.16 73</td>
<td>6.55 6.01 55</td>
<td>7.32 6.84 48</td>
</tr>
<tr>
<td>TIPS</td>
<td>4.31 4.35 (4)</td>
<td>2.15 2.31 (16)</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>REITs</td>
<td>12.48 12.57 (9)</td>
<td>8.96 8.94 2</td>
<td>8.59 8.62 (4)</td>
<td>3.41 3.10 31</td>
</tr>
<tr>
<td>Commodities</td>
<td>(25.45) (26.08) 64</td>
<td>(19.96) (19.81) (15)</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>JRF II Fund</td>
<td>1.65 1.72 (7)</td>
<td>6.38 6.25 14</td>
<td>6.59 6.58 1</td>
<td>5.64 5.69 (5)</td>
</tr>
</tbody>
</table>

#### JRF II CUMULATIVE RETURNS

![JRF II Cumulative Returns Chart]

#### JRF II 1-YEAR EXCESS AND ROLLING 3-YEAR EXCESS RETURNS

![JRF II 1-Year Excess Return Chart]

![JRF II Rolling 3-Year Excess Return Chart]
LRF Fund Objective

The Legislators’ Retirement System Fund is a supplemental income plan that was available to members of the California Legislature serving prior to November 7, 1990; all elected constitutional officers; and legislative statutory officers. Funds are allocated across five asset classes under a fairly balanced investment strategy.

Actual Capital Allocation

Policy asset allocation targets were approved by the Investment Committee on August 15, 2011.

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Current Allocation (%)</th>
<th>Target Allocation (%)</th>
<th>Variance (%)</th>
<th>Current Allocation (millions)</th>
<th>Target Allocation (millions)</th>
<th>Dollar Variance (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Equity</td>
<td>23.4%</td>
<td>24.0%</td>
<td>-0.6%</td>
<td>$ 27.8</td>
<td>$ 28.5</td>
<td>$(0.7)</td>
</tr>
<tr>
<td>US Fixed Income</td>
<td>39.8%</td>
<td>39.0%</td>
<td>0.8%</td>
<td>$ 47.2</td>
<td>$ 46.3</td>
<td>$ 0.9</td>
</tr>
<tr>
<td>TIPS</td>
<td>25.8%</td>
<td>26.0%</td>
<td>-0.2%</td>
<td>$ 30.7</td>
<td>$ 30.9</td>
<td>$(0.2)</td>
</tr>
<tr>
<td>REITs</td>
<td>8.1%</td>
<td>8.0%</td>
<td>0.1%</td>
<td>$ 9.6</td>
<td>$ 9.5</td>
<td>$ 0.1</td>
</tr>
<tr>
<td>Commodities</td>
<td>2.9%</td>
<td>3.0%</td>
<td>-0.1%</td>
<td>$ 3.4</td>
<td>$ 3.6</td>
<td>$(0.2)</td>
</tr>
<tr>
<td>Cash</td>
<td>0.0%</td>
<td>0%</td>
<td>0.0%</td>
<td>$ 0.0</td>
<td>$ 0.0</td>
<td>$ 0.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>$ 118.7</td>
<td>$ 118.7</td>
<td>$ 0.0</td>
</tr>
</tbody>
</table>
Asset Liability Management Expectations
Per the current CalPERS Legislators’ Retirement System Fund Statement of Investment Policy.

LRF Risk and Return

- Global Equity
- Fixed Income
- Total
- TIPS
- REITs
- Commodities

3-Year Net Return
3-Year Standard Deviation

Annual Expected Return
Expected Standard Deviation

LRF 3-Year Realized Risk and Return

3-Year Net Return: 5.6% 5.8%
3-Year Standard Deviation: 5.3% 7.1%
## LRF PERFORMANCE SUMMARY

<table>
<thead>
<tr>
<th>As of 06/30/16</th>
<th>1 - YEAR</th>
<th>3 - YEAR</th>
<th>5 - YEAR</th>
<th>10 - YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLOBAL EQUITY</td>
<td>(3.77) (3.97) 20</td>
<td>6.64 6.54 11</td>
<td>6.29 6.22 8</td>
<td>4.54 4.48 6</td>
</tr>
<tr>
<td>FIXED INCOME</td>
<td>9.63 9.58 5</td>
<td>6.91 6.16 75</td>
<td>6.56 6.01 56</td>
<td>7.35 6.86 49</td>
</tr>
<tr>
<td>TIPS</td>
<td>4.31 4.35 (5)</td>
<td>2.16 2.31 (16)</td>
<td>2.57 2.63 (7)</td>
<td>4.84 4.79 5</td>
</tr>
<tr>
<td>REITs</td>
<td>12.50 12.57 (7)</td>
<td>8.96 8.94 3</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>COMMODITIES</td>
<td>(25.43) (26.08) 65</td>
<td>(19.97) (19.81) (16)</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>LRF FUND</td>
<td>4.04 4.15 (11)</td>
<td>5.58 5.34 24</td>
<td>5.78 5.65 13</td>
<td>6.08 5.87 21</td>
</tr>
</tbody>
</table>

### LRF CUMULATIVE RETURNS

![LRF Cumulative Returns Chart](chart.png)

### LRF ROLLING 3-YEAR EXCESS RETURNS

![LRF Rolling 3-Year Excess Returns Chart](chart.png)
Long-Term Care Fund Objective

CalPERS offers optional long-term care benefits to members, funded entirely by enrollee premiums. The Long-Term Care Program was established to administer and finance the program. Funds are allocated across five asset classes, predominantly in fixed income.

The Fund is passively managed by State Street Global Advisors.

Actual Capital Allocation

![Pie chart showing asset allocation]

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Current Allocation (%)</th>
<th>Target Allocation (%)</th>
<th>Variance (%)</th>
<th>Current Allocation (millions)</th>
<th>Target Allocation (millions)</th>
<th>Dollar Variance (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Equity</td>
<td>13.8%</td>
<td>15.0%</td>
<td>-1.2%</td>
<td>$597.1</td>
<td>$648.1</td>
<td>$(51.0)</td>
</tr>
<tr>
<td>US Fixed Income</td>
<td>62.5%</td>
<td>61.0%</td>
<td>1.5%</td>
<td>$2,698.5</td>
<td>$2,635.6</td>
<td>$62.9</td>
</tr>
<tr>
<td>TIPS</td>
<td>6.0%</td>
<td>6.0%</td>
<td>0.0%</td>
<td>$258.7</td>
<td>$259.2</td>
<td>$(0.5)</td>
</tr>
<tr>
<td>REITs</td>
<td>12.5%</td>
<td>12.0%</td>
<td>0.5%</td>
<td>$540.9</td>
<td>$518.5</td>
<td>$22.4</td>
</tr>
<tr>
<td>Commodities</td>
<td>5.2%</td>
<td>6.0%</td>
<td>-0.8%</td>
<td>$225.2</td>
<td>$259.2</td>
<td>$(34.0)</td>
</tr>
<tr>
<td>Cash</td>
<td>0.0%</td>
<td>0%</td>
<td>0.0%</td>
<td>$0.2</td>
<td>-</td>
<td>$0.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>0.0%</strong></td>
<td><strong>$4,320.7</strong></td>
<td><strong>$4,320.7</strong></td>
<td><strong>$(0.0)</strong></td>
</tr>
</tbody>
</table>

Policy asset allocation targets were approved by the Investment Committee on April 16, 2012.
Asset Liability Management Expectations
Per the current CalPERS Long-Term Care Fund Statement of Investment Policy.

LTCF RISK AND RETURN

LTCF 3-Year Realized Risk and Return

- Global Equity
- Fixed Income
- TIPS
- Commodities
- REITs
- TOTAL
### LTCF PERFORMANCE SUMMARY

#### LTCF Net Return vs. Benchmark Return

<table>
<thead>
<tr>
<th>As of 06/30/16</th>
<th>1 - YEAR</th>
<th>Excess Bps</th>
<th>3 - YEAR</th>
<th>Excess Bps</th>
<th>5 - YEAR</th>
<th>Excess Bps</th>
<th>10 - YEAR</th>
<th>Excess Bps</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLOBAL EQUITY</td>
<td>(3.51)</td>
<td>(3.87)</td>
<td>36</td>
<td>6.44</td>
<td>6.13</td>
<td>31</td>
<td>6.37</td>
<td>6.20</td>
</tr>
<tr>
<td>FIXED INCOME</td>
<td>9.60</td>
<td>9.58</td>
<td>2</td>
<td>6.18</td>
<td>6.16</td>
<td>1</td>
<td>5.97</td>
<td>6.01</td>
</tr>
<tr>
<td>TIPS</td>
<td>4.33</td>
<td>4.35</td>
<td>(3)</td>
<td>2.30</td>
<td>2.31</td>
<td>(1)</td>
<td>2.60</td>
<td>2.63</td>
</tr>
<tr>
<td>REITs</td>
<td>12.06</td>
<td>11.15</td>
<td>91</td>
<td>8.32</td>
<td>7.60</td>
<td>72</td>
<td>8.09</td>
<td>7.66</td>
</tr>
<tr>
<td>COMMODITIES</td>
<td>(25.88)</td>
<td>(26.08)</td>
<td>20</td>
<td>(19.74)</td>
<td>(19.81)</td>
<td>7</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### LTCF CARE FUND

<table>
<thead>
<tr>
<th>As of 06/30/16</th>
<th>1 - YEAR</th>
<th>Excess Bps</th>
<th>3 - YEAR</th>
<th>Excess Bps</th>
<th>5 - YEAR</th>
<th>Excess Bps</th>
<th>10 - YEAR</th>
<th>Excess Bps</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLOBAL EQUITY</td>
<td>5.48</td>
<td>5.20</td>
<td>27</td>
<td>4.91</td>
<td>4.61</td>
<td>29</td>
<td>4.31</td>
<td>4.15</td>
</tr>
</tbody>
</table>

### GLOBAL EQUITY

- FY 2007: (3.51)%
- FY 2008: (3.87)%
- FY 2009: 36 Bps
- FY 2010: 6.44%
- FY 2011: 6.13%
- FY 2012: 31 Bps
- FY 2013: 6.37%
- FY 2014: 6.20%
- FY 2015: 17 Bps
- FY 2016: 4.55%

### FIXED INCOME

- FY 2007: 9.60%
- FY 2008: 9.58%
- FY 2009: 2 Bps
- FY 2010: 6.18%
- FY 2011: 6.16%
- FY 2012: 1 Bps
- FY 2013: 5.97%
- FY 2014: 6.01%
- FY 2015: (4) Bps
- FY 2016: 7.04%

### TIPS

- FY 2007: 4.33%
- FY 2008: 4.35%
- FY 2009: (3) Bps
- FY 2010: 2.30%
- FY 2011: 2.31%
- FY 2012: (1) Bps
- FY 2013: 2.60%
- FY 2014: 2.63%
- FY 2015: (4) Bps
- FY 2016: 4.86%

### REITs

- FY 2007: 12.06%
- FY 2008: 11.15%
- FY 2009: 91 Bps
- FY 2010: 8.32%
- FY 2011: 7.60%
- FY 2012: 72 Bps
- FY 2013: 8.09%
- FY 2014: 7.66%
- FY 2015: 43 Bps
- FY 2016: 2.96%

### COMMODITIES

- FY 2007: (25.88)%
- FY 2008: (26.08)%
- FY 2009: 20 Bps
- FY 2010: (19.74)%
- FY 2011: (19.81)%
- FY 2012: 7 Bps
- FY 2013: -
- FY 2014: -
- FY 2015: -
- FY 2016: -
CERBT Strategy 1 Objective
The California Employer Retirees’ Benefit Trust (CERBT) was established in March 2007 for public employers to pre-fund their retiree health and other post-employment benefit obligations. Employers may choose among three different CERBT investment strategies. Compared with Strategies 2 and 3, this portfolio consists of a higher percentage of equities than bonds and other assets.

Fixed income, TIPS and commodities asset classes are managed by CalPERS staff. Global equity and REITs are passively managed by State Street Global Advisors.

Strategic Allocation Target Ranges

Actual Capital Allocation

Policy asset allocation targets were approved by the Investment Committee on April 16, 2012.
Asset Liability Management Expectations

Per the current CERBT Fund Statement of Investment Policy.

CERBT Strategy 1 Risk and Return

- 3-Year Net Return
- Annual Expected Return

- 3-Year Standard Deviation
- Expected Standard Deviation

CERBT Strategy 1 3-Year Realized Risk and Return

- Global Equity
- Fixed Income
- TIPS
- Commodities
- REITs
- Total
### CERBT STRATEGY 1 PERFORMANCE SUMMARY

<table>
<thead>
<tr>
<th></th>
<th>06/30/16</th>
<th>1 - YEAR</th>
<th>3 - YEAR</th>
<th>5 - YEAR</th>
<th>10 - YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Net Returns</td>
<td>Benchmark Return</td>
<td>Excess Bps</td>
<td>Net Returns</td>
<td>Benchmark Return</td>
</tr>
<tr>
<td>GLOBAL EQUITY</td>
<td>(3.44)</td>
<td>(3.87)</td>
<td>43</td>
<td>6.50</td>
<td>6.13</td>
</tr>
<tr>
<td>FIXED INCOME</td>
<td>9.65</td>
<td>9.58</td>
<td>7</td>
<td>6.92</td>
<td>6.16</td>
</tr>
<tr>
<td>TIPS</td>
<td>4.32</td>
<td>4.35</td>
<td>(3)</td>
<td>2.16</td>
<td>2.31</td>
</tr>
<tr>
<td>REITs</td>
<td>12.05</td>
<td>11.15</td>
<td>90</td>
<td>8.37</td>
<td>7.60</td>
</tr>
<tr>
<td>COMMODITIES</td>
<td>(26.46)</td>
<td>(26.08)</td>
<td>(37)</td>
<td>(20.24)</td>
<td>(19.81)</td>
</tr>
<tr>
<td>CERBT Strategy 1</td>
<td>1.00</td>
<td>0.71</td>
<td>29</td>
<td>6.14</td>
<td>5.76</td>
</tr>
</tbody>
</table>

#### CERBT STRATEGY 1 CUMULATIVE RETURNS

- **CERBT S1 Net Return**
- **Index Return**
- **CERBT S1 Cumulative Return**
- **Index Cumulative Return**

#### CERBT STRATEGY 1 1-YEAR EXCESS AND ROLLING 3-YEAR EXCESS RETURNS

- **1 Year Excess Return**
- **Rolling 3-Year Excess Return**
CERBT Strategy 2 Objective

The California Employer Retirees’ Benefit Trust (CERBT) was established in March 2007 for public employers to pre-fund their retiree health and other post-employment benefit obligations. Employers may choose among three different CERBT investment strategies. Compared with Strategies 1 and 3, this portfolio consists of a more moderate allocation of equities, bonds, and other assets.

Fixed income, TIPS and commodities asset classes are managed by CalPERS staff. Global equity and REITs are passively managed by State Street Global Advisors.

Policy asset allocation targets were approved by the Investment Committee on April 16, 2012.
Asset Liability Management Expectations

Per the current CERBT Fund Statement of Investment Policy.

CERBT Strategy 2 Risk and Return

3-Year Net Return: 5.8%
Annual Expected Return: 6.7%

3-Year Standard Deviation: 6.6%
Expected Standard Deviation: 9.3%

CERBT Strategy 2 3-Year Realized Risk and Return

- Global Equity
- Fixed Income
- TIPS
- Commodities
- REITs
- TOTAL

Risk (Standard Deviation of Returns) %

Return %
## CERBT STRATEGY 2 PERFORMANCE SUMMARY

### CERBT STRATEGY 2 CUMULATIVE RETURNS

<table>
<thead>
<tr>
<th></th>
<th>1 - YEAR</th>
<th>3 - YEAR</th>
<th>5 - YEAR</th>
<th>10 - YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Net</td>
<td>Benchmark</td>
<td>Excess</td>
<td>Net</td>
</tr>
<tr>
<td>GLOBAL EQUITY</td>
<td>(3.53)</td>
<td>(3.87)</td>
<td>34</td>
<td>6.45</td>
</tr>
<tr>
<td>FIXED INCOME</td>
<td>9.64</td>
<td>9.58</td>
<td>6</td>
<td>6.91</td>
</tr>
<tr>
<td>TIPS</td>
<td>4.30</td>
<td>4.35</td>
<td>(5)</td>
<td>2.12</td>
</tr>
<tr>
<td>REITs</td>
<td>12.03</td>
<td>11.15</td>
<td>88</td>
<td>8.30</td>
</tr>
<tr>
<td>COMMODITIES</td>
<td>(26.35)</td>
<td>(26.08)</td>
<td>(27)</td>
<td>(20.17)</td>
</tr>
<tr>
<td>CERBT Strategy 2</td>
<td>2.91</td>
<td>2.75</td>
<td>16</td>
<td>5.83</td>
</tr>
</tbody>
</table>

### CERBT STRATEGY 2 1-YEAR EXCESS AND ROLLING 3-YEAR EXCESS RETURNS

- **1 Year Excess Return**
- **Rolling 3-Year Excess Return**

#### CERBT STRATEGY 2 CUMULATIVE RETURNS GRAPH

- **CERBT S2 Net Return**
- **Index Return**
- **CERBT S2 Cumulative Return**
- **Index Cumulative Return**

#### CERBT STRATEGY 2 1-YEAR EXCESS AND ROLLING 3-YEAR EXCESS RETURNS GRAPH

- **1 Year Excess Return**
- **Rolling 3-Year Excess Return**
CERBT Strategy 3 Objective

The California Employer Retirees' Benefit Trust (CERBT) was established in March 2007 for public employers to pre-fund their retiree health and other post-employment benefit obligations. Employers may choose among three different CERBT investment strategies. Compared with Strategies 1 and 2, this portfolio consists of a higher percentage of bonds and other assets and a lesser percentage of equities.

Fixed income, TIPS and commodities asset classes are managed by CalPERS staff. Global equity and REITs are passively managed by State Street Global Advisors.

Strategic Allocation Target Ranges

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Current Allocation (%)</th>
<th>Target Allocation (%)</th>
<th>Variance (%)</th>
<th>Current Allocation (millions)</th>
<th>Target Allocation (millions)</th>
<th>Variance (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Equity</td>
<td>23.1%</td>
<td>24.0%</td>
<td>-0.9%</td>
<td>$ 41.6</td>
<td>$ 43.2</td>
<td>$(1.7)</td>
</tr>
<tr>
<td>US Fixed Income</td>
<td>38.4%</td>
<td>39.0%</td>
<td>-0.6%</td>
<td>$ 69.2</td>
<td>$ 70.3</td>
<td>$(1.0)</td>
</tr>
<tr>
<td>TIPS</td>
<td>24.9%</td>
<td>26.0%</td>
<td>-1.1%</td>
<td>$ 44.9</td>
<td>$ 46.8</td>
<td>$(1.9)</td>
</tr>
<tr>
<td>REITs</td>
<td>7.9%</td>
<td>8.0%</td>
<td>-0.1%</td>
<td>$ 14.2</td>
<td>$ 14.4</td>
<td>$(0.3)</td>
</tr>
<tr>
<td>Commodities</td>
<td>3.2%</td>
<td>3.0%</td>
<td>0.2%</td>
<td>$ 5.8</td>
<td>$ 5.4</td>
<td>$ 0.3</td>
</tr>
<tr>
<td>Cash</td>
<td>2.5%</td>
<td>0%</td>
<td>2.5%</td>
<td>$ 4.5</td>
<td>-</td>
<td>$ 4.5</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>$ 180.1</td>
<td>$ 180.1</td>
<td>$(0.0)</td>
</tr>
</tbody>
</table>

Policy asset allocation targets were approved by the Investment Committee on April 16, 2012.
Asset Liability Management Expectations

Per the current CERBT Fund Statement of Investment Policy.

CERBT STRATEGY 3 RISK AND RETURN

<table>
<thead>
<tr>
<th>3-Year Net Return</th>
<th>Annual Expected Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5%</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3-Year Standard Deviation</th>
<th>Expected Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.3%</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

CERBT Strategy 3 3-Year Realized Risk and Return

- Global Equity
- Fixed Income
- TIPS
- Commodities
- REITs
- TOTAL

Risk (Standard Deviation of Returns) %
## CERBT STRATEGY 3 PERFORMANCE SUMMARY

### CERBT STRATEGY 3 CUMULATIVE RETURNS

<table>
<thead>
<tr>
<th></th>
<th>CERBT S3 Net Return</th>
<th>Index Return</th>
<th>CERBT S3 Cumulative Return</th>
<th>Index Cumulative Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2007</td>
<td>0.0%</td>
<td>0.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2008</td>
<td>0.2%</td>
<td>0.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2009</td>
<td>0.4%</td>
<td>0.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2010</td>
<td>0.6%</td>
<td>0.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2011</td>
<td>0.8%</td>
<td>0.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2012</td>
<td>1.0%</td>
<td>1.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2013</td>
<td>1.2%</td>
<td>1.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2014</td>
<td>1.4%</td>
<td>1.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2015</td>
<td>1.6%</td>
<td>1.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2016</td>
<td>1.8%</td>
<td>1.9%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 1-YEAR EXCESS AND ROLLING 3-YEAR EXCESS RETURNS

<table>
<thead>
<tr>
<th>Category</th>
<th>1 Year Excess Return</th>
<th>Rolling 3-Year Excess Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLOBAL EQUITY</td>
<td>(3.46) (3.87) 40</td>
<td></td>
</tr>
<tr>
<td>FIXED INCOME</td>
<td>9.64 9.58 6</td>
<td>6.86 6.16 70</td>
</tr>
<tr>
<td>TIPS</td>
<td>4.31 4.35 (4)</td>
<td>2.19 2.31 (12)</td>
</tr>
<tr>
<td>REITs</td>
<td>12.01 11.15 87</td>
<td>8.37 7.60 77</td>
</tr>
<tr>
<td>COMMODITIES</td>
<td>(26.33) (26.08) (24)</td>
<td>(20.08) (19.81) (28)</td>
</tr>
<tr>
<td>CERBT Strategy 3</td>
<td>4.14 4.07 8</td>
<td>5.52 5.13 40</td>
</tr>
</tbody>
</table>

### CERBT STRATEGY 3 CUMULATIVE RETURNS

![CERBT S3 Cumulative Returns Chart](chart_url)

### CERBT STRATEGY 3 1-YEAR EXCESS AND ROLLING 3-YEAR EXCESS RETURNS

![1-Year Excess and Rolling 3-Year Excess Returns Chart](chart_url)