Pennsylvania Municipal Retirement Board Policy Statement Rule Number 99-4	Investment Guidelines

Purpose: To establish a clear set of investment guidelines to be followed by the Board, their investment consultant and the various investment advisors or managers.

Authority: Act 15 of 1974, "Pennsylvania Municipal Retirement Law": Section 405.

Policy: INTRODUCTION

The Pennsylvania Municipal Retirement Board (the Board) has adopted the following guidelines in an effort to set forth the expectations, restrictions, and policy decisions that the Board utilizes to fulfill its fiduciary responsibility. These guidelines were developed to assist the staff of the Pennsylvania Municipal Retirement System (the System) and the investment advisors hired by the Board in the day-to-day management of the System's assets. This document is to be read in conjunction with each individual investment advisor's contract. The two documents shall be considered the sole source for directing investment policy decisions in the absence of direct Board action to the contrary.

BACKGROUND

The System is an independent state agency created by act of the General Assembly. Its purpose is to administer public pension plans for municipalities and political subdivisions. The State Treasurer is custodian of the Fund.

The System has responsibility for approximately 725 individual pension plans with a variety of benefit structures. Total of employees covered exceeds 12,000 including approximately 2,600 retirees. The System is experiencing a positive cash flow and expects no change in this position for the foreseeable future. The System assumes that all benefit payments can be made from incoming revenue as opposed to any depletion of invested assets.

The System's Board is required to establish the regular interest it will credit the accounts on an annual basis in advance of the fiscal year. Excess investment earnings are allocated to plan members on an equalized basis after netting administrative expenses. The Board believes it practical and possible to have a six and five-tenths percent (6.5%) annual rate of return net of all expenses over a typical market cycle (five-year period) and adopted this figure on May 21, 1987 as the regular rate of interest to be credited by the System.

INVESTMENT OBJECTIVE

The Board's investment objective is to benefit our member municipalities by adding value to their assets. Recognizing that inflation can erode value, the Board's goal is to have the fund earn at least two percent (2%) more annually than the average annual inflation rate over a long period of time. While this is the System-wide goal, individual investment advisors' performance measurements rely on other characteristics which are specifically spelled out in this document and in the individual contractual agreements for the investment advisors.

INVESTMENT PHILOSOPHY

The Board considers itself a conservative fiduciary, placing greatest emphasis on quality of investments and consistency in return. Despite this conservative posture, the Board still believes that investments should perform in such a manner that the rate of return over a five-year period, net of management fees, should exceed the recognized market indices for the various asset vehicles. Specifically, fixed income returns are expected to exceed the Lehman Aggregate Bond Index; the returns of equity managers of portfolios containing large capitalized firms are expected to exceed the Standard and Poor's 500 Stock Composite Index; the returns of managers of portfolios containing small capitalized firms are expected to exceed The Russell 2,000 index, and the returns on cash are expected to exceed the 90-Day Treasury Bill Offering.

Real estate returns shall consist of two components: the core portfolio benchmark return and the non-core portfolio benchmark return. The benchmark return for the core real estate portfolio investments is a real rate of return of five percent (5%) over ten-year time periods. The benchmark return for the non-core portfolio is a real rate of return of no less than six percent (6%) over ten-year time periods. In achieving the core benchmark return, emphasis shall be placed on the income component of the total return. A minimum income return requirement does not apply to non-core investments.

The Board believes that active management should add more value than passive management to the portfolio. The Board, however, recognizes that passive management does have merit for diversification, ease of participation, and cost of administration purposes and therefore shall draw upon both styles for investment management.

The Board believes that one of the most important responsibilities it has as a fiduciary is to determine the appropriate total asset allocation for the System. Individual investment advisors are specifically restrained by their individualized contracts or guidelines as to the asset classifications in which they may invest. The investment vehicles which the Board believes appropriate for the System include equities (both domestic and international), a fixed income portfolio of corporate and government bonds (both domestic and international), real estate, and cash or cash equivalents.

After consideration of the September 1998 asset allocation study, the Board established the allocation goals to be as follows:

Equities (large capitalized firms)	Thirty-five percent (35%)
Equities (small capitalized firms)	Fifteen percent (15%)
Equities (non-United States domiciled firms)	Fifteen percent (15%)
Fixed Income	Twenty-five percent (25%)
Real Estate (Total)	Ten percent (10%)
Direct Real Estate Equity	No more than four and five tenths percent (4.5%)
Commingled Real Estate Funds with Equity Participation	The remainder of the ten percent (10%) allocated to real estate

The allocations are to be based upon market value rather than cost. Managers hired to invest in small capitalized firms shall only be allowed to invest in the securities of firms listed as part of the Russell 2000 Index as of the date of purchase for the portfolio.

The Board believes that the most value over the long term results from how the portfolio is allocated among the approved asset classes. For that reason the Board shall retain exclusive control of the entire System's portfolio allocation. Specific steps have been designed for the Secretary of the System to allocate and reallocate new monies and existing assets on a monthly basis to meet the overall asset allocation objectives.

The Board believes that its relationship with the investment advisors and staff should be an open one in which constant communication occurs between the parties. However, only those understandings and expectations that have been agreed to vis-à-vis the individual investment advisor's guidelines adopted by the Board and the individualized contracts hiring the investment advisors are to be considered in managing the account. Appropriate action for any breach of contract shall be instituted when, in the judgment of the Board, further action is necessary.

PORTFOLIO CONSTRUCTION

To assist the Board in obtaining its investment objectives for the fund investment advisors shall be retained after due diligence. Each investment advisor shall be individually reviewed by the Board periodically but no less than annually. In addition to the overall investment guidelines for the System, each investment advisor shall have an individualized contract and a more specific set of guidelines reflecting the Board's expectations and restrictions. The individual investment advisor's guidelines are to be incorporated into the overall guidelines of the System and are to be treated as appendices to this public document. All investments shall be made in compliance with applicable federal and state law.

Within the individual specific investment guidelines, the investment advisors shall have the discretion to buy and sell securities when, in their judgment, the investment outlook warrants such transactions.

The Board's expectation is that all assets in the Fund shall be invested to the fullest extent possible daily. Idle cash is to be avoided.

SPECIFIC SHORT-TERM CONSIDERATIONS

Assets shall be invested only in those vehicles specifically authorized for use by the investment advisor. All other transactions shall be prohibited. All investment advisors shall have discretion to weight the commitment of their resources to the authorized investment vehicle(s). While it is the desire of this Board to remain as fully invested as possible, any advisor who wishes to be postured in a cash or cash equivalent position shall either invest in the vehicles authorized by the System or utilize the System's depository relationship with the State Treasurer who is custodian of the Fund and invests all cash on a daily basis.

It is the Board's desire and responsibility to have the cash performance reported in the investment advisor's overall performance measured by the Board's investment consultant. A weighted daily balance crediting investment earnings from the short-term fund at Treasury shall be monitored and reported to both the manager and the investment consultant monthly. However, no management fee shall be paid by the System to any manager for that portion of average assets in excess of five percent (5%) remaining in cash equivalents at Treasury. The calculation of the average position shall be based on the daily cash balance as compared to the total assets at market value at the close of the previous calendar quarter.

SPECIFIC FIXED INCOME CONSIDERATIONS

The Board seeks to bring income and stability to the overall portfolio through fixed income vehicles. The bond portfolio is expected to be diversified from a geographic and industrial standpoint. Price appreciation is a consideration in the purchase of bonds. Reflecting the conservative tenor of the Board, the bond portfolio shall be invested in quality vehicles. Only those bonds issued by the federal government and its agencies or foreign government bonds denominated in U.S. dollars rated "AA" or higher, and only those corporate bonds which are rated and which ratings are no lower than "A" or better by both Moody's Investment Service and Standard and Poor's 500 shall be purchased. Should any bond drop below investment quality (BA or lower), the manager shall divest the holding or report in writing to the System's Secretary as to why the security remains a safe investment for the portfolio. As marketability is an important factor, all bonds purchased shall be of an issue that has an outstanding par value of at least fifty million dollars ($50,000,000) except for 144A securities.

The Board also permits the following specific fixed income investment securities:

(1) 144A securities rated "A" or better and accompanied by registration rights;
(2) Collateralized mortgaged-backed securities (CMO) and commercial mortgaged-backed securities (CMBS) rated "AAA;"
(3) Asset-backed securities rated "A" or better; and
(4) To be announced (TBA) issues (Fannie Mae and Freddie Mac) but only when the System intends to take delivery.

No single holding of an investment advisor other than a U.S. government bond is to account for more than five percent (5%) of the market value of that investment advisor's bond portfolio. The System shall not hold as assets more than ten percent (10%) of any one bond issue nor more than five percent (5%) of the bonds of any one issuing agent. Corporate bonds of any given sector of an industry are not to account for more than twenty-five percent (25%) of the market value of the bond portfolio. To insure these restrictions are valid, no investment advisor shall exceed these limits when applied to the individual portfolio.

Preferred stock is considered a fixed income surrogate.

SPECIFIC EQUITY INVESTMENT POLICY

The System's equity portfolio reflects the Board's desire not only to add value by income but also to include growth through market appreciation. Considerations of market appreciation shall be reviewed on a three-to-five year time horizon.

The System seeks to have an equity portfolio with diversification, quality issuance, growth potential and underlying value. No single equity holding shall account for more than seven and five-tenths percent (7.5%) of the market value of the System's equity portfolio, nor generally should the securities of any single sector account for more than twenty percent (20%) of the value of a particular manager's portfolio. The industry grouping shall be as defined by the Board's investment consultant. No more than one percent (1%) of the capitalization of any company is to be held by the System. The cumulative holdings of a manager for all of that manager's clients shall account for no more than five percent (5%) of the outstanding voting common stock of a corporation. It is anticipated that a manager will adhere to the guidelines and when holdings do not, a manager shall advise the Board within thirty (30) of exceeding the guidelines and justify why they are outside the authorized limits.

The purchase of convertible securities shall be permitted in equity portfolios provided the underlying equity is approved. Convertible bonds are considered to be equity surrogates and are permitted provided the underlying equity, if considered, would otherwise meet the guidelines.

SPECIFIC REAL ESTATE POLICY

The Board underscores its belief in the principle that diversification in investment vehicles should enhance the potential return on the investments by decreasing the overall risk of the portfolio. Investment decisions regarding the real estate portfolio shall be guided by the objectives to preserve capital, maximize cash distributions and income, achieve a total return competitive with the other asset classes, and maintain a broad diversification of assets and managers. Controlling risk within the real estate portfolio is as important as seeking higher returns.

The vehicles utilized for investment in real estate may be both direct equity participation and participation in commingled funds that involve equity participation. Consideration shall be given to the types of properties and to the geographic locations. Specific limitations as well as the specific investment process shall be detailed in individual real estate advisors' contracts. The asset class of equity real estate is recognized as a long term investment (seven to ten years).

Equity real estate investments provide for benefits derived directly from property operations and subsequent cash flows. Equity-oriented investments in income producing commercial and residential properties shall be emphasized.

An investment risk associated with real estate is that the actual income and total return may vary from the expected or projected return targets. The Fund shall manage this investment risk by implementing the following policies:

> A proposed investment shall exhibit institutional quality which is defined as similar to investments made by comparable pension funds and insurance companies.
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> All investments shall be underwritten, managed by, and disposed of (if necessary) by a qualified real estate investment manager.
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> The equity real estate portfolio shall be diversified by property type, economic/geographic location, and manager in order to reduce risk.
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> A manager's acquisition, management, and disposition of real estate investments shall be guided by the prudent expert standard.

All real estate investments shall be valued by a qualified independent appraiser(s) (MAI) at regular intervals, but no less than biennially. Managers shall estimate the market value of each core property investment in those years independent appraisals are not performed. The manager's valuation shall be used for performance measurement purposes.

The real estate investments shall be made by means of any legally permissible investment vehicle including individually managed accounts, co-investments, group trusts, REITs (Real Estate Investment Trust), partnerships, and securities. The System shall seek investments through said investment vehicles in formal/informal secondary markets. The System's participation in a real estate investment pool shall be limited to twenty percent (20%) of the total net assets of such an investment pool. Co-investment pools are excluded from this percentage participation criteria.

The property type classification components are as follows: (1) Office; (2) Retail; (3) Industrial; (4) Residential; and (5) Other. No more than forty percent (40%) of the real estate portfolio maybe in any one classification

Real estate portfolio compositions shall be divided so that no less than eighty percent (80%) shall be core and no more than twenty percent (20%) non-core.

Core Real Estate:

Core investments shall include operating and substantially leased office, retail, industrial, and apartment properties located in major metropolitan markets, or key distribution centers exhibiting strong and diversified economic bases. (An operating and substantially leased property is defined as a property with no less than eighty percent (80%) of its net leasable area leased exclusive of master leases, letters of credit or other such guarantees, and operating income which is sufficient to pay operating expenses and debt service and provide a return consistent with the core real estate portfolio benchmark return.) Core investments may be comprised of direct investments in real estate and participating in pools of capital with similar investors to provide diversity and access to larger, more dominant properties.

The core investment type shall be unleveraged equity, leveraged equity, and debt/equity hybrid investments. The overall debt to equity ratio shall not exceed 1:1 for any future pooled investments or new separate accounts, and 2:1 for individual assets.

There is no minimum investment size. The maximum investment size shall be such that a loss of fifty percent (50%) in the gross asset value of a property in which an investment is made shall result in a loss in the net asset value of the combined real estate portfolio of no more than seven and five-tenths percent

(7.5%). The net investment value of a property shall not exceed fifteen percent (15%) of the net investment value of the combined equity real estate portfolio.

Multi-tenanted properties with staggered lease termination dates are preferred to properties with an undue concentration of lease termination dates unless such concentration further diversifies the lease termination dates of the portfolio. Single tenant properties will be considered if the tenant provides credit and lease structure diversification within the total real estate portfolio of the Fund, the tenant is financially sound, the property can be converted to multi-tenant use at a reasonable cost, and the property will not have an undue concentration of lease termination dates.

Non-Core Real Estate:

Non-core investments are those investments which are not core investments and typically exhibit more risk. They may require specialized acquisition and/or asset management skills to moderate the higher risk associated with the investment. Non-core investments include developmental properties, investments in land, and other non-traditional property types.

The purpose of the non-core association is to permit the System to take advantage of unique investment opportunities where the inherent risk is greater than that of core investments and the projected return is determined to be commensurate with the risk. The non-core property type classification distribution targets shall be the same as the core targets. Non-core investments may be proposed by any entity including banks, insurance companies, real estate firms, or individuals.

The non-core ownership structure is preferably unleveraged equity due to the greater risk associated with non-core investments. The leveraged equity or debt/equity hybrid investments structure may increase the risk associated with a non-core investment and shall therefore be utilized only if acceptable debt service coverage, loan to value, foreclosure and other provisions providing protection can be obtained. For purposes of evaluating new investments, the debt service coverage shall be no less than one and twenty-five hundredth percent (1.25%), and the loan to value ratio shall be no more than sixty-five percent (65%).

PROHIBITED TRANSACTIONS

The Board prohibits (1) purchasing of commodities, mineral rights, and warrants except those previously authorized, (2) short selling and the purchasing of securities on margin, and (3) selling or buying options or futures contracts on either fixed income or equity instruments. Unleveraged derivatives used to dampen risk, execute an unleveraged strategy, or reallocate assets within a portfolio quickly may be used by a manager provided the exposure to derivatives does not exceed five percent (5%) of the manager's portfolio at market value.

Leveraged derivatives of any nature or the use of derivatives to create leverage are strictly prohibited. Notwithstanding the above, warrants received in corporate restructuring may be retained at the manager's discretion.

EXECUTION AND OPERATION

The System is required by law to utilize the Pennsylvania State Treasury as the depository. Consistent with the authority of the Treasury Department, a Master Custodian may be appointed by the Treasurer. The System shall require the Master Custodian to be responsible for the security lending program utilized by the System. The security lending operation is not expected to have any impact on the investment manager's discretion. Investment advisors are expected to be able to work within this arrangement.

Investment advisors shall execute orders on the best net price basis. Transactional costs and the costs associated with execution of trades as well as the rate of turnover shall be monitored by the System. The best execution rule shall be observed by all advisors. Active equity advisors are expected to execute trades on the auction markets (NYSE and AMEX) at a rate close to the execution only cost (currently averaging three cents ($.03) per share or less). Investment advisors executing trades on the dealer markets (NASDAQ) are expected to act solely in the best interest of the plan when executing a trade. Deviation from these requirements shall be justified by the investment manager in writing.

Investment advisors may participate in a recapture program with an institutional broker(s) of their choice so that the average execution cost of trades in a calendar year does not exceed the average costs of trades executed at the execution only price. The Fund shall not enter into an exclusive use clause with any institutional broker. Advisors may work with any firm that offers the same level of service at the same level of net cost to the Fund.

The Board takes full responsibility for exercising the voting privilege contained in proxy solicitations and has adopted specific guidelines for staff guidance. These guidelines as adopted and hereafter amended shall be considered an integral part of these investment guidelines.

COMMUNICATIONS

The Board expects an open and constant line of communication between the System's staff and the investment advisors. The frequency of the communication among the three parties is key to the appropriate management of the Fund. The Board assumes the responsibility of reporting to individual investment advisors any significant changes in the assessment of the income requirement, risk-taking capabilities, or other vital characteristics concerning the management of the Fund.

Recognizing the dynamic nature of the underlying markets and the securities in which the Fund is investing, it shall be the responsibility of the investment advisor to report to the Board any suggestions or alterations in these guidelines or specific contract considerations which may be desirable for the achievement of greater satisfactory investment results. Revisions shall be considered from time to time.

Reports required of the investment advisors to the System's Board and staff shall include:

A timely confirmation of all transactions,

A monthly summary of transactions,

A quarterly statement of asset values at cost and at market,

Any explanation of contemplated major shifts in investment strategy or manager style before implementation in the System's portfolio, and

An explanation of major changes in organization or the personnel responsible for the development/management of the advisor's investment policy and/or associated with the System's account.

In addition to these written reports, the investment advisor is obligated to make periodic personal appearances before the Board as specifically detailed in the investment advisor's contract. Investment advisors' fees shall be paid in hard dollars. The cost of the investment advisors' management of any of the System's assets shall be a factor considered during the performance review of the managers' portfolios.

MONITORING

The System shall monitor the performance of its investment advisors through direct involvement of the Board, the System's staff, and any consultant hired for this purpose by the Board. The investment advisors are expected to work with these parties in a reasonable and cooperative fashion.

CERTIFICATION

These investment guidelines were adopted by the Pennsylvania Municipal Retirement Board on September 23, 1999. This document is the official Investment Guidelines of the Pennsylvania Municipal Retirement System.

Attachment: Policy Guidelines for Proxy Voting Adopted September 22, 1994.

Effective Date: This rule is to be implemented effective immediately and shared with all current PMRS investment consultants, advisors and managers as well as the System's staff. Parties will be held to these compliance standards beginning January 1, 2000.

Adoption Date: Adopted at the September 23, 1999 meeting of the Pennsylvania Municipal Retirement Board.

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