

Plymouth County
Retirement Association

Investment Policy Statement

Updated September 4, 2019

I. Overview & Purpose

This Investment Policy Statement has been developed to provide a framework around which to manage and monitor the assets of the Plymouth County Retirement Association (the "System"). The purpose of the Investment Policy Statement is to define policies to guide the implementation of the System's investment goals and objectives in addition to establishing delegations of authority and responsibility, with the end result being effective management and control of the investment process.

The Investment Policy Statement shall:

- Document the System's objectives and set forth appropriate and prudent policies and guidelines to assist in the achievement of those objectives.
- Provide an investment framework for the System that sets parameters to ensure prudence and care in the execution of the investment program.
- Establish criteria to evaluate the System's investment performance.
- Communicate investment policies, objectives, guidelines, and performance criteria to the Board, staff, external investment managers, advisors, consultants, custodians and all other interested parties.
- Serve as a document to guide ongoing oversight of the System's investments.
- Comply with regulations established by the Public Employee Retirement Administration Committee ("PERAC").
- Document the fulfillment of the overall fiduciary responsibilities of the Board.

This Investment Policy Statement may, from time to time and in writing, be modified as appropriate.

II. Fiduciaries & Standard of Prudence

The Board members are Trustees of the System and are, therefore, fiduciaries. In addition, Consultants, the Board's Executive Director and staff are also fiduciaries of the System. All fiduciaries shall:

1. Discharge all of his/her duties solely in the interest of members and their beneficiaries for the exclusive purpose of providing benefits to members and their beneficiaries.
2. Act with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of like character and with like aims.

3. Diversify the investments of the System so as to minimize the risk of large losses, unless it is clearly prudent to do so.
4. Adhere to the Massachusetts General Laws and the rules and regulations promulgated by PERAC.

These standards of prudence also apply to other fiduciaries, which include the employees of the System who exercise discretionary authority or control over the management or administration of the System or its assets as well as persons designated by the Board to carry out fiduciary responsibilities including the external investment managers, the general investment consultant, specialized investment consultants, and the custodian.

III. Investment Objectives

The investment objective of the System is to fully fund the plan by generating sufficient long-term inflation adjusted capital appreciation while providing sufficient liquidity to meet short-term withdrawal requirements. The Board desires to balance the goal of higher long-term returns with the goal of minimizing contribution volatility, recognizing that these are often competing goals. This balance requires taking both assets and liabilities into account when setting investment strategy. Therefore, the investment objectives over extended periods of time are to achieve an annualized investment return that:

1. In nominal terms, equals or exceeds the actuarial investment return assumption of the System adopted by the Board. The Board acknowledges the investment portfolio may achieve higher returns in some years and lower returns in other years.
2. Meets or exceeds the System's total fund policy index benchmark, which equals the weighted average of the benchmarks for each asset class and the target weightings for each asset class. The policy benchmark enables comparison of the System's actual performance to a passively managed proxy, and it measures the contribution of active investment management and policy implementation.

The Board members of the System recognize the long-term return requirements of the System and, therefore, short-term fluctuations in value are secondary to the long-term objective.

IV. Investment Restrictions

The System is a Massachusetts Contributory Retirement System and is, therefore, governed by Chapter 32 of the Massachusetts General Laws. Investment procedures and restrictions stipulated under these regulations must be followed.

The Board intends that the assets of the System at all times are invested in accordance with the provisions of Massachusetts State law and investment regulations. The Board will retain legal counsel when appropriate to review contracts and provide advice with respect to applicable statutes and regulations.

V. Asset Allocation

The Fiduciaries of the System believe that the return objective can be best achieved by constructing a fully diversified portfolio and maintaining target asset class weights over long holding periods and through all market environments. It is expected that over long holding periods, a diversified strategy will play a critical role in balancing the risks of different markets in which the System will invest and help generate superior risk adjusted returns.

Asset allocation studies will be conducted using an optimization process when there is a change in the investment policy that will not be satisfied by the current allocation. Such a change may be, but not limited to a change in liquidity needs, a fully funded status or the introduction of an asset class in which the System does not currently invest. While the Board acknowledges the limitations and assumptions inherent in conducting an asset allocation study, they will be performed in order to illustrate how changes to the existing allocation will affect the long-term risk and return profile of the Plan.

On an annual basis, the Board reviews its asset allocation policy. At this time, the Board determines whether there have been significant changes with regard to (1) the economic environment, (2) the Board's objectives, and/or (3) other considerations affecting the asset allocation policy, including liquidity needs. If deemed appropriate, the Board will commission an asset allocation study to reassess and possibly change its asset allocation policy. Adoption of the asset allocation recommendation requires a vote of the majority of the Board.

The System's portfolio target weights at the broad asset class level are as detailed in Appendix C.

The portfolio will be allowed to fluctuate at the broad asset class level within the policy ranges noted in Appendix C. In an effort to minimize the J-curve effect associated with real estate / real assets and private equity limited partnership investments, the System will over commit to these investments by an amount consistent with the System's annual private market pacing study.

VI. Rebalancing Policy

In general, cash flows to and from the Association or its investments will be allocated in such a manner as to keep each asset class within its target range.

The Board recognizes that, periodically, market forces may move the PCRA's allocations outside the target ranges. The Board also recognizes that failing to rebalance the allocations would unintentionally change the PCRA's structure and risk posture. Consequently, the Board has established a process to rebalance the allocations periodically.

On at least an annual basis, if any strategic allocation is outside the specified target range, assets will be shifted to return the strategy to the target range. The specific plan for rebalancing will identify those assets that can be shifted at the lowest possible risk and cost, if the rebalancing cannot be accomplished solely by allocating contributions and withdrawals.

The Board also recognizes that the asset allocation represents long-term target ranges and not short-term imperatives. As such, the Board authorizes the Executive Director and Investment Officer to work with the consultant to make transfers among asset classes and managers as long as such transfers do not move asset classes outside target ranges.

VII. Revenue Enhancing Programs

If deemed appropriate, The Trustees will engage in two revenue enhancing programs to increase the annual cash flows to the System: commission recapture and securities lending.

1. Commission Recapture

The Trustees acknowledge that brokerage commissions are an asset of the System. Further, Trustees recognize that commissions costs are only one component of execution costs and that managers should follow a best execution strategy; trading style, transaction order flow, broker selection decisions and research requirements of the managers should not be adversely affected by the commission recapture program.

Eligible investment managers are encouraged to participate in the commission recapture program, should there be one in place, and provided commission are competitive. Investment managers are not precluded from using brokerage firms with whom they have a “soft dollar” arrangement, provided said firms offer competitive execution services.

2. Securities Lending

The securities lending program actively lends securities through a single securities lending program to qualified borrowers in order to provide incremental income to the System. Borrowers in return provide liquid collateral in exchange for the right to borrow securities. Securities shall be fully collateralized at all times. Cash collateral shall be invested in a pool vehicle selected by the Trustees on which interest is paid. A negotiated portion of this interest shall be paid to the borrower while the balance shall be kept by the lending agent and the System.

VIII. Performance Benchmarks

To facilitate the periodic reporting and to provide a relative measure to gauge success, performance benchmarks will be utilized at the broad asset class level and at the manager level. Customized benchmarks will be utilized at the broad asset class level and will be computed as a weighted average of the underlying asset classes in the portfolio. A summary of approved benchmarks is provided below:

<u>Broad Asset Class</u>	<u>Benchmark</u>
Total Portfolio	Customized* and 60% MSCI ACWI / 40% Barclays Global Aggregate
Domestic Equity	Russell 3000
International Developed Equity	MSCI EAFE
International Emerging Market Equity	MSCI Emerging Markets
Global Equity	MSCI ACWI
Core Fixed Income	75% Bloomberg Barclays U.S. Aggregate/ 25% Bloomberg Barclays U.S. TIPS
Value-Added Fixed Income	33% Bloomberg Barclays High Yield, 33% CSFB Bank Loan Index, 33% JP Morgan EMBI Global Diversified
Hedge Funds	HFRI Fund of Funds Composite
Real Estate	80% NCREIF ODCE / 20% Wilshire REIT
Private Equity / Venture Capital	Cambridge Associates Fund of Funds Composite 1-Quarter Lag
Real Assets	CPI + 3%
Cash	Three Month T-Bill

** This index is a weighted average of the underlying asset classes comprising the broad asset class.*

In addition to benchmarks for asset classes, the System employs benchmarks for each one of its investment managers. The individual investment manager benchmarks are approved by the Board.

IX. Investment Manager Selection

The selection and hiring of investment managers, commission recapture brokers and securities lending managers shall be subject to a competitive process that satisfies the Boards' fiduciary duty and meets the requirements of M.G.L. c. 32 and 840 CMR.

X. Portfolio Monitoring Procedures

The Trustees will meet with the Consultant no less frequently than quarterly to review portfolio performance, review portfolio weights relative to target weights and managers' performance. Further, the Board will endeavor to meet with each of its investment managers in accordance with PERAC requirements.

The investment managers managing separate accounts on behalf of the System will be issued investment manager guidelines and they will be monitored at two levels of contract review: Watchlist and Probation, the latter being a more heightened level of review.

The Consultant will recommend to the Board when a manager should be placed on or removed from Watchlist or Probation. When an investment manager is placed on the Watchlist/Probation, it is effective immediately. There is no minimum time requirement on the Watchlist/Probation before a termination may be made. An investment manager's contract may be terminated for any reason at any time, whether on Watchlist/Probation or not.

A representative listing of potential reasons an investment manager may be added to Watchlist/Probation is detailed in Appendix D. During an investment manager's tenure on the Watchlist/Probation, the investment consultant will provide the Board with regular reports, including background information and support, about the progress the investment manager is or is not making. An investment manager may be removed from heightened alert if the Board believes the issues that placed the firm on the Watchlist/Probation are resolved.

Should the manager's performance not improve over a reasonable time period, the Consultant will recommend further action and possible termination after a careful review of the manager's performance, portfolio structure and the market environment. Before a manager is officially dismissed, the Consultant will recommend to the Board a plan of action for managing (internally, externally, or in combination) or liquidating the assets.

Circumstances may warrant that the Trustees take immediate action to terminate a manager. Therefore, the Trustees reserve the right to bypass the course outlined above and remove a manager immediately if deemed prudent and in the best interests of the Plan participants.

XI. Investment Costs

The Board intends to monitor and control investment costs at every level of the System and seek the highest net-of-fee returns.

- Professional fees will be negotiated whenever possible.
- Where appropriate, passive portfolios will be used to minimize management fees and portfolio turnover.
- Where appropriate, assets will be transferred in-kind during manager transitions and System restructurings to eliminate unnecessary turnover expenses.
- Managers will be instructed to minimize brokerage and execution costs.

XII. Proxy Voting Policy & Corporate Governance

The Board recognizes that the voting of proxies is important to the overall performance of the System. The Board has delegated the responsibility of voting all proxies on behalf of the System to the investment managers. The Board expects that managers will execute all proxies in a timely fashion. Also, the Board expects the managers to provide a full accounting of all proxy votes, and upon request, a written explanation of individual voting decisions.

APPENDIX A

PERMISSIBLE ASSET CLASSES

Asset Class	Purpose
Public Domestic Equity	Total Return Potential
Public Foreign Equity	Total Return Potential Diversification
Private Equity	Total Return Potential
Real Estate	Total Return Potential Diversification Income
Investment Grade Bonds	Return Stability Income
High Yield Bonds	Total Return Potential Diversification Income
Non-U.S. Bonds	Total Return Potential Diversification Income
Private Debt	Total Return Potential Diversification Income
Real Assets	Total Return Potential Diversification Income
Hedge Funds	Total Return Potential Diversification

APPENDIX B

TWENTY-YEAR, SINGLE ASSET CLASS AND SUB-ASSET CLASS FORECAST¹

Asset Class	Expected Return (%)	Volatility (%)
Fixed Income		
Cash Equivalents	2.9	1.0
Short-term Investment Grade Bonds	3.4	1.0
Investment Grade Bonds	3.9	4.0
Investment Grade Corporate Bonds	4.6	7.0
Long-term Government Bonds	3.7	12.0
Long-term STRIPS	3.9	19.0
TIPS	3.6	7.0
High Yield Bonds	6.5	11.0
Bank Loans	6.1	9.0
Foreign Bonds	2.3	8.0
Emerging Market Bonds (major)	5.2	11.0
Emerging Market Bonds (local)	5.2	14.0
Equities		
U.S. Equity	8.1	17.0
Developed Market Equity	8.5	19.0
Emerging Market Equity	10.4	24.0
Frontier Market Equity	10.3	21.0
Global Equity	8.6	17.0
Private Equity/Debt	9.8	23.0
Buyouts	10.1	24.0
Venture Capital	10.0	34.0
Mezzanine Debt	7.2	15.0
Distressed Debt	7.3	20.0
Real Assets		
Real Estate	7.0	15.0
REITs	7.0	26.0
Core Private Real Estate	5.8	11.0
Value Added Real Estate	7.5	18.0
Opportunistic Real Estate	9.1	24.0
Natural Resources (Public)	9.0	22.0
Natural Resources (Private)	9.5	21.0
Commodities (naïve)	5.0	17.0
Infrastructure (Public)	8.2	17.0
Core Infrastructure (Private)	6.5	14.0
Non-Core Infrastructure (Private)	8.8	22.0
Other		
Hedge Funds	5.4	7.0
Long-Short	5.0	9.0
Event-Driven	6.3	8.0
Global Macro	5.2	6.0
Risk Parity (10% vol)	6.2	10.0
Tactical Asset Allocation	5.1	10.0

¹ Based on Meketa Investment Group 2019 Asset Study.

APPENDIX B (CONTINUED)
EXPECTED CORRELATIONS AMONG ASSET CLASSES AND SUB-ASSET CLASSES¹

	TIPS	Investment Grade Bonds	High Yield Bonds	U.S. Equity	Developed Market Equity	Emerging Market Equity	Private Equity	Real Estate	Natural Resources (private)	Commodities	Core Infrastructure (private)	Hedge Funds
TIPS	1.00											
Investment Grade Bonds	0.80	1.00										
High Yield Bonds	0.30	0.20	1.00									
U.S. Equity	0.00	0.05	0.70	1.00								
Developed Market Equity	0.15	0.05	0.70	0.90	1.00							
Emerging Market Equity	0.15	0.05	0.70	0.80	0.90	1.00						
Private Equity/Debt	0.05	0.05	0.65	0.85	0.80	0.75	1.00					
Real Estate	0.10	0.20	0.50	0.50	0.45	0.40	0.45	1.00				
Natural Resources (private)	0.10	0.10	0.45	0.65	0.60	0.60	0.55	0.45	1.00			
Commodities	0.35	0.05	0.40	0.35	0.55	0.60	0.30	0.15	0.65	1.00		
Core Infrastructure (private)	0.30	0.30	0.60	0.55	0.55	0.50	0.45	0.60	0.60	0.35	1.00	
Hedge Funds	0.20	0.05	0.70	0.80	0.85	0.85	0.65	0.45	0.65	0.65	0.60	1.00

¹ Based on Meketa Investment Group 2019 Asset Study.

APPENDIX C
ASSET ALLOCATION TARGETS

<u>Asset Class</u>	<u>Portfolio Target Weight</u>	<u>Policy Range</u>
Domestic Equity	26%	21% - 36%
Developed Intl. Equity	6%	1% - 16%
Emerging Intl. Equity	10%	5% - 20%
Global Equity	10%	5% - 20%
Core Bonds ¹	9%	4% - 14%
Value Added Fixed Income ²	6%	2% - 12%
Hedge Fund of Funds	4%	2% - 8%
Real Estate	10%	5% - 15%
Private Equity	13%	4%-18%
Real Assets ³	6%	2 % - 10%
Cash	0%	< 3%

Based upon the expected asset returns, risks, and correlations cited in Appendix B, this target allocation exhibits an expected annual return of 8.6% and an expected annual standard deviation of 14.4%.

¹ Core Bonds includes Investment Grade Bonds and TIPS.

² Value Added Fixed Income includes high yield bonds, bank loans, emerging markets debt, and multi-sector bonds.

³ Real Assets includes natural resources, timber, and infrastructure.

APPENDIX D

WATCHLIST AND PROBATION POLICY

A. Organizational Issues

- Change in ownership or control of the company
- Significant change in team composition or responsibilities
- Material change in the business organization of the investment manager
- Departure of significant personnel

B. Performance

- 1, 3 and 5-year performance net of fees below benchmark
- 1, 3 and 5-year performance net of fees below peers (below median of relevant peer universe)
- Performance inconsistent with the investment manager's style and risk controls

C. Investment Process

- Deviation from investment style
- Deviation from risk controls

D. Other

- Material guideline violation not brought to our attention by the investment manager
- Material guideline violation not sufficiently explained by the investment manager
- Failure to comply with terms of contract
- Any extraordinary regulatory action or other proceeding affecting the investment
- Failure to abide by Massachusetts law and investment restrictions
- Unsatisfactory client service