

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

**FOR
ASSET ALLOCATION STRATEGY**

~~December 2, 2013~~ April 14, 2014

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

I. PURPOSE

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

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

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

II. STRATEGIC OBJECTIVE

The Program shall be managed to accomplish the following:

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

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

III. RESPONSIBILITIES

- A. In addition to the Committee's responsibilities outlined in the Total Fund Statement of Investment Policy, the Committee is also responsible for approving asset classes for investment and approving a policy target allocation, permissible range, and benchmark for each asset class.
- B. CalPERS Investment Staff ("Staff") is responsible for the following:
 - 1. All aspects of Program portfolio management including monitoring, analyzing, and evaluating performance relative to the appropriate benchmark.
 - 2. Managing CalPERS asset class allocations within policy ranges approved by the Committee, in accordance with Policy guidelines.
 - 3. Reporting to the Committee monthly on asset class allocations relative to their targets and ranges.
 - 4. Reporting to the Committee 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.
 - 7. Determining adjustments in asset class allocations, and directing rebalancing account activity and fund transfers across asset classes.

- C. The [General Pension Consultant](#) (“Consultant”) is responsible for monitoring, evaluating, and reporting periodically, 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 ~~and ranges~~ listed in Table 1 below were approved ~~December 2010~~ February 2014 by the Committee ~~and Board~~. These policy targets are expected to be implemented over a period of one to two years beginning ~~July 1, 2011~~ 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 permissible ranges listed in Table 1 are effective ~~July 1, 2011~~ July 1, 2014.

Table 1

<u>Asset Class</u>	<u>Policy Target</u>	<u>Policy Range</u> Relative to Target
<u>Growth</u>		
—Global Equity	49%	+/- 7%
—Alternative Investment Management (AIM)	14%	+/- 4%
Total Growth	63%	+/- 7%
Income—Global Fixed Income (GFI)	16%	+/- 5%
Real Assets	13%	+/- 5%
Inflation	4%	+/- 3%
Liquidity	4%	+/- 3%
Total Fund	100%	N/A

<u>Asset Class</u>	<u>July 1 2014 Interim Target</u>	<u>July 1 2015 Interim Target</u>	<u>Policy Target (Reach July 1, 2016)</u>	<u>Policy Range Relative to Target</u>
<u>Growth</u>				
<u>Global Equity</u>	51%	48%	47%	+/- 7%
<u>Private Equity</u>	10%	11%	12%	+/- 4%
<u>Total Growth</u>	61%	59%	59%	+/- 7%
<u>Income - Global Fixed Income</u>	19%	19%	19%	+/- 5%
<u>Real Assets</u>				
<u>Real Estate</u>	10%	11%	11%	+/- 5%
<u>Infrastructure & Forestland</u>	2%	3%	3%	+/- 2%
<u>Total Real Assets</u>	12%	14%	14%	+/- 5%
<u>Inflation</u>	6%	6%	6%	+/-3%
<u>Liquidity</u>	2%	2%	2%	+/-1%
<u>Total Fund</u>	100%	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 completed at least once every three years coincident with the review

of actuarial methods and assumptions currently on a four year cycle. ~~and~~ The Asset Allocation Strategy analysis will be presented to the Committee for review and approval of Policy target asset class allocations and ranges.

Staff may recommend ~~, a market valuation-driven analysis be conducted at the midpoint of the four year review cycle, or as needed in response to market conditions~~ a more frequent analysis of asset class allocations and ranges if expected returns, risks or liability values have substantially changed since the prior analysis. Additionally, the Program shall be reviewed by Staff at least annually to ensure that all assumptions used in establishing the Program continue to be reasonable.

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:
 - a. Strategic role of the asset class in the ALM framework based on fundamental characteristics and risk and return drivers.
 - b. Sufficient size, liquidity, and cost efficiency to permit CalPERS to invest meaningful amounts in that asset class, and have a material effect on CalPERS return.
 - c. Availability of sufficient internal or external investment and technical expertise to ensure prudent implementation of an investment in that asset class.
 - d. Presence of diversification, return enhancement, liquidity provision, or some other readily identifiable attribute sufficiently different from other asset classes and which enhances CalPERS ability to achieve the strategic objectives outlined in Section II.
 - e. Acceptance by other large pension plan sponsors as a feasible and meaningful asset class, or in the absence of such acceptance, academic support for its inclusion.
 - f. Availability of sufficient data, history, or expertise to assess the feasibility and benefit of the asset class to CalPERS, by means of a measurable investment outcome. Further, the asset class must have a basis for developing expected investment returns, risks, and correlations for the purposes of the financial study.

2. An asset class may be approved for investment provided it meets the above criteria, and the Committee has had the opportunity for sufficient education to enable it to fulfill its fiduciary responsibility in making such an approval.
3. Once CalPERS approves an asset class for investment, as part of the Program, the investment may only be made in accordance with a policy reviewed and approved by the Committee for that asset class. Such a policy shall specify the investment guidelines and provide for the monitoring of that asset class.

VI. INVESTMENT APPROACHES AND PARAMETERS – IMPLEMENTATION

- A. Adherence to the asset class policy ranges shall be monitored and reported to the Committee as part of the Monthly 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 at least quarterly.
- F. Target Tracking Error

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

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

G. External Manager Investment Guidelines

1. Manager Selection

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

2. Investment Manager Guidelines

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

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

VII. DERIVATIVES AND LEVERAGE

A. Strategies

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

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

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 Pricing 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 TERMS

Key words used in the policy are defined in CalPERS Master Glossary of Terms.

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
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Approved by the Investment Committee	September 11, 2006
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Approved by the Investment Committee	September 10, 2007
Revised by the Policy Subcommittee	April 21, 2008
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Approved by the Investment Committee	December 14, 2009
Revised by the Policy Subcommittee	April 11, 2011
Approved by the Investment Committee	May 16, 2011
Policy Effective	July 1, 2011
Admin changes to update template format and to align this policy with the Global Derivatives and Counterparty Risk Policy	December 2, 2013
Revised by the Investment Committee	May 19, 2014

Asset Allocation Strategy Policy Glossary

Active Asset Allocation Return

The portfolio return attributable to deviations between actual and policy asset allocations. Returns can be attributed to two sources: the active asset allocation return and the benchmark-relative return of each asset class. The CalPERS asset allocation return is calculated by the Custodian.

Asset Class Allocation

The net long market value of all non-derivative securities plus the net long futures-equivalent notional value of all derivatives.

Counterparty Risk

The risk that CalPERS will have difficulty enforcing the provisions of a contract (Also known as “legal” risk).

Decision Factors

A measure or characteristic used for relating strategic goals to a specific asset allocation decision.

Exchange Traded Fund

An exchange-traded fund (ETF) is an investment company that is legally classified as an open-end company or a Unit Investment Trusts. An ETF is not classified as a mutual fund by the Securities and Exchange Commission because of limited redeemability. A typical ETF is similar to an index fund, and will invest in either all of the securities of a selected index or a representative sample of the securities included in the index.

Forward Contract (Forwards)

An instrument that allows the purchase or sale of a specific quantity of a commodity, government security, foreign currency, or other financial instrument at the current price, with delivery and settlement at a specified future date.

Fund Benchmark

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.

General Pension Consultant

An individual or organization that provides specialized professional assistance to the Investment Committee in determining the pension fund's asset allocation model or optimal combination of investments in order to maximize risk-adjusted investment returns in a manner consistent with the State's long-term pension liabilities.

Investment Grade

A minimum credit rating of Baa3 by Moody's Investor Service or BBB- for Standard & Poor's Corporation, and BBB- by Fitch. Investment grade ratings apply to issuers whose financial risk is relatively low and the probability of future payment relatively high.

Leverage

A condition where a portfolio's market obligation may exceed the market-value-adjusted capital commitment by the amount of borrowed capital (debt).

Liquidity Risk

The inability to trade a position at a price approximating fair value.

Option

Contracts that give the purchaser the right, but not the obligation, to buy or sell an underlying instrument at a certain price (the exercise or strike price) on or before an agreed date (the exercise period). For this right, the purchaser pays a premium to the seller. The seller (writer) of an option has a duty to buy or sell at the strike price, should the purchaser exercise his right.

Policy Range

The permissible allocations of an asset class set by the Investment Committee.

Pricing Valuation Risk

The risk that the fair value of an asset cannot be established.

Rebalancing

The movement of portfolio asset class exposures closer to policy target weightings, generally resulting in a reduction in active (benchmark-relative) risk.

SEC

The Securities and Exchange Commission. This is the federal agency created by the Securities Exchange Act of 1933 to administer that act and the Securities Act of 1933, formerly carried out by the Federal Trade Commission.

Swap

Private agreement between two companies to exchange cash flows in the future according to a prearranged formula.

Tracking Error

The annualized standard deviation of the difference between the total return of the portfolio and the total return of the benchmark. The term tracking error is frequently used to describe return deviation, the total return of a portfolio, minus the total return of a benchmark index.