Investment Committee March 16, 2015

Agenda Item – Adoption of Total Fund Investment Policy and Repeal of Legacy Policies

Attached are the following policies proposed for repeal by the Investment Committee – February-March 2015

- 1. CalPERS Total Fund Statement of Investment Policy
- Investment Beliefs
- 3. Asset Allocation Strategy
- 4. Benchmarks
- 5. Risk Management
- 6. Global Derivatives and Counterparty Risk
- 7. Leverage
- 8. Divestment
- 9. Opportunistic Program
- 10. Plan Level and Asset Level Transition Portfolios
- 11. Role of Private Asset Class Board Consultants
- 12. Custody Management
- 13. Terminated Agency Pool
- 14. Economically Targeted Investment Program (ETI)
- 15. Healthcare Investment Initiative Inter-Program Conflict of Interest Protocol

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

TOTAL FUND STATEMENT OF INVESTMENT POLICY

July 22, 2014

This policy is effective immediately upon adoption and supersedes all previous Total Fund Statement of Investment and Policy Administration policies.

LPURPOSE

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.

The purpose of this Policy, and each of CalPERS other investment policies (collectively the "Policies"), is to provide a framework for the management of CalPERS assets. The Policies outline objectives, benchmarks, restrictions and responsibilities so that the Committee, Staff, consultants, managers, members and beneficiaries, and all CalPERS stakeholders clearly understand the objectives and policies of CalPERS investment program. The Policies also encourage effective communication, facilitate transparency and compliance, and provide a framework for reporting back to the Committee, as appropriate.

The Policies set forth the guidelines which the Committee deems to be appropriate and prudent in consideration of the needs of and the legal requirements applicable to CalPERS investment program. The Policies provide criteria against which investment results will be measured and serve as a review document to guide ongoing operations and oversight. The Policies also are intended to ensure that the Committee is fulfilling its fiduciary responsibilities in the management of CalPERS investments.

The Committee intends for the Policies to be a dynamic document and will review them from time to time. Policies will be modified periodically to reflect the changing nature of CalPERS assets and investment programs, benefit and structural changes, and economic conditions.

In addition, the Committee has delegated to the Staff certain authority that pertains to the ongoing management and administration of CalPERS assets and various investment programs. These delegations are contained in a master delegation document that the Committee has approved.

II.STRATEGIC 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. This will be accomplished through a carefully planned and executed long-term investment program that efficiently and effectively allocates and manages the assets of CalPERS.

The Policies have been designed to allow CalPERS to achieve a long-term total return. As such, prudent risk-taking is appropriate within the context of overall diversification to meet CalPERS long-term investment objectives. The assets of CalPERS will be broadly diversified to minimize the effect of short-term losses within any investment program. Consistent with California Constitution, Article XVI, section 17, all of CalPERS investment activities, and all investment transactions, shall be designed and executed solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system.

III.RISK MANAGEMENT

Risk management is central to managing the assets of CalPERS and to achieving the strategic objectives. A framework for risk management is established through the adoption of investment policies for total fund strategic asset allocation, individual asset classes and portfolios with appropriate benchmarks and reasonable risk limits for the implementation of the program. The level of risk assumed will be monitored and reported using selected risk metrics as required in the Risk Management Policy.

IV.RESPONSIBILITIES

- A. The Committee's responsibilities include, but are not limited to:
 - 1. Developing and adopting policies to achieve CalPERS strategic objectives.
 - 2. Reviewing policy recommendations made by Staff.
 - 3. Periodically reviewing and amending the Policies, as appropriate.
- B. The Investment Staff's duties include, but are not limited to:
 - 1. Periodically reviewing the Policies and making recommendations to the Committee regarding new Policy development, Policy revisions

- or amendments, Policy elimination, and any other aspect that the Staff considers pertinent regarding Policy development.
- Engaging with other asset class Staff, consultants, and other pertinent parties, to seek advice and counsel regarding investment strategy and investment results.
- 3. Developing and maintaining an up-to-date procedures manual.
- Implementing and adhering to all policies.
- C. The Board's independent investment consultants' responsibilities include, but are not limited to:
 - 1. Providing independent review, analysis, and recommendations regarding the development and revision of policies to ensure overall consistency, use of best practices, a systemwide approach, and implementation of CalPERS policies.
 - 2. Reporting to the Committee as appropriate.

✓ PERFORMANCE OR JECTIVE AND RENCHMARK

Specifically:

- A. The assets of CalPERS will be invested to meet or exceed the actuarial rate over the long-term;
- B. CalPERS will seek to maximize the returns for the level of risk taken:
- C. CalPERS will seek to achieve a return that exceeds the Policy Index; and
- D. CalPERS will invest its assets efficiently, bearing in mind the impact of management and transaction costs on the return of the assets.

VI. INVESTMENT APPROACHES AND PARAMETERS

Not applicable.

VILCALCULATIONS AND COMPUTATIONS

Not applicable.

Page 4 of 4

VIII.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.

Approved by the Investment Committee	June 18, 2007
Administrative changes made due to Policy Review Project	June 17, 2009
Reviewed by the Policy Subcommittee; no changes	August 17, 2009
recommended	
Revised by the Policy Subcommittee	November 16, 2009
Approved by the Investment Committee:	December 14, 2009
Administrative changes to:	July 22, 2014
Remove references to the Policy Subcommittee (delegation of	
authority was rescinded February 13, 2012)	
☐ Update template language	
- Reflect the Policy Glossary of Terms Update Project	_

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR INVESTMENT BELIEFS

July 22, 2014

This policy is effective immediately upon adoption and supersedes all previous investment beliefs 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 CalPERS Investment Beliefs ("Investment Beliefs"). The design of this Policy ensures that the Committee and the CalPERS Investment Staff ("Staff"), along with external managers and investment consultants, take prudent and careful action when managing CalPERS assets. This Policy requires that CalPERS develop and maintain a set of Investment Beliefs.

The Investment Beliefs are included as Attachment A

II.STRATEGIC OBJECTIVE

CalPERS 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. This will be accomplished through a carefully planned and executed long-term investment program that efficiently and effectively allocates and manages the assets of CalPERS.

Managing the CalPERS investment program requires exercising judgment in the face of considerable uncertainty. The Investment Beliefs provide a framework for exercising judgment and making investment decisions. Investment Beliefs:

- Provide a basis for strategic management of the investment portfolio
- · Inform organizational priorities
- Ensure alignment between the Committee and Staff
- · Become part of the CalPERS culture

Investment Beliefs also provide context for CalPERS actions. They reflect CalPERS values and acknowledge CalPERS responsibility to sustain its ability to pay benefits for generations. The Investment Beliefs also acknowledge the critical importance of a strong and durable economy in achieving CalPERS objectives.

The Investment Beliefs are not a checklist to be applied by rote to every decision. They are a guide for making judgmental decisions that often require balancing multiple, inter-related decision factors.

III.RESPONSIBILITIES

A.Staff is responsible for the following:

- Facilitating a periodic review of the Investment Beliefs in conjunction with the Strategic Asset Allocation process.
- 2. Reporting to the Committee no less than annually on investment program strategy and its consistency with the Investment Beliefs.
- 3. Integrating the Investment Beliefs into Committee and Staff orientation and ongoing Staff communication programs.
- B. The General Pension Consultant ("Consultant") is responsible for participating in the periodic review of the Investment Beliefs.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

Not applicable.

V.CALCULATIONS AND COMPUTATIONS

Not applicable.

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.

Adopted by the Investment Committee	October 14, 2013
Administrative changes to standardize reporting frequencies to	July 22, 2014
"no less than annually"	
Administrative changes to reflect the Policy Glossary Update	July 22, 2014
Project	

INVESTMENT BELIEFS

October 14, 2013

Liabilities must influence the asset structure.

- A. Ensuring the ability to pay promised benefits by maintaining an adequate funding status is the primary measure of success for CalPERS.
- B. CalPERS has a large and growing cash requirement and inflationsensitive liabilities; assets that generate cash and hedge inflation should be an important part of the CalPERS investment strategy.
- C. CalPERS cares about both income and appreciation components of total return.
- D. Concentrations of illiquid assets must be managed to ensure sufficient availability of cash to meet obligations to beneficiaries.

A long time investment horizon is a responsibility and an advantage.

Long time horizon requires that CalPERS:

- A. Consider the impact of its actions on future generations of members and taxpayers.
- B. Encourage investee companies and external managers to consider the long-term impact of their actions.
- C. Favor investment strategies that create long-term, sustainable value and recognize the critical importance of a strong and durable economy in the attainment of funding objectives.
- D. Advocate for public policies that promote fair, orderly and effectively regulated capital markets.

Long time horizon enables CalPERS to:

- A. Invest in illiquid assets, provided an appropriate premium is earned for illiquidity risk.
- B. Invest in opportunistic strategies, providing liquidity when the market is short of it.

ATTACHMENT A: INVESTMENT BELIEFS

Page 2 of 5

- C. Take advantage of factors that materialize slowly such as demographic trends.
- D. Tolerate some volatility in asset values and returns, as long as sufficient liquidity is available.
- CalPERS investment decisions may reflect wider stakeholder views, provided they are consistent with its fiduciary duty to members and beneficiaries.
- A. As a public agency, CalPERS has many stakeholders who express opinions on investment strategy or ask CalPERS to engage on an issue. CalPERS preferred means of responding to issues raised by stakeholders is engagement.
- B. CalPERS primary stakeholders are members / beneficiaries, employers and California taxpayers as these stakeholders bear the economic consequences of CalPERS investment decisions.
- C. In considering whether to engage on issues raised by stakeholders, CalPERS will use the following prioritization framework:
 - 1. Principles and Policy to what extent is the issue supported by CalPERS Investment Beliefs, Principles of Accountable Corporate Governance or other Investment Policy?
 - Materiality does the issue have the potential for an impact on portfolio risk or return?
 - 3. Definition and Likelihood of Success is success likely, in that CalPERS action will influence an outcome which can be measured? Can we partner with others to achieve success or would someone else be more suited to carry the issue?
 - Capacity does CalPERS have the expertise, resources and standing to influence an outcome?
- Long-term value creation requires effective management of three forms of capital: financial, physical and human.
- A. Governance is the primary tool to align interests between CalPERS and managers of its capital, including investee companies and external managers.

ATTACHMENT A: INVESTMENT BELIEFS

Page 3 of 5

- B. Strong governance, along with effective management of environmental and human capital factors, increases the likelihood that companies will perform over the long-term and manage risk effectively.
- C. CalPERS may engage investee companies and external managers on their governance and sustainability issues, including:
 - Governance practices, including but not limited to alignment of interests.
 - 2. Risk management practices.
 - 3. Human capital practices, including but not limited to fair labor practices, health and safety, responsible contracting and diversity.
 - 4. Environmental practices, including but not limited to climate change and natural resource availability.

CalPERS must articulate its investment goals and performance measures and ensure clear accountability for their execution.

- A. A key success measure for the CalPERS investment program is delivery of the long-term target return for the fund.
- B. The long time horizon of the fund poses challenges in aligning interests of the fund with Staff and external managers.
- C. Staff can be measured on returns relative to an appropriate benchmark, but Staff performance plans should include additional objectives or key performance indicators to align Staff with the fund's long-term goals.
- D. Each asset class should have explicit alignment of interest principles for its external managers.

Strategic asset allocation is the dominant determinant of portfolio risk and return.

- A. CalPERS strategic asset allocation process transforms the fund's targeted rate of return to the market exposures that Staff will manage.
- B. CalPERS will aim to diversify its overall portfolio across distinct risk factors/return drivers.

ATTACHMENT A: INVESTMENT BELIEFS

- Page 4 of 5
- C. CalPERS will seek to add value with disciplined, dynamic asset allocation processes, such as mean reversion. The processes must reflect CalPERS characteristics, such as time horizon and size of assets.
- D. CalPERS will consider investment strategies if they have the potential to have a material impact on portfolio risk and return.

CalPERS will take risk only where we have a strong belief we will be rewarded for it.

- A. An expectation of a return premium is required to take risk; CalPERS aims to maximize return for the risk taken.
- B. Markets are not perfectly efficient, but inefficiencies are difficult to exploit after costs.
- C. CalPERS will use index tracking strategies where we lack conviction or demonstrable evidence that we can add value through active management.
- D. CalPERS should measure its investment performance relative to a reference portfolio of public, passively managed assets to ensure that active risk is being compensated at the Total Fund level over the long-term.

Costs matter and need to be effectively managed.

- A. CalPERS will balance risk, return and cost when choosing and evaluating investment managers and investment strategies.
- B. Transparency of the total cost to manage the CalPERS portfolio is required of CalPERS business partners and itself.
- C. Performance fee arrangements and incentive compensation plans should align the interests of the fund, Staff and external managers.
- D. CalPERS will seek to capture a larger share of economic returns by using our size to maximize our negotiating leverage. We will also seek to reduce cost, risk and complexity related to manager selection and oversight.
- When deciding how to implement an investment strategy, CalPERS will implement in the most cost effective manner.

Page 5 of 5

- Risk to CalPERS is multi-faceted and not fully captured through measures such as volatility or tracking error.
- A. CalPERS shall develop a broad set of investment and actuarial risk measures and clear processes for managing risk.
- B. The path of returns matters, because highly volatile returns can have unexpected impacts on contribution rates and funding status.
- C. As a long-term investor, CalPERS must consider risk factors, for example climate change and natural resource availability, that emerge slowly over long time periods, but could have a material impact on company or portfolio returns.
- Strong processes and teamwork and deep resources are needed to achieve CalPERS goals and objectives.
- A. Diversity of talent (including a broad range of education, experience, perspectives and skills) at all levels (Board, Staff, external managers, corporate boards) is important.
- B. CalPERS must consider the government agency constraints under which it operates (e.g., compensation, civil service rules, contracting, transparency) when choosing its strategic asset allocation and investment strategies.
- C. CalPERS will be best positioned for success if it: 1.
 - Has strong governance.
 - 2. Operates with effective, clear processes.
 - 3. Focuses resources on highest value activities.
 - 4. Aligns interests through well designed compensation structures.
 - Employs professionals who have intellectual rigor, deep domain knowledge, a broad range of experience and a commitment to implement CalPERS Investment Beliefs.

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.

LPURPOSE

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;

- 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:
 - 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.
 - 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.

- 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.

Table 1

Asset Class	Policy Target	Interim Target	Policy Range Relative to Target
Growth			
—Global Equity	47%	51%	+/- 7%
— Private Equity	12%	10%	+/- 4%
<u>Total Growth</u>	59%	<u>61%</u>	+/- 7%
Income - Global Fixed Income	19%	19%	+/- 5%
Real Assets			
Real Estate	11%	10%	+/- 5%
Infrastructure & Forestland	3%	2%	+/- 2%
Total Real Assets	14%	12%	+/- 5%
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.
- 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:
 - 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.
- 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 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.

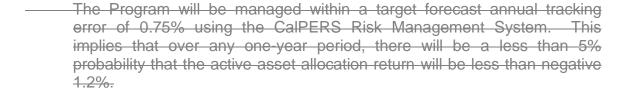
For Global Equity and Global Fixed Income, the cumulative adjustment of the asset class weighting by Staff shall not exceed 50% of the policy range of the asset class within any quarter without advance Committee consent.

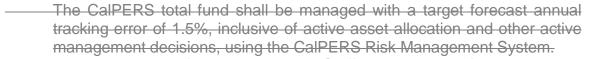
Changes in asset class allocations may be achieved by the movement of capital between asset classes through the trading of securities or through the use of derivatives. The intent is for asset class allocations to be actively managed rather than being allowed to passively drift with recent relative asset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





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").
- 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.

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 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

Dag	n 1	1	of.	1	1
-Page	7. 1	⇉.	<u>u.</u>	丄	_

Annanayad by the Deliey Cub committee	August 10, 1000
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	December 2, 2013
this policy with the Global Derivatives and Counterparty	
Risk Policy	
Approved by the Investment Committee	May 19, 2014
Administrative changes to standardize reporting	May 29, 2014
frequencies to "no less than annually"	
Administrative changes to reflect the Policy Glossary of	May 29, 2014
Terms Update Project	_

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR BENCHMARKS

August 22, 2014

This policy is effective immediately upon adoption and supersedes all previous Benchmarks policies.

LPURPOSE

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 selection and modification of program benchmarks ("Program"). The design of this Policy ensures that investors, managers, consultants, and other participants selected by CalPERS take prudent and careful action when selecting program benchmarks and managing the benchmark modification process. Additionally, use of this Policy assures sufficient flexibility in managing investment risks and returns associated with managing Program benchmarks.

II.STRATEGIC OBJECTIVE

The Program shall be managed to accomplish the following:

- A. Manage total portfolio risk and return characteristics; and,
- B. Establish controls for the selection and modification of benchmarks.

III.RESPONSIBILITIES

- A. The Committee is responsible for approving total fund policy benchmarks.
- 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. Modifying benchmarks as applicable.
- 3. 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. 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 performance of the Program relative to the Policy.
 - 2. Reviewing and approving all requests for benchmark replacements and modifications.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

- A. The performance objective is for the various asset classes and programs to meet or exceed their respective benchmarks.
- B. The benchmark for individual programs or strategies is listed in one of the following attachments:
 - 1. Attachment A: Total Fund Policy
 - 2. Attachment B: Asset Allocation Policies 3.

Attachment C: Asset Class Policies

Policies included in the following categories do not have referenced benchmarks; therefore, they are not listed in the attachments: Investment and Risk Management, Ethics, Operations and Shareowner Activities.

C. Benchmark Definitions – Please see the applicable attachments for a definition of each program's component (i.e., industry, sector, country, etc.) benchmark.

V. INVESTMENT APPROACHES AND PARAMETERS

The purpose of a benchmark is to establish target investment exposures, facilitate the reporting to the Committee no less than annually, and to provide a relative measure to gauge success.

A. Desirable Benchmark Characteristics

The desirable characteristics of a suitable program benchmark are set forth below.

1. Public Market Securities / Programs

- a. Investable The securities contained in the benchmark should represent tradable positions. Ideally, the benchmark should be constructed with low turnover to minimize transactions costs.
- b. Measurable The pricing of the benchmark should be transparent, making it possible to track benchmark performance.
- Unambiguous The names and weights of the securities in the benchmark should be clearly defined.

2. Private Market Programs

- a. Measurable The pricing of the benchmark should be transparent, making it possible to track benchmark performance.
- b. Predetermined The names and weights of the components of the benchmark should be clearly defined.
- c. Representative The components of the benchmark should be suitably representative of the investments and their associated risk and return levels.

B. Benchmark Modification Indicators:

The following factors may indicate that modification of a benchmark should be considered:

- 1. When a more cost efficient alternative is available that captures the risk return characteristics of the asset class or program.
- 2. When a component (i.e., industry, sector, country, etc.) of the benchmark is exposed to economic risks that are of such a degree that the future economic viability of that industry or sector is in doubt. Examples of such indicators:
 - a. The industry, not an individual company, shares common exposure to product liability judgments, settlements, and ongoing litigation that have the potential to exceed the industry's net worth.
 - b. Significant threat of a specific component filing bankruptcy.
 - c. Regulatory or legislative actions or both that have the potential to substantially impair specific component earnings.
 - d. Policy actions in the institutional investor community that, in aggregate, have the potential to have a deleterious effect on specific component share prices.
- In the event that these or other indicators are evidenced, Staff or a member of the Committee may bring the matter before the Committee for due diligence and consideration. This due diligence will include:
 - a. Analysis by Staff, in consultation with third-party experts, that the indicators are evidenced and have the potential to adversely impact the benchmark performance.
 - b. Analysis of the expected effect of the benchmark modification on the total portfolio risk/return characteristics.

C.Benchmark Modification Process

- 1. Staff is responsible for completing the Benchmark Change Control Form, obtaining the appropriate Senior Investment Officer approval, and submitting the form to the Investment Servicing Division Portfolio Analytics Unit ("ISD PA").
- 2. ISD PA Staff is responsible for reviewing the proposed purpose of the benchmark replacement or benchmark component modification.

- 3. The Consultant is responsible for reviewing and approving the benchmark replacement or benchmark component modification.
- The Chief Investment Officer ("CIO") or the COIO must also approve the benchmark replacement or benchmark component modification.
- Once the Consultant and the CIO or COIO has approved the benchmark modification, ISD — PA Staff will notify the Office of Enterprise Compliance, the Asset Allocation/Risk Management Unit and the Custodian.

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.

Approved by the Policy Subcommittee:	June 15, 2009
Adopted by the Investment Committee:	August 17, 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
Administrative Update to Attachment F –	February 7, 2012
Real Asset Policies:	
Administrative Update to Attachment B –	March 1, 2012
Asset Allocation Policies Program Benchmarks:	
Administrative Update to change AIM to Private Equity (PE):	October 10, 2012
Approved by the Investment Committee to add Multi Asset	December 10, 2012
Class Partners Allocation and Program	
Administrative Update to Attachment B –	February 22, 2013
Asset Allocation Policies Program Benchmark:	
Administrative Update to Attachment J – Other (Non-PERF)	May 10, 2013
Investment Portfolio Policies Program Benchmark	
Approved by the Investment Committee:	June 17, 2013

BENCHMARKS	Page 5 of 6
DEIVOI IIVIAI (I (O	1 ago <u>0</u> 01 0

Administrative Change regarding postponement of	
implementation date to:	July 30, 2013
Approved by the Investment Committee:	September 16, 2013
Policy Effective:	July 1, 2013
Administrative Update to overall policy to include reference	December 5, 2013
to Investment Beliefs, and revisions to:	
Attachment A - Total Fund Policy Benchmarks	
Attachment B - Asset Allocation Policies Program	
Benchmarks	
Attachments C, D, E, and J for Program Benchmarks	
Administrative Update to the Investment Approaches and	March 6, 2014
Parameters Section, the attached Program Benchmarks	
(Attachments C through J) and consolidation into	
Attachment C	
Administrative changes to standardize reporting frequencies	June 24, 2014
to the Investment Committee to "no less than annually"	
Administrative Update to align with Asset Allocation Strategy	June 24, 2014
changes approved by IC May 19, 2014	
Administrative changes to reflect the Policy Glossary of	June 24, 2014
Terms Update Project	
Administrative changes to align with Asset Allocation	August 22, 2014
Strategy changes approved by IC May 19, 2014 and	
administrative update to the Income Policy and Real Assets	
Program (Attachment C)	

ATTACHMENT A

TOTAL FUND POLICY BENCHMARKS

August 22, 2014

The total fund policy benchmark is the average return of the asset class benchmark indices weighted by asset class benchmark allocations. The fund benchmark return is the return attributable to the target asset class allocations. Staff employs active strategies in an effort to achieve a fund portfolio return that exceeds the fund benchmark return.

Asset Class	Benchmark	Policy Weight	Interim Target Weight
Growth	-84%Public Equity benchmark + 16% Private Equity benchmark	-59.0%	-61.0%
Income	90% Barclays Long Liabilities + 10% Barclays International Fixed Income Index GDP weighted ex-US	-19.0%	-19.0%
Inflation Assets	75% ILB benchmark + 25% Commodities benchmark	-6.0%	-6.0%
Real Assets	-83% Real Estate benchmark + 8.5% Infrastructure benchmark + 8.5% Forestland benchmark	-14.0%	-12.0%
Liquidity	75% Barclays Treasury 2-10 yr. + 25% 1 mo. T-bill	2.0%	-2.0%

Interim target weights were approved by the Committee effective July 1, 2014. During the transition of implementing the approved strategic policy targets, interim weights will be used to calculate the total fund policy benchmark through June 30, 2015.

ATTACHMENT B

ASSET ALLOCATION (AND TRUST FUNDS) POLICIES PROGRAM BENCHMARKS

August 22, 2014

Policy	Program	Benchmark
Asset Allocation Strategy (Public Employees' Retirement Fund)		Policy Index
California Employers' Retiree Benefit Trust (CERBT) Fund		The benchmark for each asset allocation fund is a weighted benchmark determined by weighting each asset class benchmark by its policy target.
	Global Equity	MSCI-ACWI IMI (Net)
	U.S. Fixed Income	Barclays Long Liability Index
	TIPS	Barclays U.S. TIPs Index, Series
	Commodities	S&P GSCI Total Return Daily
	REITS	FTSE EPRA/NAREIT Developed Liquid (Net)
Judges' Retirement System Fund	Cash Equivalents	91-day Treasury Bill
Judges' Retirement System II Fund		The benchmark for each asset allocation fund is a weighted benchmark determined by weighting each asset class benchmark by its policy target.
	Global Equity	CalPERS Custom FTSE Global Composite
	U.S. Fixed Income	Barclays Long Liability Index
	TIPS	Barclays U.S. TIPs Index, Series
	Commodities	S&P GSCI Total Return Daily
	REITS	FTSE EPRA/NAREIT Developed Index

ASSET ALLOCATION POLICIES PROGRAM BENCHMARKS – ATTACHMENT B Page 3 of 3

Policy	Program	Benchmark
Legislators' Retirement System Fund		The benchmark for each asset allocation fund is a weighted benchmark determined by weighting each asset class benchmark by its policy target.
	Global Equity	CalPERS Custom FTSE Global Composite
	U.S. Fixed Income	Barclays Long Liability Index
	TIPS	Barclays U.S. TIPs Index, Series
	Commodities	S&P GSCI Total Return Daily
	REITs	FTSE EPRA/NAREIT Developed Index
Long-Term Care Fund		The benchmark for each asset allocation fund is a weighted benchmark determined by weighting each asset class benchmark by its policy target.
	Global Equity	MSCI ACWI IMI (Net)
	U.S. Fixed Income	Barclays Long Liability Index
	TIPS	Barclays U.S. Treasury Inflation Protected Securities(TIPS) Index
	Commodities	S&P GSCI Total Return Daily
	REITs	FTSE EPRA/NAREIT Developed Liquid (Net)
Public Employees' Health Care Fund	U.S. Fixed Income	Barclays U.S. Aggregate Bond Index
Supplemental Income Plans (Core Funds)		The performance of each individual investment fund will be evaluated against its appropriate asset class benchmark.

ASSET ALLOCATION POLICIES PROGRAM BENCHMARKS – ATTACHMENT B Page 3 of 3

Policy	Program	Benchmark
Supplemental Income Plans CalPERS Target Retirement Date and POFF Funds		The benchmark for each asset allocation fund is a weighted benchmark determined by weighting each asset class benchmark by its policy target.
	U.S. Equity	Russell 3000 Index
	International Equity	MSCI ACWI ex-USA IMI Index (Net)
	U.S. Fixed Income	Barclays U.S. Aggregate Bond Index
		Barclays U.S. 1-3 Year Government/Credit Bond Index
	Real Assets	The benchmark is a weighted benchmark consisting of:
		Dow Jones-U.S. Select REIT Index; Dow Jones-UBS Roll Select Commodity Index; S&P Global Large MidCap Commodity and Resources Index; Barclays U.S. TIPS Bond Index
	Cash Equivalents	BofA Merrill Lynch U.S. 3- Month Treasury Bill Index

ATTACHMENT C

ASSET CLASS POLICIES PROGRAM BENCHMARKS

August 22, 2014

Policy	Program	Benchmark	
GROWTH POLICIES			
Growth	Total Growth	84%Public Equity benchmark +16% Private Equity benchmark	
Public Equity	Total Public Equity	FTSE CalPERS Global (All-World, All- Capitalization) customized to exclude Board- directed divestments	
Private Equity (PE)	Total Private Equity	(67% FTSE U.S. TMI + 33% FTSE AW ex U.S. TMI) +3% lagged one quarter.	
INCOME POLICIES			
Global Fixed Income Program	Dollar-Denominated Fixed Income Program	Barclays Long Liabilities Index.	
	International Fixed Income Program	Barclays International Fixed Income Index GDP weighted ex-US	
Low Duration Fixed Income Program	Dollar-Denominated Fixed Income High Quality Libor (HQL) Program	Federal Funds based index	
	Dollar-Denominated Fixed Income Short Duration Program	Federal Funds based index	
	Internally Managed Dollar- Denominated Short-Term- Program	Total rate of return of the State Street Bank Short- Term Investment Fund after investment management fees.	
Treasury Inflation Protected Securities (TIPS)	-	Barclays Group Real: U.S. TIPS Index	

ASSET ALLOCATION POLICIES PROGRAM BENCHMARKS – ATTACHMENT C Page 2 of 2

Policy	Program	Benchmark
INFLATION ASSETS POLICIES		
Inflation Assets	Overall Program	75% ILB benchmark + 25% Commodities benchmark
	Commodities Program	Standard & Poor's GSCI Total Return Index
	Inflation-Linked Bond Program	ILB Custom Index: Blend of 67% Barclays Global Inflation-Linked U.S. and 33% Barclays Universal Government Inflation Linked Bond Index ex-US.
REAL ASSETS POLICIES		
Real Assets	Total Real Assets	83% Real Estate benchmark + 8.5%Infrastructure benchmark + 8.5% Forestland benchmark.
	Real Estate Program	NCREIF ODCE (net of fees)
	Infrastructure Program	Consumer Price Index +4%, lagged one quarter
	Forestland Program	NCREIF Timberland
LIQUIDITY POLICIES		
Liquidity Program	Total Liquidity Program	75% Barclays Treasury 2-10 yr. + 25% 1 mo. T-bill
MULTI ASSET CLASS POLICIES		
Multi Asset Class Partners Program	Multi Asset Class Program	Absolute 7.5%
ABSOLUTE RETURN STRATEGIES POLICIES		
Absolute Return Strategies	Absolute Return Strategies Program	1 yr Treasury Note + 5%

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR RISK MANAGEMENT PROGRAM

Mya 29, 2014

This Policy is effective immediately upon adoption and supersedes all previous risk management policies.

I.PURPOSE

The California Public Employees' Retirement System ("CalPERS") Investment Beliefs 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 Risk Management Program ("Program"). The Policy is designed to ensure that an effective risk management system is in place to monitor the risk levels of the CalPERS investment portfolios.

This Policy does not require the elimination of risk but instead strives to achieve a balance between risk and return. CalPERS must take on risk to achieve desired levels of return. The objective of the Program is to ensure that risk taken is prudent and properly managed.

ILSTRATEGIC OBJECTIVE

The Program shall be managed to accomplish the following:

- A. Provide an integrated process for overall risk management on both a consolidated and disaggregated basis;
- B. Identify, measure and communicate risks across the Total Fund; and,
- C. Monitor investment returns as well as risk to determine if risks taken are adequately compensated.

RISKMANAGEMENT Page 2 of 5

III.RESPONSIBILITIES

- A. The Program is intended to manage CalPERS economic and investment risks. It is not intended to manage other risks that CalPERS faces, including operational risks and legal risks. These risks are managed by other units within CalPERS and are addressed within their separate policies.
- B. CalPERS Investment Staff ("Staff") is responsible for the following:
 - Selecting, maintaining and enhancing the risk management tools used by the Program to provide analyses that inform and support the investment actions of the entire CalPERS Investment Staff.
 - Reporting on CalPERS investment risks and associated returns to the Committee and Investment Staff as described in Section V. below.
 - 3. Monitoring compliance with the Policy. Staff shall report material changes and all violations of guidelines to the Committee.
 - Coordinating a working group with representatives from each of the asset classes to collaborate on risk practices and processes.
- C. The Risk Management Consultant and **General Pension Consultant** are responsible for advising Staff on risk management efforts and reporting to the Committee no less than annually.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

The Program shall be benchmarked against the risk management practices of other major pension fund peers to remain in the forefront of pension fund risk management.

V. INVESTMENT APPROACHES AND PARAMETERS

RISK REPORTS

A. Standard Risk Reports

RISKMANAGEMENT Page 3 of 5

Staff shall provide the following reports to the Committee no less than annually, or more frequently as needed. In addition, Risk Staff will review these reports with Investment Staff on a monthly basis.

- 1. Volatility Staff will report on both forecasted total risk and tracking error, measured as one standard deviation for the next year. These measures will be reported for each asset class and the Total Fund. In addition, Staff will document the accuracy of risk forecasts for the Total Fund. Staff will accomplish this by presenting the history of monthly forecast and realized risk for both total risk and tracking error.
- 2. Leverage Staff will provide a report of recourse debt, non-recourse debt and notional leverage by asset class and the Total Fund. The report will also include capital commitments for the illiquid asset classes.
- Currency risk A report summarizing both actual portfolio and benchmark currency exposures of the Total Fund will be provided.
- 4. Counterparty risk Staff will report on counterparty exposure, summarizing net amounts owed to or due from CalPERS investment counterparties. The report will include credit default swap spreads and credit ratings for use in determining when exposure to individual counterparties is to be limited.
 - 5.Concentration risk Staff will aggregate exposures across asset classes to create measures of concentration including industries, countries and security issuer. This information will be presented for both the total fund portfolio and policy benchmark.

B.Additional Risk Reports

- Stress testing During times of market stress, staff will provide a report which estimates the potential loss of market value to the Total Fund portfolio if certain economic events or historical scenarios were to occur.
- Liquidity risk During times of market stress, staff will report on the
 risk that assets cannot trade at or near the previous market price
 because of inadequate trading volume for particular instruments.
 Liquidity risk may also be evaluated based on capital commitments
 and debt restructuring requirements.

RISKMANAGEMENT Page 4 of 5

 Scenario Analysis – Staff will review the impact on total risk and tracking error of proposed new strategies or shifts in existing investments. The risk analysis will be performed at the asset class and Total Fund levels.

C. Risk Limits and Guidelines

- 1. The Policy for Asset Allocation Strategy determines tracking error limits for the Total Fund and active asset allocation. The CalPERS Total Fund shall be managed within a forecast annual tracking error. The active asset allocation component of the Total Fund tracking error shall be managed within a forecast annual tracking error limit. Both of the limits are specified in the Policy for Asset Allocation Strategy.
- The leverage report shall document the amount of leverage in each asset class relative to the leverage limit established in each asset class policy.
- The counterparty report establishes guidelines for each investment counterparty based on credit default swap spreads which will be used to monitor trends in the credit quality of each counterparty.
- 4. A "what-if" risk analysis will be performed for any investment that exceeds the Senior Investment Officer delegated authority. Staff will also perform a "what-if" risk analysis upon the request of other Investment Office Staff or the Committee.

IMPLEMENTATION AND MONITORING

- A. The Risk Management Program shall be continuously reviewed by Staff to enhance the timeliness, accuracy and usability of CalPERS risk management tools.
- B. The Chief Investment Officer, Senior Investment Officers and their professional investment staffs shall incorporate the relevant information generated by the Risk Management Program as part of their investment decision making processes.

RISK MANAGEMENT Page 5 of 5

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.

Approved by the Policy Subcommittee	September 10, 2004
Adopted by the Investment Committee	October 18, 2004
Revised by the Policy Subcommittee	December 10, 2004
Approved by the Investment Committee	February 14, 2005
Revised by the Policy Subcommittee	October 12, 2007
Approved by the Investment Committee	November 13, 2007
Revised by the Policy Subcommittee	November 16, 2009
Approved by the Investment Committee	December 14, 2009
Administrative changes to standardize reporting	May 29,2014
frequencies to the Investment Committee to "no less	
than annually"	
Administrative changes to reflect the Policy Glossary	May 29, 2014
of Terms Update Project	

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR GLOBAL DERIVATIVES AND COUNTERPARTY RISK

May 29, 2014

This policy is effective immediately upon adoption and supersedes all previous Derivatives policies.

LPURPOSE

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

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

The Policy is intended to provide a strategic framework for governance of the use of derivatives and derivatives strategies by the CalPERS Investment Office across both internally and externally managed portfolios. The policy is intended to ensure that CalPERS has effective operational, risk management and compliance controls when using derivatives within the investment process.

II.STRATEGIC OBJECTIVE

The strategic objective of this Policy is to outline the issues that must be addressed for each derivatives strategy, whether internally or externally managed, in regard to guidelines, development of procedures and operational requirements.

III.POLICY SCOPE

A.Benefit Plans/Trusts Covered under the Policy

This Policy applies to the use of derivatives by CalPERS within the following Defined Benefit, Health Care and Defined Contribution Benefit Plans/Trusts:

1. Public Employees' Retirement Fund ("PERF") 2.

Legislators' Retirement System ("LRS")

- 3. Judges' Retirement System I ("JRS I")
- 4. Judges' Retirement System II ("JRS II")
- 5. Long Term Care ("LTC") Fund
- 6. Health Care Fund ("HCF")
- 7. Contingency Reserve Fund ("CRF")
- 8. California Employers' Retiree Benefit Trust ("CERBT") Fund
- Supplemental Income Program Defined Contribution ("SIP DC")
 Funds
 - a.CalPERS 457
 - State Peace Officers' and Firefighters Supplemental Plans ("POFF")
 - c.Supplemental Contribution Program ("SCP") d.
 - Placer County 457/401K
- B. All sections of this Policy shall apply to the use of derivatives by Investment Staff ("Staff") and external managers ("Managers") operating under Investment Management Agreements (IMAs).

- C. The following shall apply to application of the Policy for investments through Registered/Commingled Funds or private investments made through Limited Liability Entities only:
 - 1. Staff must exercise thorough due diligence in assessing the scope of each Limited Liability Entity or Registered/Commingled Fund Manager's use of derivatives, their purpose, experience of the fund Manager's staff in managing these positions, inherent leverage and the Manager's systems, controls and operations in determining appropriateness of these entities for CalPERS investment.
 - 2. Staff shall evaluate periodically (no less than annually) for any changes in the use of derivatives at each Limited Liability Entity or Registered/Commingled Fund to reaffirm the appropriateness of these investments at inception.
 - Limited Liability Entity or Registered/Commingled Fund managers may be required to provide information to Staff on derivatives trading activities within each entity in order for CalPERS to comply with applicable aggregation or position limit regulations and reporting requirements.

IV.RESPONSIBILITIES

A.Staff is responsible for the following:

- 1. Monitor the implementation of and compliance with the Policy including due diligence and oversight of derivatives activities by External Managers, Limited Liability Entities, or Registered/Commingled Fund vehicles.
- Monitor derivatives and counterparty risk exposures.
- 3. Immediately report concerns, problems, material changes and all violations of Guidelines and Policies at the next Committee meeting, or sooner if deemed necessary. These reports shall include explanations of the violations and appropriate recommendations for corrective action.

- 4. Evaluate the use of derivatives across CalPERS to ensure the appropriate investment risk controls are in place.
- 5. Develop internal guidelines and procedures for the use, control and compliance of derivatives.
- Provide input to the Derivatives and Counterparty Risk Committee regarding the content and guidelines contained in the Policy and the Investment Office Derivatives and Counterparty Risk Procedures Manual.
- 7. Use derivative products in a prudent manner in line with established policies, procedures and guidelines.
- B. The Investment Office Derivatives and Counterparty Risk Committee is responsible for the following:
 - Act as a standing committee to provide oversight on the use of derivatives and counterparty risk by CalPERS Investment Office including the development and approval of the Investment Office Derivatives and Counterparty Risk Procedures Manual.
 - 2. Provide updates and guidance to the Operating Committee and the Investment Strategy Group regarding policy issues and matters that are likely to have a significant impact on derivatives markets and the implementation of derivatives strategies within 3 the Investment Office.
- C. The General Pension Consultant ("Consultant") is responsible for monitoring, evaluating and reporting no less than annually to the Committee on the performance of portfolios to ensure that any derivative use does not have a long-term harmful effect on the portfolio.
- D. The External Manager is responsible for all aspects of portfolio management as set forth in each External Manager's IMA with CalPERS and shall fulfill the following duties:
 - 1. Operate under IMAs.
 - 2. Communicate with Staff as needed regarding investment strategy and investment results.

3. Cooperate fully with CalPERS Staff, Custodian and General Pension Consultant concerning requests for information.

V. PERFORMANCE OBJECTIVE AND BENCHMARK

Not Applicable.

VI. INVESTMENT APPROACHES AND PARAMETERS

A.Derivatives Terminology

A derivative is broadly defined as a financial instrument whose value, usefulness and marketability, is derived from or linked to the value of an underlying security, commodity, or index that represents either direct ownership of an asset or the direct obligation of an issuer, otherwise known as the cash market instrument.

Generally, there are five main categories of derivatives identified by the assets from which they are derived:

- 1. Currency derivatives
- 2. Interest rate derivatives 3.
- Credit derivatives
- 4. Commodity derivatives
- Equity derivatives

A derivative position can be expressed using a number of different financial instruments, each of which has a unique regulatory, risk and documentation context:

- 1. A futures contract
- A cleared derivative
- 3.An over-the-counter ("OTC") derivative
- A hybrid instrument that embeds a derivative in a debt instrument.

Derivatives under this Policy include, without limitation:

- 1. Futures contracts
- Options
- 3. Options on futures contracts
- 4. Forward contracts
- 5.Swap agreements
- 6.Security based swap agreements
- 7.Swap contracts with embedded options
- Instruments or contracts intended to manage transaction or currency exchange risk in purchasing, selling or holding investments.

Spot Foreign Exchange transactions with settlement date up to T+5 shall be exempt from this Policy.

Cash transactions in any asset class are not derivatives. Derivatives, as defined in this Policy, shall not be construed to include a broad range of securities, such as Collateralized Mortgage Obligations (CMOs) and convertible bonds.

B.Derivatives Application Permitted

Derivatives may be used to efficiently manage the Total Fund portfolio or individual sub-portfolios risk and return characteristics.

C. Derivatives Application Not Permitted

Derivative applications may only be used to invest in asset classes that are consistent with CalPERS Total Fund Statement of Investment Policy and Asset Allocation Strategy Policy asset categories, implementation strategies, and risk-return characteristics.

D. Derivatives Control Procedures

Staff shall adopt documented control procedures that cover the following areas:

- 1. Accounting and Performance measurement for derivatives.
- Risk Management procedures for evaluating the use of derivatives and monitoring market risk exposure, liquidity needs, and counterparty risk limits.
- Operational Risk procedures that establish a process for evaluating operational activities associated with derivatives to ensure the use of proper systems, controls, staffing, and staff qualifications.
- Regulatory Compliance procedures for ensuring compliance with any regulations in conjunction with derivatives activities undertaken by CalPERS.

E.Derivatives Risk Limitations

Staff should reference the Investment Office Derivatives and Counterparty Risk Procedures Manual, Asset Allocation Strategy Policy, Leverage Policy and asset class investment policies for additional limitations specific to their portfolios inclusive of cash and derivatives instruments.

Managers should reference their IMA including Investment Guidelines for risk limitations specific to their portfolio or to the asset class or trust for which they are managing investments.

VII.CALCULATIONS AND COMPUTATIONS

Not Applicable

VIII.GLOSSARY OF CALPERS-SPECIFIC TERMS

Italicized terms appearing in the Policy are CalPERS specific in nature and redefined in the CalPERS Specific Glossary of Terms

÷

GLOBAL DERIVATIVES AND COUNTERPARTY RISK	——————————————————————————————————————
1	
Adopted by the Investment Committee	November 18, 2013
The following legacy Derivatives Policies were repealed	November 18, 2013
Derivatives – External Money Managers	
Development of Derivatives Strategies	
Administrative changes to standardize reporting frequencies to	May 29, 2014
the Investment Committee to "no less than annually"	
Administrative changes to reflect the Policy Glossary of Terms	May 29, 2014
Update Project	-
•	

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR LEVERAGE

May 29, 2014

This policy is effective immediately upon adoption and supersedes all previous Leverage 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.

The use of financial leverage magnifies investment returns, both positively and negatively, and could increase the volatility of returns. Market illiquidity may substantially increase the risk of a leveraged investment particularly under certain crisis scenarios. Leverage needs to be managed prudently and within specified limits.

The purpose of the Leverage Policy ("Policy") is to set forth a framework for comprehensively identifying, measuring, managing, and reporting various forms of leverage. It requires that the Asset Allocation/Risk Management unit report on leverage to the Committee. The Policy also specifies limits on forms of leverage not included in existing policies and requires that leverage be aggregated when reporting at the Total Fund.

II.STRATEGIC OBJECTIVE

The Policy is intended to set limits and standards on the use of leverage that reasonably balance investment flexibility with risk management. Consistent measurement and periodic reporting of leverage as directed in this Policy should enable CalPERS to employ leverage in the programs and time periods when the expected return to risk tradeoff is most attractive.

The Policy is also intended to result in greater consistency across investment units, and in greater ability of the Committee to direct policies concerning leverage. A Fund-wide Policy should also better account for the effect that leverage may have on debt costs and in the ability to maintain asset class weights within policy ranges.

LEVERAGE Page 2.of.5

III.RESPONSIBILITIES

- A. CalPERS Investment Staff ("Staff") is responsible for the following:
 - 1. Staff in each asset class unit are responsible for monitoring leverage, complying with policies, and reporting no less than annually to the Risk Management unit, regarding actual leverage for the programs that the asset class unit manages. The Asset Allocation/Risk Management unit is responsible for leverage policy development and monitoring and reporting leverage aggregated at the Total Fund level.
 - Monitoring the implementation of, and compliance with, the Policy. Staff shall report concerns, problems, material changes, and all violations of the Policy at the next Committee meeting, or sooner if deemed necessary. These reports shall include explanations of any violations and appropriate recommendations for corrective action.
 - 3. The Asset Allocation/Risk Management unit shall report no less than annually to the Committee on:
 - a. Recent estimates by asset class on recourse debt, nonrecourse debt, and notional leverage. Leverage for the Currency, Credit Enhancement, and Securities Lending programs shall be reported separately from asset class leverage.
 - b. The amount of debt previously classified as recourse that CalPERS paid in the prior year.
- B. The **General Pension Consultant** ("Consultant") is responsible for evaluating the Policy.

-11/	,	PERF	DRMANCE	OR IEC	TIV/F		ENCHMARK
1 4	-			ODOLO		AITO D	LITOIIIIII

Not applicable.

LEVERAGE Page 3.of.5

V. INVESTMENT APPROACHES AND PARAMETERS

A. Prohibitions

- 1. Use of leverage is prohibited unless expressly permitted in the relevant asset class or program policy.
- 2. Direct debt, except for unsettled loss positions on non-exchange traded contracts, is prohibited unless authorized by the Committee for a defined purpose.

B.Guidelines

1. All Forms of Leverage

- a. The Policy applies to all CalPERS investments.
- b. In determining the appropriate amount of leverage where permitted, Staff shall consider relevant factors such as the expected incremental return and risk, debt service coverage ratio, stability and certainty of cash flows, and liquidity.
- A capital commitment does not represent leverage or direct debt.

2. Non-recourse Debt

- a. Policies for Private Real Estate, Infrastructure, and Forestland shall include limits on the use of non-recourse debt-
- b. The amount of non-recourse debt shall be measured by the debt to market value ratio of the asset, or by the debt to cost ratio if obtaining an approximate market value is not feasible as determined by the Staff responsible for the investment.
- c. The policies of Global Equity (public market equity) and AIM (private equity) shall address the management of leverage as a risk factor, and specify limits as appropriate.

LEVERAGE Page 4.of.5

3. Recourse Debt

- a. Since recourse debt is a call on capital of the CalPERS Total Fund, the use of recourse debt may be permitted as an exceptional case if approved in the relevant program policy.
- b. Any policy that permits the use of recourse debt shall include the following terms:
 - (1)a limit on the amount of recourse debt;
 - (2) diversification requirements on the assets with recourse debt; and,
 - (3) due diligence standards on the assets with recourse debt.
- c. Recourse debt is prohibited for investments in Absolute Return Strategies ("ARS") or other programs that do not have complete transparency on all investment positions. The maximum potential loss on these positions shall be the amount of investment.

4. Notional Leverage

- a. Notional leverage results in exposure to non-cash-likesecurities that exceeds the value of the capital employed. It is created primarily through the use of derivative instruments or reinvestment of cash collateral of lent securities.
- b. Examples of notional leverage include the following:
 - (1) A strategy involving long positions in equity futures and investment of the collateral in non-cash-like securities: and.
 - (2) A securities lending program in which the cash collateral is invested in non-cash-like securities.
- c. Any program policy that permits the use of notional leverage shall include risk management guidelines and a limit on the amount of notional leverage.

LEVERAGE Page 5 of 5

- d. The use of currency swaps does not result in notional leverage because the swaps merely convert exposure from one currency to another.
- e. For any program or asset class, the amount payable on over-the-counter financial contracts may not exceed \$500 million at any time unless the value of the debt in excess of \$500 million is secured by an equivalent value of dedicated cash-like securities, except for brief periods as a result of extreme market volatility.
- f. Calculation of **net exposure** requires access to information on portfolio investments. For ARS investments and other strategies for which this information is unavailable, net exposure shall be measured as the estimated global equity beta. A program equity beta in excess of 100%, inclusive of dedicated cash-like securities, represents notional leverage.
- g. The notional value of noncash collateralized equitization shall not exceed the gross notional value of the ARS program.

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.

Approved by the Policy Subcommittee	April 17, 2009
Adopted by the Investment Committee	May 11, 2009
Administrative changes made due to Policy Review Project	June 16, 2009
Revised by the Policy Subcommittee	October 17, 2011
Approved by the Investment Committee	November 14, 2011
Administrative changes to standardize reporting frequencies to	May 29, 2014
the Investment Committee to "no less than annually"	
Administrative change to reflect the Policy Glossary of Terms	May 29, 2014
Update Project	_

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

REGARDING DIVESTMENT

May 29, 2014

This Policy is effective immediately upon adoption and supersedes all previous Divestment 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 CalPERS policy ("Policy") for responding to external or internal initiatives to cause CalPERS to sell investments or refrain from making additional investments ("Divesting") for the purpose of achieving certain goals that do not appear to be primarily investment-related, such as promoting social justice ("Divestment Initiatives"). Typically, Divestment Initiatives focus on companies that do business in a specified country, are engaged in a specified industry, or in specific practices deemed undesirable by federal and state law (e.g., human rights violations) ("Targeted Companies").

CalPERS operates in a unique and complex social-economic milieu. CalPERS investment in a company does not necessarily signify that it approves of the company's policies, products, or actions. CalPERS, nevertheless, wants companies in which it invests to meet high corporate governance, ethical, and social standards of conduct. The Committee believes that this generally will promote superior long-term investment performance. CalPERS has a distinguished history of constructively engaging companies that fail to meet CalPERS standards of conduct. CalPERS prefers constructive engagement to Divesting as a means of affecting the conduct of entities in which it invests.

CalPERS Board of Administration ("Board") and its Staff have fiduciary duties of loyalty and prudence, pursuant to the California Constitution, Article XVI, Section 17, and Government Code (GC) Section 20151, to invest "with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with those matters would use in the conduct of an enterprise of a like character and with like aims." (GC Section 20151(c).)

DIVESTMENT POLICY Page 2 of 4

These fiduciary obligations generally forbid CalPERS from sacrificing investment performance for the purpose of achieving goals that do not directly relate to CalPERS operations or benefits. Divesting appears to almost invariably harm investment performance, such as by causing transaction costs (e.g., the cost of selling assets and reinvesting the proceeds) and compromising investment strategies.

In addition, there appears to be considerable evidence that Divesting is an ineffective strategy for achieving social or political goals, since the usual consequence is often a mere transfer of ownership of divested assets from one investor to another. Investors that divest lose their ability as shareowners to influence the company to act responsibly.

This Policy, therefore, generally prohibits Divesting in response to Divestment Initiatives, but permits CalPERS to use constructive engagement, where consistent with fiduciary duties, to help Divestment Initiatives achieve their goals.

ILSTRATEGIC OBJECTIVE

The objective of this Policy is to guide CalPERS actions with respect to Divestment Initiatives.

III.RESPONSIBILITIES

- A. CalPERS Investment Staff ("Staff") is responsible for the following:
 - All aspects of portfolio management, including monitoring, analyzing, and evaluating performance relative to the appropriate benchmarks. The benchmark for the Divestment Policy is specified in the Benchmark Modification and Benchmarks Policy.
 - Developing and maintaining a process regarding Targeted Investments, which includes analyzing data obtained as part of due diligence and portfolio management, and reporting the results of this process (including making recommendations, as appropriate) to the Committee
 - 3. Monitoring implementation of, and compliance with, this Policy. Staff shall report concerns, problems, material changes, and all violations of this Policy at the next Committee meeting, or sooner if deemed necessary. These reports shall include explanations of any violations and appropriate recommendations for corrective action. In the event a Divesting decision is made, Staff shall review

the decision and, based on those reviews, make appropriate recommendations to the Committee no less than annually.

B. Staff may consult with its and the Board's investment consultants, and, through the Legal Office, fiduciary counsel, for advice about responding to Divestment Initiatives.

IV.STATEMENT OF POLICY

CalPERS will undertake constructive engagement in support of Divestment Initiatives to the extent the Committee determines to be appropriate or as required by law, but CalPERS will not sell investments in Targeted Companies or refrain from investing in them in response to Divestment Initiatives except as follows:

- A. CalPERS will sell Targeted Company investments or refrain from making them to the extent investment in the Targeted Company is imprudent and inconsistent with fiduciary duties. CalPERS recognizes that the prudence of an investment may depend on its purpose. For example, it might be imprudent to retain an investment in an actively managed portfolio, but prudent to retain it in an indexed portfolio or as part of a long-short absolute return strategy
- B. CalPERS will comply with federal laws requiring Divesting, if any.
- C. To the extent required by law and consistent with fiduciary duties, CalPERS will comply with constitutional California state laws that require Divesting.
- D. This Policy does not require CalPERS to re-examine investment policies and practices in effect when this Policy was adopted to determine whether they were influenced by Divestment Initiatives or have or will result in Divesting.

V. INVESTMENT APPROACHES AND PARAMETERS

Approaches and parameters are provided in the existing policies for the Targeted Investments.

VI.GLOSSARY OF CALPERS-SPECFIC TERMS

There are no CalPERS specific terms contained in this Policy.

DIVESTMENT POLICY	Page 4.of 4
DIVEOTIVILIVI I OLIO I	1 440 7 01 7

Approved by the Policy Subcommittee	December 15, 2008
Adopted by the Investment Committee	February 17, 2009
Admin changes due to Policy Review Project	June 16, 2009
Admin changes due to adoption of Benchmark Policy	September 29, 2009
Administrative changes to standardize reporting frequencies	May 29, 2014
to the Investment Committee to "no less than annually"	-
Administrative changes to reflect the Policy Glossary of Terms	May 29, 2014
Update Project	

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR OPPORTUNISTIC PROGRAM

May 29, 2014

This policy is effective immediately upon adoption and supersedes all pervious Opportunistic Program 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 Opportunistic Program ("Program"). The design of the Policy ensures that investors, managers, consultants, and other participants selected by CalPERS take prudent and careful action while managing the Program. Additionally, use of the Policy assures sufficient flexibility in making investment decisions.

The Program enables greater investment in assets perceived to be substantially undervalued, and the Policy specifies guidelines to manage the concurrent risks. The Program also permits the establishment of innovative portfolios.

ILSTRATEGIC OBJECTIVE

The Program shall be managed to accomplish the following:

- A. Outperform the program benchmark, and
- B.Invest prudently and in a diversified manner.

III.RESPONSIBILITIES

A. The Committee is responsible for review and approval of the Policy and corresponding delegation of authority.

- B. The Chief Investment Officer ("CIO") and the Senior Investment Officers ("SIO"s) are collectively responsible for the Program including:
 - 1. All aspects of portfolio management including monitoring, analyzing, and evaluating performance relative to the appropriate benchmark.
 - Clear assignment of investment management responsibility for each Program asset.
 - 3. Reporting to the Committee no less than annually, and more frequently if needed, about Program investments, returns, risks, and activity.
 - 4. Monitoring the implementation of, and compliance with, the Policy. Staff shall report concerns, problems, material changes, and all violations of the Policy at the next Committee meeting, or sooner if deemed necessary. These reports shall include explanations of the violations and appropriate recommendations for corrective action.
 - 5. Providing recommendations on Policy revisions to the Committee.
- 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.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

The benchmark for the Program is specified in the Benchmarks Policy.

The performance objective is to outperform the Program benchmark over rolling three-year periods, net of all Program costs and fees.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Allocation

The market value of Program investments shall not exceed 3% of the Total Fund. A violation of this limit shall be restored in a timely manner not to exceed three months, with the exact time period primarily dependent on transaction costs and liquidity.

B. Any transfer of assets between a Program account and another CalPERS account requires CIO pre-approval of all terms of the transfer.

C.Leverage

The Program shall be managed in compliance with the leverage policy. The use of recourse debt in the Program is prohibited. For each Program investment, the maximum potential loss shall be the amount of the investment.

D Permitted Instruments

Any asset not prohibited by this policy is permitted. Typically, all investable public and private securities or assets are permitted.

E.Prohibited Instruments

The following investments are prohibited:

1. Tobacco company investments, 2.

Uncovered options; and,

3. Any investment prohibited by CalPERS Insider Trading Policy or Restricted Company list.

F. Diversification Guidelines

The market value of Program non-publicly traded investments (excluding fixed income securities) shall not represent more than 1.5% of the Total Fund.

The market value of any Program strategy or type of asset shall not exceed 2% of the Total Fund.

The aggregate market value of Program assets of a single country other than the United States shall not exceed 1% of the Total Fund.

G.Risk Monitoring

Staff shall generate monthly estimates of both realized and forecast Program risks relative to benchmark.

H. External Manager Investment Guidelines

Program investments may be managed internally, or by external managers, or by a combination of internal and external managers.

1. Manager Selection

- a. Managers retained in the Program shall have demonstrated expertise in their assigned mandate.
- b. The selected managers shall be registered, or appropriately exempt from registration, with the Securities and Exchange Commission.
- 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. Manager guidelines shall not conflict with any CalPERS investment policy.

Implementation of this Program shall comply at all times with the Manager guidelines and all CalPERS investment policies.

VI.DERIVATIVES AND LEVERAGE

A. Strategies

The Program shall be managed in compliance with the Global Derivatives and Counterparty Risk Policy. Financial futures contracts, forward contracts, swaps, options, combinations of these derivatives, exchange traded funds, and structured notes may be used in the Program to take investment positions or to hedge investment exposures.

B. Justification

Derivatives have several advantages over securities including:

1. Minimizing transaction costs,

- 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 in the Program shall be in compliance with all CalPERS policies. Guidelines intended to mitigate key derivative risks are described below:

- 1. Pricing risk,
- 2. Liquidity risk; and, 3.

Counterparty risk.

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

VII.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.

VIII.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.

Approved by the Policy Subcommittee	June 15, 2009
Adopted by the Investment Committee	August 17, 2009
Admin changes due to adoption of Benchmark Policy	September 29, 2009
Admin changes to update template format and to align this	December 2, 2013
policy with the Global Derivatives and Counterparty Risk Policy	
Administrative changes to standardize reporting frequencies to	May 29, 2014
the Investment Committee to "no less than annually"	-
Administrative changes to reflect the Policy Glossary of Terms	May 29, 2014
Update Project	_

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR PLAN LEVEL AND ASSET CLASS TRANSITION PORTFOLIOS

June 17, 2014

This policy is effective immediately upon adoption and supersedes all previous Plan Level and Asset Class Transition Portfolio policies.

LPURPOSE

The California Public Employees' Retirement System ("CalPERS") Investment Beliefs 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 use of Plan Level and Asset Class Transition Portfolios ("Transition Portfolios"). The design of this Policy ensures that CalPERS staff take prudent and careful action while utilizing Transition Portfolios. Additionally, this Policy assures sufficient flexibility in managing investment risks in addition to establishing appropriate controls governing the use of Transition Portfolios.

II.STRATEGIC OBJECTIVE

Transition Portfolios allow for the separation of cost and performance impacts on investment programs or asset classes, related to cash or security movements and transactions not associated with the on-going investment management of affected portfolios. Segregating these costs and performance impacts is in line with standard market practice. Furthermore, transactions within Transition Portfolios must adhere to additional levels of oversight to monitor compliance with permitted use restrictions and verify transactions.

A. Plan Level Transition Portfolios may be established for any asset class for the purpose of achieving asset allocation or total fund related investment objectives. Plan Level Transition Portfolio usage may be initiated by the Committee, or by the Chief Investment Officer ("CIO") or designated Staff operating within their respective delegated authority. All transaction costs and investment performance for these portfolios flows directly to the Total Fund, outside an individual asset class. Plan Level Transition Portfolios may only be used for one or more of the following purposes:

- Rebalancing between Asset Classes to achieve Asset Allocation objectives;
- 2. Raising or investing cash at the Total Fund level; or
- 3. Trading to effectuate Total Fund investment objectives.
- B. Asset Class Transition Portfolios may be established within any asset class for the purpose of achieving asset class specific objectives. With advance approval from the CIO or Chief Operating Investment Officer ("COIO"), an Asset Class Transition Portfolio may be used by designated Staff of the specific asset class operating within his or her delegated authority. All transaction costs and investment performance associated with the use of the Asset Class Transition Portfolio will flow to the asset class level. Asset Class Transition Portfolios may only be used for one or more of the following purposes:
 - 1. Terminating and funding external asset managers within the asset class:
 - 2. Rebalancing between strategies and investment managers within an asset class; or,
 - 3. Raising or investing cash within the asset class.
- C. Transition Portfolios shall be subject to additional oversight in order to:
 - 1. Establish a control structure to ensure and validate Transition Portfolio transactions are executed as intended; and,
 - 2. Confirm that the Transition Portfolios are used for a permitted purpose and in the manner set forth by this and other related Investment Policies.

III.RESPONSIBILITIES

Only the CIO or designated Staff may initiate the use of a Plan Level Transition Portfolio. The SIO from the specific asset class may initiate the use of an Asset Class Transition Portfolio after receiving approval from the CIO or COIO in advance.

- A. The CIO and Asset Class Investment Staff are responsible for the following:
 - 1. For Plan Level Transition Portfolios, adherence to this Policy, the Statement of Investment Policy for Asset Allocation Strategy and all aspects of portfolio management, including analysis, investment transactions, and monitoring.
 - For Asset Class Transition Portfolios, adherence to this Policy and all aspects of portfolio management, including analysis, investment transactions, and monitoring.

B. Investment Servicing Staff is responsible for:

- Control of the movement of cash and securities at the CalPERS

 Custodian.
- 2. Creating and managing necessary procedures related to the Transition Portfolios and oversight of their use.
- 3. Reporting to the Committee no less than annually on the usage of the Transition Portfolios.
- 4. Monitoring the implementation of, and compliance with, this Policy. The COIO shall report concerns, problems, material changes, and all violations of this Policy at the next Committee meeting, or sooner if deemed necessary. These reports shall include explanations of any violations and appropriate recommendations for corrective action.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

Not applicable

V. INVESTMENT APPROACHES AND PARAMETERS

All assets within the Transition Portfolios will be held by the CalPERS Custodian and all transactions will follow CalPERS established execution and settlement procedures.

VI.CALCULATIONS AND COMPUTATIONS

Staff, investment managers, consultants, and other participants selected by CalPERS shall make all decisions and calculations based on market value and holdings details as recorded by the 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.

Approved by the Policy Subcommittee	November 16, 2009
Adopted by the Investment Committee	December 14, 2009
Administrative changes due to organization changes	April 16, 2012
Administrative change to standardize reporting	June 17, 2014
frequencies to the Investment Committee to "no less than	
annually"	
Administrative changes to reflect the Policy Glossary of	June 17, 2014
Terms Update Project	

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR ROLE OF PRIVATE ASSET CLASS BOARD INVESTMENT CONSULTANTS

May 29, 2014

This policy is effective immediately upon adoption and supersedes all previous Role of Private Asset Class Board Investment Consultants policies.

LPURPOSE

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 Role of *Private Asset Class Board Investment Consultants* ("Private Asset Class Board Investment Consultants").

II.STRATEGIC OBJECTIVE

The strategic objective of this Policy is to define the roles of the Private Asset Class Board Investment Consultants to support our mission in advancing the financial and health security for all who participate in CalPERS.

III.RESPONSIBILITIES

- A. CalPERS Investment Staff ("Staff") is responsible for monitoring the implementation of, and compliance with, the Policy. Staff shall report concerns, problems, material changes, and all violations of the Policy at the next Committee meeting, or sooner if deemed necessary. These reports shall include explanations of any violations and appropriate recommendations for corrective action.
- B. The Private Asset Class Board Investment Consultant is responsible for:
 - 1. Strategy and Policy Analysis
 - Review and opine on investment policies and delegations of authority.

- b. Review and opine on strategic and annual plans.
- c. Provide forecasts of asset class returns for total fund asset allocation purposes.
- d. No less than annually, provide analysis of market developments, market conditions, and macro-level view of market opportunities to the Committee.

2.Performance Analysis and Monitoring

- a. No less than annually report to the Committee regarding investment performance and portfolio risk and attribution analysis; Monitor and report on deviations from policy benchmark performance and long-term expected performance.
- b. Provide guidance on performance measurement methodologies.
- c. Review and opine annually on appropriateness of asset
- d. Validate accuracy of Real Estate incentive fee calculations 1.

3.Independent Advisor to the Committee

- a. Provide opinion to the Committee on investments above Staff's delegation of authority.
- b. Evaluate whether investment transactions comply with applicable Committee policy and, if applicable, Staff's delegation of authority and provide opinion regarding compliance.
- c. Perform annual reviews of major asset class sub-component programs and provide opinion on performance, risk, manager selection and monitoring processes, and on internal control process and staffing.

⁴ This is a current role of the Real Estate Board Investment Consultant that could be re-evaluated overtime.

- d. Perform annual review of the program and provide opinion on performance, risk, manager selection and monitoring processes, and on internal control processes and staffing.
- e. Provide independent advice to the Committee on all aspects of the program and its implementation.
- f. Provide analysis and reports consistent with Policy, as directed by the Committee.
- 4. Except as noted in Section III.B.5, The Private Asset Class Board Investment Consultants shall not:
 - a. Manage assets for CalPERS.
 - b. Perform work for Staff on special projects.
 - c. Provide opinions to Staff regarding specific investment
- 5. In limited circumstances, the Private Asset Class Board Investment Consultant may be engaged for roles enumerated in section III.B.4.a-c if the Private Asset Class Board Investment Consultant possesses unique knowledge or expertise that is not available through other providers. Such an arrangement must be approved by the Committee prior to engagement. In situations where adequate time is not available to request Committee approval, Staff may request approval from the Chair of the Committee. Upon approval of the request, Staff will notify the other Committee members.

IV. INVESTMENT TRANSACTIONS – PRIVATE ASSET CLASS BOARD INVESTMENT CONSULTANTS – REAL ASSETS

- A. Investment Transactions within Staff's delegated authority
 - 1. Investment transactions less than or equal to \$50 million:
 - a. Staff will analyze the transaction and make the investment
 - An Investment Pool Consultant, other than the Private Asset Class Board Investment Consultant may provide a *Prudent*

- Person Opinion to Staff at the discretion of the Senior Investment Officer ("SIO").
- c. The Private Asset Class Board Investment Consultant may observe transaction discussions at the request of the SIO.
- 2.Investment transactions that exceed \$50 million²:
 - a. Staff will analyze the transaction and make the investment decision.
 - b. An Investment Pool Consultant, other than the Private Asset Class Board Investment Consultant will provide a Prudent Person Opinion to Staff.
 - c. The Private Asset Class Board Investment Consultant may observe transaction discussions at the request of the SIO.
- B. Investment transactions exceeding Staff's delegated authority:
 - 1. Staff will analyze the transaction and provide a recommendation to the Committee.
 - 2. An Investment Pool Consultant, other than the Private Asset Class Board Investment Consultant will provide a Prudent Person Opinion to Staff.
 - The Private Asset Class Board Investment Consultant will participate in transaction discussions.
 - 4. The Private Asset Class Board Investment Consultant will provide an opinion on the transaction to the Committee.

C. Opinion Standard

The Private Asset Class Board Investment Consultant and the Investment Pool Consultants shall provide a Prudent Person Opinion on the merits of a transaction following a fiduciary standard of care.

²-All new investments and aggregated commitment of additional capital to a single investment or a single—manager within a fiscal year timeframe.

V.INVESTMENT TRANSACTIONS – PRIVATE ASSET CLASS BOARD INVESTMENT CONSULTANTS – PRIVATE EQUITY

- A. Investment Transactions within Staff's delegated authority
 - 1. Investment transactions considered Fund investments, Co-Investments or *Customized Investment Accounts* that invest alongside other similarly structured funds in the same investments:
 - a. Staff will analyze the transaction and make the investment decision.
 - An Investment Pool Consultant, other than the Private Asset Class Board Investment Consultant may provide an independent due diligence report to Staff at the discretion of the SIO.
 - c. The Private Asset Class Board Investment Consultant may observe transaction discussions at the request of the SIO.
 - Investment transactions considered a Customized Investment Account with an individual mandate that does not invest alongside other similarly structured funds in the same investments or a Direct Investment:
 - a. Staff will analyze the transaction and make the investment decision.
 - b. An Investment Pool Consultant, other than the Private Asset Class Board Investment Consultant will provide a Prudent Person Opinion to Staff.
 - c. The Private Asset Class Board Investment Consultant may observe transaction discussions at the request of the SIO.
- B. Investment transactions exceeding Staff's delegated authority:
 - 1. Staff will analyze the transaction and provide a recommendation to the Committee.

ROLE OF PRIVATE ASSET CLASS BOARD INVESTMENT CONSULTANTS

Page 6 of 6

- An Investment Pool Consultant, other than the Private Asset Class Board Investment Consultant will provide a Prudent Person Opinion.
- The Private Asset Class Board Investment Consultant will
 participate in transaction discussions and provide an opinion on the
 transaction to the Committee.

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.

Approved by the Policy Subcommittee	June 15, 2011
Adopted by the Investment Committee	August 15, 2011
Approved by the Investment Committee	October 15, 2012
Administrative changes to standardize reporting	May 29, 2014
frequencies to the Investment Committee to "no less	
than annually"	
Administrative changes to reflect the Policy Glossary of	May 29, 2014
Terms Update Project	_

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR CUSTODY MANAGEMENT

November 13, 2007

This policy is effective immediately upon adoption and supersedes all previous Custody Management Policies.

I.PURPOSE

The California Public Employees' Retirement System ("CalPERS") Investment Beliefs 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.

Pursuant to California Government Code Section 20172, the CalPERS Board has statutory authorization to "...retain a bank or trust company to serve as custodian for safekeeping, delivery, securities valuation, investment performance reporting, and other services in connection with investment of the retirement fund."

This document sets forth the policy ("Policy") for custody of California Public Employees' Retirement System ("CalPERS") assets and assures that custodians and other participants selected by CalPERS take prudent and careful action while safeguarding CalPERS assets.

ILPOLICY OBJECTIVE

This Policy shall ensure the safe, efficient, and accurate custody of CalPERS assets. To carry out this Policy, CalPERS will contract with custodial firms with sufficient financial strength to protect the interests of CalPERS. Contracted custodians ("Custodian") will be required, at a minimum, to demonstrate a long-term credit rating of Moody's A1 and S&P A+ (U.S. firms) or a similar measure of financial strength (non-U.S firms).

III.RESPONSIBILITIES

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

1. Monitoring the implementation of, and compliance with, the Policy.

Staff shall report concerns, problems, material changes, and all

- violations of the Policy immediately and in writing to the Committee. These reports shall include explanations of any violations and appropriate recommendations for corrective action.
- Notifying Custodian in writing of the appointment, suspension, or termination of any investment manager.
- Developing and recommending to the Committee the criteria and methodology for Custodian selection, consistent with CalPERS enterprise-wide competitive solicitation and contracting procedures.
- Ensuring that all original investment documents including deeds, titles, partnerships, and insurance contracts are safeguarded in accordance with CalPERS enterprise-wide Business Continuity Plan.
- B. Custodian duties include, but are not limited to, the following:

Custodial, Accounting, and Reporting Services

- 1. Providing the custodial, accounting and reporting services for eligible assets held in CalPERS name, in a manner consistent with industry standards and subject to strict internal controls. The Custodian shall provide services for any assets held by additional agents or sub-custodians appointed by CalPERS or the Custodian. These services shall be provided in accordance with, but not limited to, the following stipulations:
 - a. The Custodian shall establish on its books and records, a separate CalPERS account (Account), or sub accounts for purposes determined by CalPERS, consisting of all assets owned along with net asset values or market values, where applicable, and earnings, income, and other cash flows related to these assets.
 - b. The Custodian shall hold and direct its agents or subcustodians to hold all securities and other CalPERS assets in separate accounts or sub-accounts. The assets are not to be commingled with general assets or deposits of the Custodian or sub-custodians, except for cash awaiting instructions or other disposition. Custodial assets are the sole property of CalPERS and not general assets of the Custodian. CalPERS agrees that the securities and other CalPERS assets may be held by the Custodian or its sub-

- custodians and may be maintained by them in the securities depositories, clearing agencies, and book entry systems agreed upon.
- c. The Custodian shall release and deliver, or direct its agents or sub-custodians to release and deliver, CalPERS assets upon Proper Instructions as specified in the custodial contract, as amended from time to time.
- d. The Custodian shall claim any security they believe another institution, depository, and third party agent holds and registers in CalPERS name.
- e. The Custodian shall register all of CalPERS assets in the name of CalPERS or as required by the depository provided books and records, which are maintained by the Custodian showing CalPERS ownership.
- f. The Custodian may open one or more cash accounts when disbursing or remitting assets in the transition process to and from CalPERS.
- g. The Custodian shall collect, on behalf of CalPERS, income, interest, dividends, refunds, and other proceeds accruing to securities of CalPERS, except for securities loaned by third parties.
- h. The Custodian shall pay out or direct its agents or subcustodians to pay out money of CalPERS and adhere to Proper Instructions provided in the custodial contract, as amended from time to time.
- i. The Custodian shall process proxies or proxy materials in accordance with CalPERS proxy voting policy and procedures, as amended from time to time.
- j. The Custodian shall transmit promptly to CalPERS or the Investment Manager all written information received concerning assets held in the Fund in its custody.
- k. The Custodian shall keep accurate and detailed accounts of all investments, receipts, and other transactions involving CalPERS. These records shall be separate for each subaccount and include proof of all transactions involving

- securities held in the account. The securities shall be priced and valued by a third party pricing service approved by CalPERS.
- I. The Custodian shall process all cash movements across its books in full compliance with the state of California regulations regarding claims and remittances.
- m. The Custodian shall provide assurances, through a thirdparty review acceptable to CalPERS, that internal controls are sufficient to protect CalPERS assets.
- n. The Custodian shall provide electronic tools or systems which will enable CalPERS Staff to fulfill its duties to manage, monitor and report on investments and investment performance.
- Upon request of CalPERS, the Custodian shall provide to designated CalPERS consultants relevant information regarding CalPERS assets, accounting, and performance.

Fiduciary Relationship

2. Custodians, sub-custodians, and agents shall acknowledge their fiduciary relationship with CalPERS. They shall discharge each of their duties therein and exercise each of their powers (as those duties and powers are defined herein), with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters uses in the conduct of an enterprise of a like character and with like aims. The Custodian is required to contractually inform all sub-custodians and agents of this fiduciary relationship.

Ethics and Conflicts of Interest

3. Custodians shall comply with CalPERS policies and procedures, as amended from time to time, relating to ethics and conflicts of interest.

Custody of Assets Outside the United States

4. The Custodian shall have a comprehensive system, acceptable to CalPERS, of selecting and evaluating sub-custodians and

- monitoring their internal control structures, performance and financial conditions.
- 5. All sub-custodians and agents appointed by the primary Custodian to hold assets outside the United States must comply with the responsibilities of the Custodian listed in Section III.B. of this Policy and with the standards listed below for eligible foreign custodians.
- 6. Eligible foreign custodians are entities that are incorporated or organized under the laws of a country other than the United States and meet the following criteria:
 - a. Qualified foreign banks or majority-owned direct or indirect subsidiaries of U.S. banks or bank holding companies.
 - b. Securities depositories or clearing agencies that act as systems for the central handling of securities or equivalent book entries in the countries that are regulated by foreign financial regulatory authorities.
 - c. Securities depositories or clearing agencies that act as transnational systems for the central handling of securities or equivalent book entries.

IV.CUSTODIAN LIABILITY

The Custodian shall be fully liable for any loss to, or diminution in, the value of the Fund resulting from the Custodian's own acts or omissions, if the resulting loss or diminution in value of the Fund is the proximate result of the Custodian's breach of its duty of care as defined in the custodial contract, as amended or any other negotiated contract between the Custodian and CalPERS, except when such acts or omissions are in compliance with Proper Instructions. This liability shall extend to the acts or omissions of the Custodian's agents and subcustodians.

CalPERS may, at its discretion, limit the liability of the Custodian when doing so does not compromise the rights of CalPERS or the safety or security of CalPERS assets.

V.EVALUATION

A. Time and accuracy are of the essence for the delivery of services under this Policy. The custodial contract shall provide for the measures of the standards of service, its timeliness, and its accuracy.

Page 6 of 6

- B. Each year, and at the end of the Custodian's contract term, CalPERS shall conduct an evaluation of the Custodian's services. The evaluation shall be based on the terms outlined in the custodial contract, including but not limited to: CalPERS satisfaction with the Custodian's responsiveness, the services provided including safekeeping, transaction processing, delivery, securities valuation, investment performance reporting, and all other services in connection with the Fund.
- C. The custodial contract shall provide CalPERS with the ability to perform audits with the scope determined by CalPERS...

VI.GLOSSARY OF CALPERS SPECIFIC TERMS

There are no CalPERS specific terms contained in this Policy.

Approved by the Policy Subcommittee	May 19, 2000
Adopted by the Investment Committee	June 19, 2000
Revised by the Policy Subcommittee	December 10, 2004
Approved by the Investment Committee	February 14, 2005
Revised by the Policy Subcommittee	October 12, 2007
Approved by the Investment Committee	November 13, 2007
Administrative changes made due to Policy Review Project	June 16, 2009
Administrative changes to reflect the Policy Glossary of Terms	June 17, 2014
Update Project	

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR TERMINATED AGENCY POOL

May 19, 2014

This policy is effective immediately upon adoption and supersedes all previous Terminated Agency Pool policies.

LPURPOSE

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 Terminated Agency Pool ("Program"). The design of this Policy ensures that investors, managers, consultants, and other participants selected by 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 the Program.

The Program shall be managed to minimize the likelihood of the Program becoming underfunded and to immunize against the forecasted liabilities. For the purpose of this Policy, "immunization" is to match cash flows closely for at least the next 30 years and to address inflation risk adequately. Program liabilities refer to benefit payments and Program expenses.

II.STRATEGIC OBJECTIVES

The Program shall be managed to closely match the projected future benefit payments and to minimize the likelihood of the Program becoming underfunded. The Program will be utilized to:

A. Match, to the extent practicable, the cash flows of the assets to the liability cash flows across maturities for at least the next 30 years and across a range of inflation scenarios.

- B. Invest a portion of the program assets in such a way as to ensure that cash flows beyond 30 years can be met across a range of inflation scenarios provided that assets can be reinvested at the lesser of current market returns or the 5th percentile of historic market returns.
- C. Maintain adequate liquidity to meet unanticipated cash flow needs.
- D. Invest assets not needed for A, B or C above in a diversified portfolio similar to the regular asset allocation for the rest of the Public Employees' Retirement Fund ("PERF").
- E. Ensure that Program rebalancing and restructuring is performed efficiently and prudently on an annual basis.
- F. Re-evaluate the asset allocation every three years or as needed if a significant change occurs in assets and liabilities as a result of the addition of a new terminated agency.

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 this Policy.
- B. CalPERS Actuarial Staff is responsible for the following:
 - Providing a forecast of liabilities annually.
 - 2. Recalculating pool liabilities when new agencies are added to the Program.
- C. CalPERS Investment Staff ("Staff") is responsible for the following:
 - 1. Monitoring, rebalancing, analyzing, evaluating performance, and any other activities pertaining to portfolio management.
 - 2. Ensuring the Strategic Objectives are efficiently accomplished.
 - Managing the assets of the Program as approved by the Committee, in accordance with the Policy.
 - Creating an internally managed account to hold the assets of the Program.

- 5. Reporting to the Committee no less than annually, or more frequently if needed, about the performance of the Program. This update shall include, but is not be limited to, the current market value of assets and an analysis of the adequacy of the current Program allocation to meet the forecasted Program liabilities.
- 6. Monitoring the implementation and compliance of the Policy. Staff shall report concerns, problems, material changes, and all violations of Guidelines and Policies at the next Committee meeting, or earlier if deemed necessary. These reports shall include explanations of any violations and appropriate recommendations for corrective action.
- D. The *General Pension Consultant* ("Consultant") is responsible for monitoring, evaluating, and reporting to the Committee no less than annually on the Program relative to the Policy.

IV.PERFORMANCE OBJECTIVE

The performance objective is to use the least amount of assets to "immunize" against the Program liabilities while investing the surplus with assets within the rest of the PERF to maximize returns.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Approach

A three-step allocation process will be applied: (1) Use U.S. Treasury Securities in Separate Trading of Registered Interest and Principal of Securities ("STRIPS"), Treasury Inflation Protected Securities ("TIPS") and cash to closely match the forecasted benefit payments, (2) use cash or cash equivalents to provide sufficient liquidity for the forecasted cash flows in the next two years; and (3) keep the remaining surplus invested with the rest of the PERF.

B. Program Structure/Parameters

CalPERS Custodian may employ a unitized fund structure to maintain separate and distinct historical records and to produce individual net asset values of all investments.

C.Program Review

A comprehensive asset allocation analysis shall be completed and presented to the Committee for review at least once every three years or sooner if there is a significant change of funded status.

D.Rebalancing

The Investment Office and Actuarial Office will collaborate to monitor the funded status of the Program and to rebalance the recommended portfolio annually. Rebalancing involves adjusting the portfolio asset allocation to ensure that the cash flow of assets closely match the latest forecasted liabilities as provided by the Actuarial Staff.

E. Restrictions, Prohibitions and Authorized Securities

Authorized securities for the "immunization" and surplus segments are indicated in the following table.

Segment	Authorized Securities
"Immunization"	U.S. Treasury STRIPS U.S. Treasury TIPS Cash or cash equivalents
Surplus	All securities included within the rest of the PERF

VI.DERIVATIVES AND LEVERAGE POLICY

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

VII.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.

VIII.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.

Attachment 4, Page 83 of 95

Policy #13 Page 5 of 5

Adopted by the Investment Committee	December 10, 2012
Administrative changes to update template format and to align	December 24, 2013
this policy with the Global Derivatives and Counterparty Risk	
Policy	
Administrative changes to standardize reporting frequencies to	May 19, 2014
the Investment Committee to "no less than annually"	
Administrative changes to reflect the Policy Glossary of Terms	May 19, 2014
Update Project	<u>-</u>

TERMINATED AGENCY POOL

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR ECONOMICALLY TARGETED INVESTMENT PROGRAM

June 17, 2014

This policy is effective immediately upon adoption, and supersedes all previous Economically Targeted Investment Program policies.

I.PURPOSE

The California Public Employees' Retirement System ("CalPERS") Investment Beliefs 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 *Economically Targeted Investment* ("ETI") Program ("Program"). The design of this Policy ensures that investors, managers, consultants, and other participants selected by 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.

II.STRATEGIC OBJECTIVES

The Program shall be managed to accomplish the following:

A. Achieve competitive risk-adjusted rates of return.

B. Assist in the improvement of national and regional economies. CalPERS choices in ETI's will provide collateral benefits to targeted geographic areas, groups of people, or sectors of the economy while providing CalPERS with prudent investment options. Furthermore, prudent investment in ETI's creates jobs and housing and improves the general infrastructure.

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 benchmark.

- 2. Reporting to the Committee no less than annually and more, if needed, about the performance of the Program.
- 3. Monitoring the implementation of, and compliance with, the Policy. Staff shall report concerns, problems, material changes, and all violations of the Policy at the next Committee meeting, or sooner if deemed necessary. These reports shall include explanations of any violations and appropriate recommendations for corrective action.
- B. The **General Pension Consultant** ("General Pension Consultant") is responsible for:

Monitoring, evaluating, and reporting no less than annually, to the Committee, on the performance of the Program as well as identification of assets committed, invested, and disposed of under this Policy.

W. PERFORMANCE OBJECTIVE AND BENCHMARK

Specific performance objectives and benchmarks for each ETI and *California Emerging Market Investment* are outlined in the applicable asset class policies.

V. INVESTMENT APPROACHES AND PARAMETERS.

- A. The Board's constitutional duties, as defined and clarified by amendments to California Constitution Article XVI, Section 17, take precedence over any other considerations. Any other considerations will be entertained only when not in conflict with any of these duties. It is recognized that investments made for the sole benefit of CalPERS beneficiaries may also generate collateral benefits.
- B. CalPERS will consider only ETIs which, when judged solely on the basis of economic value, would be financially comparable to alternatively available investments. Comparability will be judged on a risk-adjusted basis with CalPERS being willing to accept no less in return and incur no additional risk or cost.
- C. The collateral benefits shall not be considered part of the return to CalPERS nor shall any improvement to the national, regional, or local economies or any improvement in California Emerging Markets, as specified in Attachment A, be considered part of risk reduction. The decision to choose the ETI in consideration of its broader benefits may occur only after the investment is deemed acceptable to CalPERS exclusively on its economic investment merits.

- D. Any benefit an ETI may confer on other interests is not the responsibility or within the ability or control of CalPERS, but only of those who manage or are otherwise responsible for the enterprise. This will be made expressly clear to third parties and CalPERS beneficiaries.
- E. For allocation purposes, ETIs will be included with similar investments that are free of economically targeted elements, and the combined assets will be subject to the Board's asset allocation guidelines, ranges, and targets. Investments shall not be made so as to alter the overall risk/return profile of CalPERS investments, which derives from CalPERS liability profile and funding level.
- F. The target allocation to ETIs shall be 2% of Fund assets. At such time as the 2% goal is achieved, the Board shall evaluate whether to increase the goal. The existence of this Policy shall not be construed as a mandate to invest in ETI's, but rather should be viewed as an additional set of suggested parameters within which to consider such investments.
- G. ETIs shall not materially alter CalPERS approved asset allocation policies. Particular attention should be paid to the State's representation in CalPERS portfolio. CalPERS exposure to the State's economy, inclusive of investment in ETIs, at a minimum, shall generally be in line with the State's representation in the eligible investment universe and consistent with the Board's fiduciary obligations.
- H. ETIs shall be consistent with the Board's fiduciary obligations and approved investment policies and guidelines. ETI investments must at all times conform to all the laws, requirements, policies and procedures governing CalPERS.
- I.ETIs shall receive prudent level of due diligence.

ETI due diligence shall be consistent with the type of investment product and portfolio classification and shall at a minimum address:

- 1. Legal sufficiency;
- 2. Identification of any potential conflicts of interest; and
- Investment Sufficiency The standard for investment sufficiency shall be consistent with existing internal policies and practices of due diligence analysis for each specific asset type.

- As part of California Emerging Market Investment due diligence, staff shall consider the current economic condition of the State and the prudence of committing assets to underserved areas given that economic condition.
- J. CalPERS may invest in ETIs so long as the Board has determined and can demonstrate that the investments properly discharge the Board's duties under the provisions of California Constitution, Article XVI, Section 17 (i.e., the duties of loyalty, care, skill, prudence, diligence and diversification) and are consistent with the California Government Code statutes applicable to CalPERS (California Government Code sections 20000 et seq.). Consequently, all other economic objectives must necessarily be secondary to, and not impair, those duties imposed by the California Constitution and CalPERS statutes.
- K. Pursuant to the above criteria, consideration shall be given in order of preference to those investments which may benefit:
 - 1. Current and retired members of CalPERS:
 - 2. Residents of the State:
 - 3. Enterprises that operate for the benefit, the support, and the employment of residents of the State; and
 - 4. Enterprises that address the economic and social need of the United States residents with unique major representation in the State.

VI.CALCULATIONS AND COMPUTATIONS

- A. Each ETI shall be separately evaluated based on its unique structure and potential in accordance with CalPERS investment criteria and this Policy. This will ensure that all CalPERS responsibilities and investment requirements are being addressed in the evaluation and investment process.
- B. ETIs, whether in a stand-alone portfolio or incorporated with like investments which have no economically-targeted orientation, shall be priced at market prices and shall be subject to the applicable performance measurements.

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.

Attachment 4, Page 88 of 95

Policy #14

ECONOMICALLY TARGETED INVESTMENT PROGRAM	<u> </u>
Approved by the Policy Subcommittee	November 30, 1999
Adopted by the Investment Committee	February 14, 2000
Revised by the Policy Subcommittee	June 14, 2002
Approved by the Investment Committee	June 17, 2002
Revised by the Policy Subcommittee	December 10, 2004
Approved by the Investment Committee	February 14, 2005
Revised by the Policy Subcommittee	December 15, 2008
Approved by the Investment Committee	February 17, 2009
Administrative changes made due to Policy Review Project	June 16, 2009
Administrative changes to standardize reporting frequencies to the	June 17, 2014
Investment Committee to "no less than annually"	
Administrative changes to reflect the Policy Glossary of Terms	June 17, 2014
Update Project	

Attachment A

California Emerging Markets June 17, 2014

California Emerging Market would include urban and rural areas undergoing or in need of revitalization where there are assets (e.g. an available labor pool, underutilized infrastructure) conducive to business development. For example, an eligible investment would include:

-Equity or	debt investments in –
	Companies with substantial business operations in an underserved urban or rural area.
	Real Estate (office, retail, housing, industrial) located in an underserved urban or rural area.
Comn	nunity Redevelopment Act (CRA) eligible investments –
	Assets comprised significantly of loans made to borrowers with annual income less than 80% of the adjusted median income for the Metropolitan Statistical Area (MSA).
	Assets comprised significantly of loans made in low to moderate income census tracts which are defined as those census tracts where the median income is less than 80% of the MSA in which the census tract resides.
Exam	ples of potential investments include but are not limited to:
	An equity or debt investment in a retail chain that needs expansion capital to grow in an inner city area to capture untapped purchasing power and growth opportunities.
	An equity or debt investment in a manufacturing operation that needs capital to build a facility in a low income, rural Enterprise Zone to access middle skilled workers.
	An equity or debt investment in a distribution company that takes advantage of lower cost, underutilized inner city real estate to reduce costs and locate closer to customers and transportation networks.
	An equity or debt investment in companies to finance back office operations located in areas with an underemployed, available labor pool.

Attachment 4, Page 90 of 95

Policy #14

CALIFOR	KIVIA E	MERGING MARKETS	<u>Page 2 01 2</u>
E		An equity investment in a private equity fund that targets debt a investments in companies/real estate in underserved areas.	nd equity
E		An equity or debt investment in a mixed use urban development reproject.	eal estate
E		An investment in CRA eligible single family or multi-family mortgage	pools.
E	_	An investment in commercial mortgages that are CRA eligible.	
E		An investment in Small Business Administration Loans that are CR/	\ eligible.
	lew i r	nvestments in the marketplace that have not yet been identified	

CALIFORNIA PUBLIC EMPLOYEE'S RETIREMENT SYSTEM

HEALTHCARE INVESTMENT INITIATIVE INTER-PROGRAM CONFLICT OF INTEREST PROTOCOL (Effective April 18, 2007)

This Protocol shall be effective immediately upon adoption, and supercedes all previous policies and protocols on this subject. However, this Protocol does not supersede and is meant to supplement any applicable provisions of state or federal law, including the Political Reform Act (Cal. Gov. Code section 87200 et seq.) and Government Code sections 20152.5 and 20153.

LOBJECTIVES AND PURPOSE

The Board of Administration of the California Public Employees' Retirement System (Board) is charged with the administration and management of the California Public Employees' Retirement System (CalPERS or System). The Board has a constitutional duty to administer the System in accordance with its fiduciary responsibility for investment of the moneys and administration of the pension system. The Board must discharge its duties with respect to the pension system solely in the interest of, and for the exclusive purposes of providing benefits to participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable administrative expenses. The California Constitution specifies that the Board's duty to participants and their beneficiaries shall take precedence over any other duty.

The Board is also charged with managing a healthcare program under the Public Employees' Medical and Hospital Care Act (PEMHCA). As part of its duties, the Board enters into group medical plan contracts on behalf of the healthcare plan participants. In negotiating and administering these agreements, the Board owes a duty of loyalty to the participants of PEMHCA health plans. In addition to the PEMHCA plans, the Board is responsible for administering the self-funded Long-Term Care Plan (LTCP) that is created by statute as a trust fund for the exclusive benefit of its participants. While a fiduciary generally may not undertake conflicting roles, the Board has a legal duty to administer all of CalPERS benefit programs, including its pension, health, and long-term care plans. The purpose of this protocol is to ensure that the Board and its staff fulfill their fiduciary obligations to members of the plans that they administer.

Page 2 of 5

The CalPERS Investment Office, through the Alternative Investment Management Program (AIM), is launching the Healthcare Investment Initiative (HII), which will target investments in healthcare services and products. The objective of the HII is to generate investment returns by leveraging the expertise of two CalPERS divisions – the Investment Office and the Health Benefits Branch (HBB).

The HII, however, may present potential conflicts between the interests of pension plan and health plan participants. Because AIM (through the HII) and HBB may engage, or contemplate engaging, in transactions or other decisions that simultaneously involve both programs, the System may be faced with conflicting duties or the appearance of such.

This Protocol is designed to: (1) assure the appropriate identification of actual, potential, or perceived inter-program conflicts of interest; (2) establish a process for evaluating these conflicts to ensure that each decision is made in the best interest of the respective plan's participants; and (3) identify the decision makers.

H.DEFINITIONS

The following definitions apply to terms used in this Protocol:

- A. The "Conflicts Officer" is CalPERS General Counsel or his or her delegate.
- B. A "Disclosable Interest" is any circumstance that may give rise to an Actual, Potential or Perceived Conflict, and it is not limited to the Disclosable Interests reported under Section III.
- C. An "Inter-Program Conflict of Interest" or "Conflict" exists when an Official's discretionary decision-making or advice as to one Program may be biased or influenced by, or may have the appearance of being biased or influenced by, the interests of a different Program. An Inter-Program Conflict may be Actual, Potential, or Perceived as defined below:
 - 1. An "Actual Conflict" exists when an Official has the right or ability to make, or influence the making of, an HII and/or HBB transaction or other decision, and the interests of the HII Program and the HBB Program diverge on the transaction or other decision.
 - 2. A "Potential Conflict" exists when the HII Program invests in a fund of funds, a fund, a company, or an entity that directly, or through a portfolio company, contracts with or otherwise provides goods or services to PEMHCA or the LTCP.

Page 3 of 5

A "Perceived Conflict" exists when no Actual or a Potential Conflict
 exists but the transaction or other decision may reasonably be
 viewed as giving rise to a Potential or Actual Conflict.

There is no "Inter-Program Conflict of Interest" or "Conflict" when an Actual or Potential Conflict does not exist and an HII Program investment, transaction, or other decision is not actually or potentially influenced by the HBB Program or the interests of PEMHCA or the LTCP.

- D. The "Inter-Program Conflicts Panel" or "Panel" means the panel selected by the Conflicts Officer to resolve Inter-Program Conflicts of Interest. The Panel includes the Conflicts Officer and additional members selected by the Conflicts Officer including, without limitation, Assistant Executive Officers from the operations support branch or divisions and/or the Deputy Executive Officer of Operations. The composition of the Panel may change depending on the conflict it is asked to resolve.
- E. An "Official" refers to a CalPERS Board member or employee who participates in discretionary administration or operation of a Program.
- F. A "Program" refers to a benefit program that CalPERS administers. The "Pension Program" includes the pension plans for members of the Public Employees' Retirement System, the Legislators' Retirement System, the Judges' Retirement Systems I/II, the Volunteer Firefighters Length of Service Award Program, and the Supplemental Savings Programs. The "HBB Program" includes the group medical plan contracts for the benefit of PEMHCA healthcare plan members and LTCP participants.

III.DISCLOSURE OBLIGATIONS

This protocol establishes the following disclosure obligations:

- A. AIM and HBB will be responsible for working together to monitor and identify Inter-Program Conflicts.
- B. Each Official is responsible for identifying and reporting Actual, Potential, and Perceived Inter-Program Conflicts of Interest to the Conflicts Officer.
- C. Each Official shall take steps to ensure such reporting, including without limitation, attending training by the Conflicts Officer contemplated by Section V.A.
- D. AIM will be responsible for assisting HBB to identify HII investments.

Page 4 of 5

E. Once a Disclosable Interest has been reported to the Conflicts Officer, the Conflicts Officer may direct the Official to suspend further actions.

IV.PROTOCOL FOLLOWING DISCLOSURES

- A. As soon as an Official reasonably believes that an Inter-Program Conflict exists, the Official should notify the Conflicts Officer, who will advise the Official as to whether an Inter-Program Conflict exists. If an Inter-Program Conflict exists, the Conflicts Officer may use any reasonable means that he or she determines to be appropriate to avoid or remediate the Inter-Program Conflict, but generally shall utilize the following process:
 - 1. The Official, if requested by the Conflicts Officer, shall prepare a written memorandum describing the Inter-Program Conflict and the pros and cons of the Official's recommendation or advice with respect to a decision or transaction, and submit the memorandum to the Conflicts Officer.
 - 2. The Conflicts Officer will submit the memorandum to the Inter-Program Conflicts Panel for consideration. In reviewing such a Conflict, the Panel may conduct its own independent investigation of the Inter-Program Conflict (including seeking impartial, disinterested advice from outside counsel, consultants, or advisors) before the Panel reasonably concludes that the decision or transaction is unbiased and in the best interest of the respective plan participants.
 - The Inter-Program Conflicts Panel, if necessary, may decide not to approve a decision or transaction recommended by the Official because of a Conflict.
 - 4. The Inter-Program Conflicts Panel, if necessary, may delegate a transaction or other decision to a neutral, independent third party to avoid or remediate an Actual Conflict of Interest.
 - 5. An Official may appeal a decision rendered under Sections IV.A.3 and IV.A.4 above by making a written request to the Inter-Program Conflicts Panel within two (2) business days of the decision.
- B. The Inter-Program Conflicts Panel may request quarterly updates or reports on activities conducted by AIM and HBB with respect to any Disclosable Interest.

- Page 5 of 5
- C. The Inter-Program Conflicts Panel has the right to meet and receive a presentation by AIM or HBB regarding any matter related to the HII that can reasonably be expected to be related to or cause a Disclosable Interest.
- D. The Inter-Program Conflicts Panel may require an Official to sign a certification stating that he or she has not acted on any Disclosable Interest in a manner that is inconsistent with this Protocol.

V. PROACTIVE RESPONSIBILITIES OF OFFICIALS

- A. The Conflicts Officer will provide periodic notice or training, as appropriate, to inform Officials of this Protocol and their duty normally to act solely in the best interest of each Program without regard to the other Programs.
- B. Whenever appropriate, and at a minimum of once annually, CalPERS will review the investments that were made through the HII and evaluate how the Protocol is working.
- C. This Protocol will be incorporated by reference into any written agreements signed between AIM's selected Strategic Partner and CalPERS, as well as the written operational procedures for HII, AIM and HBB.
- D. The Inter-Program Conflicts Panel will allocate among the affected Programs, as it deems appropriate, any cost it incurred in the Conflicts resolution process.
- E. CalPERS will not take any adverse action against any Official for bringing Inter-Program Conflict matters to the attention of the Conflicts Officer or the Inter-Program Conflicts Panel.
- F. Any uncertainty regarding requirements under this Protocol should be referred to Conflicts Officer for clarification.

Adopted by the Investment Committee: April 16, 2007 Adopted by the Health Benefits Committee: April 17, 2007 Adopted by the Full Board of Administration: April 18, 2007