

Investment Policy Statement

I. Purpose and Mission

The Investment Policy Statement establishes the investment guidelines to enable MassPRIM to effectively manage the Pension Reserves Investment Trust Fund ("PRIT Fund"). This policy provides sufficient flexibility to capture investment opportunities while providing guidelines to ensure that prudence, care, and discipline are utilized in the management of the investment program.

MassPRIM seeks to prudently increase the value of the PRIT Fund to ensure that current and future benefit obligations are adequately funded. MassPRIM seeks to maximize the probability of achieving the required rate of return while limiting unanticipated large drawdowns. MassPRIM constructs and maintains a broadly diversified investment portfolio of high-quality and high-performing investment strategies.

II. Background and Legal Authority

The Pension Reserves Investment Management Board ("PRIM Board") oversees the PRIT Fund, and both were established by the Massachusetts General Court (Chapter 661 of the Acts of 1983) to address the unfunded pension liability of the public employees' retirement systems of the Commonwealth of Massachusetts. Subsequent Acts of the Massachusetts General Court (Chapter 315 of the Acts of 1996) merged the assets of the Massachusetts State Teachers and Employees Retirement Systems Trust with the PRIT Fund under the authority of the PRIM Board. The PRIT Fund may also serve as an investment vehicle for the retirement systems of Massachusetts authorities, counties, cities, and towns.

Nine Trustees comprise the PRIM Board, and they have authority to create standing Committees, employ an Executive Director, and approve the engagement of investment managers, custodians, advisors, and other vendors necessary to effectively manage the assets of the PRIT Fund.

The responsibilities and fiduciary standards of the PRIM Board, its Committee members, and staff are specified in Massachusetts General Laws (M.G.L) Chapter 32. and in the PRIM Board Governance Manual. Fiduciary standards extend to MassPRIM Committee members, staff, investment managers, custodians, investment advisors, and others who exercise discretionary authority or discretionary control over the management or disposition of PRIT Fund assets.

The Massachusetts Conflict of Interest Law, M.G.L. Chapter 268A, sets a minimum standard of ethical conduct for PRIM Board members, Committee members and staff. The law applies to all members and employees, whether elected or appointed, full time or part time, paid or unpaid.

III. Investment Objectives

MassPRIM's overall objective is to maximize the probability of achieving the required rate of return compatible with its risk tolerance and prudent investment practices over the long-term. Investment performance is measured by three long-term objectives as described below:

A. Benchmarking

Benchmarks enable MassPRIM to compare the PRIT Fund's actual performance. Asset class and sub-asset class benchmarks are recommended by MassPRIM staff in cooperation with a relevant investment advisor(s) and approved by the PRIM Board. Each investment strategy is measured against an appropriate benchmark that describes the opportunity set, risk, and return characteristics associated with the strategy. MassPRIM staff, with investment advisor(s), will review benchmarks for appropriateness, as needed.

B. Actuarial Target Rate of Return ("Required Rate of Return")

The actuarial target rate of return is the actuarial assumption affecting future Commonwealth funding rates and pension liabilities, and it is set by the Public Employee Retirement Administration Commission (PERAC.) The PRIM Board seeks to earn a long-term investment return that meets or exceeds the actuarial target rate of return.

C. Downside Protection

MassPRIM seeks to minimize the probability of having a significant market-induced drawdown in the PRIT Fund. The maximum drawdown goals are delineated in the annual asset allocation exercise and approved by the PRIM Board.

MassPRIM expects to meet or exceed these three objectives over a long-term investment horizon.

IV. Duties and Responsibilities

Specific duties and responsibilities of the PRIM Board, PRIM Board Chair, Executive Director and Committees are outlined in the Board Governance Manual. Additional duties and responsibilities for key fiduciaries of the PRIT Fund include:

A. Staff

MassPRIM staff are responsible for managing the day-to-day operations of MassPRIM and the PRIT Fund. Staff shall:

- Develop policies and procedures to manage the operations of MassPRIM effectively and efficiently.
- Provide analysis and recommendations to the PRIM Board and Committees, as appropriate.
- Coordinate asset allocation reviews and recommend changes, as appropriate.
- Conduct competitive and fair procurements of investment managers, advisors, custodians, and other vendors.
- Approve guidelines and contracts for each outside investment manager and vendor.
- Monitor and evaluate investment managers and other vendors to ensure adherence to established objectives, guidelines, or agreed upon deliverables.
- Perform portfolio restructuring, rebalancing, and terminations, as necessary.

B. Investment Managers

MassPRIM contracts with investment managers and grants them discretion on individual investments and strategies consistent with specified objectives and guidelines. Each investment manager operates under a contract that specifies responsibilities and appropriate performance expectations. Each contract includes investment guidelines and administrative requirements for the management of each portfolio.

C. Advisors

MassPRIM may contract with advisors to assist the PRIM Board, Committees, and staff in performance reviews, asset allocation studies, investment structure analyses, manager screening, selection and monitoring, benchmark reviews, investment research, and other matters, as needed.

D. Custodians

MassPRIM contracts with one or more custodian banks or trust institutions to provide comprehensive global custodial services. The custodian is responsible for the physical retention and administration of property received by the PRIT Fund, the valuation of certain investments, the collection of income, disbursement of funds, and the monthly reporting of all transactions in accordance with generally accepted accounting principles.

V. Asset Allocation Plan and Rebalancing Policy

Asset Allocation Plan

MassPRIM staff shall examine the Asset Allocation Plan annually and may make recommendations to the PRIM Board, as appropriate. Additionally, at least once every five years, this examination shall include a comprehensive review of the Commonwealth's current and projected pension assets and liabilities, long-term capital markets rate of return assumptions, and MassPRIM's risk and liquidity tolerances.

Rebalancing Policy

The Asset Allocation Plan specifies acceptable allocation ranges for each major asset class in the PRIT Fund. The actual allocations may temporarily deviate from the target ranges due to market volatility, cash flows, liquidity constraints, and investment manager performance. Material deviations from the target ranges may alter the expected return and risk of the PRIT Fund. The PRIM Board acknowledges that market conditions, changes to the Asset Allocation Plan, or circumstances beyond PRIM's control, may lead to asset class weightings being temporarily out of their target ranges.

MassPRIM staff is responsible for rebalancing asset class allocations as necessary to remain compliant with the Asset Allocation Plan. It is recognized that it may be prudent to allow an extended period to fully rebalance the PRIT Fund to be in compliance with the Asset Allocation Plan. The spirit of this policy is to implement the Asset Allocation Plan in a cost-effective manner, recognizing that overly precise management of asset exposures can result in transactions costs that are not economically justified. Staff may utilize futures contracts to rebalance the PRIT Fund.

VI. Risk Management

Effective risk management is paramount to the long-term success and stability of the PRIT Fund. Risk management is a primary responsibility for MassPRIM staff and essential to delivering risk-adjusted returns. MassPRIM staff has developed the Investment and Operations Risk Control Document, which details PRIM's significant risks and the controls implemented by MassPRIM to mitigate said risks. Mass PRIM staff evaluates and monitors three fundamental investment risks for all investments: equity risk, credit risk, and interest rate risk.

Additional risks PRIM staff consider include, but are not limited to:

Liquidity Risk

A primary objective of the PRIT Fund is to maintain sufficient liquidity to pay benefits and other plan expenses in a timely manner. Illiquidity risk must be monitored and controlled to ensure MassPRIM is not required to liquidate investments at distressed prices. Private Equity, Real Estate, Timberland and certain investments in Portfolio Completion Strategies and Value-Added Fixed Income are considered illiquid and not practical to use these assets to fund cash needs of the PRIT Fund. PRIM staff shall also monitor the unfunded committed balances to certain investments in these asset classes. Global Equities and Core Fixed Income are generally liquid and are considered the primary source of cash.

Investment Manager Risk

No one investment manager should materially impact the long-term performance of the PRIT Fund. No active manager shall comprise more than 10% of total PRIT Fund assets. The PRIT Fund shall be diversified across multiple asset classes and within each asset class, diversified across multiple investment managers utilizing differentiated investment strategies and processes. Factors MassPRIM staff shall consider when sizing an investment manager include, but are not limited to asset class, active or passive strategy, liquidity, organization stability, volatility, tracking-error, track record, and investment vehicle.

Leverage and Derivatives

The PRIT Fund may utilize leverage as part of the Asset Allocation Plan. The PRIT Fund may utilize derivatives as part of our Rebalancing Policy and cash management process.

Investment managers may utilize leverage or derivatives only when MassPRIM staff has expressly permitted the use and is consistent with MassPRIM's investment objectives and the investment manager's strategy.

VII. Global Equities

A. Investment Objectives

The objective of Global Equities is to achieve long-term capital appreciation by investing primarily in publicly-traded equity securities with high relative liquidity characteristics. Global Equities may serve as a primary source of liquidity to the PRIT Fund, as needed.

B. Investment Structure

Global Equities is composed of Domestic Equities, International Equities, and Emerging Markets Equities. Global Equities may include investments in common stocks or other equity-related securities. The Global Equities portfolio shall be diversified in terms of geography, market capitalizations, style categories, sectors, and currency denominations. The Global Equities portfolio is implemented through both active and passive management strategies, as appropriate.

MassPRIM shall utilize separately managed account structures, where possible, to achieve additional control, cost, and/or transparency features.

VIII. Core and Value-Added Fixed Income

A. Investment Objective

The objective of Core Fixed Income is to provide stable income generation, capital preservation, and deflation protection with high relative liquidity and low relative volatility. Core Fixed Income may serve as a primary source of liquidity to the PRIT Fund, as needed.

The objective of Value-Added Fixed Income is to provide exposure to higher yielding fixed income strategies. These strategies improve the risk-adjusted return profile of the fixed income portfolio by investing in higher credit risk and less traditional fixed income strategies with lower liquidity characteristics. Value-Added Fixed Income may serve as a secondary source of liquidity to the PRIT Fund, as needed.

B. Investment Structure

Core Fixed Income is comprised of Domestic Investment Grade Fixed Income, Short and Long-Duration U.S. Treasury securities, and Inflation-Linked Fixed Income securities. Core Fixed Income generally includes investment grade fixed income securities including U.S. Treasuries, U.S. Agencies, U.S. corporate bonds, mortgage and asset backed securities, and other core fixed income related instruments. Core Fixed Income is implemented through both active and passive management strategies, as appropriate.

Value-Added Fixed Income is comprised of Publicly Traded Value-Added Fixed Income and Private Value-Added Fixed Income. Publicly Traded Value-Added Fixed Income investments include investment grade fixed income and non-investment grade fixed income including high yield, bank loans, emerging markets sovereign and corporate debt, in both U.S. Dollar and local currency, asset-backed securities, convertible bonds, credit default swaps, collateralized loan obligations (CLOs) and collateralized debt obligations (CDOs). Private Value-Added Fixed Income includes Other Credit Opportunities (OCO) and Private Debt. Other Credit Opportunities are investments in unique or differentiated credit sectors. Private Debt investments generally are in partnerships that may invest in private or public loans, stressed or distressed assets, bonds and other corporate debt instruments.

MassPRIM shall utilize separate account structures, where possible, to maximize control and transparency. Investments may be made in 'funds of one' or in commingled funds such as limited partnerships, limited liability companies or offshore corporations, where appropriate.

C. Co-Investments

Consistent with PRIM Board-approved guidelines, MassPRIM staff may invest in Value-Added Fixed Income Co-investments.

IX. Private Equity

A. Investment Objectives

The objective of Private Equity is to generate higher returns relative to public market equities to compensate for the lower liquidity characteristics of the asset class. Private Equity is also expected to provide diversification benefits to the PRIT Fund. Private Equity is not considered a short or medium-term source of liquidity to the PRIT Fund.

B. Investment Structure

Private Equity investments are generally limited partnerships, that draw down committed capital over a specified investment period to construct portfolios of U.S. and non-U.S. privately-held companies. Private Equity investments are characterized as long-term investments (10+ years) with limited liquidity. Private Equity is generally composed of Buyouts, Growth Equity and Venture Capital.

Buyouts refer to a strategy of making control investments as part of a transaction in which a company, business unit, or business asset is acquired from the current owners, typically with the use of financial leverage. Buyout strategies attempt to create value by using their ownership position to improve the operations, governance, capital structure, and/or strategic position of the companies in which they invest. The companies held in Buyout funds are generally mature and generate positive operating cash flows.

Growth Equity investments generally are minority investments in less mature private companies seeking capital to accelerate revenue growth and profitability.

Venture Capital refers to minority equity investments in less-proven, immature, small, and rapidly growing companies. Venture Capital encompasses a broad range of companies in various stages

of development from initial start-up/seed-stage to later-stage. Venture Capital backed companies are typically cash flow negative, requiring cash infusions in order to become profitable and sustainable businesses.

C. Securities Distributed

MassPRIM staff may utilize a third-party investment firm to manage securities distributed by its investment managers.

D. Co-Investment Program

Consistent with Board-approved guidelines, MassPRIM staff may invest in Private Equity Coinvestments.

E. GP-Led Secondaries

Consistent with PRIM Board-approved guidelines, MassPRIM staff may invest in Private Equity GP-Led Secondary investments.

X. Real Estate

A. Investment Objective

The objective of Real Estate investments is to generate attractive risk-adjusted returns through stable income and appreciation of real assets. Real Estate investments should also provide a meaningful source of diversification and inflation protection to the PRIT Fund.

Real Estate (with the exception of Public Real Estate Securities) is not considered a short or medium-term source of liquidity to the PRIT Fund.

B. Investment Structure

Real Estate is composed of Core Real Estate; Non-Core Real Estate; and Public Real Estate Securities (REITs).

Core Real Estate investments are high quality, well leased properties typically located in the U.S. and diversified across a variety of property sectors and locations.

Non-Core Real Estate investments are generally those in which property income is enhanced through one or more of the following: development; capital improvements; and leasing. Other non-core value creation methods may include recapitalization, portfolio aggregation, and take-private transactions. The Non-Core Real Estate portfolio exists to supplement and diversify the Core Real Estate portfolio and may include equity, debt and non-U.S. investments.

Public Real Estate Securities include investments in publicly traded real estate investments (REITs).

Real Estate shall utilize separate account structures, where possible, to maximize control and transparency. Investments may be made in 'funds of one' or in commingled funds such as limited partnerships, limited liability companies or offshore corporations, where appropriate.

C. Investment Guidelines

Investment Diversification

To reduce concentration risk, PRIM's Private Core Real Estate portfolio seeks to be diversified by property sector and geographic weights. Single manager exposure will be limited to no more than 30% of the total Real Estate portfolio, including public real estate securities.

Leverage

The MassPRIM may utilize leverage to enhance the returns of the Real Estate portfolio or certain real estate investments. MassPRIM will seek to maintain high levels of liquidity, accretive leverage and a low loan to value ratio, comparable to that of MassPRIM's benchmark.

The following leverage guidelines have been adopted by the PRIM Board:

- a. Financing Characteristics PRIM may consider all available sources of financing. Fixed rate financing is preferred. However, fixed and floating rate financing may be utilized. Derivatives may be used to achieve these rates. The decision to use fixed or floating rates will be determined at the time of borrowing and will be a function of availability, rate and risk.
- b. Debt Service Coverage Leverage may be utilized at the total portfolio level or property level, and can be in the form of secured or unsecured indebtedness. Leverage will generally be used when borrowing costs are at least 100 basis points below that of property portfolio operating yield and attractive borrowing terms can be put in place that will insure adequate debt-service coverage ratios.
- c. Total Leverage Ratio- The total leverage ratio should be no more than 10% higher than MassPRIM's private real estate benchmark leverage ratio, and no higher than 50% of the total real estate property portfolio net asset value. The total leverage ratio includes any property level financing in place as well as the portfolio level facility. Leverage contained in commingled funds and co-investments is not included in this calculation. The calculation of the loan-to-value ratio will be: total debt/gross asset value of the real estate property portfolio.

The above targets may be temporarily out of their ranges while MassPRIM staff and the investment managers rebalance the Real Estate portfolio.

D. Direct Property Investments

Consistent with PRIM Board-approved guidelines, MassPRIM staff may purchase, manage, and sell real estate properties directly. Direct investments and partnerships in individual real assets may be utilized to improve return and lower cost but is limited to 15% of the Real Estate portfolio.

XI. Timberland

A. Investment Objective

The objective of Timberland investments is to provide a diversified source of stable returns and inflation protection. Timberland is not considered a short or medium-term source of liquidity to the PRIT Fund.

B. Investment Structure

Timberland investments include forest assets managed for the purpose of producing a financial return. Returns are primarily driven by the growth and sales of timber, changes in land value and other ancillary sources of income.

Timberland shall utilize separate account structures, where possible, to maximize control and transparency. Club investments and co-investments with other professional investors may be considered where PRIM retains a high level of control and influence.

C. Investment Guidelines

Investment Diversification

The Timberland portfolio seeks to be diversified by investing in a variety of geographic regions, timber types (e.g. softwood and hardwood), age-classes, wood product categories (e.g. construction, high-end products, pulp, and biomass) and with different managers.

MassPRIM targets portfolio exposure that is at least 70% in the US and no more than 30% outside of the US. The international component is designed to provide diversification and return enhancement through higher growth rates, differentiated end-markets, currency exposure and country characteristics.

Given the illiquid nature of timberland, MassPRIM staff shall exercise judgement in rebalancing to this range when deviations are identified.

Leverage

Leverage is permitted up to 20% on the total MassPRIM timberland portfolio and up to 30% on a specific property. All leverage shall be non-recourse except for customary exclusions related to fraud and environmental representations. Leverage should be limited to circumstances where positive leverage can be obtained (i.e. in circumstances where the debt interest rate is less than the net operating income yield of the property). Properties normally may not be cross-collateralized.

XII. Portfolio Completion Strategies

A. Investment Objective

The objective of Portfolio Completion Strategies (PCS) allocation is to diversify and enhance the risk/return profile of the entire PRIT Fund through accessing a broader array of investment opportunities. PCS may serve as a secondary source of liquidity to the PRIT Fund, as needed.

B. Investment Structure

PCS is currently composed of Hedge Funds and Real Assets.

Hedge Funds investments are composed of Stable Value and Directional. Stable Value strategies seek to provide positive absolute returns over the long-term, with minimal realized market beta over time. Directional investments generally exhibit moderate market beta exposures and aim to deliver a higher total return compared to comparable equity risk over the long term.

Real Assets investments generally include investment in hard assets and asset-backed investments that are inflation-sensitive and income-generating.

MassPRIM will utilize a separate account structure or a fund-of-one structure, where possible, to maximize control and transparency.

C. Investment Guidelines

Concentration Limits

The investment exposure to PCS strategies will vary over time depending on recommendations by MassPRIM staff and based on a variety of factors including strategy capacity and the outlook for specific managers.

D. Emerging Manager Direct Hedge Fund Program

Consistent with PRIM Board-approved guidelines, MassPRIM staff may invest in Emerging Hedge Fund Managers to access emerging talent and future capacity.

E. PCS Co-Investments

Consistent with PRIM Board-approved guidelines, MassPRIM staff may invest in PCS Coinvestments.

XIII. Investment Process

Investment Manager Agreements

Each investment will comply with M.G.L. Chapter 32 and be governed by legal agreements that are specific to the investment structure. For each investment manager, the investment objectives and guidelines are specified in legal agreements, typically in an Investment Management Agreement (IMA) for separately managed accounts or in limited partnership agreements or other contracts.

Financial Reporting

The PRIM Board shall contract with a nationally recognized independent audit firm to audit MassPRIM and the PRIT Fund annually. The financial statements of the PRIT Fund and MassPRIM are to be prepared in conformity with U.S. generally accepted accounting principles. The PRIT Fund and PRIM comply with Governmental Accounting Standards Board (GASB) guidance.

Securities Lending

MassPRIM may lend its publicly traded securities through an agent to other market participants, or to another principal, in return for compensation. MassPRIM staff monitors the risks, such as counterparty and reinvestment risk, associated with each aspect of its securities lending program. Cash collateral is re-invested in low risk and highly liquid securities, as established within the investment guidelines. In addition, a portion of the cash collateral may be utilized by PRIT Core Realty, LLC, as part of the Real Estate debt program.

XIV. Stewardship and Sustainability

As a long-term investor, MassPRIM recognizes that fund performance is subject to a range of complex issues that evolve over time, including from environmental, social, governance, geopolitical, legal and policy sources. Where such issues affect the risk-adjusted returns of the PRIT Fund, MassPRIM has the responsibility to assess and address them. In doing so, MassPRIM will adopt a research-grounded, data-driven, and strategic approach that is anchored to our fiduciary duty. This is consistent with MassPRIM's core belief that every investment must be evaluated based on risk, return, and cost.

MassPRIM's stewardship efforts are specifically designed to protect and enhance the long-term sustainability and success of the PRIT Fund. Our stewardship efforts will be evaluated based on the following objectives:

- Enhance Risk/Return: Enhance the risk/return expectations of the PRIT Fund.
- Create Measurable Impact: Create tangible impact by pursuing focused and measurable efforts.
- Promote Leadership & Innovation: Promote thought leadership and explore opportunities for innovation.

The PRIM Board has approved MassPRIM's Stewardship Policy and Proxy Voting Policy.