



Agenda Item 6a

October 13, 2014

ITEM NAME: Revision of Affiliate Funds Policies

PROGRAM: Asset Allocation and Risk Management

ITEM TYPE: Policy & Delegation – Action

RECOMMENDATION

Approve the revised Statements of Investment Policy (Policy Statements), including the strategic asset allocation ranges, for the following Affiliate Funds:

- Judges' Retirement System (JRS) Fund
- Judges' Retirement System II (JRS II) Fund
- Legislators' Retirement System (LRS) Fund
- California Employers' Retiree Benefit Trust (CERBT) Fund

The revised Policy Statements are provided as Attachments 1 through 4. CalPERS' Asset Allocation Strategy Policy is included for reference as Attachment 5. Opinion letters from Wilshire Associates and Pension Consulting Alliance Inc. (PCA) are provided as Attachments 6 and 7, respectively.

EXECUTIVE SUMMARY

The four Affiliate Fund Policy Statements were presented to the Investment Committee (IC) for initial review on September 15, 2014. Staff has incorporated the IC's feedback and made other minor adjustments as follows:

- JRS Policy: Added clarifying language which ties future strategic asset allocation analysis to be contingent on a pre-funding of future liabilities, specifies that the asset allocation will be 100% Liquidity, eliminating the need for rebalancing, and establishes minimal tracking error.
- CERBT Policy: Added clarifying language with regards to managing these portfolios in a manner that minimizes tracking error.
- All Policies: Changed the approval date to October 13, 2014.

Changes made to the Policy Statements based on the IC's feedback are denoted with yellow highlighting within Attachments 1 through 4.

STRATEGIC PLAN

This agenda item supports the CalPERS Strategic Plan goal of improving long-term pension and health benefit sustainability.

INVESTMENT BELIEFS

This agenda item supports CalPERS' Investment Belief 1, that liabilities must influence the asset structure and Investment Belief 6, that strategic asset allocation is the dominant determinant of portfolio risk and return.

BACKGROUND

The new strategic asset allocations for the aforementioned Affiliate Funds were adopted by the IC on September 15, 2014 and referred to the CalPERS' Board of Administration (Board). The Board approved the IC recommendation on September 17, 2014 during Agenda Item 10 "Asset Liability Management – Affiliate Funds."

Additionally, September IC Agenda Item 8b, "Affiliate Funds Strategic Asset Allocation Proposed Policy Modifications – Initial Review," presented the related policy changes required to implement the asset allocation recommendations.

ANALYSIS

A summary of the recommended changes and rationale are as follows:

1. Section V.B. – Strategic Asset Allocation Process – To align the Affiliate Funds' (JRS, JRS II, LRS, and CERBT) strategic asset allocation process with the Public Employees' Retirement Fund (PERF), staff's recommendation is to reference the Asset Allocation Strategy Policy approved by the IC in May 2014. JRS has added language that a comprehensive Asset Allocation Strategy will be followed pending the pre-funding of future liabilities.
2. Section V.D. – Policy Asset Class Allocation Targets and Ranges – The primary edits are contained within the table in this section, which specify the Affiliate Funds' (JRS, JRS II, LRS, and CERBT) asset class targets and the ranges by which exposure may vary from the targets without further input from the IC. The asset class targets are included in Table 1 and the ranges are included in Table 2. JRS has an allocation of 100% Liquidity (i.e., cash equivalent securities) because of its use as a reserve account. Thus, JRS does not require any asset allocation ranges unless it begins to pre-fund future liabilities.

Table 1 – Affiliate Fund Policy Portfolios

Asset Class Component	CERBT 3 & LRS	CERBT 2	JRS II	CERBT 1
Global Equity	24%	40%	50%	57%
Fixed Income	39%	39%	34%	27%
Treasury Inflation-Protected Securities (TIPS)	26%	10%	5%	5%
Commodities	3%	3%	3%	3%
Real Estate Investment Trusts (REITs)	8%	8%	8%	8%

Table 2 – Recommended Affiliate Fund Ranges

Asset Class	Current Asset Allocation Range		Recommended Asset Allocation Range	
	Current Range for CERBT 1 & JRS II	Current Range for CERBT 2, CERBT 3 & LRS	Recommended Range for CERBT 1, CERBT 2 & CERBT 3	Recommended Range for LRS & JRS II
Global Equity	±5%	±5%	±2%	±5%
Fixed Income	±5%	±5%	±2%	±5%
TIPS	±2%	±4%	±2%	±3%
Commodities	±2%	±2%	±2%	±3%
REITs	±2%	±2%	±2%	±5%
Cash	+1%	+1%	+2%	+2%

- Section V.F. – Target Tracking Error – To align the Affiliate Funds' (JRS II and LRS) target tracking error with the PERF, staff's recommendation is to reference the Asset Allocation Strategy Policy. This policy includes language that constrains the targeted forecast annual tracking error. Additional language has also been added to the Policy Statements of JRS and CERBT to specify that these funds will be managed in a manner which minimizes any tracking error.

BUDGET AND FISCAL IMPACTS

Not Applicable

BENEFITS/RISKS

The proposed revisions provide the following benefits:

- Increasing alignment between the affected Affiliate Fund Policies and the revised Asset Allocation Strategy Policy which articulates the link between the strategic asset allocation analysis and the Asset Liability Management work cycles.
- Mitigating and managing operational and reputational risks by documenting the changes to the strategic asset allocation targets developed through the most recent strategic asset allocation analysis and approved by the Board in September 2014.
- Enhancing risk management of Affiliate Funds by specifying asset class ranges and allowable tracking error that is most appropriate given staff's intention to passively or actively manage each Affiliate Fund.

A risk associated with the proposed Policy Statement modifications is that they allow staff greater ability to actively manage JRS II and LRS. This may result in larger deviations in actual performance from the Policy Portfolios than what has been experienced in the past. While the intent is to allow greater consistency in the manner that the Affiliate Programs and the PERF are managed, where appropriate, this may pose additional risk for JRS II and LRS. This risk would materialize to the extent that any actively managed positions underperform the Policy Portfolio.

This risk will be mitigated by the continued enhancement of the investment risk management, monitoring, and reporting of the Affiliate Funds in a manner that is consistent with the processes used for the PERF.

ATTACHMENTS

- Attachment 1 – JRS Statement of Investment Policy with Proposed Revisions
- Attachment 2 – JRS II Statement of Investment Policy with Proposed Revisions
- Attachment 3 – LRS Statement of Investment Policy with Proposed Revisions
- Attachment 4 – CERBT Statement of Investment Policy with Proposed Revisions
- Attachment 5 – CalPERS Statement of Investment Policy for Asset Allocation
Strategy
- Attachment 6 – Wilshire Associates Opinion Letter
- Attachment 7 – PCA Opinion Letter

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**CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
STATEMENT OF INVESTMENT POLICY**

**FOR
JUDGES' RETIREMENT FUND**

~~May 15, 2014~~ **October 13, 2014**

This policy is effective immediately upon adoption and supersedes all previous Judges' Retirement Fund policies.

I. PURPOSE

The California Public Employees' Retirement System ("CalPERS") Investment Beliefs Policy and Total Fund Statement of Investment Policy, adopted by the CalPERS Investment Committee ("Committee"), set forth CalPERS overarching investment purposes and objectives with respect to all its investment programs.

This document sets forth the investment policy ("Policy") for the Judges' Retirement Fund. The Judges' Retirement Fund was established under the Judges' Retirement System Law to provide retirement and death benefits for State Supreme and Appellate Court justices, and Superior Court and Municipal Court judges who were appointed or elected before November 9, 1994. The Judges' Retirement Fund is funded by the State General Fund on a pay-as-you-go basis.

The design of this Policy ensures that investors, managers, consultants, and other participants selected by CalPERS take prudent action while managing the Judges' Retirement Fund. Additionally, use of this policy assures sufficient flexibility in managing investment risks and returns associated with this Program.

II. STRATEGIC OBJECTIVE

The Judges' Retirement Fund shall be managed to accomplish the following:

- A. Maintain liquidity to meet operational expenses and benefit payments.

III. RESPONSIBILITIES

- A. CalPERS Investment Staff ("Staff") is responsible for the following:

- 1. All aspects of portfolio management including monitoring, analyzing, and evaluating performance relative to the appropriate benchmarks.
- 2. Reporting ~~internally~~ to the Committee no less than annually concerning the implementation of this Policy.

JUDGES' RETIREMENT FUND

3. Overseeing **external managers** secured to provide investment services for the Judges' Retirement Fund.
 4. Creating internally-managed funds and soliciting externally-managed funds for the Judges' Retirement Fund.
 5. Monitoring the implementation of and compliance with Policy. Staff shall report concerns, problems, material changes, and all violations of guidelines and policies at the next Committee meeting, or sooner if deemed necessary. All events deemed materially important will be reported to the Committee immediately. These reports shall include explanations of any violations and appropriate recommendations for corrective action.
- B. External Managers ("Manager") are responsible for aspects of portfolio management as set forth in each Manager's contract with CalPERS and may fulfill the following duties:
1. Communicate with CalPERS Staff, as needed, regarding investment strategies and investment results.
 2. Monitor, analyze, and evaluate performance relative to the agreed upon benchmark.
 3. Cooperate fully with CalPERS Staff, Custodian, and Consultant concerning requests for information.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

- A. The benchmark for the Judges' Retirement Fund is specified in the Benchmarks Policy.
- B. The fund will be invested to provide sufficient liquidity for operational expenses and benefit payments.

V. INVESTMENT APPROACHES AND PARAMETERS

- A. Philosophy and Approach

The Judges' Retirement Fund shall be managed in accordance with the CalPERS Total Fund Statement of Investment Policy and in a manner consistent with the respective investment policy governing each asset class. Such policies approved by the Committee shall specify the method and parameters for implementation and provide for the ongoing monitoring of that asset class.

JUDGES' RETIREMENT FUND

B. Strategic Asset Allocation Process

To the extent that the Judges' Retirement Fund contributions are used to pay benefits only and not to pre-fund liabilities, a comprehensive Asset Allocation Strategy analysis is not applicable or required. If the Judges' Retirement Fund begins to pre-fund future liabilities, then a comprehensive Asset Allocation Strategy analysis shall be completed periodically that follows the schedule and process as described in the CalPERS Statement of Investment Policy for Asset Allocation Strategy, Section V.C. Strategic Asset Allocation Process, at a regular interval and will be presented to the Committee for review and approval of the Policy target asset allocations. The Chief Investment Officer ("CIO") may recommend a more frequent analysis if expected returns, risks or liability values have substantially changed since the prior analysis. The CIO may also recommend to the Committee changes in the Policy asset allocation targets.

C. Fund Structure

When the Judges' Retirement Fund is invested with other CalPERS administered trust assets, the Custodian shall employ a unitized fund structure to maintain separate and distinct historical records and to produce individual net asset values (NAV's) for the Judges' Retirement Fund.

D. Policy Asset Class Allocation Targets and Ranges

The Committee shall approve Policy asset class allocation targets and ranges expressed as a percentage of total assets. The Judges' Retirement Fund Policy asset class allocation targets and permissible ranges are as follows:

<u>Asset Class</u>	<u>Judges' Retirement Fund</u>	
	<u>Policy Target</u>	<u>Policy Range Relative to Target</u>
<u>Liquidity</u>	<u>100%</u>	<u>+/- 0%</u>
<u>Total Fund</u>	<u>100%</u>	

E. Rebalancing

Since the entire portfolio is invested in the Liquidity asset class, no rebalancing will be required to maintain the 100% Liquidity allocation.

F. Target Tracking Error

JUDGES' RETIREMENT FUND

The Judges' Retirement Fund will be managed in a manner which minimizes any Tracking Error.

G. Restrictions, Prohibitions and Authorized Securities

Restrictions, prohibitions and authorized securities of the Judges' Retirement Fund are defined in the policy governing each asset class or external investment manager guidelines.

All transactions involving derivatives are governed by the Global Derivatives and Counterparty Risk Policy.

VI. CALCULATIONS AND COMPUTATIONS

Investors, managers, consultants, and other participants selected by CalPERS shall make all calculations and computations on a market value basis, as recorded by CalPERS Custodian.

VII. GLOSSARY OF CALPERS SPECIFIC TERMS

Italicized terms appearing in the Policy are CalPERS specific in nature and are defined in the [CalPERS Specific Glossary of Terms](#).

Adopted by the Investment Committee	August 19, 2013
Administrative changes to update template format and to align this policy with the Global Derivatives and Counterparty Risk Policy	December 3, 2013
Administrative changes to standardize reporting frequencies to the Investment Committee to "no less than annually"	May 15, 2014
Administrative changes to reflect the Policy Glossary of Terms Update Project	May 15, 2014
Approved by the Investment Committee	<u>October 13, 2014</u>

**CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
STATEMENT OF INVESTMENT POLICY**

**FOR
THE JUDGES' RETIREMENT SYSTEM II (JRS II) FUND**

~~May 15, 2014~~ **October 13, 2014**

This policy is effective immediately upon adoption and supersedes all previous Judges' Retirement System II ("JRS II") Fund policies.

I. PURPOSE

The California Public Employees' Retirement System ("CalPERS") Investment Beliefs Policy and Total Fund Statement of Investment Policy, adopted by the CalPERS Investment Committee ("Committee"), set forth CalPERS overarching investment purposes and objectives with respect to all its investment programs.

This document sets forth the investment policy ("Policy") for the JRS II Fund. The design of this Policy ensures that investors, managers, consultants, and other participants selected by CalPERS take prudent and careful action while managing the JRS II Fund. Additionally, use of this Policy assures sufficient flexibility in managing investment risks and returns associated with the JRS II Fund.

The JRS II Fund was established in 1994 to create a fully funded actuarially-sound retirement system for Supreme and Appellate Court justices, Superior Court judges, and Municipal Court judges appointed or elected on or after November 9, 1994.

II. STRATEGIC OBJECTIVE

The JRS II Fund shall be managed to accomplish the following:

- A. Invest in an asset allocation mix with targets and ranges based on a periodic asset liability management review.
- B. Achieve the highest total rate of return reasonably possible within prudent levels of risk and liquidity for the JRS II Fund's liabilities.
- C. Maintain significant diversification to temper losses from market volatility.
- D. Ensure that the asset class policy ranges approved by the Committee are adhered to, and that any rebalancing is performed efficiently and prudently.

THE JUDGES' RETIREMENT SYSTEM II (JRS II) FUND

- E. Maintain adequate liquidity to meet cash needs.

III. RESPONSIBILITIES

- A. In addition to the Committee's responsibilities outlined in the Total Fund Statement of Investment Policy, the Committee is also responsible for approving asset classes for investment and approving a policy target allocation, permissible range, and benchmark for each asset class.
- B. CalPERS Investment Staff ("Staff") is responsible for the following:
 - 1. All aspects of portfolio management including monitoring, analyzing, and evaluating performance relative to the appropriate benchmark.
 - 2. Providing individualized asset allocation strategy recommendations to the Committee, including selection of asset class benchmarks, Policy targets and ranges.
 - 3. Managing the asset class allocations of the JRS II Fund within Policy ranges approved by the Committee, in accordance with Policy guidelines.
 - 4. Creating internally managed funds and soliciting externally managed funds to be used in the composition of the JRS II Fund.
 - 5. Identifying opportunities and making recommendations to the Committee consistent with pertinent delegations.
 - 6. Reporting ~~internally~~ to the Committee no less than annually concerning the implementation of this Policy. This report shall include, but is not limited to, the current market value and asset class allocations compared to the Policy targets and ranges.
 - 7. Monitoring the implementation of, and compliance with, the Policy. Staff shall report concerns, problems, material changes, and all violations of Guidelines and Policies at the next Committee meeting, or sooner if deemed necessary. All events deemed materially important will be reported to the Committee immediately. These reports shall include explanations of any violations and appropriate recommendations for corrective action.
- C. The **General Pension Consultant** ("Consultant") is responsible for monitoring, evaluating, and no less than annually reporting to the Committee on the JRS II Fund performance relative to the benchmark and Policy.

THE JUDGES' RETIREMENT SYSTEM II (JRS II) FUND

D. **External Managers** ("Manager") are responsible for aspects of portfolio management as set forth in each Manager's contract with CalPERS and shall fulfill the following duties:

1. Communicate with CalPERS staff, as needed, regarding investment strategies and investment results.
2. Monitor, analyze, and evaluate performance relative to the agreed-upon benchmark.
3. Cooperate fully with CalPERS staff, Custodian, and Consultant concerning requests for information.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

- A. The benchmark for the JRS II Fund is specified in the Benchmarks Policy.
- B. CalPERS shall invest the assets of the JRS II Fund to meet or exceed the actuarial rate over the long-term.

V. INVESTMENT APPROACHES AND PARAMETERS

- A. Philosophy and Approach

The JRS II Fund shall be managed in accordance with the CalPERS Total Fund Statement of Investment Policy and in a manner consistent with the respective investment policy governing each asset class. Such policies approved by the Committee shall specify the method and parameters for implementation and provide for the ongoing monitoring of that asset class.

- B. Strategic Asset Allocation Process

A comprehensive ~~a~~Asset ~~a~~Allocation ~~s~~Strategy analysis shall be completed periodically that follows the schedule and process as described in the CalPERS Statement of Investment Policy for Asset Allocation Strategy, Section V.C. Strategic Asset Allocation Process ~~at least once every three years and will be presented to the Committee for review and approval of the Policy target asset allocations and ranges. The Chief Investment Officer ("CIO") may recommend a more frequent analysis if expected returns, risks or liability values have substantially changed since the prior analysis. The CIO may also recommend to the Committee changes in the Policy asset allocation targets and ranges. A target for cash is exempt from consideration.~~

THE JUDGES' RETIREMENT SYSTEM II (JRS II) FUND

C. Fund Structure/Parameters

Staff shall manage the JRS II Fund in accordance with the approved strategic asset allocation. CalPERS Custodian shall employ a unitized fund structure to maintain separate and distinct historical records and to produce individual net asset values (NAV's) for each asset class.

D. Policy Asset Class Allocation Targets and Ranges

The Committee shall approve Policy asset class allocation targets and ranges expressed as a percentage of total assets. The Committee shall set Policy ranges sufficiently wide to permit efficient and flexible implementation, yet sufficiently narrow to maintain the basic risk and return relationship established by the allocation targets.

The JRS II Fund Policy asset class allocation targets and permissible ranges are as follows:

<u>Asset Class</u>	<u>JRS II Fund</u>	
	<u>Policy Target</u>	<u>Policy Range Relative to Target</u>
<u>Global Equity</u>	<u>50%</u>	<u>+/- 5%</u>
<u>Fixed Income</u>	<u>34%</u>	<u>+/- 5%</u>
<u>Treasury Inflation-Protected Securities (TIPS)</u>	<u>5%</u>	<u>+/- 3%</u>
<u>Commodities</u>	<u>3%</u>	<u>+/- 3%</u>
<u>Real Estate Investment Trusts (REITs)</u>	<u>8%</u>	<u>+/- 5%</u>
<u>Liquidity</u>	<u>0%</u>	<u>+ 2%</u>
<u>Total Fund</u>	<u>100%</u>	

<u>Asset Class</u>	<u>JRS II Fund</u>	
	<u>Policy Allocation</u>	<u>Policy Range</u>
<u>U.S Inflation Linked Bonds</u>	<u>6%</u>	<u>+/- 2%</u>
<u>U.S. Nominal Bonds</u>	<u>20%</u>	<u>+/- 5%</u>
<u>Global Equity</u>	<u>63%</u>	<u>+/- 5%</u>
<u>Global Public Real Estate</u>	<u>8%</u>	<u>+/- 2%</u>
<u>Commodities</u>	<u>3%</u>	<u>+/- 2%</u>

THE JUDGES' RETIREMENT SYSTEM II (JRS II) FUND

Expected Return	7.00%
Expected Risk	11.31%
Return/Risk	0.62%

~~Approved by the Committee, August 15, 2011.~~

E. Rebalancing

Adherence to the Policy asset class allocation targets and ranges shall be monitored and reported to the Committee no less than annually. This report shall display a comparison between the JRS II Fund asset class allocations and the Policy asset class allocation targets and ranges. The report shall also compare the investment performance results of each asset class and the benchmark returns.

Asset class allocations shall be managed to be within Policy ranges. Cash in the portfolio will be held within a range of 0—12%. Allocations may temporarily deviate from Policy ranges due to extreme market volatility and will be reported as set forth above. If an asset class allocation exceeds the Policy range, staff shall return the asset allocation to within its Policy range in a timely manner, with the exact time period primarily dependent on transaction costs and liquidity.

Changes in ~~Policy~~ asset class allocations may be achieved by the movement of capital between asset classes through the trading of pooled funds or through the use of derivatives. The intent is for ~~Policy~~ asset class allocations to be actively managed rather than being allowed to passively drift with recent relative asset class returns.

F. Target Tracking Error

The JRS II Fund will be managed within a target forecast annual tracking error as described in the CalPERS Statement of Investment Policy for Asset Allocation Strategy, Section VI.F. Target Tracking Error.

FG. Restrictions, Prohibitions and Authorized Securities

Restrictions, Prohibitions and Authorized Securities of the JRS II Fund are defined in the policy governing each asset class or external investment manager guidelines.

All transactions involving derivatives are governed by the Global Derivatives and Counterparty Risk Policy.

VI. CALCULATIONS AND COMPUTATIONS

THE JUDGES' RETIREMENT SYSTEM II (JRS II) FUND

Investors, managers, consultants, and other participants selected by CalPERS shall make all calculations and computations on a market value basis, as recorded by CalPERS Custodian.

VI. GLOSSARY OF CALPERS-SPECIFIC TERMS

Italicized terms appearing in the Policy are CalPERS specific in nature and are defined in the [CalPERS Specific Glossary of Terms](#).

Judges' Retirement System II

Approved by the Policy Subcommittee	June 15, 2011
Adopted by the Investment Committee	August 15, 2011
Administrative changes to update template format and to align this policy with the Global Derivatives and Counterparty Risk Policy	December 3, 2013
Administrative changes to standardize reporting frequencies to the Investment Committee to "no less than annually"	May 15, 2014
Administrative changes to reflect the Policy Glossary of Terms Project Update	May 15, 2014
Approved by the Investment Committee	October 13, 2014

The Judges' Retirement System II was previously Attachment B of the Affiliate Fund Policy. The dates below reflect the revision history of the Affiliate Fund Policy:

Affiliate Fund Policy

Approved by the Policy Subcommittee:	August 18, 2008
Adopted by the Investment Committee:	September 15, 2008
Revised by the Investment Committee:	December 15, 2008
Admin changes made due to Policy Review Project:	June 16, 2009
Admin changes due to adoption of Benchmark Policy:	September 28, 2009

**CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
STATEMENT OF INVESTMENT POLICY**

**FOR
THE LEGISLATORS' RETIREMENT SYSTEM (LRS) FUND**

~~May 15, 2014~~ **October 13, 2014**

This policy is effective immediately upon adoption and supersedes all previous Legislators' Retirement System ("LRS") Fund policies.

I. PURPOSE

The California Public Employees' Retirement System ("CalPERS") Investment Beliefs Policy and Total Fund Statement of Investment Policy, adopted by the CalPERS Investment Committee ("Committee"), set forth CalPERS overarching investment purposes and objectives with respect to all its investment programs.

This document sets forth the investment policy ("Policy") for the LRS Fund. The design of this Policy ensures that investors, managers, consultants, and other participants selected by CalPERS take prudent and careful action while managing the LRS Fund. Additionally, use of this Policy assures sufficient flexibility in managing investment risks and returns associated with the LRS Fund.

The Legislators' Retirement System was established by statute to provide retirement benefits to members of the Legislature elected prior to November 7, 1990, elected Constitutional Officers, the Insurance Commissioner, and Legislative Statutory Officers.

II. STRATEGIC OBJECTIVE

The LRS Fund shall be managed to accomplish the following:

- A. Invest in an asset allocation mix with targets and ranges based on a periodic asset liability management review.
- B. Achieve the highest total rate of return reasonably possible within prudent levels of risk and liquidity for the LRS Fund's liabilities.
- C. Maintain significant diversification to temper losses from market volatility.
- D. Ensure that the asset class policy ranges approved by the Committee are adhered to, and that any rebalancing is performed efficiently and prudently.

THE LEGISLATORS' RETIREMENT SYSTEM (LRS) FUND

- E. Maintain adequate liquidity to meet cash needs.

III. RESPONSIBILITIES

- A. In addition to the Committee's responsibilities outlined in the Total Fund Statement of Investment Policy, the Committee is also responsible for approving asset classes for investment and approving a policy target allocation, permissible range, and benchmark for each asset class.
- B. CalPERS Investment Staff ("Staff") is responsible for the following:
 - 1. All aspects of portfolio management including monitoring, analyzing, and evaluating performance relative to the appropriate benchmark.
 - 2. Providing individualized asset allocation strategy recommendations to the Committee, including selection of asset class benchmarks, Policy targets and ranges.
 - 3. Managing the asset class allocations of the LRS Fund within Policy ranges approved by the Committee, in accordance with Policy guidelines.
 - 4. Creating internally managed funds and soliciting externally managed funds to be used in the composition of the LRS Fund.
 - 5. Identifying opportunities and making recommendations to the Committee consistent with pertinent delegations.
 - 6. Reporting ~~internally~~ to the Committee no less than annually concerning the implementation of this Policy. This report shall include, but is not limited to, the current market value and asset class allocations compared to the Policy targets and ranges.
 - 7. Monitoring the implementation of, and compliance with, the Policy. Staff shall report concerns, problems, material changes, and all violations of Guidelines and Policies at the next Committee meeting, or sooner if deemed necessary. All events deemed materially important will be reported to the Committee immediately. These reports shall include explanations of any violations and appropriate recommendations for corrective action.
- C. The **General Pension Consultant** ("Consultant") is responsible for monitoring, evaluating, and reporting no less than annually to the Committee on the LRS Fund performance relative to the benchmark and Policy.

THE LEGISLATORS' RETIREMENT SYSTEM (LRS) FUND

D. **External Managers** ("Manager") are responsible for aspects of portfolio management as set forth in each Manager's contract with CalPERS and shall fulfill the following duties:

1. Communicate with CalPERS staff, as needed, regarding investment strategies and investment results.
2. Monitor, analyze, and evaluate performance relative to the agreed-upon benchmark.
3. Cooperate fully with CalPERS staff, Custodian, and Consultant concerning requests for information.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

- A. The benchmark for the LRS Fund is specified in the Benchmarks Policy.
- B. CalPERS shall invest the assets of the LRS Fund to meet or exceed the actuarial rate over the long-term.

V. INVESTMENT APPROACHES AND PARAMETERS

- A. Philosophy and Approach

The LRS Fund shall be managed in accordance with the CalPERS Total Fund Statement of Investment Policy and in a manner consistent with the respective investment policy governing each asset class. Such policies approved by the Committee shall specify the method and parameters for implementation and provide for the ongoing monitoring of that asset class.

- B. Strategic Asset Allocation Process

A comprehensive ~~a~~Asset ~~a~~Allocation ~~s~~Strategy analysis shall be completed periodically that follows the schedule and process as described in the CalPERS Statement of Investment Policy for Asset Allocation Strategy, Section V.C. Strategic Asset Allocation Process. ~~at least once every three years and will be presented to the Committee for review and approval of the Policy target asset allocations and ranges. The Chief Investment Officer ("CIO") may recommend a more frequent analysis if expected returns, risks or liability values have substantially changed since the prior analysis. The CIO may also recommend to the Committee changes in the Policy asset allocation targets and ranges. A target for cash is exempt from consideration.~~

THE LEGISLATORS' RETIREMENT SYSTEM (LRS) FUND

C. Fund Structure/Parameters

Staff shall manage the LRS Fund in accordance with the approved strategic asset allocation. CalPERS Custodian shall employ a unitized fund structure to maintain separate and distinct historical records and to produce individual net asset values (NAV's) for each asset class.

D. Policy Asset Class Allocation Targets and Ranges

The Committee shall approve Policy asset class allocation targets and ranges expressed as a percentage of total assets. The Committee shall set Policy ranges sufficiently wide to permit efficient and flexible implementation, yet sufficiently narrow to maintain the basic risk and return relationship established by the allocation targets.

The LRS Fund Policy asset class allocation targets and permissible ranges are as follows:

<u>Asset Class</u>	<u>LRS Fund</u>	
	<u>Policy Target</u>	<u>Policy Range Relative to Target</u>
<u>Global Equity</u>	<u>24%</u>	<u>+/- 5%</u>
<u>Fixed Income</u>	<u>39%</u>	<u>+/- 5%</u>
<u>Treasury Inflation-Protected Securities (TIPS)</u>	<u>26%</u>	<u>+/- 3%</u>
<u>Commodities</u>	<u>3%</u>	<u>+/- 3%</u>
<u>Real Estate Investment Trusts (REITs)</u>	<u>8%</u>	<u>+/- 5%</u>
<u>Liquidity</u>	<u>0%</u>	<u>+2%</u>
<u>Total Fund</u>	<u>100%</u>	

<u>Asset Class</u>	<u>LRS Fund</u>	
	<u>Policy Allocation</u>	<u>Policy Range</u>
<u>U.S Inflation Linked Bonds</u>	<u>15%</u>	<u>+/- 4%</u>
<u>U.S. Nominal Bonds</u>	<u>42%</u>	<u>+/- 5%</u>
<u>Global Equity</u>	<u>32%</u>	<u>+/- 5%</u>
<u>Global Public Real Estate</u>	<u>8%</u>	<u>+/- 2%</u>
<u>Commodities</u>	<u>3%</u>	<u>+/- 2%</u>

THE LEGISLATORS' RETIREMENT SYSTEM (LRS) FUND

Expected Return	5.75%
Expected Risk	7.27%
Return/Risk	0.79%

~~Approved by the Committee, August 15, 2011.~~

E. Rebalancing

Adherence to the Policy asset class allocation targets and ranges shall be monitored and reported to the Committee no less than annually. This report shall display a comparison between the LRS Fund asset class allocations and the Policy asset class allocation targets and ranges. The report shall also compare the investment performance results of each asset class and the benchmark returns.

Asset class allocations shall be managed to be within Policy ranges. Cash in the portfolio will be held within a range of 0 — 21%. Allocations may temporarily deviate from Policy ranges due to extreme market volatility and will be reported as set forth above. If an asset class allocation exceeds the Policy range, staff shall return the asset allocation to within its Policy range in a timely manner, with the exact time period primarily dependent on transaction costs and liquidity.

Changes in ~~Policy~~ asset class allocations may be achieved by the movement of capital between asset classes through the trading of pooled funds or through the use of derivatives. The intent is for ~~Policy~~ asset class allocations to be actively managed rather than being allowed to passively drift with recent relative asset class returns.

F. Target Tracking Error

The LRS Fund will be managed within a target forecast annual tracking error as described in the CalPERS Statement of Investment Policy for Asset Allocation Strategy, Section VI.F. Target Tracking Error.

FG. Restrictions, Prohibitions and Authorized Securities

Restrictions, Prohibitions and Authorized Securities of the LRS Fund are defined in the policy governing each asset class or external investment manager guidelines.

All transactions involving derivatives are governed by the Global Derivatives and Counterparty Risk Policy.

VI. CALCULATIONS AND COMPUTATIONS

THE LEGISLATORS' RETIREMENT SYSTEM (LRS) FUND

Investors, managers, consultants, and other participants selected by CalPERS shall make all calculations and computations on a market value basis, as recorded by CalPERS Custodian.

VII. GLOSSARY OF CALPERS-SPECIFIC TERMS

Italicized terms appearing in the Policy are CalPERS specific in nature and are defined in the [CalPERS Specific Glossary of Terms](#).

Legislators' Retirement System

Approved by the Policy Subcommittee	June 15, 2011
Adopted by the Investment Committee	August 15, 2011
Admin changes to update template format and to align this policy with the Global Derivatives and Counterparty Risk Policy	December 3, 2013
Administrative changes to standardize reporting frequencies to the Investment Committee to "no less than annually"	May 15, 2014
Administrative changes to reflect the Policy Glossary of Terms Update Project	May 15, 2014
<u>Approved by the Investment Committee</u>	October 13, 2014

The Legislators' Retirement System was previously Attachment C of the Affiliate Fund Policy. The dates below reflect the revision history of the Affiliate Fund Policy:

Affiliate Fund Policy

Approved by the Policy Subcommittee:	August 18, 2008
Adopted by the Investment Committee:	September 15, 2008
Revised by the Investment Committee:	December 15, 2008
Admin changes made due to Policy Review Project:	June 16, 2009
Admin changes due to adoption of Benchmark Policy:	September 28, 2009

**CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
STATEMENT OF INVESTMENT POLICY**

**FOR
THE CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST (CERBT) FUND**

~~May 15, 2014~~ **October 13, 2014**

This policy is effective immediately upon adoption and supersedes all previous policies governing the Annuitants' Healthcare Coverage Fund, also known as the California Employers' Retiree Benefit Trust (CERBT) Fund.

I. PURPOSE

The California Public Employees' Retirement System ("CalPERS") Investment Beliefs Policy and Total Fund Statement of Investment Policy, adopted by the CalPERS Investment Committee ("Committee"), set forth CalPERS overarching investment purposes and objectives with respect to all its investment programs.

This document sets forth the investment policy ("Policy") for the policy portfolios ("Portfolios") of the California Employers' Retiree Benefit Trust ("CERBT"). The design of this Policy ensures that investors, managers, consultants, and other participants selected by CalPERS take prudent and careful action while managing the Portfolios. Additionally, use of this Policy ensures sufficient flexibility in managing investment risks and returns associated with the CERBT.

The CERBT was established March 1, 2007 for public employers to prefund their retiree health and other post-employment benefit obligations. The CERBT is currently known in statute as the Annuitants' Healthcare Coverage Fund. There are three separate Portfolios ("Strategy 1", "Strategy 2", and "Strategy 3") for the CERBT, which provide employers a choice of asset allocation strategies.

II. STRATEGIC OBJECTIVE

Each of the CERBT Portfolios shall be managed to accomplish the following:

- A. Offer to employers a distinct investment alternative.
- B. Invest in an asset allocation mix with targets and ranges based on a periodic asset liability management review.
- C. Maintain significant diversification to temper losses from market volatility.
- D. Ensure that the asset class policy ranges approved by the Committee are adhered to, and that any rebalancing is performed efficiently and prudently.

- E. Maintain adequate liquidity to meet cash needs.

III. RESPONSIBILITIES

- A. In addition to the Committee's responsibilities outlined in the Total Fund Statement of Investment Policy, the Committee is also responsible for approving asset classes for investment and approving a policy target allocation, permissible range, and benchmark for each asset class.
- B. CalPERS Investment Staff ("Staff") is responsible for the following:
1. All aspects of portfolio management including monitoring, analyzing, and evaluating performance relative to the appropriate benchmark.
 2. Providing individualized asset allocation strategy recommendations to the Committee, including selection of asset class benchmarks, Policy targets and ranges.
 3. Managing the asset class allocations of the Portfolios within Policy ranges approved by the Committee, in accordance with Policy guidelines.
 4. Creating internally managed funds and soliciting externally managed funds to be used in the composition of the Portfolios.
 5. Identifying opportunities and making recommendations to the Committee consistent with pertinent delegations.
 6. Reporting ~~internally~~ to the Committee no less than annually concerning the implementation of this Policy. This report shall include, but is not limited to, the current market value and asset class allocations compared to the Policy targets and ranges.
 7. Monitoring the implementation of, and compliance with, the Policy. Staff shall report concerns, problems, material changes, and all violations of Guidelines and Policies at the next Committee meeting, or sooner if deemed necessary. All events deemed materially important will be reported to the Committee immediately. These reports shall include explanations of any violations and appropriate recommendations for corrective action.
- C. The **General Pension Consultant** ("Consultant") is responsible for monitoring, evaluating, and reporting to the Committee no less than annually on the three CERBT Portfolios' performance relative to the benchmark and Policy.

D. **External Managers** ("Manager") are responsible for aspects of portfolio management as set forth in each Manager's contract with CalPERS and shall fulfill the following duties:

1. Communicate with CalPERS staff, as needed, regarding investment strategies and investment results.
2. Monitor, analyze, and evaluate performance relative to the agreed-upon benchmark.
3. Cooperate fully with CalPERS staff, Custodian and Consultant concerning requests for information.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

- A. The benchmark for the CERBT is specified in the Benchmarks Policy.
- B. CalPERS shall invest the assets of each of the CERBT Portfolios to meet or exceed the individualized benchmark designated in the Policy.

V. INVESTMENT APPROACHES AND PARAMETERS

- A. Philosophy and Approach

The CERBT Portfolios shall be managed in accordance with the CalPERS Total Fund Statement of Investment Policy and in a manner consistent with the respective investment policy governing each asset class. Such policies approved by the Committee shall specify the method and parameters for implementation and provide for the ongoing monitoring of that asset class.

- B. Strategic Asset Allocation Process

A comprehensive ~~a~~Asset ~~a~~Allocation ~~s~~Strategy analysis shall be completed periodically that follows the schedule and process as described in the CalPERS Statement of Investment Policy for Asset Allocation Strategy, sSection V.C. Strategic Asset Allocation Process. ~~—at least once every three years and will be presented to the Committee for review and approval of the Policy target asset allocation and ranges. The Chief Investment Officer ("CIO") may recommend a more frequent analysis if expected returns, risks or liability values have substantially changed since the prior analysis. The CIO may also recommend to the Committee changes in the Policy asset allocation targets and ranges. A target for cash is exempt from consideration.~~

C. Fund Structure/Parameters

Staff shall manage the Portfolios in accordance with the approved strategic asset allocation. CalPERS Custodian shall employ a unitized fund structure to maintain separate and distinct historical records and to produce individual net asset values (NAV's) for each asset class.

D. Policy Asset Class Allocation Targets and Ranges

The Committee shall approve Policy asset class allocation targets and ranges expressed as a percentage of total assets. The Committee shall set Policy ranges sufficiently wide to permit efficient and flexible implementation, yet sufficiently narrow to maintain the basic risk and return relationship established by the allocation targets.

There are three separate CERBT Portfolios ("Strategy 1", "Strategy 2", and "Strategy 3"). Levels of expected return and risk vary among the Portfolios. The Policy asset class allocation targets and permissible ranges are as follows:

<u>Asset Class</u>	<u>Strategy 1</u>		<u>Strategy 2</u>		<u>Strategy 3</u>	
	<u>Policy Target</u>	<u>Policy Range Relative to Target</u>	<u>Policy Target</u>	<u>Policy Range Relative to Target</u>	<u>Policy Target</u>	<u>Policy Range Relative to Target</u>
<u>Global Equity</u>	<u>57%</u>	<u>+/- 2%</u>	<u>40%</u>	<u>+/- 2%</u>	<u>24%</u>	<u>+/- 2%</u>
<u>Fixed Income</u>	<u>27%</u>	<u>+/- 2%</u>	<u>39%</u>	<u>+/- 2%</u>	<u>39%</u>	<u>+/- 2%</u>
<u>Treasury Inflation-Protected Securities (TIPS)</u>	<u>5%</u>	<u>+/- 2%</u>	<u>10%</u>	<u>+/- 2%</u>	<u>26%</u>	<u>+/- 2%</u>
<u>Commodities</u>	<u>3%</u>	<u>+/- 2%</u>	<u>3%</u>	<u>+/- 2%</u>	<u>3%</u>	<u>+/- 2%</u>
<u>Real Estate Investment Trusts (REITs)</u>	<u>8%</u>	<u>+/- 2%</u>	<u>8%</u>	<u>+/- 2%</u>	<u>8%</u>	<u>+/- 2%</u>
<u>Liquidity</u>	<u>0%</u>	<u>+ 2%</u>	<u>0%</u>	<u>+ 2%</u>	<u>0%</u>	<u>+ 2%</u>
<u>Total</u>	<u>100%</u>		<u>100%</u>		<u>100%</u>	

<u>Asset-Class</u>	<u>Strategy 1</u>		<u>Strategy 2</u>		<u>Strategy 3</u>	
	<u>Policy Allocation</u>	<u>Policy Range</u>	<u>Policy Allocation</u>	<u>Policy Range</u>	<u>Policy Allocation</u>	<u>Policy Range</u>
<u>U.S. Inflation-Linked Bonds</u>	<u>5%</u>	<u>+/- 2%</u>	<u>15%</u>	<u>+/- 4%</u>	<u>15%</u>	<u>+/- 4%</u>
<u>U.S. Nominal Bonds</u>	<u>18%</u>	<u>+/- 5%</u>	<u>24%</u>	<u>+/- 5%</u>	<u>42%</u>	<u>+/- 5%</u>
<u>Global Equity</u>	<u>66%</u>	<u>+/- 5%</u>	<u>50%</u>	<u>+/- 5%</u>	<u>32%</u>	<u>+/- 5%</u>

THE CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST (CERBT)

Global Public Real Estate	8%	±/-2%	8%	±/-2%	8%	±/-2%
Commodities	3%	±/-2%	3%	±/-2%	3%	±/-2%
Expected Return	-7.10%		6.50%		5.75%	
Expected Risk	11.73%		9.46%		7.27%	
Return/Risk	-0.61%		0.69%		0.79%	

Approved by the Committee, August 15, 2011.

E. Rebalancing

Adherence to the Policy asset class allocation targets and ranges shall be monitored and reported to the Committee no less than annually. This report shall display a comparison between the Portfolios' asset class allocations and the Policy asset class allocation targets and ranges. The report shall also compare the investment performance results of each asset class and the benchmark returns.

Asset class allocations shall be managed to be within Policy ranges. Cash in the portfolio will be held within a range of 0 – 21%. Allocations may temporarily deviate from Policy ranges due to employer contributions/distributions and/or extreme market volatility and will be reported as set forth above. If an asset class allocation exceeds the Policy range, staff shall return the asset class allocation to within its Policy range in a timely manner, with the exact time period primarily dependent on transaction costs and liquidity.

Changes in Policy asset class allocations may be achieved by the movement of capital between asset classes through the trading of pooled funds or through the use of derivatives. The intent is for Policy asset class allocations to be actively managed rather than being allowed to passively drift with recent relative asset class returns.

F. Target Tracking Error

The CERBT Portfolios will be managed in a manner which minimizes any Tracking Error.

F.G. Restrictions, Prohibitions and Authorized Securities

Restrictions, Prohibitions and Authorized Securities of the CERBT are defined in the policy governing each asset class or external investment manager guidelines.

All transactions involving derivatives are governed by the Global Derivatives and Counterparty Risk Policy.

THE CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST (CERBT)

VI. CALCULATIONS AND COMPUTATIONS

Investors, managers, consultants, and other participants selected by CalPERS shall make all calculations and computations on a market value basis, as recorded by CalPERS Custodian.

VII. GLOSSARY OF CALPERS-SPECIFIC TERMS

Italicized terms appearing in the Policy are CalPERS specific in nature and are defined in the [CalPERS Specific Glossary of Terms](#).

California Employers' Retiree Benefit Trust

Approved by the Policy Subcommittee	June 15, 2011
Adopted by the Investment Committee	August 15, 2011
Administrative changes to update template format and to align this policy with the Global Derivatives and Counterparty Risk Policy	December 3, 2013
Administrative changes to standardize reporting frequencies to the Investment Committee to "no less than annually"	May 15, 2014
Administrative changes to reflect the Policy Glossary of Terms Update Project	May 15, 2014
<u>Approved by the Investment Committee</u>	October 13, 2014

The California Employers' Retiree Benefit Trust was previously the Annuitants' Healthcare Coverage Fund and Attachment A of the Affiliate Fund Policy. The dates below reflect the revision history of the Affiliate Fund Policy:

Affiliate Fund Policy

Approved by the Policy Subcommittee:	August 18, 2008
Adopted by the Investment Committee:	September 15, 2008
Revised by the Investment Committee:	December 15, 2008
Admin changes made due to Policy Review Project:	June 16, 2009
Admins changes due to adoption of Benchmark Policy:	September 28, 2009

Annuitants' Healthcare Coverage Fund (Policy consolidated into the Affiliate Fund Policy)

Approved by the Policy Subcommittee:	December 15, 2006
Adopted by the Investment Committee:	December 18, 2006
Repealed by the Policy Subcommittee:	August 18, 2008
Repealed by the Investment Committee:	September 15, 2008

**CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
STATEMENT OF INVESTMENT POLICY**

**FOR
ASSET ALLOCATION STRATEGY**

May 29, 2014

This policy is effective immediately upon adoption and supersedes all previous Asset Allocation Strategy policies.

I. PURPOSE

The California Public Employees' Retirement System ("CalPERS") Investment Beliefs Policy and Total Fund Statement of Investment Policy, adopted by the CalPERS Investment Committee ("Committee"), set forth CalPERS overarching investment purposes and objectives with respect to all its investment programs.

This document sets forth the investment policy ("Policy") for the Asset Allocation Strategy ("Program"). The design of this policy ensures that investors, managers, consultants, and other participants selected by the CalPERS take prudent and careful action while managing the Program. Additionally, use of this policy assures sufficient flexibility in managing investment risks and returns associated with this Program.

The Program involves establishing asset class allocation policy targets and ranges, and managing asset class allocations within their policy ranges. CalPERS recognizes that over 90% of the variation in investment returns of a large well-diversified pool of assets can typically be attributed to asset allocation decisions.

II. STRATEGIC OBJECTIVE

The Program shall be managed to accomplish the following:

- A. Recommend an asset allocation mix with targets and ranges based on a periodic asset liability management ("ALM") review;
- B. Achieve the highest rate of total return reasonably possible within prudent levels of risk and liquidity;
- C. Maintain sufficient diversification to avoid large losses and preserve capital;

ASSET ALLOCATION STRATEGY

- D. Ensure that the asset class policy ranges approved by the Committee are adhered to, and that any rebalancing is performed efficiently and prudently;
- E. Maintain adequate liquidity to meet cash needs; and,
- F. Generate positive returns through any active asset allocation decisions subject to policy ranges and risk limits.

III. RESPONSIBILITIES

- A. In addition to the Committee's responsibilities outlined in the Total Fund Statement of Investment Policy, the Committee is also responsible for approving asset classes for investment and approving a policy target allocation, permissible range, and benchmark for each asset class.
- B. CalPERS Investment Staff ("Staff") is responsible for the following:
 - 1. All aspects of Program portfolio management including monitoring, analyzing, and evaluating performance relative to the appropriate benchmark.
 - 2. Managing CalPERS asset class allocations within policy ranges approved by the Committee, in accordance with Policy guidelines.
 - 3. Reporting to the Committee monthly on asset class allocations relative to their targets and ranges.
 - 4. Reporting to the Committee no less than annually and more frequently if needed about Program allocations, returns, risks, and activity.
 - 5. Monitoring the implementation of, and compliance with, the Policy. Staff shall report concerns, problems, material changes, and all violations of Guidelines and Policies at the next Committee meeting. All events deemed materially important will be reported to the Board immediately. These reports shall include explanations of the violations and appropriate recommendations for corrective action.
 - 6. Providing recommendations to the Committee concerning the identification of asset classes and selection of asset class benchmarks, policy targets and ranges.

ASSET ALLOCATION STRATEGY

7. Determining adjustments in asset class allocations, and directing rebalancing account activity and fund transfers across asset classes.
- C. The **General Pension Consultant** (“Consultant”) is responsible for monitoring, evaluating, and reporting no less than annually, to the Committee, on the performance of the Program relative to the benchmark and Policy.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

The Fund benchmark is specified in the Benchmarks Policy.

The goal is to establish asset class policy targets and ranges that meet the objectives described in Section II above.

The performance objective is to achieve positive active asset allocation returns over rolling five-year periods.

V. INVESTMENT APPROACHES AND PARAMETERS – STRATEGIC

A. Asset Class Policy Targets and Ranges

Policy asset class targets listed in Table 1 below were approved in February 2014 by the Committee and Board. These policy targets are expected to be implemented over a period of several years beginning July 1, 2014. During this transition period, interim policy targets will be used to calculate the Policy Index return with the concurrence of the Consultant. The interim targets will be evaluated on an annual basis, or sooner as warranted by market conditions. The permissible ranges listed in Table 1 are effective July 1, 2014.

ASSET ALLOCATION STRATEGY**Table 1**

Asset Class	Policy Target	Interim Target	Policy Range Relative to Target
<i>Growth</i>			
Global Equity	47%	51%	+/- 7%
Private Equity	12%	10%	+/- 4%
<u>Total Growth</u>	<u>59%</u>	<u>61%</u>	<u>+/- 7%</u>
Income - Global Fixed Income	19%	19%	+/- 5%
<i>Real Assets</i>			
Real Estate	11%	10%	+/- 5%
Infrastructure & Forestland	3%	2%	+/- 2%
<u>Total Real Assets</u>	<u>14%</u>	<u>12%</u>	<u>+/- 5%</u>
Inflation	6%	6%	+/-3%
Liquidity	2%	2%	+/-1%
Total Fund	100%	100%	N/A

B. Asset Class Benchmarks

Each asset class and related components shall have a benchmark specified in the Benchmarks Policy and approved by the Committee.

C. Strategic Asset Allocation Process

1. A comprehensive Asset Allocation Strategy analysis shall be coincident with the review of actuarial methods and assumptions, currently on a four-year cycle. The Asset Allocation Strategy analysis will be presented to the Committee for review and approval of Policy target asset class allocations and ranges.

Staff shall present a market valuation-based analysis at the midpoint of the four year review cycle, or as needed in response to market conditions or changes impacting the capital market assumptions

Staff may also recommend to the Committee changes in the policy targets and ranges.

ASSET ALLOCATION STRATEGY

2. The Program shall reflect analyses that consider the current and expected financial condition of CalPERS including projected CalPERS liabilities. Analyses shall also encompass the expected long-term capital markets outlook, expected inflation, and CalPERS risk tolerance.
 - a. Analyses shall identify suitable asset classes in accordance with Section V.D, and consider asset class expected returns, volatilities, and correlations.
 - b. Analyses shall consider relevant and timely decision factors. These decision factors shall be incorporated into the comprehensive Asset Allocation Strategy analysis to permit Committee members to establish investment priorities. Decision factors may include the following:
 - (1) Measures of projected funded status;
 - (2) Measures of the likelihood of deterioration in funded status;
 - (3) Measures of projected cost; and
 - (4) Measures of the likelihood of unacceptably high costs.
 - c. Analyses of alternative asset mixes shall measure the estimated effect on expected risk and return, and diversification.
 - d. The Committee shall approve policy asset allocation targets and ranges expressed as a percentage of total assets. The Committee shall set policy ranges sufficiently wide to permit efficient and flexible implementation, yet sufficiently narrow to maintain the basic risk and return relationship established by the allocation targets.

D. Asset Class Criteria

A financial or real asset type shall be considered as an asset class if it has a risk, return, and correlation profile sufficiently different from existing CalPERS asset classes, and if its inclusion or exclusion materially affects the expected risk and return of CalPERS total return.

1. Criteria for consideration when evaluating an asset class shall include the following:

ASSET ALLOCATION STRATEGY

- a. Strategic role of the asset class in the ALM framework based on fundamental characteristics and risk and return drivers.
 - b. Sufficient size, liquidity, and cost efficiency to permit CalPERS to invest meaningful amounts in that asset class, and have a material effect on CalPERS return.
 - c. Availability of sufficient internal or external investment and technical expertise to ensure prudent implementation of an investment in that asset class.
 - d. Presence of diversification, return enhancement, liquidity provision, or some other readily identifiable attribute sufficiently different from other asset classes and which enhances CalPERS ability to achieve the strategic objectives outlined in Section II.
 - e. Acceptance by other large pension plan sponsors as a feasible and meaningful asset class, or in the absence of such acceptance, academic support for its inclusion.
 - f. Availability of sufficient data, history, or expertise to assess the feasibility and benefit of the asset class to CalPERS, by means of a measurable investment outcome. Further, the asset class must have a basis for developing expected investment returns, risks, and correlations for the purposes of the financial study.
- 2. An asset class may be approved for investment provided it meets the above criteria, and the Committee has had the opportunity for sufficient education to enable it to fulfill its fiduciary responsibility in making such an approval.
 - 3. Once CalPERS approves an asset class for investment, as part of the Program, the investment may only be made in accordance with a policy reviewed and approved by the Committee for that asset class. Such a policy shall specify the investment guidelines and provide for the monitoring of that asset class.

VI. INVESTMENT APPROACHES AND PARAMETERS – IMPLEMENTATION

- A. Adherence to the asset class policy ranges shall be monitored and reported to the Committee as part of the Monthly Chief Investment Officer (“CIO”) Report. This report shall display a comparison between the portfolio asset class allocations and the policy targets and ranges. The

ASSET ALLOCATION STRATEGY

report shall also compare the investment performance results of each asset class and the benchmark returns.

- B. Asset class allocations shall be managed to be within policy ranges. Allocations may temporarily deviate from policy ranges due to extreme market volatility. If an asset class allocation exceeds the policy range, Staff shall return the asset allocation to within its policy range in a timely manner, with the exact time period primarily dependent on transaction costs and liquidity.

Staff decisions concerning asset class active weights shall be determined in consideration of capital market views, relevant asset class characteristics, transaction costs, liquidity, and risks subject to this Policy and all other applicable policies.

For Global Equity and Global Fixed Income, the cumulative adjustment of the asset class weighting by Staff shall not exceed 50% of the policy range of the asset class within any quarter without advance Committee consent.

Changes in asset class allocations may be achieved by the movement of capital between asset classes through the trading of securities or through the use of derivatives. The intent is for asset class allocations to be actively managed rather than being allowed to passively drift with recent relative asset class returns.

- C. Accounts may be established and used to adjust asset class allocations within policy ranges, or to return asset allocations that have exceeded a policy range to within the policy range.

CalPERS cash may remain as cash or be converted to equity or bond exposure subject to active asset allocation decisions and policy ranges.

- D. Managers may be retained for Program implementation subject to policy asset allocation ranges.
- E. The active asset allocation return will be measured and included in the Total Fund return and reported to the Committee no less than annually.
- F. Target Tracking Error

The Program will be managed within a target forecast annual tracking error of 0.75% using the CalPERS Risk Management System. This implies that over any one-year period, there will be a less than 5% probability that the active asset allocation return will be less than negative 1.2%.

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The CalPERS total fund shall be managed with a target forecast annual tracking error of 1.5%, inclusive of active asset allocation and other active management decisions, using the CalPERS Risk Management System. For both types of tracking errors, Staff will evaluate forecast values against subsequent realized values over rolling three-year periods.

G. *External Manager* Investment Guidelines

1. Manager Selection

- a. Managers retained in the Program shall have recognized expertise in active asset allocation.
- b. The selected managers shall be registered, or appropriately exempt from registration, with the Securities and Exchange Commission ("SEC").
- c. Managers shall be selected in accordance with the applicable California laws and regulations, and CalPERS policy.

2. Investment Manager Guidelines

Program Managers shall operate under guidelines that describe their investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities and procedures, benchmark and performance objectives.

Implementation of this Program shall comply at all times with manager-specific investment management guidelines in addition to all applicable CalPERS investment policies.

VII. DERIVATIVES AND LEVERAGE

A. Strategies

Financial futures contracts, forward contracts, swaps, options, combinations of these derivatives, exchange traded funds, and structured notes may be used in the Program for the following purposes:

1. Adjust asset class allocations, within approved policy ranges.
2. Minimize the investment effect of average cash balances held in cash equivalents accounts by overlaying asset class derivatives.

ASSET ALLOCATION STRATEGY

B. Justification

Derivatives have several advantages in adjusting asset class allocations, including:

1. Minimizing transaction costs;
2. Increasing the speed of transactions, and thus the ability to respond quickly to volatile capital markets; and
3. Minimizing disruption of CalPERS portfolios.

C. Risks

Any use of derivatives to adjust asset class allocations shall comply with this Policy and all other applicable CalPERS policies including the Global Derivatives and Counterparty Risk Policy. Key derivative risks are described below:

1. Valuation risk;
2. Liquidity risk; and
3. Counterparty risk.

Counterparty risk shall be managed in accordance with the Global Derivatives and Counterparty Risk Policy.

D. Leverage

The Program shall be in compliance with the Leverage Policy.

1. Exposure Limit

Derivative exposure used in the Program is limited to amounts that maintain all asset class allocations within their approved ranges.

2. Collateral

Collateral for all derivatives used in the Program shall consist of Investment Grade fixed income securities.

3. Prohibited Uses

This Policy authorizes only activity expressly designed to either overlay cash with exposure to another asset class or adjust portfolio asset class allocations within policy ranges. It does not

ASSET ALLOCATION STRATEGY

authorize any other derivative trading purpose nor does it alter derivatives activity authorization given under other approved Policy documents.

VIII. CALCULATIONS AND COMPUTATIONS

Investors, managers, consultants, and other participants selected by CalPERS shall make all calculations and computations on a market value basis as recorded by CalPERS Custodian.

IX. GLOSSARY OF CALPERS SPECIFIC TERMS

Italicized terms appearing in the Policy are CalPERS specific in nature and are defined in the [CalPERS Specific Glossary of Terms](#).

ASSET ALLOCATION STRATEGY

Approved by the Policy Subcommittee	August 12, 1998
Adopted by the Investment Committee	August 14, 1998
Revised by the Policy Subcommittee	December 13, 2002
Approved by the Investment Committee	February 18, 2003
Revised by the Policy Subcommittee	December 10, 2004
Approved by the Investment Committee	February 14, 2005
Revised by the Policy Subcommittee	June 10, 2005
Approved by the Investment Committee	August 15, 2005
Revised by the Policy Subcommittee	August 11, 2006
Approved by the Investment Committee	September 11, 2006
Revised by the Policy Subcommittee	August 10, 2007
Approved by the Investment Committee	September 10, 2007
Revised by the Policy Subcommittee	April 21, 2008
Approved by the Investment Committee	May 12, 2008
Revised by the Policy Subcommittee	December 15, 2008
Approved by the Investment Committee	February 17, 2009
Approved by the Investment Committee	March 16, 2009
Revised by the Policy Subcommittee	August 17, 2009
Approved by the Investment Committee	September 14, 2009
Admin change due to Benchmark Policy	September 28, 2009
Revised by the Policy Subcommittee	November 16, 2009
Approved by the Investment Committee	December 14, 2009
Revised by the Policy Subcommittee	April 11, 2011
Approved by the Investment Committee	May 16, 2011
Policy Effective	July 1, 2011
Admin changes to update template format and to align this policy with the Global Derivatives and Counterparty Risk Policy	December 2, 2013
Approved by the Investment Committee	May 19, 2014
Administrative changes to standardize reporting frequencies to “no less than annually”	May 29, 2014
Administrative changes to reflect the Policy Glossary of Terms Update Project	May 29, 2014

Julia K. Bonafede, CFA
President of Wilshire Consulting

September 22, 2014

Mr. Henry Jones
Chairman of the Investment Committee
California Public Employees' Retirement System
400 P Street, Suite 3492
Sacramento, CA 95814

Re: Revision of Affiliate Funds Policies

Dear Mr. Jones:

At the September 2014 Investment Committee (IC) meeting, Staff reviewed modifications to the proposed statements of investment policy for the following Affiliate Funds:

- California Employers' Retiree Benefit Trust (CERBT)
- Legislators' Retirement Fund (LRS)
- Judges' Retirement Fund (JRS)
- Judges' Retirement II Fund (JRS II).

As an additional enhancement to the modifications proposed at the September IC meeting, the policy for the JRS fund reflects the potential for the financial structure to migrate from a pay-as-you-go system to pre-funding the liabilities. If this change should occur then the policy appropriately mandates that an asset allocation study be initiated by staff to invest the pre-funded assets.

New language has also been proposed for the CERBT funds to strengthen the commitment to continue to minimize tracking error around the policy benchmark for each fund.

Recommendation

Wilshire supports the proposed investment policy modifications for the Affiliate Funds and we are always available to answer any questions you may have.

Sincerely,





September 22, 2014

Mr. Henry Jones, Chairman
Investment Committee
California Public Employees' Retirement System
Sacramento, California 95814

Re: October IC Agenda Item 6a – Revision of Affiliate Fund Policies

Dear Mr. Jones,

The purpose of this letter is to provide the Investment Committee with Pension Consulting Alliance's (PCA's) opinion regarding Agenda Item 6a for the October Investment Committee meeting. In summary, PCA supports the final recommendations for the respective statements of policy for each of the four affiliate funds under review. PCA also believes that staff and the Investment Committee have conducted a thorough process and applied assumptions that have been consistent with the process and assumptions utilized under the earlier comprehensive policy review of the PERF portfolio. The final set of recommended policy portfolios and the updated statements of policy provide appropriate risk/return profiles for each of the respective affiliate funds. This opinion follows our review of the predecessor topic, Item 6a, on the September 2014 IC agenda.

The final recommendations for the affiliated fund statements of policy are reasonable and prudent. PCA notes that the allocation policies for the different funds can vary widely due to the unique objectives and risk tolerances of each respective fund.

Given the above context and the various tradeoffs the affiliated funds face, PCA believes that the Committee can accept the recommended policy language for each of the funds on the basis of the information provided in this agenda item as well as previous IC agendas.

We look forward to addressing any questions or clarifications on this matter at the Investment Committee meeting.

Respectfully,

A handwritten signature in black ink, appearing to read "Allan Emkin".

Allan Emkin