

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

**~~FOR  
SUPPLEMENTAL INCOME PLANS (SIP)  
CalPERS TARGET RETIREMENT DATE FUNDS~~**

**~~April 14, 2015~~**

*~~This policy is effective upon adoption and supersedes all previous Supplemental Income Plans CalPERS Target Retirement Date Fund policies.~~*

**~~I. PURPOSE~~**

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

~~This document sets forth the investment policy ("Policy") for the CalPERS Supplemental Income Plans ("SIP") Target Retirement Date Funds Strategy ("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.~~

~~The Program furthers these goals by establishing asset class allocation targets and ranges, and managing asset class allocations within their policy ranges. For the Target Retirement Date Funds the asset class allocations are designed to change over time according to a pre-determined glidepath.~~

**~~II. STRATEGIC OBJECTIVE~~**

~~The investment options offered in the CalPERS Target Retirement Date Funds will be broadly diversified to minimize the effect of short-term losses within any mix of investments. The objective of these funds, in combination with defined benefit pension income and possibly social security, is to help participants achieve retirement adequacy. The Program shall further these objectives by seeking to accomplish the following:~~

- ~~A. Recommend asset allocation policies with targets and ranges based on a periodic assessment of estimated participant information such as: retirement objectives and time horizons, demographics, other retirement assets and risk tolerances.~~
- ~~B. Offer asset allocation funds that 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.~~

### ~~III. RESPONSIBILITIES~~

- ~~A. In addition to the Committee's responsibilities outlined in the SIP Statement of Investment Policy, the Committee is also responsible for approving asset classes for investment and approving a policy target allocation, permissible range, and benchmark for each asset class.~~
- ~~B. CalPERS Investment Staff ("Staff") is responsible for the following:~~
  - ~~1. All aspects of portfolio management including monitoring, analyzing, and evaluating performance relative to the appropriate benchmark.~~
  - ~~2. Managing CalPERS asset class allocations within policy ranges approved by the Committee, in accordance with Policy guidelines.~~
  - ~~3. Reporting to the Committee no less than annually and more frequently if needed about Program allocations, 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 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.~~
  - ~~5. Providing recommendations to the Committee concerning the identification of asset classes and selection of asset class benchmarks, policy targets and ranges.~~

~~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 appropriate benchmark and Policy.~~

~~D. Internal and **External Managers** ("Manager") are responsible for aspects of portfolio management as set forth in their respective investment management contracts, guidelines or policies and shall fulfill the following duties:~~

- ~~1. Communicate with staff as needed regarding investment strategy and investment results.~~
- ~~2. Manage to the objectives of each fund.~~
- ~~3. Monitor, analyze, and evaluate performance relative to the agreed upon benchmark.~~
- ~~4. Cooperate fully with Staff, SIP's custodian, the Third Party Administrator and the consultant concerning requests for information.~~

#### ~~IV. PERFORMANCE OBJECTIVE AND BENCHMARK~~

~~A. The benchmark for the Supplemental Income Plans CalPERS Target Retirement Date Funds is specified in the Total Fund Investment Policy, Appendix 5, Investment Benchmarks Tables.~~

~~B. The objective is for the funds to meet the return of the appropriate benchmark.~~

#### ~~V. INVESTMENT APPROACHES AND PARAMETERS~~

~~A. Asset Class Policy Targets and Ranges~~

~~The policy asset class targets and permissible ranges for the Target Retirement Date Funds are shown in the glidepath below. Each Fund has asset allocation targets based on an expected retirement year. The Funds' asset allocation targets are adjusted annually by moving each Fund to the asset allocation one row down in the glidepath table. When a Fund's asset allocation reaches those of the Income Fund, the Fund will be closed and participants in the Fund will be mapped to the Income Fund. Participants may self-select funds either based on their expected retirement date or based on their individual asset allocation preference. If no selection is made, the participant assets will be defaulted based on the participant age with an assumed retirement age of 60. Funds were built~~

and assigned with an initial retirement age of 60, based on CalPERS member demographic data.

### Target Retirement Date Funds Glidepath

Year	Target Retirement Date Fund	US Equity		International Equity		US Fixed Income		Cash		Real Assets		Expected Return	Expected Risk
		Target	Range	Target	Range	Target	Range	Target	Range	Target	Range		
2013	2055	37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2014		37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2015		37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2016		37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2017		37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2013	2050	37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2014		37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2015		37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2016		37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2017		37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2013	2045	37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2014		37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2015		37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2016		37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2017		37%	+/- 4	43%	+/- 4	10%	+/- 2	0%		10%	+/- 1	7.6%	15.9%
2013	2040	36%	+/- 4	42%	+/- 4	11%	+/- 2	1%	+/- 1	10%	+/- 1	7.5%	15.5%
2014		35%	+/- 4	41%	+/- 4	13%	+/- 2	2%	+/- 1	9%	+/- 1	7.3%	15.1%
2015		34%	+/- 4	40%	+/- 4	14%	+/- 2	3%	+/- 1	9%	+/- 1	7.2%	14.7%
2016		33%	+/- 4	39%	+/- 4	16%	+/- 2	4%	+/- 1	8%	+/- 1	7.1%	14.3%
2017		32%	+/- 4	37%	+/- 4	17%	+/- 2	6%	+/- 1	8%	+/- 1	7.0%	13.9%
2013	2035	31%	+/- 4	36%	+/- 4	18%	+/- 2	7%	+/- 1	8%	+/- 1	6.8%	13.4%
2014		30%	+/- 4	35%	+/- 4	20%	+/- 4	8%	+/- 1	7%	+/- 1	6.7%	13.0%
2015		29%	+/- 4	34%	+/- 4	21%	+/- 4	9%	+/- 1	7%	+/- 1	6.6%	12.6%
2016		28%	+/- 4	33%	+/- 4	23%	+/- 4	10%	+/- 1	6%	+/- 1	6.5%	12.2%
2017		27%	+/- 4	32%	+/- 4	24%	+/- 4	11%	+/- 2	6%	+/- 1	6.3%	11.8%
2013	2030	26%	+/- 4	31%	+/- 4	25%	+/- 4	12%	+/- 2	6%	+/- 1	6.2%	11.4%
2014		25%	+/- 4	30%	+/- 4	27%	+/- 4	13%	+/- 2	5%	+/- 1	6.1%	11.0%
2015		24%	+/- 4	28%	+/- 4	29%	+/- 4	14%	+/- 2	5%	+/- 1	6.0%	10.6%
2016		23%	+/- 4	27%	+/- 4	30%	+/- 4	15%	+/- 2	5%	+/- 1	5.8%	10.2%
2017		22%	+/- 4	26%	+/- 4	31%	+/- 4	17%	+/- 2	4%	+/- 1	5.7%	9.8%
2013	2025	21%	+/- 4	25%	+/- 4	32%	+/- 4	18%	+/- 2	4%	+/- 1	5.6%	9.4%
2014		20%	+/- 2	24%	+/- 4	34%	+/- 4	19%	+/- 2	3%	+/- 1	5.5%	9.0%
2015		19%	+/- 2	23%	+/- 4	35%	+/- 4	20%	+/- 2	3%	+/- 1	5.3%	8.6%
2016		18%	+/- 2	22%	+/- 4	37%	+/- 4	21%	+/- 4	2%	+/- 1	5.2%	8.2%
2017		18%	+/- 2	20%	+/- 4	38%	+/- 4	22%	+/- 4	2%	+/- 1	5.1%	7.8%
2013	2020	17%	+/- 2	19%	+/- 2	39%	+/- 4	23%	+/- 4	2%	+/- 1	5.0%	7.5%
2014		15%	+/- 2	17%	+/- 2	42%	+/- 4	25%	+/- 4	1%	+/- 1	4.8%	6.8%
2015		13%	+/- 2	15%	+/- 2	45%	+/- 4	26%	+/- 4	1%	+/- 1	4.6%	6.3%
2016		12%	+/- 2	14%	+/- 2	46%	+/- 4	27%	+/- 4	1%	+/- 1	4.4%	5.9%
2017		11%	+/- 2	13%	+/- 2	48%	+/- 4	28%	+/- 4	0%		4.3%	5.5%
2013	2015	10%	+/- 2	12%	+/- 2	49%	+/- 4	29%	+/- 4	0%		4.2%	5.3%
2014		9%	+/- 2	11%	+/- 2	50%	+/- 4	30%	+/- 4	0%		4.1%	5.2%
2015		9%	+/- 2	11%	+/- 2	50%	+/- 4	30%	+/- 4	0%		4.1%	5.1%
2016		9%	+/- 2	11%	+/- 2	50%	+/- 4	30%	+/- 4	0%		4.1%	5.1%
2017		9%	+/- 2	11%	+/- 2	50%	+/- 4	30%	+/- 4	0%		4.1%	5.1%
2013	2010 (Income)	9%	+/- 2	11%	+/- 2	50%	+/- 4	30%	+/- 4	0%		4.1%	5.1%
2014		9%	+/- 2	11%	+/- 2	50%	+/- 4	30%	+/- 4	0%		4.1%	5.1%
2015		9%	+/- 2	11%	+/- 2	50%	+/- 4	30%	+/- 4	0%		4.1%	5.1%
2016		9%	+/- 2	11%	+/- 2	50%	+/- 4	30%	+/- 4	0%		4.1%	5.1%
2017		9%	+/- 2	11%	+/- 2	50%	+/- 4	30%	+/- 4	0%		4.1%	5.1%

\* Asset allocations become effective on October 1 of each year.

~~B. Asset Allocation Fund Design Process~~

- ~~1. A comprehensive design analysis shall be completed for each asset allocation fund at least once every three years and will be presented to the Committee for review and approval of policy asset allocation targets and ranges. The Chief Investment Officer ("CIO") may recommend a more frequent analysis of asset allocation targets and ranges if expected returns, risks or estimated participant characteristics 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. The CIO may also recommend to the Committee changes in the policy targets and ranges.~~
- ~~2. The Program analyses shall also encompass the expected long-term capital markets outlook and expected inflation.~~
  - ~~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 determine a suitable glidepath for the Target Date Retirement Funds taking into consideration the estimated participant characteristics.~~
  - ~~c. Analyses of alternative asset allocation strategies shall measure the estimated effect on expected risk and return, diversification, and likelihood of meeting participant retirement objectives.~~
  - ~~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.~~

~~C. 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 the SIP Program.~~

- ~~1. Criteria for consideration when evaluating an asset class shall include the following:~~
  - ~~a. Sufficient size, liquidity, and cost efficiency to permit CalPERS SIP to invest meaningful amounts in that asset class, and have a material effect on CalPERS SIP return.~~
  - ~~b. Availability of sufficient internal or external investment and technical expertise to ensure prudent implementation of an investment in that asset class.~~
  - ~~c. Presence of diversification, return enhancement, liquidity provision, or some other readily identifiable attribute sufficiently different from other asset classes and which enhances CalPERS SIP ability to achieve the strategic objectives outlined in Section II.~~
  - ~~d. 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.~~
  - ~~e. Availability of sufficient data, history, or expertise to assess the feasibility and benefit of the asset class to CalPERS SIP, 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. The Committee may approve an asset class for investment provided it meets the above criteria.~~
- ~~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. Philosophy and Approach~~

~~The funds shall be managed in accordance with the approved Policy or Policies governing each asset class. Such policies shall specify the method and parameters for implementation and provide for the ongoing monitoring of that asset class.~~

## ~~B. Funds Structure/Parameters~~

~~Staff shall manage each fund in accordance with the approved strategic asset allocation. In order to increase the investment opportunities, selected internally managed funds shall be made available for investment in the form of pooled funds. When the Supplemental Income Plan is invested with other CalPERS administered trust assets, the custodian shall employ a unitized fund structure to maintain separate and distinct historical records and to produce individual net asset values (“NAV’s”).~~

## ~~C. Rebalancing~~

~~Asset class allocations shall be managed to be within policy ranges. Allocations may temporarily exceed policy ranges due to extreme market volatility or due to changing allocations established for a particular fund. In this case, the asset allocation will be returned to within its policy range in a timely manner, with the exact time period dependent upon transaction costs and liquidity.~~

~~Upon adoption of significant policy changes, a reasonable time period will be allowed to transition to the new asset allocations.~~

## ~~D. Restrictions, Prohibitions and Authorized Securities~~

~~Restrictions, prohibitions and authorized securities of the Fund are defined in the Policy governing each asset class.~~

~~All transactions involving derivatives are governed by the Total Fund Investment Policy, Section V, Global Derivatives and Counterparty Risk.~~

## ~~VII. CALCULATIONS AND COMPUTATIONS~~

~~Investors, managers, consultants, and other participants selected by CalPERS SIP shall make all calculations and computations on a market value basis as recorded by CalPERS SIP 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 16, 2008
Adopted by the Investment Committee	August 18, 2008
Technical Revision to Reflect Benchmark Name Change	December 15, 2008
Revised by the Policy Subcommittee	February 17, 2009
Approved by the Investment Committee	March 16, 2009
Administrative changes due to Policy Review Project	June 16, 2009
Administrative changes due to adoption of Benchmark Policy	September 28, 2009
Approved by the Investment Committee	October 15, 2012
Approved by the Investment Committee	November 13, 2012
Approved by the Investment Committee	June 17, 2013
Administrative changes to update template format and to align this policy with the Global Derivatives and Counterparty Risk Policy	December 3, 2013
Administrative changes to standardize reporting frequencies to the Investment Committee to “no less than annually”	May 15, 2014
Administrative changes to reflect the Policy Glossary of Terms Update Project	May 15, 2014
Administrative changes to correct rounding errors to the Target Retirement Date Funds Glidepath table	September 26, 2014
Administrative changes to reflect closure of State Peace Officer & Firefighters (POFF) Fund	April 14, 2015



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

**~~FOR  
TREASURY INFLATION PROTECTED SECURITIES PROGRAM~~**

**~~May 19, 2014~~**

*~~This policy is effective immediately upon adoption and supersedes all previous Treasury Inflation Protected Securities 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 Treasury Inflation Protected Securities Program ("TIPS 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 TIPS Program. Additionally, use of this Policy assures sufficient flexibility in controlling investment risks and returns associated with the TIPS Program.~~

**~~II. STRATEGIC OBJECTIVE~~**

~~The TIPS Program shall be managed to accomplish the following:~~

- ~~A. Diversify CalPERS overall investment programs;~~
- ~~B. Dampen the overall risk of CalPERS investment programs; and~~
- ~~C. Enhance CalPERS total returns.~~

**~~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 no less than annually on the performance and risk metrics for the TIPS Program to the Committee.~~

3. ~~Monitoring internal and **external managers** in the implementation of, and compliance with, the Policy. Staff shall report concerns, problems, material changes, and all violations of 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** ("Consultant") is responsible for:~~

~~Monitoring, evaluating and reporting no less than annually, to the Committee, on the performance of the TIPS Program relative to the benchmark and Policy.~~

C. ~~For those TIPS Programs managed by an External Managers ("Manager"), the Manager is responsible for aspects of portfolio management and shall also fulfill the following duties:~~

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

#### ~~IV. PERFORMANCE OBJECTIVE AND BENCHMARK~~

~~The performance objective for the TIPS Program is to exceed the return of the benchmark.~~

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

#### ~~V. INVESTMENT APPROACHES AND PARAMETERS~~

A. ~~Investment Approach~~

~~Investors in TIPS seek protection from future inflation and have made a specific asset allocation for this purpose. For this reason, the TIPS Program shall be principally invested in TIPS. In general, the TIPS Program is expected to have a duration that is similar to the duration of the Barclays Capital Global Real: U.S. TIPS Index unless expected returns and economic analysis dictate otherwise. Staff will identify those issues in the universe of TIPS which offer the best returns while maintaining the TIPS Program duration objective.~~

~~B. Specific Risk Parameters~~

~~CalPERS shall manage the following major categories of fixed income risk:~~

- ~~1. Benchmark Risk was reviewed by the Consultant who determined that the Barclays Capital Global Real: U.S. TIPS Index was the appropriate reference point.~~
- ~~2. Interest Rate Risk must be controlled using duration management. Duration shall be maintained within  $\pm 10\%$  of benchmark duration.~~
- ~~3. Real Return Risk must be monitored and managed through economic analysis that, at a minimum, looks at volatility, expected inflation, and implied inflation.~~
- ~~4. Yield Curve Risk must be managed in a controlled and disciplined way by monitoring key rate durations and principal component analysis.~~
- ~~5. Sector Risk must be controlled by using the ranges below.~~

~~Sector Ranges: The following ranges by which actual allocations can fluctuate from the benchmark sector weightings:~~

<del>Sector</del>	<del>Index</del>	<del>Sector Ranges</del>
<del>TIPS</del>	<del>100%</del>	<del>80%-100%</del>
<del>Nominal US Treasury</del>	<del>—0%</del>	<del>0%-15%</del>
<del>STIF</del>	<del>—0%</del>	<del>0%-5%</del>
<del>Total</del>	<del>100%</del>	<del>NA</del>

~~C. Authorized Securities~~

- ~~1. U.S. Treasury Inflation Protected Securities;~~
- ~~2. Nominal (not Inflation Protected) U.S. Treasury Securities; and~~
- ~~3. A Short Term Investment Fund (STIF).~~

~~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.~~

~~Treasury Inflation Protected Securities:~~

~~Approved by the Policy Subcommittee: June 15, 2007~~

~~Adopted by the Investment Committee: August 13, 2007~~

~~**Name changed to Treasury Inflation Protected Securities Program**~~

~~Revised by the Policy Subcommittee April 21, 2008~~

~~Approved by the Investment Committee May 12, 2008~~

~~Technical Revision to Reflect Benchmark Name Change December 15, 2008~~

~~Administrative changes made due to Policy Review Project June 16, 2009~~

~~Administrative changes due to adoption of Benchmarks Policy October 30, 2009~~

~~Administrative changes to standardize reporting frequencies to the Investment Committee to “no less than annually” May 19, 2014~~

~~Administrative changes to reflect the Policy Glossary of Terms Update Project May 19, 2014~~