Ohio Public Employees Retirement System
Statement of Investment Objectives and Policies
Defined Benefit Fund
November 2009

TABLE OF CONTENTS

Revision History

Policy Established	**September 16, 1998**
Policy Revised	May 16, 2001
Policy Revised	June 19, 2002
Policy Revised	June 17, 2003
Policy Revised	May 18, 2005
Policy Revised	September 19, 2006
Policy Revised	November 14, 2007
Policy Revised	November 18, 2009

I. SCOPE

This Policy applies to the assets within the Ohio Public Employees Retirement System ("OPERS") Defined Benefit Fund, hereafter referred to as the "DB Fund".

II. PURPOSE

This Policy provides the broad strategic investment framework for managing the DB Fund.

III. LEGAL AUTHORITY

The investment powers and fiduciary responsibilities of the OPERS Retirement Board ("Board") are specified in Section 145.11 of the Ohio Revised Code.

Section 145.11 specifies that the Board and other fiduciaries shall discharge their duties:

- Solely in the interest of participants and beneficiaries.
- For the exclusive purpose of providing benefits and defraying reasonable expenses of administering OPERS.
- With care, skill, prudence, and diligence of a prudent person.
- By diversifying the investments.

OPERS Investment Staff ("Staff") and others who are involved in the management of the Fund's assets, are subject to the same standards as the Board, and shall be governed in their personal investment activities by the OPERS Code of Ethics and Personal Trading Policy, and applicable Ohio Law.

IV. INVESTMENT PHILOSOPHY

The Board believes OPERS' assets should be managed in a fashion that reflects OPERS' unique liabilities, funding resources and portfolio size, by incorporating accepted investment theory and reliable, empirical evidence. Specifically, OPERS has adopted the following principles:

- Asset allocation is the key determinant of return and, therefore, commitments to asset allocation ranges will be maintained through a disciplined rebalancing program.
- Diversification, both by and within asset classes, is the primary risk control element.
- Active management, or the pursuit of returns in excess of benchmarks, entails the possibility of disappointing results over periods shorter than a full market cycle. Therefore, assets will be invested with a long-term perspective.

- Passive investment vehicles consist of index funds and derivatives-based strategies, and these are suitable alternatives to actively managed portfolios, especially in highly efficient markets.

V. INVESTMENT OBJECTIVE

The investment objective of the DB Fund is to support OPERS' mission to provide secure retirement benefits for its members. Meeting this objective necessitates making active decisions about markets in a long-term framework which, by its nature, involves taking reasonable risks. OPERS also seeks to operate effectively and at an appropriate cost.

VI. ASSET ALLOCATION

A. Purpose

The asset allocation establishes a framework for OPERS that has a high likelihood, in the judgment of the Board, of realizing OPERS' long-term investment objective.

B. Targets and Ranges

The principal components of the investment Policy are "target" allocation percentages for various markets that are believed to offer differing risk/reward trade-offs, referred to as "asset classes", and minimum and maximum percentages for each asset class ("ranges"). The purpose of ranges is to appropriately and cost-effectively balance the Board's Investment Policy with the investment strategies pursued over shorter investment periods. The table below contains OPERS' target allocation percentages and ranges.

Asset Class	Target Allocation	Range
Public Equity	*50%*	*40 to 60%*
U.S. Equity	25	20 to 30
Non-U.S. Equity	25	20 to 30
Public Fixed Income	*25%*	*15 to 32%*
Liquidity	2	0 to 4
Core Fixed	9	6 to 12
Long Bonds	9	6 to 12
High Yield	5	2 to 8
Alternatives	*25%*	*8 to 30%*
Private Equity	10	0 to 14
Real Estate	10	0 to 14
Hedge Funds/Opportunistic	3	0 to 5
Infrastructure	2	0 to 3
Total	*100%*	
Operating Cash	*N/A*	*0 to 5%*

The primary asset classes of Public Equity and Public Fixed Income have target allocations of 50% and 25%, respectively, with the remaining 25% allocated to a diverse group of asset classes referred to as “Alternatives.”

The range setting approach is as follows:

- Each equity sub-allocation (U.S. and Non-U.S.) has a symmetrical range equivalent to 20% of its target allocation, or 5 percentage points as a proportion of the DB Fund.
- Since they have smaller targets than equities, each fixed income sub-allocation has a symmetrical range of 30% of their respective target percent allocation, rounded to a whole percentage point. The allocations to Liquidity and High Yield are given wider ranges for greater flexibility and to accommodate wider market swings.
- The ranges for the sub-allocations within Alternatives are asymmetrical to reflect the starting allocation and the dominant influence of public market fluctuations on their proportion. Allocations may, but are not intended to go to 0%; however, minimums above 0% imply the setting of investment “pacing” at the Policy level rather than at the strategy level, which is considered undesirable.

Operating cash for such purposes as paying benefits or other day to day expenses is treated as having a target allocation of 0% with a range of 0% to 5%.

To the extent the actual allocation to Alternative Assets (except Real Estate) is over or under the target percentage, that percentage will be added to, if it is under, or subtracted from if it is over, the target percentage and range for Public Equity. For Real Estate, the overage or underage will be applied to the Fixed Income targets and ranges in a similar manner.

C. Rebalancing

Staff will ensure conformance with the asset allocation set forth in the Policy through monthly, or more frequent, review. In conducting rebalancing activities, the Board expects Staff to operate under the following guidelines:

1. Staff must initiate rebalancing transactions to bring all percentages to values inside the range limits, or alternatively, seek formal Board approval promptly to remain outside the ranges.

2. To implement the investment strategy, Staff will manage the asset allocation nearer to or away from the target percentages, but within Policy ranges. Quarterly performance reports to the Board will also reflect actual allocations and variances from targets.

The spirit of this Policy is to implement the investment strategy within the targets and asset allocation ranges at a reasonable cost, recognizing that overly precise administration of Policy targets can result in transaction costs that are not economically justified.

D. Periodic Review

The Board establishes the asset allocation targets and ranges and reviews them annually. Typically every three to five years the Board will undertake a comprehensive review of investment Policy designed to assess the continuing appropriateness of investment Policy. This ordinarily involves an asset-liability study that places the development of investment Policy into the context of future benefit payments, liabilities, required funding, the appropriateness of the actuarial interest rate assumption and the prospective funded status of liabilities. The comprehensive review also ordinarily includes a study of portfolio design for optimal diversification and comparisons with peer practices.

VII. PERFORMANCE OBJECTIVES

A. Defined Benefit Fund

The performance objectives for the DB Fund are to: (1) exceed the return of the Policy benchmark, net of investment expenses over five year periods; and (2) exceed the actuarial interest rate (currently 8%) over a reasonable longer time horizon. The Policy benchmark combines designated market indexes for asset classes, weighted by asset allocation targets. The table on the next page contains the market indexes for the respective asset classes.

Expectations for outperformance are a function of the projected excess returns for each asset class and are aggregated at the Fund level. Actual DB Fund performance is compared to the Policy benchmark and against expected returns.

In addition, DB Fund performance relative to the Policy benchmark return is expected to be competitive with peer funds with similar allocations. Likewise, the risk-adjusted performance is expected to be competitive with that of its peers.

During periods of transition resulting from a change in the Board-approved target asset allocations, the interim target asset allocation used to calculate benchmark performance for the DB Fund will be established on a quarterly basis in advance of the subsequent quarter. That target mix will be based on allocations made by Staff and reported to the Board through quarterly performance reports.

B. Asset Classes

Each asset class shall be measured relative to its designated market index. It is expected that the active management of individual asset classes will provide an investment return in excess of the index, net of expenses, over five year periods, with suitable discretion. The margin of superior performance for each asset class is identified in the Asset Class Policies.

Asset Class	Market Index
Public Equity	
U.S. Equity	Russell 3000 Stock Index
Non-U.S. Equity	MSCI All Country World Index Ex-U.S.
Public Fixed Income	
Liquidity	91 day U.S. Treasury Bills
Core Fixed	Barclays U.S. Aggregate Bond Index
Long Bonds	Barclays U.S. Long Govt./Credit Index
High Yield	Barclays U.S. High Yield Index
Alternatives	
Private Equity	Russell 3000 Stock Index + 300 basis points
Real Estate	NCREIF Property Index
Hedge Funds/Opportunistic	3 Month LIBOR + 4 percentage points
Infrastructure	CPI + 5 percentage points

VIII. RISK MANAGEMENT

The Board ensures adequate risk control through the following means:

A. Diversification

Investments shall be diversified to minimize the impact of the loss from individual investments. In addition to achieving diversification by asset class, careful attention shall be paid to diversification within each asset class and sub-allocation and across managers.

B. Portfolio Guidelines

Every portfolio shall operate under written guidelines approved by both Staff and the Investment Advisor(s) which are designed to ensure the portfolio pursues its return objective within the acceptable risk parameters.

C. Risk Parameters

A formal process shall be established whereby the total active risk (risk of achieving performance different than the DB Fund benchmark) shall be within a margin approved by the Board. Staff shall recommend risk parameters. The Board shall approve DB Fund total active risk parameters as part of the *OPERS Annual Investment Plan* and approve asset class risk parameters in the Asset Class Policies. Risk management reports shall be provided periodically to the Board.

D. Compliance Monitoring

Compliance with all elements of this Policy, Asset Class Policies, and portfolio guidelines shall be monitored with exceptions being reported monthly, in writing, to the Board.

IX. ROLES AND RESPONSIBILITIES

The following section outlines the roles and responsibilities for each of the parties involved with executing this Policy. In addition to those activities that are described below, each person involved with this Policy is to act with the same care, skill, prudence, and due diligence under the circumstances then prevailing that experienced investment professionals acting in like capacity and fully familiar with such matters would use in like activities for like aims in accordance and compliance with all applicable laws, rules, and regulations.

The Board has the ability to determine the manner in which it implements its duties and how duties are delegated to other parties that are described in this section.

A. Retirement Board

The Board's authority includes:

1. Asset Allocation

a. Establishing and modifying the asset allocation targets and ranges for the DB Fund.

b. Approving Asset Class Policies.

c. Reviewing annually this *Statement of Investment Objectives and Policies, Defined Benefit Fund* which would include making a determination whether or not the Fund is in transition, a period when the Fund is moving toward a new target allocation.

2. Asset Management

a. Approving the *OPERS Annual Investment Plan* to strategically manage the investments as described in Section X.

b. Determining delegations of authority in connection with investment management.

c. Approving the process of hiring, retaining, or terminating investment managers based on an established and Board-approved evaluation process, and ensuring adequate supervision of investment managers.

d. Approving the Corporate Governance Policy Statement and Guidelines.

3. Risk Control and Administration

a. Ensuring that appropriate investment Policies are in place.

b. Ensuring adequate risk controls are in place.

c. Ensuring compliance with all of its Policies and directives.

d. Reviewing risk reports and taking appropriate actions when necessary.

e. Ensuring that custody and other ancillary investment functions are performed satisfactorily.

4. Monitoring and Evaluation

a. Establishing performance benchmarks and expectations.

b. Monitoring the performance of investments.

c. Evaluating Staff's capability and performance.

d. Retaining Investment Advisors, actuaries and other consultants, as appropriate.

B. Investment Committee

The Investment Committee ("Committee") monitors investment activity and makes recommendations to the Board on all matters covered in Section IX A, above, as appropriate. It evaluates proposals requiring Board action and makes recommendations for consideration by the Board. Through its activities, it represents the interests of the Board in all investment-related matters.

The Committee chairperson chairs the meetings of the Committee, reviews the agenda and serves as liaison between the Board, Staff, and Investment Advisors between meetings of the Committee or Board. In this capacity, the chairperson works with the Chief Investment Officer ("CIO") in establishing the agenda for Committee meetings. If matters come to the attention of the chairperson that he or she believes are important to communicate to the Board before the next regularly scheduled meeting, the chairperson has the responsibility to inform the Board chairperson accordingly.

C. Investment Staff

Staff manages the investments and reports to the Committee.

The Board expects Staff to take a leadership role in investment management. Recognizing that OPERS operates with a very high standard of care, the Board expects Staff to discharge its fiduciary responsibilities in managing OPERS' investments. Furthermore, the Board expects Staff to:

- Advise the Board when Staff believes action relative to investment Policies or implementation is required of the Board.
- Review and approve portfolio guidelines and proposed changes to guidelines.
- Establish and conduct an appropriate process for monitoring OPERS' investments and implementing the Board's decisions.
- Assure that this Policy is reflected in the investment manager agreements and/or guidelines, as appropriate.
- Establish, in advance, the interim target asset allocation for the subsequent quarter, which is to be used to calculate benchmark performance for the DB Fund during periods of transition resulting from a change in the Board-approved target asset allocations. Annually, Staff will discuss with the Board the Fund's transition status including forward plans.
- Inform the Board of any and all matters Staff believes to be sufficiently material to warrant the Board's attention.
- Operate at all times in the best and exclusive interest of OPERS and in compliance with all applicable laws and investment Policies.
- The CIO is responsible for notifying OPERS Chief Executive Officer of investment Policy and guideline compliance exceptions, and risk management matters, as appropriate.

All members of Staff are accountable to the CIO. The CIO is responsible for all Staff actions relative to the management of OPERS' investments. In this regard, it is the responsibility of the CIO to satisfy himself/herself that all Policies and directives of the Board are implemented.

D. Custodian

Ohio's Treasurer of State ("Treasurer") acts as the custodian of OPERS as specified in Section 145.26 of the Ohio Revised Code. The Treasurer may employ subcontractors to provide certain custodial functions. OPERS Staff is responsible for monitoring and reporting OPERS' custodial needs to the Committee.

E. Investment Advisors

The Board may appoint Investment Advisors ("Advisors") unaffiliated with OPERS to assist with the investment program. These Advisors will be appointed by the Board and shall perform functions established through contractual agreements and may include:

- Advising the Board in the management of OPERS' investments.
- Critically evaluating the *OPERS Annual Investment Plan* and investment proposals that come before the Board and advising the Board accordingly.
- Reviewing and approving portfolio guidelines and proposed changes to guidelines.
- Monitoring OPERS' investments, internal investment activities, and external managers.
- Reporting independently to the Board on the performance of OPERS' investments.
- Conducting periodic and special studies on behalf of the Board.
- Assisting and supporting Staff in various projects; e.g., developing proposals for consideration by the Board, manager searches, evaluations of external managers and other service providers.

F. Actuary

The Board retains an actuary for the purpose of forecasting asset and liability growth and the many complex factors included in estimating future pension costs. These factors include, but are not limited to, interest rates, inflation, investment earnings, mortality rates, and employee turnover. These actuarial assumptions are then used to forecast uncertain future events affecting OPERS. The actuary shall be held to the highest standards and shall provide periodic reports on the actuarial valuation of OPERS, and shall provide recommendations to the Board including, among other things, the estimated level of contributions necessary to fund benefits as specified in Section 145.22 of the Ohio Revised Code. The actuary is appointed by and serves at the pleasure of the Board.

G. Investment Managers (Internal and External)

In general, the primary responsibility of each investment manager is to invest assets in accordance with the *Statement of Investment Objectives and Policies, Defined Benefit Fund*, and in accordance with their own judgments concerning relative investment values. Accordingly, the investment managers are responsible for determining the prices at which securities are bought and sold, and the best method for implementing investment strategy. The specific duties and responsibilities of each investment manager or its representatives are as follows:

- Managing the assets of the DB Fund under their supervision in accordance with the guidelines and objectives contained within their guidelines.
- Exercising full investment discretion in regards to buying, managing, and selling assets within the guidelines to achieve the objectives.
- Communicate with Staff and the Investment Advisor, in writing, regarding all significant changes pertaining to the assets it manages or the firm itself in a timely manner.

The Board expects the investment managers to use the same care, skill, prudence, and due diligence under the circumstances then prevailing that experienced investment professionals acting in like capacity and fully familiar with such matters would use in like activities for like aims in accordance and compliance with all applicable laws, rules, and regulations.

X. ANNUAL INVESTMENT PLAN

Annually, Staff shall present to the Board for its consideration the *OPERS Annual Investment Plan* ("Annual Investment Plan"). The principal functions of the Annual Investment Plan are to:

- Define the essential asset management characteristics for the DB Fund and the principal asset classes, which include but are not necessarily limited to, target percentages and ranges, benchmarks, investment strategy, policies concerning utilization of active and passive management, and proposed changes in investment guidelines.
- Specify expected excess (active management) return and risk, provisions for risk control, and investment expense.
- Clarify delegations of authority by the Board to Staff for various aspects of investment management.
- Identify resource (staffing and budgetary) requirements.
- Describe key initiatives for the year.

The Annual Investment Plan is the principal, although not exclusive, vehicle by which Staff will prescribe asset allocation and investment strategies with related performance benchmarks. The Annual Investment Plan will also be the principal vehicle by which

Staff identifies prospective new strategies and outlines a general framework to support the need for new or replacement portfolios, managers, or Advisors.

XI. MONITORING AND REPORTING

The following reports will be reviewed with the Board to ensure monitoring and compliance with this Policy:

- Monthly review of asset allocation relative to targets – Staff
- Quarterly performance report – Investment Advisors and Staff
- Quarterly report on compliance – Staff
- Annual, or more frequently as appropriate, review of active risk estimates – Staff
- Quarterly report on derivatives held in each of the asset classes – Staff
- Semi-annual report of commissions with detail by asset classes and broker – Staff
- Additional reports will be provided as needed