

EAST BAY MUNICIPAL UTILITY DISTRICT EMPLOYEES' RETIREMENT SYSTEM

Statement of Investment Policy and Procedures

Last Revised September 2014

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I. INTRODUCTION

This document provides a framework for the investment management of the assets of the East Bay Municipal Utility District Employees' Retirement System (the 'System' or "EBMUDERS"). Its purpose is to assist the Board of Administration (the Board' or "Retirement Board") in effectively supervising and monitoring the investments of the System, and achieving its objective of providing adequate retirement, disability, survivorship and other post-employment benefits to eligible Members of the Retirement System in a cost-effective manner. Specifically, it will address:

- The general goals of the investment program;
- Specific asset allocations, rebalancing procedures and investment guidelines;
- Performance objectives; and
- Responsible parties.

This Investment Policy statement includes the provisions of the California Constitution and Statutes and will:

- Set forth investment policies, objectives and procedures which the Retirement Board judges to be appropriate and prudent, in consideration of the needs of the Employees' Retirement System;
- Establish the criteria which the investment management organizations retained by the Retirement System are expected to meet and against which they are to be measured;
- Communicate the investment policies and objectives and performance criteria to the Investment Managers; and
- Serve as a review document to guide the Board's ongoing oversight of the investment of Retirement System's assets.

It is the practice of the Retirement Board to change its policies and objectives in accordance with changing regulatory, economic, financial and administrative conditions as they change over time.

The System is governed by a six-member Retirement Board, with five voting members and one non-voting retired member. In the formation of this investment policy and goal statement, a primary consideration of the Board has been their awareness of the stated purpose of the System. The Board's investment activities are designed and executed in a manner that will fulfill these goals.

This policy statement is designed to allow for sufficient flexibility in the management oversight process to capture investment opportunities as they may occur, while setting forth reasonable parameters to ensure prudence and care in the execution of the investment program.

II. INVESTMENT OBJECTIVES

A. Overall Performance Goals

The System's general investment goals are broad in nature. The following goals, consistent with the above described purpose, are adopted:

- 1. The overall goal of the System's investment assets is to provide adequate retirement and disability, survivorship and postemployment healthcare benefits to eligible employees in a cost effective manner. This will be accomplished through a carefully planned and executed investment program.
- 2. A secondary objective is for the System investment assets to achieve a long-term total annual rate of return, including dividends, interest, and capital appreciation which exceeds the assumed actuarial rate of return and a total annual return net of all investment management fees and expenses, which meets or exceeds a weighted average of the asset class benchmarks specified below, where the weights correspond to the System's strategic policy allocation.
- 3. In addition, System investment assets should achieve a real or inflation adjusted return of 4% or more above the nationwide Urban Consumers Price Index.
- 4. The Retirement System endeavors to achieve the above System investment asset return objectives within a time horizon of three to five years or approximately a full market cycle.
- 5. System investment assets should remain fully invested.
- 6. Investment management of System investment assets should recognize that the Retirement System is relatively risk averse and the System's capital should be preserved. Therefore, the goals of the Employees' Retirement System are to be achieved recognizing safety of principal, liquidity and yield in that order.
- 7. Assets must be diversified by type and issuer.
- 8. Allocation of assets to Investment Managers shall be determined by the Retirement Board to accommodate changing conditions and laws.
- 9. The System's investment program shall at all times comply with existing and future applicable local, state, and federal regulations
- 10. All transactions undertaken will be for the sole benefit of the System's Members and beneficiaries and for the exclusive purpose of providing benefits to them and defraying reasonable administrative expenses associated with the System.
- 11. All fees and other costs payable to third-party providers of services to the System shall be payable from System assets
- 12. The System has a long-term investment horizon, and utilizes an asset allocation which encompasses a strategic, long-run perspective of capital markets. It is recognized that a strategic long-run asset allocation plan implemented in a

consistent and disciplined manner will be the major determinant of the System's investment performance.

13. Investment actions are expected to comply with "prudent person" standards, meaning:

"with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man 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."

B. Performance Goals by Asset Class

1. The performance objective of the portfolio's allocation to each asset class in which the System's assets are invested shall be to achieve a total return net of fees and expenses which equals or exceeds the market indexes listed below over a full market cycle as defined by the Board.

Asset Class Performance Benchmarks

ASSET CLASS	BENCHMARK
1. U.S. Equities:	Russell 3000 Index
2. Non-U.S. Equities:	MSCI ACWI x US Index
3. Core Fixed-Income:	Barclays Aggregate Index
4. Non-Core Fixed-Income:	50% Barclay's US 1-3 Yr. Govt./Credit Index, 25% Barclay's 1-5 Yr. US High Yield Cash Pay Index, 25% S&P/LSTA Performing Loans Index
5. Real Estate:	50% NCREIF (lagged), 50% FTSE NAREIT All Equity REITs Index
6. Covered Calls:	BXM Covered Calls Index*

^{*}Also known as the CBOE S&P 500 BuyWrite Index

- 2. Performance results for System investment assets and for each Investment Manager shall be calculated and evaluated quarterly and presented to the Board for review.
- 3. A special target index will be created and utilized to measure the performance results of the portfolio, serving as a benchmark for the total portfolio. This Total Portfolio Benchmark will be included in evaluation reports presented to the Board for review. The Total Portfolio Benchmark will consist of and be weighted as follows:

Total Portfolio Benchmark

- 40% Russell 3000 Index
- 20% BXM Covered Calls Index
- 15% MSCI ACWI x US
- 10% Barclay's Aggregate Index
- 5% Barclays US 1-3 Yr. Govt./Credit Index
- 2.5% Barclays 1-5 Yr. US High-Yield Cash-Pay Index
- 2.5% S&P/LSTA Performing Loans Index
- 2.5% NCREIF (lagged)
- 2.5% FTSE NAREIT All Equity REITs index

This target benchmark index reflects the asset allocation goal established by the Retirement Board.

III. DUTIES AND RESPONSIBILITIES

A. Duties of the Board or its Designee(s)

The Retirement Board has the responsibility for administration of the System for the benefit of plan participants, although it is not the intent of the Board of Retirement to become involved in the day-today investment decisions. The Board or its designee(s) will adhere to the following procedures in the management of the Board's assets:

- 1. The Board develops and approves guidelines for the execution of the Board's investment program.
- 2. The Board is responsible for selecting qualified Investment Managers, the General Investment Consultant, the Master Custodian, and other service providers.
- 3. The Board will ensure a formal review of the System's investment structure. An asset-liability study including allocation and financial performance reviews will be conducted every three to five years or more frequently as the need arises. The review will include recommended adjustments to the long-term, strategic asset allocation to reflect any changes in policy, applicable regulations, long-term capital market assumptions, actuarial assumptions and the System's financial condition.
- 4. The Board may retain investment consultants to provide such services as conducting investment performance reviews, asset-liability studies, asset allocation, Investment Manager reviews, and investment research.
- 5. The Board will review investments and Investment Managers at least quarterly to ensure that policy guidelines continue to be met. The Board will monitor investment returns on both an absolute basis and relative to appropriate benchmarks as set forth in this policy, including measurements against benchmarks and key qualitative factors and peer group comparisons. The source of information for these reviews may be staff, the General Investment Consultant, the Investment Managers, and others as appropriate. The Board is responsible for taking appropriate action if investment objectives are not being met or if policies and guidelines are not being followed.
- 6. The Board will provide oversight to ensure investments in a cost-effective manner subject to Board approval. These costs include, but are not limited to, investment management, consulting and custodial fees, transaction costs and other administrative costs. Costs to administer the System are chargeable to and expected to be paid by the System.

B. Duties of the Administrative-Investment Committee

The Administrative-Investment Committee shall meet as needed. Duties of the Administrative-Investment Committee shall be as follows:

- Make recommendations as to general investment policies, practices, and procedures to the Retirement Board including, but not limited to, asset mix, portfolio diversification, average maturity, portfolio risk level and rate of return.
- 2. Review the investment performance of the Retirement System.
- 3. Confer with the Investment Managers to review investments and current market environment.
- 4. Review the Statement of Investment Policy and Procedures as adopted by the Retirement Board and make recommendations as to the content thereof.
- 5. Render advice to the Retirement Board relative to the desirability of and the procedure to retain investment advisors, performance measurement services, and bank custody of securities owned.
- 6. Select one Committee member to serve as Chair at all meetings scheduled by the Administrative-Investment Committee.

C. Duties of the East Bay Municipal Utility District Staff

The Director of Finance of the East Bay Municipal Utility District shall serve as the Manager of Finance of the System. The Director of Finance and his/her staff provide analysis and recommendations to the Board on a wide variety of investments and investment related matters; oversee and direct the implementation of Board policies, and manage the System's portfolio on a day to day basis.

Pursuant to this policy, the Board has delegated to the Director of Finance:

- 1. Authority to withdraw assets from assigned managers as necessary to efficiently meet operating needs and to invest the System's cash without requiring the Board's permission but only as set forth in this policy.
- Responsibility to recommend service providers to the Board, including conducting the search process for the General Investment Consultant, Investment Managers, Master Custodian, and other service providers as requested by the Board.
- 3. Responsibility for implementation and administration of this policy and of the Board's decisions, including:
 - a. Managing the relationships with service providers to the System to ensure that they are providing all the necessary assistance to Board and to staff. Should any service provider fail to do so, the Director of Finance may make changes to the extent consistent his/her authority pursuant to this policy, or recommend appropriate changes to the Board;
 - b. Ensuring that Investment Managers conform to the terms of their contracts, appropriate policies and guidelines; and

- c. Ensuring that performance monitoring systems are consistent with this policy and provide the Board with as timely, accurate and useful information as possible.
- 4. Authority to manage portfolio restructuring resulting from portfolio rebalancing or manager terminations, with the assistance of the General Investment Consultant, a transition manager, other consultants, and Investment Managers, as needed.
- 5. Authority to vote proxies in stocks held by the System. Proxies will be voted with Management unless otherwise directed by the Board.
- 6. Authority to designate individual staff of the District to carry out his/her responsibilities under this policy.
- 7. The Director of Finance may rely upon the assistance of the General Investment Consultant as needed to fulfil his/her obligations.
- 8. The Director of Finance and his/her staff, with assistance from the General Investment Consultant as needed, shall also:
 - a. Be responsible for organizing and/or participating in any special research for the Board; and
 - b. Advise and keep the Board apprised of any other events of investment significance.

D. Duties of the General Investment Consultant

The Investment Consultant shall be responsible for the following:

- 1. At the request of the Director of Finance or his/her designee, assist Staff in performance of their duties as listed in this investment policy.
- Prepare a quarterly performance report and a comprehensive annual report which shall include performance attribution on the Board's Investment Managers and performance of total System assets. Performance results shall be presented to show:
 - a. The degree to which portfolios and investment managers have achieved Retirement Board investment objectives;
 - b. That the investment managers' strategy has been consistent with their stated philosophies; and
 - c. How the total portfolio and the individual managers performed in comparison with other pension funds and peer managers.

- d. These reports shall include, but are not limited to:
 - i. Performance of System asset portfolio as a whole with respect to this policy, including stated benchmarks and policy objectives, and comparison with other pension funds.
 - ii. A report on the general economic and investment environment as it affects the System asset portfolio as a whole and the asset allocation categories and Investment Managers individually.
 - iii. Each Investment Manager's performance on an ongoing basis relative to Board investment objectives as stated in this policy, using investment performance criteria relative to specific benchmarks associated with its asset class and to benchmarks incorporated into its agreement.
 - iv. A check on each Investment Manager's adherence to its stated investment style and discipline.
 - v. Any instability of Investment Manager personnel and organization.
 - vi. Any unusual portfolio activity, trading volume, and execution costs.
 - vii. Risk and performance characteristics with respect to an individual Investment Manager's portfolio not logically explainable in terms of the published style or out-of-step with manager's style peer group.
 - viii. Failure by an Investment Manager to comply with all investment guidelines
 - ix. How the individual managers performed in comparison with other pension funds and peer managers;
 - x. Documentation and recommendations with respect to implementation of this policy pertaining to Watch Status. Documentation includes material pertaining to the Investment Manager's consideration for Watch Status, placement on Watch Status, removal from Watch Status and/or replacement/termination; and
 - xi. Any other factors considered by the General Investment Consultant to be of material relevance to the Board in their evaluations of the Investment Managers individually or the performance of the System's asset portfolio as a whole.
- 3. Make recommendations to the Board regarding investment policy and strategic asset allocation, including managing and interpreting the periodic asset-liability study as requested by the Board.

- 4. Assist the Board in the implementation of this policy pertaining to Watch Status of individual Investment Managers/portfolios, including documentation of relevant factors and recommendations for individual Board actions.
- 5. Assist the Board in the selection of qualified Investment Managers, and assist in the review of existing managers, including monitoring changes in personnel, ownership and the investment process.
- 6. Assist the Board in the selection of a qualified custodian if necessary.
- 7. Provide topical research and education on investment subjects as requested by the Board or Investment staff.

E. Duties of the Investment Managers

The investment managers shall:

- 1. Contract by written agreement with the Board to invest within approved guidelines.
- 2. Provide the Board with proof of liability and fiduciary insurance coverage at the time of execution of engagement contract and annually thereafter until the relationship is terminated.
- 3. Be a SEC-Registered Investment Advisor under the 1940 Act or an authorized bank or trust, and be recognized as providing demonstrated expertise over a number of years in the management of institutional assets within a defined investment specialty.
- 4. Adhere to the investment management style concepts and principles for which they were retained, including, but not limited to, developing portfolio strategy, performing research, developing buy, hold and sell lists, and purchasing and selling securities.
- 5. Obtain best execution for all transactions for the benefit of the System with brokers and dealers qualified to execute institutional orders on an ongoing basis at the best net cost to the System, and, where appropriate, facilitate soft dollar credits and the recapture of commissions for the System's benefit.
- 6. The Board has determined that Investment Managers should be encouraged to direct approximately 25% of their trades through brokers specified by the Board. This may allow the Retirement System to recapture some of the commission costs. It should be understood that the trades should be executed on a competitive basis to ensure best execution and to limit commission costs.
- 7. Investment Managers should also recognize that it is the intent of the System to encourage the growth and development of firms eligible for the East Bay

Municipal Utility District's Contract Equity Program (CEP) when prudently possible. Investment Managers are encouraged to execute trades through CEP firms. Such trades must be executed on a competitive basis to ensure best execution and to limit commission costs.

- 8. Investment Managers are required to reconcile monthly accounting, transaction and asset summary data with custodian valuations, and communicate and resolve any significant discrepancies with the custodian and Staff.
- 9. Investment Managers are required to report the following at least monthly to General Investment Consultant, and upon request to the Board and Director of Finance or his/her designee:
 - a. Transaction and asset summary data reported at cost and fair market value:
 - Rate of return, which calculation shall include net income, realized gains and losses, and, if appropriate, unrealized appreciation and depreciation; and
 - c. Managers that invest in derivatives are also required to make quarterly reports on the specific risk exposure to the system.
- 10. If requested by Staff and/or the General Investment Consultant, Investment Managers are required to provide in writing reasons for underperformance with respect to policy and/or agreement benchmarks
- 11. Investment Managers are required to maintain frequent and open communication with the Board and Director of Finance or his/her designee(s) on all significant matters pertaining to the Investment program, including, but not limited to, the following:
 - a. Major changes in the Investment Manager's investment outlook, investment strategy and portfolio structure;
 - b. Significant changes in ownership, organizational structure, financial condition or key or senior personnel;
 - c. Any changes in the Portfolio Manager, Relationship Manager or other personnel assigned to the System;
 - d. Each client that terminates its relationship whose terminated portfolio account represents at the least one percent of the Investment Manager's aggregate portfolio on the day of notice of termination with the Investment Manager, within 30 days of such termination;
 - e. Each client that terminates its relationship when the cumulative terminations for a calendar month equals or exceeds one percent of the Investment Manager's aggregate portfolio as of the first business day of the reporting month; and

- f. All pertinent issues which the Investment Manager deems to be of significant interest or material importance.
- 12. Meet with the Board and the Director of Finance or his/her designee as requested.

F. Duties of the Master Custodian

The Master Custodian shall be responsible to the Board for the following:

- 1. Provide complete global custody and depository services for the designated accounts.
- 2. Manage a Short Term Investment Fund (STIF) for investment of any uninvested cash, and ensure that all available cash is invested. If the cash reserves are managed externally, full cooperation must be provided.
- 3. Provide in a timely and effective manner a monthly report of the investment activities implemented by the Investment Managers.
- 4. Collect all income and principal realizable and properly report it on the periodic statements.
- 5. Provide monthly and fiscal year-end accounting statements for the portfolio, including all transactions; these should be based on accurate security values for both cost and market. These should include, where appropriate, records of amortized cost. These reports should be provided within acceptable time frames.
- 6. Report situations where accurate security pricing, valuation and accrued income is either not possible or subject to considerable uncertainty.
- 7. Provide assistance to the System to complete such activities as the annual audit, transaction verification or unique issues as required by the Board.
- 8. Manage a securities lending program to enhance income if directed by the Board. If the securities lending program is managed externally, full cooperation must be provided.
- 9. Process class action processing services including tracking class action lawsuits, filing claims on behalf of the System, responding to inquiries from the claims administrators, following up on rejection notices with additional information where appropriate, posting settlement fund distributions to appropriate System accounts, and providing reports on proceeds received.

IV. INVESTMENT POLICIES AND PROCEDURES

A. Asset Allocation — Asset/Liability

- 1. The Board regularly adopts and implements an asset allocation policy that is predicated on a number of factors, including:
 - a. A projection of actuarial assets, liabilities, benefit payments and required contributions;
 - b. Historical and expected long-term capital market risk and return behavior;
 - c. An assessment of future economic conditions, including inflation and interest rate levels; and
 - d. The current and projected funding status of the System.
- 2. The asset allocation will be determined through appropriate studies undertaken by consultants retained by the Board. The allocation study will include all asset classes deemed prudent and appropriate by the Board. The Board, with the aid of the Director of Finance and the investment consultant, will determine the assumptions and criteria to be used in the asset allocation study. The following assumptions and criteria will be so determined:
 - a. The expected return from each asset category.
 - b. The expected standard deviation of each asset category.
 - c. The minimum and maximum percent to be invested in each asset category.
 - d. The correlation relationship between the asset categories.
 - e. The minimum acceptable return over a given time period.
 - f. The net contribution as a percent of payroll.
 - g. The expected payroll growth rate.
- 3. The resulting asset allocation mixes will be approved by the Board with input from the Director of Finance and the investment consultant and an optimum selection made. The asset allocation study will be performed no less frequently than every five years. Appropriate adjustments to the existing portfolio will then be made in the most expeditious and appropriate manner. The Director of Finance is authorized to retain a Transition Manager to assist with major re-allocations of the portfolio.
- 4. On a more frequent, periodic basis, the Director of Finance, with assistance from the investment consultant, will analyze the portfolio structure of each asset class. Analysis shall include:

- a. appropriateness of asset class and manager benchmarks,
- b. alignment structure of individual portfolios with asset class benchmarks based on manager holdings and mandate,
- c. evaluation of whether the asset class is structured in such a manner that is consistent with the Boards objectives,
- d. analysis of underperforming managers, and
- e. overall risk profile of the asset class.
- 5. Pursuant to the diversification of the investments of the Retirement System so as to minimize the risk of large losses, the assets of the System shall be diversified according to the specified target percentages:

Strategic Policy Allocation (approved September 2013)

Asset Class	2013 Target
US Equity	40%
Non-US Equity	15%
Core Fixed-Income	10%
Non-Core Fixed Income	10%
Covered Calls	20%
Real Estate	5%

As of December 31, 2014

Segment	Actual \$(000)	Actual %	Target %*	Variance_
Total Portfolio	1,370,463	100%	100%	
Domestic Equity	566,026	41.3%	40.0%	1.3%
International Equity	178,536	13.0%	15.0%	-2.0%
Covered Calls	279,419	20.4%	20.0%	0.4%
Total Fixed Income	257,936	18.8%	20.0%	-1.2%
Real Estate**	74,471	5.4%	5.0%	0.4%
Cash	14,075	1.0%	0.0%	1.0%

^{**}RREEF performance results and allocation are lagged one-quarter.

6. The System should remain fully invested. The allocation goal recognizes that at any time equity and fixed income Investment Managers may have transactional cash on hand, however available cash held by individual Investment Managers should not exceed 5% of their individual portfolios.

Core and Non-Core Fixed-Income Investment Managers can exceed 5% of the portfolio for strategic purposes only.

- 7. The District will also maintain enough cash as working capital to effectively meet cash flow demands on the system. These funds are not considered investable System assets. These funds will be invested by Staff in accordance with this policy.
- 8. Financial derivatives may be used within prudent limits to manage risk, lower transaction costs, or augment returns. Derivative securities should not be utilized to materially increase a portfolio's risk or duration. Leveraged positions are prohibited.

B. Rebalancing Guidelines

As markets move over time, the actual asset mix of the System's portfolio may diverge from the target allocations established by the Board through the asset allocation process.

- 1. The Board and staff, with the assistance of the General Investment Consultant, will monitor the portfolio's asset allocation relative to target allocations and ranges at least annually.
- 2. Staff, with the assistance of the General Investment Consultant, will monitor the volatility of the market at least annually utilizing the CBOE Market Volatility Index (the VIX) and other relevant information to identify and measure Turbulent Market Periods. A Turbulent Market Period is defined as one during which the current VIX level is one standard deviation above its three-year moving average.
- 3. With respect to each asset class group for which the Board has set a target allocation, the Board, in consultation with Staff and its investment consultant, have establish the rebalancing range limitations illustrated in the table entitled Strategic Policy Allocation Rebalancing Ranges Non-Turbulent Market Periods, incorporated in this policy. These rebalancing range limitations are to be used during market periods that are not defined as Turbulent.

Strategic Policy Allocation Rebalancing Ranges – Non-Turbulent Market Periods

Asset Class	2013 Target	Range	Min	Max
US Equity	40%	-/+ 5%	35%	45%
Non-US Equity	15%	-/+ 3%	12%	18%
Core Fixed-Income	10%	-/+ 2%	8%	12%

Non-Core Fixed Income	10%	-/+ 3%	7%	13%
Covered Calls	20%	-/+ 4%	16%	24%
Real Estate	5%	-/+ 2%	3%	7%

4. The Board, in consultation with staff and its investment consultant, has established wider rebalancing range limitations to be in effect during a Turbulent Market Period with respect to each asset class group for which the Board has set a target allocation. These ranges are illustrated in the table entitled Strategic Policy Allocation Rebalancing Ranges —Turbulent Market Periods and incorporated in this policy.

Strategic Policy Allocation Rebalancing Ranges – Turbulent Market Periods

Asset Class	2013 Target	Range	Min	Max
US Equity	40%	-10% to +6%	30%	46%
Non-US Equity	15%	-5% to +2%	10%	17%
Core Fixed-Income	10%	-2% to +5%	8%	15%
Non-Core Fixed Income	10%	-3% to +3%	7%	13%
Covered Calls	20%	-4% to +6%	16%	26%
Real Estate	5%	-2% to +2%	3%	7%

- 5. Whenever an allocation to a particular asset class is above or below target, but within the target range as illustrated in the table Strategic Policy Allocation Rebalancing Ranges Non-Turbulent Market Periods, the Director of Finance or his/her designee may rebalance partially or fully back to target subject to the considerations below. During Turbulent Market Periods the Director of Finance, in his/her discretion, may move to the wider rebalancing ranges for the major classes (US equity, non-US equity, and fixed-income) as outlined in the table Strategic Policy Allocation Rebalancing Ranges Turbulent Market Periods. Staff will immediately report any such move to wider rebalancing ranges to the Board at its next meeting.
- 6. The Director of Finance or his/her designee may rebalance a particular asset class partially or fully back to target if:
 - a. The assets are publicly traded;

- b. There is an opportunity to rebalance efficiently utilizing cash inflows and cash balances held by managers; and
- c. Trading opportunities can be utilized to the extent that they permit liquidating or adding to positions while limiting trading costs.

Staff will immediately report any such rebalancing to the Board at its next meeting.

7. The Director of Finance will not be required to reallocate private market asset classes, given the difficulty in managing the allocations to these less liquid asset classes. If the actual allocation for such assets falls outside the predetermined range Staff, in consultation with the General Investment Consultant, will make a recommendation to the Board for bringing the allocation as close as practicable to the policy target within a reasonable time-frame.

V. ELIGIBLE INVESTMENTS

The Board will utilize the following portfolio components to fulfill the asset allocation targets and total System performance goals established elsewhere in this document.

A. Public Equities Portfolio

The Board expects that over the long run, total returns to equities will be higher than the returns to fixed-income securities, but may be subject to substantial volatility over shorter periods. Public equity holdings may include:

1. U.S. Equities

- a. <u>Index Funds / Core Stocks</u> This component of the portfolio will provide broadly diversified, core exposure through index funds to the U.S. equity market, primarily in large capitalization companies. Index funds provide primary liquidity for asset allocation.
- b. <u>Large Cap Stocks</u> As a more defensive portion of the equity portfolio, value stocks, covering the upper range of market capitalization, are expected to outperform the broad market during periods of flat or declining trends, while underperforming during rising markets. Value stocks typically exhibit higher dividend yield, lower Price/Earnings ratios, and lower Price/Book ratios.
- c. <u>Large Cap Growth Stocks</u> Large cap growth stock allocation provides exposure to stocks of large capitalization, whose valuations are more directly tied to future earnings prospects. Often, growth stocks sell at higher prices relative to expected or historical earnings growth. Growth stock volatility tends to be higher than value stocks, although such stocks generally outperform during rising markets while trailing the market in flat or declining periods.
- d. Small Cap Stocks The principal characteristic of the small value stock component is its emphasis in stocks with a market capitalization generally ranging from \$200 million 1.5 billion that are characterized by faster growth and higher long-term returns during periods of flat or declining trends. Value stocks typically exhibit higher dividend yield, lower Price/Earnings ratios, and lower Price/Book ratios.
- e. <u>Small Cap Growth Stocks</u> The principal characteristic of the small cap growth stock component is its emphasis in stocks with a market capitalization generally ranging from \$200 \$1.5 billion that are characterized by faster growth and higher long-term returns during rising markets. Growth stock volatility tends to be higher than for value stocks.
- f. The objectives for investment of the US equity portfolio are:
 - i. Achieve a total return net of management fees which exceeds the Russell 3000 Index;

- ii. Achieve a minimum long-term rate of return which shall exceed the inflation rate as measured by the nationwide Urban Consumers Price Index by 4%;
- iii. Achieve performance results which will rank in the top third of Investment Managers which utilize a similar investment style;
- iv. The use of futures and options in the domestic equity accounts may be used for hedging purposes as part of their portfolio management strategy and will be incidental to their securities trading activities; and
- v. In order to minimize the risk associated with investment in the small cap market, it is expected that over the long term (3-5 years) Index Funds / Core Stocks, Large Value Stocks, and Large Growth Stocks combined will comprise approximately 92% of the System's target allocation to the U.S. Equity investment asset class while Small Value Stocks and Small Growth Stocks together will comprise approximately 8% of the System's target allocation to the U.S. Equity investment asset class. It is understood that this is a long-term objective, and that over short- or medium-term (less than 3 years) investments inconsistent with these percentages are not in violation of this policy. During periods when investments are inconsistent with these percentages, Staff and/or the General Investment Consultant will include in their regular report(s) to the Board the rationale behind this inconsistency.
- g. The equity portfolio shall be diversified. When fully invested in equities or at its normal level of investment, System investment assets should be invested in a minimum of 20 U.S. Equity securities. At no time may a single equity investment exceed 5% of the value of total System assets. Additionally, at no time may the System own more than 5% of any individual company.

2. Non-U.S. Equities

- a. <u>Developed Markets</u> This category includes broadly diversified equity markets outside the U.S. and consequently plays a significant role in diversifying the portfolio. This segment will concentrate on larger companies in established equity markets around the world utilizing a top/down approach.
- b. <u>Emerging Markets</u> This component is made up of equity positions in companies located in emerging, rapidly growing countries around the world. Because these are countries which are typically in the early development stages of economic growth, the returns in these countries tend to be higher and more volatile on a year-to-year basis.
- c. The objectives for investment of the non-US equity portfolio are:

- i. Achieve a total return net of management fees which exceeds the Morgan Stanley Capital International (MSCI) ACWI x U.S. Index;
- ii. Achieve a minimum long-term rate of return which shall exceed the inflation rate as measured by the nationwide Urban Consumers Price Index by 5%;
- iii. Achieve performance results which will rank in the top third of a peer group of international Investment Managers; and
- iv. Currency hedging will be permitted as part of a defensive strategy to protect an international equity portfolio.
- d. In order to minimize the risk associated with investment in emerging market securities, it is expected that over the long term (3-5 years) investment in Developed Markets will constitute approximately 80% of the System's target allocation to the Non-U.S. Equity investment asset class while investments in Emerging Markets will constitute approximately 20% of the System's target allocation to the Non-U.S. Equity investment asset class. It is understood that this is a long-term objective and that over short- or medium-term (less than 3 years) investments inconsistent with these percentages are not in violation of this policy. During periods when investments are inconsistent with these percentages, staff and/or the General Investment Consultant will include in their regular report(s) to the Board the rationale behind this inconsistency.
- e. Each international equity portfolio shall be diversified. When fully invested in Non-U.S. Equities or at its normal level of investment, System investment assets should be invested in a minimum of 20 securities. At no time may a single Non-U.S. Equity investment exceed 5% of the value of the total System assets. Additionally, at no time may the System own more than 5% of any individual company.

B. Fixed-Income Portfolio

The primary role of the fixed-income portfolio is to provide a more stable investment return and to generate income while diversifying the System's investment assets. The fixed-income holdings may be comprised of the following segments:

1. Core Fixed Income

- a. The Core Fixed Income component will provide core exposure to the U.S. fixed-income market including Treasury and government agency bonds, corporate debt, mortgages and asset-backed securities. This component will be composed primarily of investment grade issues with duration similar to that of an applicable core bond index.
- b. The objectives for investment of the core fixed income component of the Fixed-Income portfolio are:

- i. Preserve capital and provide a reasonable level of income on a consistent basis:
- ii. Earn an average annual return from income and capital appreciation net of management fees which exceeds 50 basis points of the Barclay's US Aggregate Bond Index;
- iii. Achieve performance results that will rank in the top third of fixed income results achieved by a peer group of Investment Managers and counselors;
- iv. Achieve a minimum long-term rate of return which shall exceed the inflation rate as measured by the nationwide Urban Consumers Price Index by 3%; and
- v. Achieve the above objectives within a time horizon of a minimum of three to five years or approximately a full market cycle.
- c. Holdings of securities issued by the United States Government or any of its agencies need not be diversified. Securities of any one issuer with maturities of more than one year, other than the United States Government or any of its agencies, shall not exceed 5% of the value of the total portfolio. Securities of any one issuer of foreign government issues shall not exceed 10% of the value of the total portfolio at the time of purchase. Fixed income managers have the authority to make international investments, not to exceed 20% of their total portfolio. Investment in U.S. dollar denominated bonds of foreign governments, international organizations, foreign corporations, and U.S. subsidiaries of foreign corporations are permitted, however, shall not exceed 35% of the market value of the portfolio.
- d. The use of futures and options in the fixed income accounts may be used as part of their portfolio management strategy and will be incidental to their securities trading activities. The resulting aggregate risk profile (volatility) of the portfolio will not be different from that permissible by using securities only.
- e. Short (sold) options positions will generally be hedged, either with current portfolio security holdings, other options or futures options. Mortgage derivatives with significant short option characteristics will not exceed 5% of the portfolio, and will generally be a) offset by positions in other mortgage derivatives, or b) offset by other portfolio positions.
- f. No derivatives will be executed which will increase the value at risk of the portfolio by more than 25 basis points of the portfolio's market value.
- g. Structured notes with significant short options positions or increasing leverage will not be purchased, and in no case will structured notes exceed 5% of portfolio value. Structured Notes issued by the U.S. Government (Treasuries & Agencies) will be considered allowable investments, and are restricted to 25%.

- h. Fixed income managers are authorized to use futures and options contracts to supplement their investment capabilities to provide flexibility in managing the fixed income portfolios and reduce the cost of implementing strategies to respond to changing market conditions without incurring the higher transaction costs associated with buying and selling specific securities. These transactions are authorized to enable the manager to reduce the exposure of the portfolio to interest rate changes by reducing or increasing the duration of the portfolio without selling any of the actual holdings.
- i. No more than 5% of the portfolio will be invested in original futures margin and options premiums, exclusive of any in-the-money portion of the premiums.
- j. Cash can exceed 5% of the portfolio for strategic purposes only.

2. Non-Core Fixed Income

- a. Non-Core Fixed Income will primarily consist of U.S. denominated fixed income securities. It is expected that this component of the Fixed-Income portfolio may have a material allocation to below investment grade securities.
- b. The objectives for investment of the non-core fixed income component of the Fixed-Income portfolio are:
 - i. Diversify the Fixed-Income portfolio, by reducing exposure to increasing interest rates, provide current income, and to earn, over time, an average annual total rate of return which is equal to or exceeds T-Bills plus 4% net of management fees;
 - ii. Provide a high level of income consistent with capital preservation;
 - iii. Minimize exposure to interest rate risk, and
 - iv. Achieve the above objectives within a time horizon of a minimum of three to five years or approximately a full market cycle.
- c. The non-core fixed income component shall be composed primarily of two segments; one segment consisting of investment grade securities and one segment consisting of non-investment-grade securities. Investment-grade securities are defined as securities rated investment-grade by two or more rating agencies. Noninvestment-grade securities are defined as securities rated non-investment-grade (BB+ or Ba1) by two or more rating agencies. If a bond is rated by two rating agencies, it must be rated below-investment-grade by at least one rating agency. If only one rating agency rates the bond, then a rating below BBB-or Baa3 is considered non-investment-grade. The portfolio may contain unrated bonds. Unrated and/or SEC Rule 144A high yield fixed income instruments without registration rights must not exceed 25% of the market value of the Non-Core Fixed Income portfolio.

- d. In the event of a downgrade below single C, or in the case of a default, Manager(s) must notify staff and the General Investment Consultant of the downgrade within two days of the date that the downgrade occurs. In the event of a downgrade below single C, or in the case of a default, if the Manager(s) elects to retain the bond in the portfolio the Manager(s) must inform Staff and the General Investment Consultant of the downgrade within two days of the date that the downgrade occurs, and provide a rationale for continued retention of the holding.
- e. There may be instances when debt issues convert into equity-oriented securities (i.e. preferred stock, common stock or warrants to purchase other equity securities). To handle these situations, fixed income managers are allowed to hold equity-oriented positions when received in exchange for, or conversion or cancellation of debt securities held in the portfolio. The manager(s) is required to inform staff and the General Investment Consultant 30 days prior to the conversion when they intend to hold the resulting equity-oriented positions. Equity-oriented securities can be held in the portfolio no longer than six months. The manager(s) is required to provide 30 days advance notice to extend the holding period beyond the original six-month period. No more than 10% of the portfolio shall be invested in equity-oriented securities resulting from fixed-to-equity exchanges.
- f. Permissible securities include corporate bonds, convertible bonds, government bonds, government agency bonds, government-sponsored entity bonds (e.g., FNMA), mortgage bonds, asset-backed bonds, emerging market debt, Eurodollar bonds, Yankee bonds, SEC Rule 144A securities, high yield CMBS securities, REIT bonds, zero coupon bonds, bank loans (rated or unrated), preferred, structured notes and financial futures. Allowable emerging countries are those investable markets that are open for foreign investments. Investment in U.S. dollar denominated bonds of foreign governments, international organizations, foreign corporations, and U.S. subsidiaries of foreign corporations are permitted, however, shall not exceed 35% of the market value of the portfolio.
- g. Derivatives used for substitution, risk control, and arbitrage strategies are permitted. Use of derivatives for speculation is prohibited. No securities shall be purchased on margin or sold short other than any initial and maintenance margin required in connection with futures transactions which may be used only for risk management purposes.
- h. For prudent diversification, the portfolio shall have a minimum of 25 issues. No more than 10% of the lesser of cost or market value of the portfolio will be invested in any one issuer with the exception of U.S. Government, U.S. Government Agency, and bonds of U.S. Government sponsored entities.
- i. Cash can exceed 5% of the portfolio for strategic purposes only.
- j. The portfolio shall have a maturity range of 0 to 10 years with portfolio modified duration expected to range from -3 to 3 years.

C. Covered Calls Portfolio

The Covered Calls Portfolio is an equity-based asset class that is designed to provide some incremental income during flat to modestly rising markets, while providing some level of downside protection during market crises. The Board expects that over the long run, Covered Calls will produce total returns in line with U.S. public equity with less volatility, but will vary markedly from U.S. public equity during market extremes. Under a bull/recovery market scenario, Covered Calls generally underperform U.S. public equity, but still tend to produce substantial upside returns. During a bear/down market scenario, Covered Calls are likely to decline in value, but by a lesser degree than U.S. public equity, providing investors with some principal protection. As a result of these attributes, Covered Calls tend to compound at a smoother rate than U.S. public equity, allowing for a potentially higher amount of wealth creation over a long-horizon holding period (i.e. 10 years).

- a. The objectives for investment of the covered call portfolio are:
 - v. For active managers, the performance objective is to outperform the benchmark, net of all fees, over 3-5 years;
 - vi. For replication managers, the performance objective is to match the benchmark, gross of fees, over 3-5 years;
 - vii. For replication managers, the volatility of their portfolio's incremental return compared to that of the benchmark should not exceed 2.0% annualized over 3-5 years;
 - viii. The Covered Calls class shall have a benchmark index of the Chicago Board Options Exchange S&P 500 BuyWrite Index (the "BXM Index");
 - ix. Derivatives used for risk control and income are permitted.
 However, the notional value of the options may not exceed the total value of the underlying equity portfolio; and
 - x. All holdings will be of sufficient size and held in issues that are traded actively enough to facilitate transactions at minimum cost and accurate market valuation.
- b. The covered call portfolio should consist of three components:
 - i. underlying equity,
 - ii. call options, and
 - iii. cash.
- c. The underlying equity should be designed to gain broad market exposure. This can be accomplished through individual stock ownership, or the utilization of ETFs to gain broad market exposure.

- d. No purchase should be made that causes an individual security to exceed 5% of the underlying equity portfolio, where those securities constitute less than 3% of the current market capitalization of the S&P 500 Index, unless an ETF is employed.
- e. Call options may be used to provide income and risk control.
- f. The notional value of the options may not exceed the total value of the underlying equity portfolio.
- g. Call options may only be written on domestic stock indices, broad market or sector ETFs, and individual domestic stocks that are held in the underlying portfolio.
- h. Managers may purchase back options in order to close out positions.
- i. Cash may exist as an intermediary component from additional funding or option premiums. The balance should not normally exceed 5% of the manager's total portfolio.
- j. Leverage may not be used.

D. Real Estate Portfolio

The Real Estate portfolio will consist primarily of public and private real estate interests such as equity (ownership) and/or fixed income participation in commercial, industrial, or residential properties. Investments may include interests in mortgages pools secured by loans of underlying properties. Real estate is expected to provide portfolio diversification due to real estate's low correlation with returns on equities and fixed-income.

- a. The objectives for investment of the real estate portfolio are:
 - i. Attractive Risk-Adjusted Returns: To obtain superior risk-adjusted returns by taking advantage of the inefficiencies of real estate as compared to other asset classes. Active management, value creation and opportunistic strategies, as well as the prudent use of third-party debt, are approved methods for generating expected returns;
 - Increased Program Diversification/Reduced Program Risk: To use real estate to enhance overall Program diversification and, in turn, reduce overall Program risk, given the historically low to negative return correlations that exist between real estate and other asset classes;
 - iii. Significant Current Cash Yields: Significant cash return based primarily on current rental income. In general, as a portion of total investment return, higher levels of current income are expected from core and value than opportunistic investments; in contrast,

- higher levels of appreciation are expected from opportunistic than value and core investments;
- iv. Inflation-Hedge: To make investments primarily in real estate equity investments that are likely to provide a reasonable hedge against price inflation; and
- v. Preservation of Principal: To achieve meaningful risk-adjusted returns without undue exposure to loss of investment principal.
- b. The public real estate portfolio shall be diversified. When fully invested in exchange traded Real Estate Investment Trusts (REITs) or at its normal level of investment, a minimum of 20 securities should be held. At no time may a single REIT investment exceed 5% of the value of the total System investment assets.
- c. Due to their limited liquidity, private real estate investments shall be approved by the Board only on a case-by-case basis. Agreements with private real estate Investment Managers shall include specific Investment Objectives and Policies that must be approved by the Board prior to execution of the agreement.

E. Cash

Cash may be invested in:

- 1. Treasury and Agency instruments with maturities no longer than 90 days;
- 2. AAA-rated money market funds invested exclusively in Treasury and Agency instruments;
- 3. Short Term Investment Funds (STIF) managed by the Master Custodian; and
- 4. Local Agency Investment Fund (LAIF).

VI. INVESTMENT MANAGER POLICY

A. Introduction

- The Board will retain external Investment Managers to manage portfolios using a specific style and methodology. Managers will have authority for determining investment strategy, security selection, and timing subject to the Policy and Manager Guidelines and legal restrictions or other Board direction. Performance objectives will also be developed for each manager.
- 2. The performance of each Investment Manager's portfolio will be monitored and evaluated on a regular basis relative to each portfolio component's benchmark return and, if available, relative to a peer group of managers following similar investment styles.
- 3. Investment actions are expected to comply with "prudent person" standards.
- 4. Each Investment Manager will be expected to know the practices of the Board and comply with those practices. It is each manager's responsibility to identify policies that have an adverse impact on performance and to initiate discussion with staff toward possible improvement of the practices of the Board.
- 5. The Board will also review each Investment Manager's adherence to its investment policy, and any material changes in the manager's organization (e.g. personnel changes, new business developments, etc.). The Investment Managers retained by the Board will be responsible for informing the Board by communication with staff of such material changes.
- 6. All bond and stock business shall be executed seeking best execution. "Best execution" means seeking to achieve the most favorable price and execution available, having in mind the System's best interest, and considering all relevant factors. These factors include price, the size of the transaction, the nature of the market for the security, current market levels and trends, the reputation, experience and financial stability of the broker involved and the quality of service rendered by the broker in other transactions. Where feasible, the stock or bonds trades shall be distributed to brokerage firms where the Administrative-Investment Committee has established a commission recapture directed brokerage program.

B. Manager Selection

The selection of Investment Managers shall be accomplished in accordance with all applicable Local, State and Federal laws and regulations. Each Investment Manager, consultant and custodian shall function under a formal contract that delineates responsibilities and appropriate performance expectations.

C. Manager Authority

The Board's Investment Managers shall direct and manage the investment and reinvestment of assets allocated to their accounts in accordance with this document; Board practices or direction; applicable Local, State and Federal statutes and regulations; and individual management investment plans and executed contracts.

D. Limitations on Concentrations of Single Managers/Firms

In order to minimize any potential risk associated with large concentrations of System investment assets being managed by a single firm, any single manager/firm, when all mandates associated with that manager/firm are aggregated, shall represent no more than 25% of the total System investment assets. If any single manager/firm exceeds this limitation, the Investment Consultant and staff shall provide the Board its solution to reallocate funds from that manager/firm within the portfolio to reduce the concentration within a reasonable time period.

E. Investment Manager Guidelines

In accordance with the Investment Objectives stated above, the Board shall provide each of the System's Investment Managers with a set of investment guidelines as stated in section V. Eligible Securities. These guidelines shall specify eligible investment, minimum diversification standards, and applicable investment restrictions necessary for diversification and risk control. Managers do not have authority to depart from their guidelines.

F. Investment Manager Performance Measurement

- The Board has the right to evaluate investment performance at any time on an ongoing basis using investment performance criteria relative to specific benchmarks over varying periods of time by asset class. Performance results for each Investment Manager shall be calculated and evaluated at least quarterly.
- 2. Each Investment Manager shall be evaluated against factors including the following:
 - a. Active Investment Managers in each asset class will be expected to:
 - outperform passive benchmarks listed in this policy in the table titled Asset Class Performance Benchmarks related to both their asset class and their investment style; and
 - ii. outperform the median manager in their investment style in the universe employed by the System's investment performance measurement consultant over full market cycles (usually3-5 years).
 - b. Qualitative indicators will be evaluated such as:
 - i. Changes in investment strategy and style;

- ii. Instability of Investment Manager personnel and organization;
- iii. Unusual portfolio activity, trading volume, and execution costs
- Risk and performance characteristics not logically explainable in terms of the published style or out-of-step with manager's style peer group; and
- v. Failure to comply with all investment guidelines.
- c. None of the qualitative indicators may be taken as conclusive evidence of inconsistency with this policy. Such a finding would be based upon the facts and circumstances of each situation as described below.
- 3. Any Investment Manager not meeting performance objectives will be subject to the manager Watch List criteria set forth below.

4. Watch Status of an Investment Manager/Portfolio

Watch status serves two basic purposes. First, it is a major decision step the Board takes to begin transitioning from one Investment Manager to another Investment Manager. Second, it allows the Investment Manager on watch status time to take any corrective action (or justify its changing condition) before the Board elects to terminate its existing relationship with the Investment Manager.

- a. An Investment Manager/portfolio is placed on "watch" status if at least one of two events occurs:
 - i. the portfolio's investment performance does not meet one of the criteria found in the following table; or
 - after the Manager Performance has been measured as described above staff and/or the investment consultant recommends to the Board that an Investment Manager is a candidate for watch status.

The Board approves or disapproves placing the Investment Manager/portfolio on "Watch" Status.

- b. If the Board approves the recommendation to place a specific Investment Manager on watch status, staff will issue a formal notification to the Investment Manager. This formal notification of watch status will include, but is not necessarily limited to, the following items:
 - i. Meeting date when the Board approved the recommendation to place the Investment Manager on watch;
 - Reason(s) for placing the Investment Manager on watch status;and

- iii. Conditions for being released from watch status (see *Manager* "Watch" Criteria table below).
- c. Typically, once a manager is placed on watch status, it should be able to exhibit improvement within a time frame of twelve to twenty four months, if not sooner.
- d. Private Real Estate Funds -- Private real estate funds are primarily invested in assets that are largely illiquid and generally have limited peer sets. In addition, these assets generally have imperfect benchmarks by which performance, according to vintage year and strategy, can be assessed. Funds are closely monitored for factors including, but not limited to:
 - i. style drift,
 - ii. key-person and other management/organizational changes,
 - iii. performance relative to original underwriting,
 - iv. fees,
 - v. transparency, and
 - vi. J-curve impact.

Underperforming fund managers will be brought to the Board's attention as soon as the consultant and staff agree the manager should be placed on watch. The termination and/or replacement of private real-estate managers is commonly more challenging than terminating managers that operate in the public markets. Terminating these types of managers can exacerbate poor performance beyond that which has already been experienced. For example, in many instances the only exit option available is via secondary sales of interests, which are often transacted at an appreciable discount to existing net asset values.

Manager "Watch" Criteria*					
Asset Class	Short-term (Rolling 12 month periods)	Medium-term (Rolling 36 month periods)	Long-term (60+ Months)		
U.S. Equity –Active	Portfolio Return ¹ < Benchmark Return -3.5%	Portfolio Annualized Return ^{1, 2} < Benchmark Annualized Return -1.75% for 6 consecutive months	VRR < 0.97 for 6 consecutive months		
U.S. Equity –Passive	Tracking Error ³ > 0.03%	Tracking Error ³ > 0.25% for 6 consecutive months	Portfolio Annualized Return ^{1, 2} < Benchmark Annualized Return -0.40% for 6 consecutive months		
Non-U.S. Equity	Portfolio Return ¹ < Benchmark Return -4.5%	Portfolio Annualized Return ^{1, 2} < Benchmark Annualized Return -2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months		
Covered Calls – Active	Portfolio Return ¹ < Benchmark Return -3.5%	Portfolio Annualized Return ^{1, 2} < Benchmark Annualized Return -1.75% for 6 consecutive months	VRR < 0.97 for 6 consecutive months		
Covered Calls – Replication	Tracking Error ³ > 0.3%	Tracking Error ³ > 0.25% for 6 consecutive months	Portfolio Annualized Return ^{1, 2} < Benchmark Annualized Return -0.40% for 6 consecutive months		
Fixed-Income – Core – Active	Portfolio Return ¹ < Benchmark Return -1.5%	Portfolio Annualized Return ^{1, 2} < Benchmark Annualized Return-1.0% for 6 consecutive months	VRR < 0.98 for 6 consecutive months		
Fixed-Income – Core – Passive	Tracking Error ³ > 0.25%	Tracking Error ³ > 0.20% for 6 consecutive months	Portfolio Annualized Return ^{1, 2} < Benchmark Annualized Return -0.30% for 6 consecutive months		
Fixed-Income – Non- Core	Portfolio Return ¹ < Benchmark Return -4.5%	Portfolio Annualized Return ^{1, 2} < Benchmark Annualized Return -2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months		

*Notes:

- Benchmarks are presented in this policy under table titled Asset Class Performance Benchmarks.
- All portfolio returns are gross of manager fees.

Footnotes:

¹ Return discounts from a benchmark return based on 2/3 of the typical tracking error estimates of the

specified type of portfolio.

² Annualized Return is the average annual return of either the portfolio or its benchmark.

³ Tracking error is a measure of the volatility of the average annual difference between the portfolio's return and the benchmark's return.

5. Release from Watch Status

- a. Investment Managers that show indications of an improvement, as reviewed by the investment consultant and determined by the Board, in one or more of the factors described earlier, may be released from watch status. Examples of improvements warranting a change in status are:
 - i. Improved investment performance in approximately twenty four months (or less) from the time of being placed on watch status;
 - ii. Investment style characteristics return to, and remain at, levels originally agreed upon; and
 - iii. Qualitative factors (such as organizational structure stabilizes, personnel adjustments, compliance requirements, etc.) are satisfactorily addressed.
- b. To release an Investment Manager from watch status, the Board must formally take action to do so. This action should be supported by documentation (produced by the investment consultant) similar in format to the Portfolio Review described above. This document should highlight original reasons for the watch status and discussion of how the Investment Manager has addressed these issues and warrants release from watch status.

6. Replacement/Termination

To terminate and/or replace an Investment Manager, the Board must formally take action to do so. This action should be supported by documentation (produced by staff and/or investment consultant). This document shall highlight original reasons for the watch status and discussion of continued developments during watch status that led to the termination/replacement recommendation.

G. Securities Lending

An agreement may be made with the System's bank custodian or other third-party custodian retained by the Board to loan securities on behalf of the Retirement System. Securities that are loaned shall be fully

collateralized in cash or other acceptable securities having at least 102% of the market value of the loaned security.

H. Commingled Group Trusts

Investments may be made in commingled group trusts. When the group trust is tax exempt, to meet the requirements of IRS Ruling 8 1-100 the declaration of trust governing each such group trust shall be deemed adopted as part of EBMUD Employees' Retirement System plan.

I. Derivatives

Investment in "derivatives" is permitted, however, leveraged derivatives or purchase of derivatives on credit is not permitted. Credit risk, market risk and legal risk will be determined by the Administrative-Investment Committee to be appropriate before any investment is made in a derivative product. For these purposes, derivatives shall be defined as securities whose return or market value is derived from another security or market index.

J. Currency Hedging

With the approval of the Administrative-Investment Committee, Investment Managers may hedge the currency risk associated with securities they manage for the Retirement System. Hedging may be accomplished through mechanisms approved by staff, including, but not limited to, currency futures contracts, currency purchases, and currency options. Approval to hedge must be obtained in advance and may be given orally or in writing. Managers need not obtain approval for each individual investment as long as the investment vehicle has been approved.

K. Proxy Voting of Securities

Investment Managers may be given the authority to vote proxies on behalf of the Retirement System. Investment Managers must vote in accordance with Board policy.

L. Transaction with Retirement Board Members, Staff, and Consultants to the Employee Retirement System

Retirement Board Members, staff, and consultants to the System, if any (including but not limited to investment officers, retirement administrators, and legal counsel) are prohibited from selling investment products to the System or any other public retirement system while they are Members of the System Board, or staff, or consultants to the System, and for two years after leaving the Board, or employment with the District, or serving as consultants to the System.

09/18/14

VII. POLICY FOR THE USE OF PLACEMENT AGENTS

In accordance with Sections 20098, 31528, 7508.57513.8 7513.85, 7513.9, and 7513.95 of the Government Code the System shall require the specific and timely disclosure of payments and compensation to Placement Agents¹ in connection with the System's investments. This Policy is intended to apply broadly to all investment contracts made by the System. The goal of this Policy is to help ensure that the System investment decisions are made by the Board solely on the merits of the investment opportunity in accordance with the Board Members' fiduciary responsibility and to avoid the appearance of undue influence on the Board or illegal pay-to-play practices in the award of investment related contracts.

A. Manager Placement Agent Disclosures

- 1. Each Manager shall provide to the System in writing the required information listed below within 45 days of the initiation of investment discussions between the Manager and the System but in any event prior to contract execution. The Manager must notify the System staff of any changes to any of the information required within 14 calendar days of the Manager knowing of the change(s).
 - a. Disclosure of Payments Made to Placement Agents
 - A written statement of whether the Manager or any of its principals, employees, agents or affiliates has compensated or agreed to compensate any person or entity to act as a Placement Agent in connection with the System's investments;
 - ii. The name of the Placement Agent, and resumes of every officer, partner and principal of the Placement Agent. The resumes shall include educational history, professional designations, regulatory licenses and investment and work experience;
 - iii. Description of any and all compensation paid or agreed to be paid to the Placement Agent, including payment to employees of the Manager who are retained in order to solicit, or who are paid based in whole or in part upon, an investment from the System;
 - iv. Description of the services rendered or the services expected to be performed by the Placement Agent and a list of the prospective clients for which such Placement Agent is utilized;
 - v. Copies of all agreements between the Manager and the Placement Agent;
 - vi. Name of the regulatory agencies the Placement Agent or any of its

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¹ "Placement Agent" includes any person or entity hired, engaged, retained by, acting on behalf of or serving for the benefit of an Investment Manager or on behalf of another Placement Agent as a third-party marketer, finder, solicitor, marketer, consultant, broker, or other intermediary to market, solicit, obtain access to the System, and/or raise money or investments either directly or indirectly from the System. Notwithstanding the foregoing, an individual who is an employee, officer, director, equity holder, partner, member or trustee of an Investment Manager and who spends one-third or more of his or her time, during a calendar year, managing the securities or assets owned, controlled, invested or held by the Investment Manager is not a Placement Agent.

affiliates are registered with, such as the Securities and Exchange Commission (SEC), the Financial Industry Regulatory Association (FINRA), or any similar regulatory agency; proof and details of such registration shall be included, or an explanation as to why no registration is required; and

vii. A statement as to whether the Placement Agent, or any of its affiliates, is registered as a lobbyist with any state or national government.

b. Disclosure of Relationships to the Board; Campaign Contributions

- i. Full disclosure of any connection between the Placement Agent or the Manager and the System, including whether anyone receiving compensation or who will receive compensation with respect to an investment from the System from the Placement Agent or the Manager is: a current or former System Board Member, System employee, or System consultant; a member of the immediate family of anyone connected to or formerly connected to the System;
- ii. Full disclosure of the donations made by the Placement Agent or the Manager during the prior 24-month period to any organization (including contributions to political campaign funds and donations to non-profits) in which any person listed in Paragraph 2.a is an officer, employee, or member of the Board or Advisory Board (or similar body). Additionally, any subsequent donations made by the Placement Agent or the Manager to any such organization during the time the Placement Agent or the Manager is receiving compensation in connection with a the System investment shall also be disclosed; and
- iii. Full disclosure of the names of any current or former System Board Members, System employees or the System consultants who suggested the retention of the Placement Agent.
- 2. All Investment Managers must provide written confirmation that they are in compliance with this Policy and complete form as required by EBMUDERS.

B. Responsibilities of Staff and Consultants

- 1. At the time that investment discussions between a Manager and the System for a prospective investment commence, Staff is responsible for providing Managers and Placement Agents with a copy of this Placement Agent Policy.
- 2. Staff and Consultants must confirm that the applicable Placement Agent disclosures have been received prior to the completion of due diligence and completion of any recommendation to proceed with the decision to invest with the Manager. For new contracts and amendments to existing contracts, the System will:

- a. Stop investment negotiations with a Manager who refuses to disclose the required information.
- b. Decline the opportunity to retain or invest with a Manager who has used or intends to use a Placement Agent who is not registered with the SEC, FINRA, or any similar regulatory agency and cannot provide an explanation as to why no registration is required.
- 3. Staff and Consultants will assist legal counsel as necessary for securing in the final contract terms and side letter agreements between the System and the Manager, including but not limited to, the following:
 - a. The Manager's agreement that it has complied with and will continue to comply with this Policy.
 - b. The Manager's representation and warranty that it will notify the System Staff of any changes to any of the information required above within 14 calendar days of when the Manager knows or should have known of the change(s).
- 4. At any meeting where an investment decision with a Manager will be considered, Staff and Consultants must notify the Board of the name(s) of any Placement Agent(s) used by the Manager in connection with the proposed investment, and any campaign contributions or gifts reported by each Placement Agent.
- 5. Staff must maintain records of all information disclosed to the System in accordance with this policy, and provide the Board with notice of any violation of this policy as soon as practicable.

C. Responsibilities of Counsel

Legal counsel to the System must review the final contract terms and side letter agreements between the System and the Manager, including all requisite agreements and representations and warranties by the Manager, for compliance in accordance with this Policy for the Use of Placement Agents.

D. Responsibilities of the Board

The Board must review all violations of this policy reported by Staff, consider whether each violation is material, and consider whether to prohibit that Manager and/or Placement Agent from soliciting new investments from the System for a period of five years from the date of violation. However, the Retirement Board may reduce this prohibition, by majority vote, at a public session upon a showing of good cause that such action is consistent with the Board's fiduciary duties.

Appendix I – GLOSSARY OF INVESTMENT TERMS

144(a) Securities – 144a securities are in concept "semi-private placement securities," that are normally traded by sophisticated institutional investors with limited financial information on the issuing company. SEC rule 144a exempts issuers from SEC registration requirements. While not legally required to file with the SEC, issuers normally do provide some sort of documentation describing the issue and financial information about the issuing company.

Accrual Basis Accounting – As opposed to cash basis accounting, this values assets based upon accrued changes in values, not actual cash flows. For example, dividends are included in the portfolio value (i.e. accrued) as of the ex-dividend date, rather than the payment date (or the declaration date).

Active Management – A form of investment management which involves buying and selling financial assets with the objective of earning positive risk-adjusted returns.

Alpha – A statistical measurement to determine whether a portfolio of securities in which a fund has invested is priced as would be expected, given the fund's beta. If the alpha of a fund is zero, the portfolio is priced as would be expected. If its alpha is greater than zero, the portfolio is priced higher than could be expected, and vice versa.

Alternative Investments – These generally refer to institutional blind pool limited partnerships/LLCs which make private debt and equity investments in privately held companies, as well as hedge funds and other publicly traded derivatives-based strategies.

American Depository Receipts (**ADRs**) – Financial assets issued by U.S. banks that represent indirect ownership of a certain number of equity shares in a foreign firm. ADRs are held on deposit in a bank in the firm's home country.

American Shares – American shares are securities issued in the US by a transfer agent acting on behalf of a foreign firm.

Asset Allocation – The process of determining the optimal allocation of a fund's portfolio among broad asset classes.

Asset Allocation Risk – The risk that a non-optimal asset allocation will be undertaken which does not meet the fund's return and risk targets.

Balanced Fund – An investment strategy which is a combination of equities and bonds.

Basis Point – 1/100th of 1%.

Barclays Aggregate Index (BC Aggregate) – an index comprised of approximately 6,000 publicly traded investment-grade bonds including U.S. Government, mortgage-backed, corporate, and yankee bonds with an approximate average maturity of 10 years.

Barclay's US 1-3 Yr. Govt/Credit Index – see BC US 1-3 Yr. Govt/Credit Index

Barclay's 1-5 Yr. US High Yield Cash Pay Index – see BC 1-5 Year US High Yield Cash Pay Index

BC High Yield – covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included. Must be rated high-yield (Ba1/BB+ or lower) by at least two of the following ratings agencies: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. All issues must have at least one year to final maturity regardless of call features and have at least \$150 million par amount outstanding.

BC Multiverse Non-US Hedged – provides a broad-based measure of the international fixed-income bond market. The index represents the union of the BC Global Aggregate Index and the BC Global High Yield Index. In this sense, the term "Multiverse" refers to the concept of multiple universes in a single macro index.

BC US Credit – includes publicly issued U.S. corporate and foreign debentures and secured notes that which are rated investment grade or higher by Moody's Investor Services, Standard and Poor's Corporation, or Fitch Investor's Service, with all issues having at least one year to maturity and an outstanding par value of at least \$250 million. Issues must be publicly issued, dollar-denominated and non-convertible.

BC US Government – includes treasuries (i.e., public obligations of the U.S. Treasury that have remaining maturities of more than one year) and agencies (i.e., publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government).

BC US 1-3 Year Government/Credit Index – measures the performance of investment-grade corporate debt and sovereign, supranational, local authority and non-U.S. agency bonds that are U.S. dollar denominated and have a remaining maturity of greater than or equal to one year and less than three years.

BC 1-5 Year US High Yield Cash Pay Index – A component of the U.S. Corporate High-Yield Bond Index, which covers the universe of fixed-rate, non-investment grade corporate debt that have a remaining maturity of greater than or equal to one year and less than five years.

BC Universal: includes market coverage by the Aggregate Bond Index fixed rate debt issues, which are rated investment grade or higher by Moody's Investor Services, Standard and Poor's Corporation, or Fitch Investor's Service, with all issues having at least one year to maturity and an outstanding par value of at least \$100 million) and includes exposures to high yield CMBS securities. All returns are market value weighted inclusive of accrued interest.

Benchmark – The standards against which investment performance is measured. An ideal benchmark is (1) clearly defined; (2) representative of the targeted strategies, opportunities, or activities; (3) investable; and (4) measurable. Good benchmarks meeting these criteria are available for virtually all traditional asset classes.

Benchmark Portfolio – A portfolio against which the investment performance of an investment manager can be compared for the purpose of determining the value-added of the manager. A benchmark portfolio must be of the same style as the manager, and in particular, similar in terms of risk.

Best Execution – This is formally defined as the difference between the strike price (the price at which a security is actually bought or sold) and the "fair market price," which involves calculating opportunity costs by examining the security price immediately after the trade is placed. Best execution occurs when the trade involves no opportunity cost, for example when there is no increase in the price of a security shortly after it is sold.

Beta – A statistical measure of the volatility, or sensitivity, of rates of return on a portfolio or security in comparison to a market index. The beta value measures the expected change in return per one percent change in the return on the market. For example, if the beta of a portfolio is 1.5, a 1 percent increase (decrease) in the return of the market will result, on average, in a 1.5 percent increase (decrease) in the return of the portfolio.

Boardroom Risk – The risk that Trustees will not ride out short term volatility (and therefore wind up altering a sound long-term strategy) due to pressure put on them in their role as Trustees.

Bottom-up Analysis – An approach to valuing securities which first involves analyzing individual companies, then the industry, and finally the economy and overall capital market.

BXM Covered Calls Index – see CBOE S&P 500 Buy Write Index

Capital Asset Pricing Model – An equilibrium model of asset pricing which states that the expected return of a security increases as the security's sensitivity to the market (i.e. beta) increases. That is, as the expected return of a security or portfolio increases (decreases), risk increases (decreases) as well.

Capitalization-weighted Market Index – A method of calculating a market index where the return of a security (or group of securities) is weighted by the market value of the security (or group of securities) relative to total value of all securities.

Cash Sweep Accounts – A money market fund into which all new contributions, stock dividend income and bond interest income is placed ("swept") for a certain period of time. At regular intervals, or when rebalancing is necessary, this cash is invested in assets in line with the asset allocation stipulated in the IPS.

CBOE – Chicago Board Options Exchange – Chicago Board Options Exchange (CBOE), the largest U.S. options exchange and creator of listed options, continues to set the bar for options trading through product innovation, trading technology and investor education. CBOE offers equity, index and ETF options, including proprietary products, such as S&P 500 options (SPX), the most active U.S. index option, and options on the CBOE Volatility Index (VIX), the world's barometer for market volatility.

CBOE S&P 500 Buy Write Index – is a passive total return index based on (1) buying an S&P 500 stock index portfolio, and (2) "writing" (or selling) the near-term S&P 500 Index (SPXSM) "covered" call option, generally on the third Friday of each month. The SPX call written will have about one month remaining to expiration, with an exercise price just above the prevailing index level (i.e., slightly out of the money). The SPX call is held until expiration and cash settled, at which time a new one-month, near-the-money call is written.

CBOE Market Volatility Index (VIX) — measures the market's perceived future volatility (read: risk and uncertainty), most often associated with a fear that the market will drop. More specifically, the VIX measures the market's expectation of future volatility implied by S&P 500 stock index (SPX) option prices. While technically it does not measure the probability that the market is going to drop in the near future, at times it does represent a measure of fear that it will.

CFA Institute – The CFA Institute is the umbrella organization for the two large investment management advisers' groups, the Institute of Chartered Financial Analysts and the Financial Analysts Federation. This organization administers the annual examinations for the CFA designation and also publishes industry guidelines for performance measurement reporting and calculations. The CFA Institute instituted a standardized performance reporting format on January 1, 1993.

Commingled Fund – An investment fund which is similar to a mutual fund in that investors purchase and redeem units that represent ownership in a pool of securities.

Commission Recapture – An agreement by which a plan sponsor earns credits based upon the amount of brokerage commissions paid. These credits can be used for services which will benefit the plan, such as consulting services, custodial fees, or hardware and software expenses.

Convertible Bond – A bond which may, at the holder's option, be exchanged for common stock.

Core Bond – A fixed income investment strategy which constructs portfolios to approximate the investment results of the BC Government/Corporate Bond Index with a modest amount of variability in duration around the index. The objective is to achieve value added from sector or issue selection.

Core Equity – An investment strategy where the portfolio's characteristics are similar to that of the S&P 500 Index, with the objective of adding value over and above the index, typically from sector or issue selection.

Correlation Coefficient – A statistical measure similar to covariance, in that it measures the mutual variation between two variables. The correlation coefficient is bounded by the values -1 and +1.

Covariance – A statistical measure of the mutual variation between two variables.

Current Yield – The annual dollar amount of coupon payments made by a bond divided by the bond's current market price.

Defensive – A fixed income investment strategy where the objective is to minimize interest rate risk by investing only in short to intermediate term securities. The average portfolio maturity is typically two to five years.

Derivative – A financial derivative is a security which derives its value from a more fundamental financial security such as a stock or bond. For example, the value of a stock option depends upon the value from the underlying stock. Because the stock option cannot exist without the underlying stock, the stock option is derived from the stock itself.

Dividend Yield – The current annualized dividend paid on a share of common stock, expressed as a percentage of the stock's current market price.

Duration – A measure of the average maturity of the stream of interest payments of a bond. The value of a given bond is more sensitive to interest rate changes as duration increases, i.e. longer duration bonds have greater interest rate volatility than shorter duration bonds.

Dollar-weighted Measurement – In calculating summary statistics, a process by which performance measures are weighted by the dollar amounts of assets in each time period.

Earnings Per Share – A firm's reported earnings divided by the number of its common shares outstanding.

Economically-targeted Investment – Investments where the goal is to target a certain economic activity, sector or area in order to produce corollary benefits in addition to the main objective of earning a competitive risk-adjusted rate of return.

Efficient Market – A theory which claims that a security's market price equals its true investment value at all times since all information is fully and immediately reflected in the market price.

Efficient Portfolio – A portfolio which offers maximum expected return for a given level of risk or minimum risk for a given level of expected return.

ERISA – The Employee Retirement Security Act, signed into law in September 1974. ERISA established a strict set of fiduciary responsibilities for corporate pension funds, and some states have adopted the ERISA provisions for public plans. It is recommended that public pension plans use the ERISA regulations as guidelines for managing the plan's assets in a procedurally prudent manner.

Eurobond – An international bond denominated in a currency other than that of the country where the bond is issued.

Exchange Traded Funds (ETF's) – ETF's are registered, open-ended unit investment trusts that invest in a basket of stocks designed to track the performance of a given index. However, like a closed-end fund, investors buy shares in ETF's from another shareholder on the open market rather than from a fund company.

Exculpatory – A clause or set of regulations, for example the "safe harbor rules", which generally frees Trustees from responsibility and liability.

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Extended Maturity – A fixed income investment strategy where average portfolio maturity is greater than that of the Barclays Capital Government/Corporate Bond Index. Variations in bond portfolio characteristics are made to enhance performance results.

Fiduciary – Indicates the relationship of trust and confidence where one person (the fiduciary) holds or controls property for the benefit of another person. For example, the relationship between a Trustee and the beneficiaries of the trust.

FTSE – is a British provider of stock market indices and associated data services, wholly owned by the London Stock Exchange.

FTSE NAREIT All Equity REITs Index – contains all tax-qualified REITs with more than 50 percent of total assets in qualifying real estate assets other than mortgages secured by real property that also meet minimum size and liquidity criteria.

Funding Risk – The risk that anticipated contributions to the plan will not be made.

Geometric Returns – A method of calculating returns which links portfolio results on a quarterly or monthly basis. This method is best illustrated by an example, and a comparison to *arithmetic returns*, which does not utilize a time link. Suppose a \$100 portfolio returned +25% in the first quarter (ending value is \$125) but lost 20% in the second quarter (ending value is \$100). Over the two quarters the return was 0%, and the method of calculating the geometric return would indicate this. However, the arithmetic calculation would simply average the two returns: (25%)(.5) + (20%)(.5) = +2.5%.

Global Equity – Managers who invest in both foreign and domestic equity securities but excludes regional and index funds.

Growth Equity – Managers who invest in companies that are expected to have above average prospects for long-term growth in earnings and profitability.

High Yield – A fixed income investment strategy where the objective is to obtain high current income by investing in lower rated, higher default-risk fixed-income securities. As a result, security selection focuses on credit risk analysis.

Index Fund – A passively managed investment in a diversified portfolio of financial assets designed to mimic the performance of a specific market index.

Interest Rate Risk – The uncertainty in the return on a bond caused by unanticipated changes in its value due to changes in the market interest rate.

Intermediate – A fixed income investment strategy where the objective is to lower interest rate risk by investing only in intermediate-term securities. The average portfolio maturity is typically five to seven years.

J Curve – The J curve is used to illustrate the historical tendency of private real estate funds to deliver negative returns in early years and investment gains in the outlying years as the portfolio matures. In the early years of the fund, a number of factors contribute to negative returns including management fees, property improvement and maintenance. Over time the fund will begin to experience unrealized gains (through

increases in property value) followed eventually by events in which gains are realized (e.g., rising rents, property sells, leveraged recapitalizations). The J-curve impact is larger for value-add and opportunistic funds relative to core funds.

Liquidity – In general, liquidity refers to the ease by which a financial asset can be converted into cash. Liquidity is often more narrowly defined as the ability to sell an asset quickly without having to make a substantial price concession.

Liquidity Risk – The risk that there will be insufficient cash to meet the fund's disbursement and expense requirements.

Lost Opportunity Risk – The risk that through inappropriate market timing strategies a fund's portfolio will miss long-run market opportunities.

Manager Search – The selection of specific managers following the manager structure.

Manager Structure – The identification of the type(s) of managers to be selected within each broad class of assets.

Marked to the Market – The daily process of adjusting the value of a portfolio to reflect daily changes in the market prices of the assets held in the portfolio.

Market Risk – See Systematic Risk.

Market Timing – A form of active management that shifts funds between asset classes based on short-term expectations of movements in the capital markets.

Merrill Lynch 91-Day Treasury Bill Index – This index is computed by linking monthly the return on 91-day Treasury Bills. The Treasury Bill rate is generally accepted as a proxy for the return on a risk-free asset.

Money Markets – Financial markets in which financial assets with a maturity of less than one year are traded.

MSCI – Morgan Stanley Capital International, - MSCI Inc. is a US-based provider of equity, fixed income, and hedge fund stock market indexes, and equity portfolio analysis tools. It is best known for publishing the MSCI World and MSCI EAFE Indexes

MSCI ACWI xUS Index – MSCI ACWI (All Country World Index) Free excluding US (gross dividends): is a free-floating adjusted market capitalization index designed to measure equity performance in the global developed and emerging markets. As of April 2002, the index consisted of 49 developed and emerging market country indices.

MSCI Europe, Australia, Far East ("EAFE") Index – The EAFE Index consists of stocks within the world's major equity markets. The EAFE index typically includes the larger companies in each market, around 60% of each market by value and covers over 1000 companies in total. In addition to national price indices, regional indexes (e.g., Europe) and industry indexes (e.g., automobiles) are included. The reports also contain key valuation data for the markets, such as price-to-earnings ratios and dividend yields. The index is based on market capitalization and, as of May 2005, contained 21 countries.

MSCI EAFE plus Canada Index – Is a free float-adjusted market capitalization index that is designed to measure developed market equity performance similar to the MSCI EAFE. This index excludes the US, but includes Canada.

MSCI Emerging Markets Free – This index contains securities of the following countries which are available to all investors regardless of local status: Argentina, Brazil, Chile, Colombia, Greece, India, Indonesia, Israel, Jordan, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Portugal, South Africa, Sri Lanka, Thailand, Turkey and Venezuela.

NAREIT Index: consists of all tax-qualified REITs listed on the New York Stock Exchange, American Stock Exchange, and the NASDAQ National Market System. The data is market weighted.

NCREIF Property Index (NPI) – The NPI contains investment-grade, non-agricultural, income-producing properties which may be financed in excess of 5% gross market value; were acquired on behalf of tax exempt institutions; and are held in a fiduciary environment. Returns are gross of fees; including income, realized gains/losses, and appreciation/depreciation; and are market value weighted. Index is lagged one quarter.

NCREIF – NCREIF is a not-for-profit trade association that serves its membership, and the academic and investment community's need for improved commercial real estate data, performance measurement, investment analysis, information standards, education, and peer group interaction.

Passive Management – For a given asset class, the process of buying a diversified portfolio which attempts to duplicate the overall performance of the asset class (i.e. the relevant market index).

Performance Attribution – The identification of the sources of returns for a security or portfolio over a particular time period.

Preferred Stock – Preferred stocks actually behaves as a fixed-income investment because the dividend payment is fixed. However, unlike bonds, the dividend payment is not legally binding.

Price-earnings Ratio – A firm's current stock price divided by its earnings per share.

Private Placement – The direct sale of a newly issued security to one or a small number of large institutional investors.

Proxy Voting – A written authorization given by a shareholder to someone else to vote his or her shares at a stockholders annual or special meeting called to elect directors or for some other corporate purpose.

Purchasing Power Risk – The risk that a portfolio will earn a return less than the rate of inflation, i.e., a negative real return.

Real Estate Investment Trust (REIT) – An investment fund whose objective is to hold real estate-related assets, either through mortgages, construction and development loans, or equity interests.

Restatement Third, Trusts (Prudent Investor Rule) – A set of new and more specific standards for the handling of the investment process by fiduciaries. These standards were adopted in 1992 and rely heavily on modern investment theory.

Return On Equity – The earnings per share of a firm divided by the firm's book value per share.

Risk-adjusted Return – The return on an asset or portfolio, modified to explicitly account for the risk of the asset or portfolio.

R-squared (\mathbb{R}^2) – Formally called the coefficient of determination, this measures the overall strength or "explanatory power" of a statistical relationship. In general, a higher \mathbb{R}^2 means a stronger statistical relationship between the variables which have been estimated, and therefore more confidence in using the estimation for decision-making.

Russell 1000 Index – Measures the performance of the 1,000 largest securities in the Russell 3000 Index. Russell 1000 is highly correlated with the S&P 500 Index and capitalization-weighted.

Russell 1000 Growth Index – Measures the performance of those Russell 1000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the Value universe.

Russell 1000 Value Index – This index contains those Russell 1000 securities with a less-than-average growth orientation. It represents the universe of stocks form which value managers typically select. Securities in this index tend to exhibit lower price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the Growth universe.

Russell 2000 Index – Measures the performance of the 2,000 smallest companies in the Russell 3000 Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index.

Russell 3000 Index – Represents the largest 3,000 US companies based on total market capitalization, representing approximately 98% of the investable US equity market.

Russell 3000 Growth Index – This index measures the performance of those Russell 3000 Index companies with higher price-to-book ratios and higher forecasted growth values. The stocks in this index are also members of either the Russell 1000 Growth or the Russell 2000 Growth indexes.

S&P/LSTA Performing Loans Index – A subset of the S&P/LSTA Leveraged Loan Index, and comprises non-investment-grade and non-rated loans. Tracking only performing loans unlike its parent index, it removes defaulted issues at the price they reach directly following the default.

Sharpe Ratio – This statistic is a commonly used measure of risk-adjusted return. It is calculated by subtracting the "risk-free" return (usually 3 Month Treasury Bill) from the portfolio return and dividing the resulting "excess return" by the portfolio's risk level (standard deviation). The result is a measure of return gained per unit of risk taken. The higher the Sharpe ratio, the better the fund's historical risk-adjusted performance.

Small Capitalization – Managers who invest in equities of companies with relatively small capitalization. The cut-off point for small capitalization varies from manager to manager, but on average targets firms with capitalization of \$200-\$600 million.

Socially-targeted Investment – An investment which is undertaken based upon social, rather than purely financial, guidelines.

Soft Dollars – The portion of a plan's commissions expense incurred in the buying and selling of securities that is allocated through a directed brokerage arrangement for the purpose of acquiring goods or services for the benefit of the plan. In many soft dollar arrangements, the payment scheme is effected through a brokerage affiliate of the investment consultant. Broker-investment consultants servicing smaller plans receive commissions directly from the counseled account. Other soft dollar schemes are effected through brokerages that, while acting as the clearing/transfer agent, also serve as the conduit for the payment of fees between the primary parties to the directed fee arrangement.

Specific Risk – The part of a security's total risk which is not related to movements in the market and therefore can be diversified away.

Standard Deviation – A statistical measure of portfolio risk. It reflects the average deviation of the observations from their sample mean. Standard deviation is used as an estimate of risk since it measure how wide the range of returns typically is. The wider the typical range of returns, the higher the standard deviation of returns, and the higher the portfolio risk. If returns are normally distributed (i.e. has a bell shaped curve distribution) then approximately 2/3 of the returns would occur within plus or minus one standard deviation from the sample mean.

Standard & Poors 500 Equity Index (S&P 500) – The most widely used U.S. index of the equity market. The S&P 500 is comprised of 500 large, successful U.S. companies and is constructed to represent movements in common stocks. Stocks are chosen so that in aggregate, they represent a broad distribution by industry group, comparable to that of stocks traded on the New York Stock Exchange. Decisions about stocks to be included and deleted are made by the S&P Index Committee. The S&P 500 represents approximately 75% of the cap-weight of all U.S. stocks.

Strategic Asset Allocation – Rebalancing back to the normal mix at specified time intervals (quarterly) or when established tolerance bands (e.g., + and - 10%) are violated

Systematic Risk – The part of a security's total risk that is related to movements in the market and therefore cannot be diversified away.

Tactical Asset Allocation – Closely related to a strategy of market timing, this strategy uses certain indicators to make adjustments in the proportions of a portfolio invested in stocks, bonds, and cash.

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Term-to-maturity – The time remaining until a bond's maturity date.

Time-weighted Return – A method of measuring the performance of a portfolio over a particular period of time. It is the cumulative compounded rate of return of the portfolio, calculated on each date that cash flow moves into or out of the portfolio.

Top-down Analysis – An approach to valuing equities which first looks at the economy and overall capital market, then industries, and finally individual firms.

Total fund policy benchmark – The average return of the asset class benchmark indices weighted by asset class benchmark allocations.

Treynor Ratio – The portfolio's average excess return over a specified period divided by the beta relative to its benchmark over the same time frame. This is used to measure the excess return per unit of systematic risk taken.

Turbulent Market Period – A market period during which the current VIX level is one standard deviation above its three-year moving average.

Urban Consumers Price Index (CPI-U) – The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. It is the most widely used measure of inflation. The CPI-U is the CPI value for Urban Consumers, represents the buying habits of the residents of urban or metropolitan areas.

Value Equity – Managers who invest in companies believed to be undervalued or possessing lower than average price/earnings ratios, based on their potential for capital appreciation.

VIX – see CBOE Market Volatility Index

Appendix II –SAMPLE PLACEMENT AGENT QUESTIONNAIRE

East Bay Municipal Utility District Employees' Retirement System (EBMUDERS)

	Investment Manager:					
	Contact Person:					
	Investment Type:	☐ Prospective / New Investment				
		☐ Amendment to an existing Investment				
1.	Manager acknowledges that it will comply with the East Bay Municipal Utility District Employees' Statement of Investment Policy and Procedures, VII. Policy for the Use of Placement Agents					
		☐ Yes ☐ No				
2.	Placement Agent Firms used	1?				
		☐ Yes ☐ No				
If the answer to question #2 is "No", please proceed to the end of this form, sign and return to EBMUDERS. Otherwise, please continue filling out the form.						
3.	If Yes, please complete:					
	A. Name of Placement Age	ent Firm:				
	Primary Contact:					

B.	Name of Placement Agent Firm:			
	Primary Contact:			
C.	Name of Placement Agent Firm:			
	Primary Contact:			
ditio	onal space is needed, please attach a separate piece of paper.			
Please provide description of payment/compensation agreement by the investment Manager or any of its principals, employees, agents or affiliates, directly or indirectly, to any person or entity to act as a Placement Agent in connection with EBMUDERS investments:				
A. Description of agreement for Placement Agent A.				
В.	Description of agreement for Placement Agent B.			
C.	Description of agreement for Placement Agent C.			
	C. Ple any to a			

If additional space is needed, please attach a separate piece of paper.

5.	Please attach a resume for each officer, partner, principal of the Placement Agent detailing person's education, professional designations, regulatory licenses and investment and wor experience.						
	Attachments?	☐ Yes	□ No				
6.	Is any such person, described in the response to question number 5 above, a current or former EBMUDERS Board Member, employee or Consultant or a member of the immediate family of any such person?						
		☐ Yes	□ No				
	If yes, please provide the name(s) of the individual(s):						
7.	Please describe any and all compensation of any kind provided or agreed to be provided to a Placement Agent, including the nature, timing and value thereof.						
8.	Please describe the services to be performed by the Placement Agent and a statement as to whether the Placement Agent is utilized by the investment.						

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9.	Please attach a copy of any and all agreements with the Placement Agent.								
	Attachments?	☐ Yes	□ No						
10.	O. Is the placement agent, or any of its affiliates, registered with the Securities and Exchange Commission or the Financial Industry?								
	Commission of the financial mud	_							
		☐ Yes	□ No						
11.	11. Is the placement agent, or any of its affiliates, registered as a lobbyist with any state or national government?								
		☐ Yes	□ No						
12.	12. Please list the names of any current or former EBMUDERS Board Members, employees, or Consultants who suggested the retention of the Placement Agent.								
			on provided above, and also under alendar days that the investment m						
the provided information must be updated within 14 calendar days that the investment manager knew or should have known of the change in information.									
		Ву:							
	Nan	 ne:							
	Tit	 tle:							
	Da	te: 							