CALSTRS

CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM

INFLATION SENSITIVE INVESTMENT POLICY

INVESTMENT BRANCH

JULY 2022

Q. Inflation Sensitive Investment Policy

EXECUTIVE SUMMARY

The purpose of the Inflation Sensitive Policy (Policy) is to expand the opportunity set beyond the current Portfolio constituents available under the current Investment Policy and Management Plan (IPMP). This Policy includes investments and strategies not covered by the Infrastructure Policy. However, this Policy incorporates the Infrastructure Policy by reference and recognizes it as an integral component of the Inflation Sensitive asset class structure.

In accordance with the CalSTRS Investment Policy and Management Plan, the California State Teachers' Retirement System Board (Board) has established an Inflation Sensitive portfolio. The primary objective for the Inflation Sensitive portfolio (portfolio) is to invest in strategies that provide further diversification of CalSTRS overall investment Portfolio. The secondary objective of the Inflation Sensitive portfolio is to invest in strategies that provide protection against inflation and generate a long-term return which exceeds both inflation and the performance benchmark while taking reasonable and prudent risk.

CalSTRS Inflation Sensitive assets are to be invested, administered, and managed in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with the California Constitution, Teachers' Retirement Law, and other applicable statutes. No investment instrument or activity prohibited by the IPMP shall be authorized for the Inflation Sensitive portfolio.

The Policy ensures that investors, managers, consultants, advisors, or other participants selected by CalSTRS take prudent and careful action while managing the Portfolio. The purchase, management, and sale of all Portfolio investments are performed by external and/or internal professionals (managers) who are monitored and evaluated by internal investment officers, a Portfolio consultant, and/or independent fiduciaries.

CalSTRS believes that environmental, social and governance (ESG) issues can affect the performance of our investments. As a result, CalSTRS Investment Policy for Mitigating Environmental, Social, and Governance Risks has been developed as a tool that both internal and external investment managers are expected to use to assess the impact of ESG risks when making an investment on behalf of CalSTRS.

The internal investment officers and independent fiduciaries operate under the direction of the Chief Investment Officer (CIO). Review of the Portfolio falls under the general consultant (Consultant), who reports directly to the Investment Committee. If a specialty asset class consultant is retained, that consultant will report directly to the Investment Committee.

Policies approved by the CalSTRS' Investment Committee cannot be altered without explicit direction from the Board.

PROGRAM OBJECTIVES

The purpose of the portfolio is to provide diversification to the CalSTRS Portfolio, lower the macroeconomic risks that pervade other major asset classes, and positively capture long-term changes in inflation.

Inflation is defined as a sustained and persistent increase in the general price level of goods and services leading to a subsequent reduction in individual and group purchasing power. Inflation can be driven by an increase in the overall money supply or disequilibrium between supply and demand, in any number of markets, that ripple across the economy. The strategic objective of the portfolio is to:

A. Provide inflation protection, diversification and inflation linked returns for the long-term.

B. Lower CalSTRS' portfolio volatility through a combination of strategies and sector allocations less correlated with long-term growth.

C. Pursue investments which provide cash flows correlated with inflationary assets that contain adjustable contractual or non-contractual payment streams that will benefit from inflation over the long-term.

D. Pursue investments expected to benefit from inflation and increase in market value over the long term.

The portfolio will seek to improve the diversification of the total investment Portfolio and enhance its risk-adjusted total return. The assets shall be managed to generate current income and provide a modest level of capital appreciation.

PERFORMANCE OBJECTIVES

The portfolio is to be structured to achieve a long-term total return that is consistent with its program benchmarks. Each strategy within the portfolio will have its own specific performance benchmark. Therefore, the portfolio will have a blended weighting comprised of the strategies undertaken. The long-term objective of the portfolio is to exceed US CPI by a reasonable level over a market cycle of three to five years.

PROGRAM BENCHMARK

The current program benchmark is a weighted blend of the Bloomberg U.S. Treasury Inflation Linked Bond Index Series L, Bloomberg Commodity Index, NCREIF Timberland Fund and Separate Account Index (quarter lagged), Zero return Daily Index, CPI +3% (quarter lagged), and a CPI +4% (quarter lagged). As new strategies are added, the future benchmark shall be a blended performance benchmark that will comprise the weightings for each of the strategies undertaken in the Inflation Sensitive portfolio multiplied by their respective benchmarks. The Policy will be updated accordingly though a schedule set forth by the Board.

PROGRAM STRUCTURE

The Inflation Sensitive portfolio is a unique hybrid class of multiple asset types that jointly seek to produce a stable return and one that exceeds the specified performance objective. To achieve the stated performance objective, the portfolio will invest in a diversified portfolio of strategies with a mixture of both internal and external management. Diversification within the Portfolio will be a critical aspect of risk-control. Investments will be aggregated, assessed, and monitored to control for unintended biases.

The Inflation Sensitive unit operates under the policies, procedures and guidelines established to govern the engagement of Managers and investment in public and private securities. The approval process for investment strategies under the Inflation Sensitive Policy shall be completed following a written recommendation by CalSTRS staff and either: 1) a program advisor, or 2) an independent fiduciary. The investment analysis and due diligence will be conducted in accordance with the CalSTRS Inflation Sensitive procedures.

Inflation Sensitive assets will consist of two major components:

A. Public – Inflation Sensitive – will include strategies that utilize public securities that have a linkage to changes in inflation and are bought and sold in widely recognized and liquid markets and can include:

    1. Government Inflation Linked Bonds – these strategies invest in US Treasury Inflation Linked securities and/or Global Sovereign Inflation Linked Securities.

    2. Inflation Linked Corporate debt (investment grade) - short-term fixed and floating rate debt and loan securities – these securities may take the form of short-term corporate securities that have investment grade ratings. Investment grade ratings are those securities rated Baa3/BBB-/BBB- or higher using two of the three equivalent ratings of Moody's, Standard and Poor's Ratings Service, or Fitch Ratings.

    3. Inflation Linked Corporate debt (high yield) - short-term fixed and floating rate debt and loan securities – these securities may take the form of short-term corporate debt in which the investor has first or second lien coverage and have below investment grade credit ratings. Below investment grade ratings are those securities rated Ba1/BB+/BB+ or lower using two of the three equivalent ratings of Moody's, Standard and Poor's Rating Service, or Fitch Ratings.

    4. Commodities and commodity-based strategies determined to be aligned with CalSTRS inflation sensitive mandate.

    5. Equity securities and equity-based strategies determined to be aligned with CalSTRS inflation sensitive mandate.

B. Private – Inflation Sensitive – will include strategies that utilize private securities that have a linkage to changes in inflation but are more illiquid than public strategies and can include:

    1. Infrastructure related equity positions. These strategies are located within the Infrastructure Portfolio and are defined in the Infrastructure Portfolio Policy.

2. Other security types and strategies may include, but are not limited to: timber, agricultural, energy, debt securities (including but not limited to infrastructure debt) commodities or other strategies uncovered as part of the Inflation Sensitive unit's normal course of business, strategies spun out of the Investment Strategies and Risk unit, or strategies presented to other units of the Investment Branch that might not fit a particular unit's mandate but might more closely fit the Inflation Sensitive unit's objectives.

Allocation Ranges

Allocation and target ranges for the Inflation Sensitive portfolio are established:

Strategy	Lower Limit	Upper Limit
• U.S. TIPS	0%	38 - 40%
• Commodities	0%	28 - 30%
• Private – Inflation Sensitive	40 - 42%	98 - 100%

New sub-asset classes and investment strategies along with their portfolio weight and range limitations will be determined by the Director of Inflation Sensitive, Deputy Chief Investment Officer, and/or Chief Investment Officer and incorporated into policy and updated accordingly through a schedule set forth by the Board.

Other Strategies

Other securities and or strategies that are deemed by the Director of Inflation Sensitive, Deputy Chief Investment Officer, Chief Investment Officer, and consultant (e.g., general or specialized consultant - if deemed necessary) that are expected to provide protection against the risks associated with inflation may also be considered under this Policy. Such investments may include, but are not limited to, public and private equity/debt, preferred public and private equity/debt and publicly listed equity with an inflation protection emphasis. The Inflation Sensitive staff may select and utilize: Co-Investments, Accounts, Joint Ventures, Commingled Funds, and appropriate Direct Investments. These vehicles will be selected to provide for appropriate return and control, the highest level of accountability on the part of management, and alignment of interests with CalSTRS, all while mitigating both risk and costs.

RISK MANAGEMENT

A. Diversification - plays a critical role in a portfolio in order to control risk and maximize returns. The portfolio is expected to diversify among and across various investment types and structures in order to ensure liquidity, maximize income and insure modest capital appreciation. Minimum and maximum ranges with respect to investment sectors, credit exposures, duration, and tracking error will be established, when applicable, to those parts of the portfolio that have significant debt exposures. The Director of Inflation Sensitive will work with managers and develop guidelines to ensure that portfolios and strategies are broadly diversified within the best practices of any particular strategy adopted.

B. Derivatives - are permitted to assist in the efficient management of risk, asset allocation or market exposures in the Portfolio. Such instruments can include futures, options, swap agreements, or forwards as well as strategies that may employ derivatives as part of their normal course of management. The implementation of any derivative strategy will be thoroughly reviewed by the Director of Inflation Sensitive, the Director of Fixed Income, the Deputy Chief Investment Officer and/or the Chief Investment Officer. Limitations concerning aggregate risk control and counterparty exposures will be documented in the investment guidelines and not conflict with the IPMP.

C. Authorized traders – authorization letters which specify who may transact business for the Portfolio shall be sent a copy of the most recent investment resolution at the time the account is opened and then periodically to all broker/dealers with whom CalSTRS conducts business. Whenever a change in an authorized trader(s) takes place, the broker/dealer shall be notified in writing or via e-mail within 24 hours in the event of a termination, or as soon as possible in the event of a newly authorized trader(s).

ELIGIBLE INVESTMENT VEHICLES

For CalSTRS to meet its objectives in the Inflation Sensitive asset class, staff will select appropriate investment vehicles to maximize return, control costs, mitigate risk, and maintain accountability. Eligible investment vehicles will include Accounts, Commingled Funds, Co-Investments and Direct Investments as described in the Infrastructure Policy and could include other potential structures depending on the investment strategy.

DISCRETIONARY AUTHORITY

1. Trading Parameters of publicly traded securities and outgoing cash transactions of previously approved commitments are based on non-cumulative daily limits designated in the Investment Policy and Management Plan (IPMP).

2. The approval decisions for Public Inflation Sensitive investments may conform to either the RFP and/or ASP process or its replacement within the current CalSTRS policies, guidelines, or procedures.

3. The approval decisions for Private Inflation Sensitive investments are delegated to staff as follows:

    a. Initial commitments -Staff has discretion to approve an initial commitment to a new investment manager up to $500 million, for accounts and commingled funds with an equivalent amount allowed for co-investments in each instance.

b. Thereafter, if a single investment manager represents an excess of twenty-five percent (25%) of the Public and Private Inflation Sensitive portfolio as measured by the target IPMP allocation, additional allocations or commitments may still be approved by staff but are subject to review by the Investment Committee if the Committee so requests. Staff will inform the Committee of firms under consideration via the transactions pipeline semi-annual report.

4. For Eligible Ownership Vehicles such as accounts, co-investments, and direct investments where CalSTRS has more investment discretion and where the investment managers are approved within the above referenced discretionary limits, or firms that have been selected through a request for proposal or other process, staff has discretion to approve individual assets so long as no single asset represents more than five percent (5%) of the CalSTRS private inflation sensitive portfolio as measured by the target IPMP allocation. Staff will inform the Investment Committee when such decisions are made through the semi-annual investment reports.

Inflation Sensitive Internal/External Management

The Inflation Sensitive portfolio will be managed through a combination of internal staff and external managers. Within the boundaries established in the procedures, the decision to hire an external manager or utilize internal investment staff for an investment strategy is made by applying a decision matrix to evaluate a variety of factors including, but not limited to, cost effectiveness/control, market transparency and liquidity, market efficiency, active risk, and infrastructure/resource requirements. CalSTRS uses active external management as a tool to implement its inflation sensitive strategies and to allocate risk where it believes there is the greatest opportunity to enhance returns commensurate with the associated risk undertaken.

Within the boundaries and ranges established by this Investment Policy, staff is responsible for the selection, allocation, and oversight of external managers hired to implement an Inflation Sensitive strategy. Manager guidelines, objectives, benchmark selection, portfolio composition, and constraints are to be administered and monitored across all inflation sensitive portfolios.

Portfolio Leverage

CalSTRS will employ leverage in the portfolio as found within a Fund, Accounts/ Co-investments, Joint Ventures, and applicable Direct Investments. Such leverage may exist at the portfolio, manager or investment level. Since leverage also increases the volatility of the portfolio, careful consideration will be given to the impact of leverage on investment and portfolio risk. In addition, limitations on the amount of leverage at the individual asset or investment entity level, as well as debt service coverage requirements, will be negotiated or arranged wherever possible.

Leverage at the aggregate Inflation Sensitive portfolio level shall be monitored with a long-term goal of maintaining it at no higher than 50 percent (50%) LTV (i.e., loan-to-value). To preserve the character of the asset class within CalSTRS' total Fund Portfolio, the aggregate asset class shall not be overleveraged. This shall be measured quarterly by comparing the principal amount of debt secured by Private Inflation Sensitive investments in the Portfolio to the aggregate gross fair market value. To the extent that leverage exceeds the maximum, CalSTRS shall make reasonable efforts to reduce the leverage ratio to below the maximum allowable, within a reasonable time frame.

Exit Strategies

The portfolio is expected to have a combination of liquid and illiquid assets. Some fund structures may have liquidation mechanisms and others may not have clearly defined liquidation events. The portfolio will seek to diversify among the various structures available based on a careful balance between the need for liquidity, the potential negative effects of inflation and structures emphasizing both income and modest capital appreciation.

MONITORING AND REPORTING

The following reports will be prepared and presented to the Board, unless otherwise stated, in order to facilitate visibility of compliance monitoring and reporting according to this document:

i. Inflation Sensitive Semi-Annual Report – prepared by staff.

ii. Performance Report – prepared by master custodian/consultant (semi-annually).

iii. Investment Manager Ratings Report – prepared by staff (semi-annually).

iv. Business Plan – prepared by staff (annually).

Policy Monitoring and Modification

The general consultant or specialized Inflation Sensitive consultant, if retained, shall monitor the investment process for compliance with this policy and report to the CalSTRS Investment Committee on a semi-annual basis.

Investment Compliance provides investment policy oversight and will report to the Investment Committee policy exceptions if they occur.

This Inflation Sensitive Investment Policy shall be reviewed periodically to determine if modifications are necessary or desirable. Any changes shall be subject to the approval of the Investment Committee.

Link to Investment Terms Glossary at CalSTRS.com

Adopted by the Teachers' Retirement Board on September 2, 2015

Revised to define APM trading and cash transfer limits and reflect new reporting frequency on April 5, 2017
Revised to give the ability to adjust the benchmark to reflect the dynamic weighting of assets that will be incorporated into the Inflation Sensitive Portfolio on July 12, 2017
Revised to reflect new format, ESG language, sub-asset class allocation, ranges and language, and exit strategy language on March 5, 2020
Revised to reflect new format, sub-asset class allocation ranges and language, clarifies procedural issues and processes, account structure on July 7, 2022