

**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.*

**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 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:
1. 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.
- c. 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.
3. 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.

4. The Chief Investment Officer (“CIO”) or the COIO must also approve the benchmark replacement or benchmark component modification.
5. 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 – Real Asset Policies:	February 7, 2012
Administrative Update to Attachment B – Asset Allocation Policies Program Benchmarks:	March 1, 2012
Administrative Update to change AIM to Private Equity (PE):	October 10, 2012
Approved by the Investment Committee to add Multi Asset Class Partners Allocation and Program	December 10, 2012
Administrative Update to Attachment B – Asset Allocation Policies Program Benchmark:	February 22, 2013
Administrative Update to Attachment J – Other (Non-PERF) Investment Portfolio Policies Program Benchmark	May 10, 2013
Approved by the Investment Committee:	June 17, 2013
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 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	December 5, 2013
Administrative Update to the Investment Approaches and Parameters Section, the attached Program Benchmarks (Attachments C through J) and consolidation into Attachment C	March 6, 2014
Administrative changes to standardize reporting frequencies to the Investment Committee to “no less than annually”	June 24, 2014
Administrative Update to Align with Asset Allocation Strategy changes approved by IC May 19, 2014	June 24, 2014
Administrative changes to reflect the Policy Glossary of Terms Update Project	June 24, 2014
Administrative changes to align with Asset Allocation Strategy changes approved by IC May 19, 2014 and administrative update to the Income Policy and Real Assets Program (Attachment C)	August 22, 2014

## 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.

<b>Asset Class</b>	<b>Benchmark</b>	<b>Policy Weight</b>	<b>Interim Target Weight</b>
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**

<b>Policy</b>	<b>Program</b>	<b>Benchmark</b>
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 L
	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 L
	Commodities	S&P GSCI Total Return Daily
	REITs	FTSE EPRA/NAREIT Developed Index



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 L
	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.

<b>Policy</b>	<b>Program</b>	<b>Benchmark</b>
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**

<b>Policy</b>	<b>Program</b>	<b>Benchmark</b>
<b>GROWTH POLICIES</b>		
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.
<b>INCOME POLICIES</b>		
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

Policy	Program	Benchmark
<b>INFLATION ASSETS POLICIES</b>		
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.
<b>REAL ASSETS POLICIES</b>		
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
<b>LIQUIDITY POLICIES</b>		
Liquidity Program	Total Liquidity Program	75% Barclays Treasury 2-10 yr. + 25% 1 mo. T-bill
<b>MULTI ASSET CLASS POLICIES</b>		
Multi Asset Class Partners Program	Multi Asset Class Program	Absolute 7.5%
<b>ABSOLUTE RETURN STRATEGIES POLICIES</b>		
Absolute Return Strategies	Absolute Return Strategies Program	<b>1 yr Treasury Note + 5%</b>