

MICHIGAN PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM
INVESTMENT POLICY STATEMENT

I. Introduction

The investment policies and objectives of the Michigan Public School Employees' Retirement System (MPERS) are intended to allow for sufficient flexibility in the management process to capture investment opportunities, yet provide parameters that will ensure prudence and care in the execution of the investment program. The State Treasurer, as sole fiduciary, in investing MPERS assets shall act with the care, skill, 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 a like character and with like aims, in accordance with Public Act 314 of 1965, as amended.

Definition of Terms

- A. Allocated Cash – Funds allocated to the investment managers. These funds are generated by income (interest, dividends) and monies earned as a result of the sales of a security. The investment managers allocated cash is invested in cash equivalents as per the short-term investment policy and is readily available for investment by the investment manager.
- B. Cost – Book value or purchase price of the security.
- C. Market – Current price of the security if sold on the open market as of a given date.
- D. Policy – Definite course or method of action selected from among alternatives, in light of given conditions, to guide and determine present and future decisions.
- E. Strategic Asset Allocation – The long range asset allocation of the plan designed to obtain a reasonable long-term total return, consistent with the degree of risk assumed, while emphasizing the preservation of long-term capital.
- F. Target Allocation – The percentage of MPERS portfolio (valued at market) to be allocated to the specific asset classes as outlined on pages five and six.
- G. Unallocated Cash – Funds generated by MPERS from contributions, less administrative expenses and benefit payments, invested in cash equivalents (but not managed by investment managers).

II. Assignment of Responsibilities

- A. The State Treasurer is the sole fiduciary and custodian of MPERS investments pursuant to State law. The State Treasurer, with input from the Director of the Bureau

of Investments (BOI), internal and external investment managers, consultants, and other service providers, shall provide the following:

1. Establish a long-term fund target asset allocation, based on the analysis and advice of the Director of the Bureau of Investments.
 2. In conjunction with the Director of the Bureau of Investments, establish a process for evaluating and selecting external managers, where needed.
 3. In conjunction with the Director of the Bureau of Investments, establish a process for monitoring and evaluating the performance of internal and external managers, as well as the overall fund.
 4. The State Treasurer will delegate investment authority pertaining to liquid investments (i.e., publicly traded equities and fixed income) to the Director of the Bureau of Investments whereas approval of illiquid investments, such as private equity investments and real estate, will require approval from the State Treasurer.
- B. The State Treasurer reports quarterly the investment activity to the Investment Advisory Committee (IAC), which reviews the investments, goals, and objectives of the retirement funds and may submit recommendations regarding them to the State Treasurer. The Investment Advisory Committee may also, by a majority vote, direct the State Treasurer to dispose of any holdings, which in the committee's judgment, are not suitable for the funds involved, and may by a unanimous vote, direct the State Treasurer to make specific investments.
- C. The Director of the Bureau of Investments serves as the Chief Executive and Chief Investment Officer of the System. The Director will implement the goals as described in section II, A (1, 2, 3) as well as direct the investment operations of the State of Michigan Retirement System (SMRS), including each major asset class, and other funds managed by the BOI in compliance with statutory requirements and sound business practices.

III. General Objectives and Policies

The general objectives are intended to define the goals to be achieved through the management of MPSERS assets. General policies are intended to provide guidelines for the State Treasurer, as sole fiduciary, to follow in meeting the general objectives.

A. General Objectives

1. The overall objective of the MPSERS is to provide retirement, survivor, and disability benefits to its members through the investment of contributions and other MPSERS assets, utilizing policies designed to maintain at least a 100% funding level for the plans' liabilities over time.
2. The primary investment objective is to maximize the rate of return on the total investment portfolio, consistent with a high degree of prudence and sufficient

diversity to eliminate inordinate risks and to meet the actuarial assumption for the investment rate of return, at a reasonable cost achieved by cultivating a motivated team of dedicated professionals.

3. The State Treasurer will seek to control the cost of funding the plan within prudent levels of risk through the investment of MPSERS assets.

B. General Policies:

1. All transactions undertaken on behalf of MPSERS will be for the sole benefit of plan participants.
2. Investments shall be made without distinction between return generated from income as opposed to capital gains, and that diversification, need for liquidity, and the potential for gain and loss will be monitored on an on-going basis.
3. The allocation of assets among various asset classes shall be approved by the State Treasurer. The asset allocation policy shall be predicated on the following factors:
 - a. the historical performance of capital markets adjusted for the expectations of the future short and long-term capital market performance;
 - b. the correlation of returns and risk among the relevant asset classes;
 - c. the expectations of future economic conditions, including inflation and interest rate assumptions;
 - d. the projected liability stream of benefits and the costs of funding to both covered employees and employers;
 - e. the relationship between the current and projected assets of the plans and the projected actuarial liability stream.

This asset allocation policy will identify the target allocation to the classes of assets MPSERS can utilize and the ranges within which each can fluctuate as a percent of the total portfolio. This policy is expected to provide diversification of assets in an effort to maximize the investment return to MPSERS consistent with prudent market and economic risk. All assets of MPSERS are to remain invested at all times in either cash equivalents or other asset classes as designated by this Policy.

4. Professional investment management firms, which are registered investment advisors or which are appropriately exempt from registration under the Investment Advisers Act of 1940 as may be amended, may be retained to assist in managing MPSERS assets. Investments shall be sufficiently diversified so as to minimize the risk of large losses. Each investment manager will function under a formal contract that delineates its responsibilities and appropriate performance expectations.

A formal set of investment guidelines and administrative requirements for management of each portfolio is to be provided to each manager. The State Treasurer will review the investment performance of these managers against their stated objectives at least quarterly. The individual managers will be judged according to benchmarks which reflect the objectives and characteristics of the strategic role their portfolio is to fulfill. Investment managers may act at their own discretion provided their actions are in accordance with Public Act 314 of 1965, as amended, the investment policy, and their contract.

5. The State Treasurer will allocate net pension fund contributions on an on-going basis in accordance with this Policy to balance the overall asset allocation against target when deviations occur because of capital market fluctuations. Such allocations can be made even if contributions to managers or asset classes which have recently experienced poor performance are entailed. If such poor performance is the result of an occurrence other than expected market-related volatility, then a reassessment of that investment shall be undertaken.
6. The State Treasurer may utilize the services of an investment consultant for the purpose of performance review, asset allocation studies, manager screening and selection, and topical studies. The comments and recommendations of the consultant will be considered by the State Treasurer, as sole fiduciary, in conjunction with other available information for the purpose of making an informed and prudent decision.
7. The State Treasurer will utilize the services of a master custodian bank that will be responsible for holding MPSERS assets, settling purchases and sales of securities; identifying and collecting income which becomes due and payable on assets held; and providing a management information/accounting system.
8. The MPSERS considers the active voting of proxies an integral part of the investment process. Proxy voting will occur in accordance with the Proxy Voting Policy incorporated by attachment.
9. A formal review of MPSERS investment structure should be conducted annually by the State Treasurer. Updated financial projections will be developed at least every two years. The information for these reviews shall come from staff, outside consultants, and investment managers, as they may be retained.
10. It is the responsibility of the State Treasurer to administer the investments of MPSERS at reasonable cost, being careful to avoid sacrificing quality. These costs include, but are not limited to, management and custodial fees, consulting fees, transaction costs, and other administrative costs chargeable to MPSERS.
11. Any investment or any action pursuant to an investment for MPSERS which is not expressly permitted under this Policy is not allowed unless submitted in writing, and formally reviewed and approved by the State Treasurer.

12. The State Treasurer will operate the pension investment program in compliance with all applicable state, federal, and local laws and regulations concerning the investment of pension assets (USC Section 401 (a) (8), (9), (16), and (25) of the Internal Revenue Code; and under Public Act 314 of 1965, as amended as attached and may be hereafter amended).

IV. Asset Allocation Policy and Objectives

Based on the factors identified in the preceding General Policies, the State Treasurer has established strategic asset allocation targets and ranges for domestic and international equities, alternative investments, domestic fixed income instruments, equity real estate, and cash or cash equivalents on a market value basis.

Ranges for each asset class are included in the asset allocation policy to provide the State Treasurer, as sole fiduciary, with flexibility to take advantage of market opportunities.

- A. The 5 year strategic asset allocation targets are provided as presented at the IAC meeting, March 21, 2002:

	<u>Targets</u>	<u>Ranges</u>	<u>Statutory Limit</u>
Domestic Equity	50.0%	45.0% - 55.0%	70%
International Equity	9.0%	7.0% - 11.0%	20%
Alternative Investments	13.0%	11.0% - 15.0%	20%
Total Equity	72.0%	63.0% - 81.0%	
Total Fixed Income	18.0%	16.0% - 20.0%	
Total Real Estate	9.0%	7.0% - 11.0%	
Cash Equivalents	1.0%	0% - 2.0%	
Total Assets	100%		

Asset classes are defined as:

Equities

Investments representing ownership interest to include public, preferred stock, convertible to stock, options on stock, units, participation or partnership shares which represent ownership interests in an underlying investment (excluding real property).

Alternative Investments

Investments representing ownership interest in partnerships, including but not limited to, venture capital and leveraged buyout, mezzanine debt and special

situations. In addition, this asset class may include public stock, the result of distribution, and private equity.

Fixed Income

Investments representing instruments with maturities greater than one year with obligated fixed or floating rates of interest to include public and private securities, mortgages, investments in life insurance general accounts and guaranteed investment contracts, with maturities greater than one year, and options on fixed income securities.

Real Estate

Equity ownership of investments in real property including commercial, retail, industrial, residential, natural resource, or land.

Cash Equivalents

Investments in fixed income securities with maturities of less than one year including but not limited to Treasury bills and notes, commercial paper, bankers acceptances, certificates of deposit, asset backed securities, eurodollar securities and debentures, and mortgages with less than one year remaining to maturity.

The assets of MPSERS may be rebalanced to target once an allocation reaches the minimum or maximum point in its range. The actual allocation to asset class shall be monitored frequently to ensure adherence to Policy allocations.

B. Based on the targets approved as of March 21, 2002, each asset class shall be suballocated as follows:

<u>Asset Class</u>	<u>Target</u>
Equities	
Domestic – Passive	15.0%
Domestic – Large-Cap Growth	16.5%
Domestic – Large-Cap Value	16.5%
Domestic – Small-Cap Growth	2.0%
International Passive	9.0%
Alternative Investments	13.0%
Total Equities	72.0%
Fixed Income	18.0%
Total Real Estate	9.0%
Cash Equivalent	1.0%

The strategic role of each asset class and subclass is defined as follows:

Equity

Passive – Two stock portfolios: one designed to track the return and characteristics of the S & P 500 Index, and the other designed to track the return and characteristics of mid-cap S & P 400 Index.

Large-Cap Growth – Diversified portfolio of large-cap stocks generally, with market capitalizations greater than \$5 billion, whose earnings growth rates exceed that of the S & P 500 Index by at least 50% and are priced at or below fair value as determined by quantitative models. Focus on companies with strong presence in categories anticipated to be fast growing, high rates of unit sales growth, and seasoned management.

Large-Cap Value – Diversified portfolio of large-cap stocks, generally with market capitalizations greater than \$5 billion, significantly underpriced as measured by price/earnings and/or price/book and meaningfully below fair value as determined by quantitative models. Focus on companies with strong presence in depressed categories, experienced management, and conservative accounting practices.

Small-Cap Growth – Diversified portfolio of small-cap stocks, generally with market capitalizations less than \$1 billion. These companies have exceptionally high long-term growth rate estimates due to emerging products and/or market opportunities, above-average ROEs, and strong managements.

International Equity - Portfolio of stocks of companies incorporated outside of the U.S. that may be denominated in non U.S. currency. The international equity investment is expected to provide diversification from U.S. equity investments. Passive international equity management attempts to replicate performance and characteristics of a predetermined benchmark. Active management attempts to add value over the benchmark through country allocation, stock selection, etc.

Fixed Income

Portfolio(s) of high quality, fixed income securities, designed to preserve capital, generate cash flow, provide liquidity, and safety of principal from capital market and default risk.

Real Estate

Equity or equity-like participation in commercial, retail, industrial, and apartment real estate properties, as well as natural and land resources. The real estate investment is expected to provide diversification from traditional capital market risk. Equity participation in concentrated or specialized niche real estate investments may include the use of leverage. Investments may be concentrated by property type, geography, and or developmental phase.

Alternative Investments

Diversified portfolio of partnerships in venture capital, leverage buyout, mezzanine debt, and special situations. The portfolio will consist of domestic and international partnerships, as well as private and public securities, which are the result of distributions.

Cash Equivalents

Portfolio of short-term fixed income securities with an average maturity of less than one year. Its purpose is to provide liquidity and safety of principal from capital market and default risk.

V. Performance Objectives

The investment performance will be measured on two levels: against objectives for the total MPSERS and against objectives for individual portfolio components (asset classes and individual managers). Investment performance shall be measured no less than quarterly on a net of fees basis. Because capital markets fluctuate, and given the length of the duration of the liability stream, the performance relative to objectives is to be judged over a period of one, three, and five years.

A. Performance Objectives for the MPSERS

1. Assure the availability of sufficient assets to pay benefits.
2. Achieve the optimal rate of return possible within prudent levels of risk and liquidity.
3. To outperform the actuarial assumption over the long term.
4. To perform in the top half of the Capital Resource Advisors public plan universe.
5. To exceed individual asset class benchmarks over the long term.
6. To produce competitive results while operating in a cost-effective manner relative to peers.
7. Maintain sufficient diversification to avoid large losses and preserve capital.

B. Performance Objectives for Individual Components

1. Domestic Equities

Passive

Return within 20 bp of the S & P 500 Index and 50 bp for the S & P mid-cap over the one, three, five year periods.

Large-Cap Growth	Exceed the S & P 500 BARRA Growth Index for one, three, five year periods.
Large-Cap Value	Exceed the S & P 500 BARRA Value Index for one, three, five year periods.
Small-Cap Growth	Exceed the Russell 2000 Growth Index for one, three, five year periods.
2. International Equities	Return within 250 bp of the Salomon Brothers BMI-EPAC Index, ½ USD & ½ LC for one, three, five year periods.
3. Fixed Income	Exceed the Lehman Government/Corp. Index over the one, three, five year periods.
4. Real Estate	Exceed the NCREIF minus 75 bp (Industry estimate for management fee) over the one, three, five year periods.
5. Alternative Investments	Exceed S & P 500 Index +300 bp over the one, three, five year periods.

VI. General Investment Manager Guidelines and Requirements

- A. Purchases and sales, security selection, and portfolio implementation of investment strategies are delegated to the discretion of the investment manager, subject to compliance with MPSERS investment policies.
- B. The following transactions are prohibited: Purchase of any securities or execution of any other transactions prohibited by P.A. 314.
- C. Transactions that involve a broker acting as a “principal” where such broker is also the investment manager who is making the transaction are prohibited. Brokers acting as investment managers are limited to “agency” transactions.
- D. Transactions shall be executed at a reasonable cost, taking into consideration prevailing market conditions and services and research provided by the executing broker.
- E. MPSERS considers the active voting of proxies an integral part of the investment process. Proxy voting will occur in accordance with the Proxy Voting Policy incorporated by attachment and is delegated to the investment managers.
- F. No more than 5% of the MPSERS portfolio at cost may be invested in the securities of a single issuer or in a single tangible asset, excluding securities issued by the U.S. government or its agencies.

G. No fixed income security shall have an equivalent credit quality below investment grade at the time of purchase defined as:

BBB- by Standard & Poors for straight bonds and convertibles.

Baa (3) by Moodys Investor Service for straight bonds and convertibles.

A2 by Standard & Poors for short term securities.

P2 by Moodys Investor Service for short-term securities.

H. The use of U.S. equity index futures is permitted to achieve the following:

1. To reduce the opportunity cost caused by “cash drag” in a rising equity market.
2. To decrease the transaction costs of equity trading without increasing the risk (volatility) of the equity component of MPSERS.
3. To increase the manager’s flexibility in meeting the performance objectives set forth for them within defined investment style and strategy constraints.

I. The use of U.S. equity futures is constrained by the following requirements:

1. Futures cannot be used for speculative purposes, or for leveraging returns.
2. Futures can be used to replicate asset returns and to hedge existing assets.

J. Real estate investments may be made in the U.S. or U.S. territories only.

K. Performance objectives are to be met on a net of fees basis.

L. All guidelines must be adhered to by internal and external money managers, however, if from time to time an exception to the guidelines shall be deemed appropriate by a manager, it may seek review and approval by the State Treasurer, as sole fiduciary, to make such an exception.

VII. Review and Modification of Investment Policy Statement

The State Treasurer, as sole fiduciary, will review the Policy at least yearly to determine if modifications are necessary or desirable. If modifications are made, they shall be promptly communicated to all investment managers and other interested persons.