Ohio Public Employees Retirement System
Statement of Investment Objectives and Policies
Defined Benefit Fund
September 2006

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Revision History

Policy Established	**September 16, 1998**
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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 entire OPERS Defined Benefit Fund.

III. LEGAL AUTHORITY

The investment powers and fiduciary responsibilities of the 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.

In addition, the staff is governed in their personal investment activities by the OPERS Code of Ethics and Personal Trading Policy, and applicable state statutes.

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.

- The pursuit of returns in excess of risk-free alternatives entails the distinct probability of disappointing results over very short periods of time and, therefore, the assets will be invested with a long-term perspective.

- Passive alternatives (index funds) to actively managed portfolios are suitable investment strategies, especially in highly efficient markets.

V. INVESTMENT OBJECTIVE

The primary investment objective is to secure statutory payments and ancillary benefits provided by OPERS. Meeting this objective necessitates prudent risk-taking with OPERS' investments. Additional objectives include earning sufficient returns to improve benefits periodically and to keep OPERS' costs reasonable for employees and employers.

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' investment objective.

B. Targets and ranges

The principal components of the investment policy are target allocation percentages for various areas of investment, known as "asset classes", and minimum and maximum percentages for each asset class. The table below contains OPERS' target allocation percentages and ranges.

Asset Class	**Target Allocation**	**Range**
U.S. Equity	43%	39 to 47%
Opportunistic Fund	1	0 to 3%
Non-U.S. Equity	20	16 to 24%
Real Estate	8	4 to 12%
Private Equity	5	1 to 9%
Global Bonds	24	20 to 28%
Cash	N/A	0 to 5%
Total	100%	

All asset classes have a range around the respective targets of 0% to 4% except for Cash and the Opportunistic Fund. Cash has a range of 0% to 5% and the Opportunistic Fund has a 0% to 3% range.

Target allocations for illiquid asset classes that are below their target allocations will be adjusted as follows. The Opportunistic Fund is shown above as a sub-component of the U.S. Equity asset class. As such, the U.S. Equity asset class will absorb any difference between the actual allocation to the opportunistic assets as compared to the target allocation.

To the extent the actual allocation to Private Equity is less than the target percentage, that percentage will be added to the target percentage for U.S. Equity without change to the range.

To the extent the actual allocation to Real Estate is less than the target percentage, that percentage will be added to the target percentage for Global Bonds without change to the range.

C. Rebalancing

The staff shall ensure conformance with the asset allocation policy through monthly review. In conducting rebalancing activities, the Board expects the staff to operate under these guidelines:

1. Whenever asset class allocation percentages fall outside the indicated range for that asset class, the staff shall initiate rebalancing transactions to bring all percentages to values that do not exceed the range limits.

2. At any time and in its discretion, the staff may bring the actual allocation to, or nearer to, the target percentages.

3. Staff has discretion to allocate away from the target allocation in the Global Bonds asset class as a result of sales in other asset classes.

4. At a minimum, the staff will ensure that as a result of a rebalancing review, no asset class allocation is outside the allowable range.

5. To the extent that it is possible to bring the actual allocation nearer to the target percentages without incurring transactions costs, or while incurring transaction costs, which in the judgment of the staff are unusually low, the staff shall do so.

The spirit of this policy is to ensure compliance with the target asset allocation percentages at a reasonable cost, recognizing that overly precise administration of policy targets can result in transaction costs that are not economically justified. Recognizing the complexity of achieving this result with a portfolio the size and complexity of OPERS, as well as the vagaries of transacting in investment markets, the Board accords the staff discretion to take those actions, which in the judgment of the staff are within the spirit of these guidelines and in the best interest of OPERS.

D. Periodic Review

The Board establishes the asset allocation targets and ranges and reviews them periodically. 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 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 primary performance objectives for the DB fund are to: (1) exceed the return of OPERS' Performance 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 Benchmark combines designated market indexes for asset classes, weighted by asset allocation targets. The table below contains the market indexes for the respective asset classes:

Asset Class	Market Index
U.S. Equity	Russell 3000 Stock Index
Opportunistic Fund	Customized Benchmark
Non-U.S. Equity	MSCI All Country World Free Index Ex-U.S.
Real Estate	Custom Real Estate Index
Private Equity	Russell 3000 Stock Index + 300 basis points
Global Bonds	Lehman U.S. Universal Index (60%)/ Lehman Long Government/Credit Index(40%)
Cash	91 Day Treasury Bill

The target allocation mix used to calculate benchmark performance for the DB fund will be established on a quarterly basis for the following quarter. That target policy asset mix will be based on the actual allocations to Real Estate and Private Equity investments at that time.

The Global Bonds asset class uses two separate benchmarks. The Global Bonds asset class benchmark has a 60% weighting to the Lehman U.S. Universal Index and a 40% weighting to the Lehman Long Government/Credit Index.

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. The margin of superior performance for each asset class and the DB fund are specified in the Annual Plan. The benchmark for the Opportunity Fund is the weighted average of the underlying investment benchmarks.

In all aspects of investing, the Board expects that results will be competitive. DB fund performance relative to OPERS' Performance Benchmark is expected to be competitive with that of other funds relative to their benchmarks. Likewise, OPERS' risk-adjusted performance is expected to be competitive with that of its peers. Active management within individual asset classes is expected to achieve returns in excess of the return available through passive investment within the asset class as indicated by the asset class benchmark. In all respects and measures, the Board expects to earn a return that compensates OPERS for the risk taken.

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 category and subcategory.

B. Portfolio guidelines

Every portfolio that is a part of OPERS' overall investment portfolio shall operate under written guidelines approved by the Board, which are designed to ensure the portfolio meets its objective and operates within acceptable risk parameters.

C. Risk budgeting

A formal process shall be established whereby the total active risk (risk of achieving performance different than the total fund benchmark) shall be within a margin approved by the Board. The Board shall approve the risk budget by which total active risk is apportioned among the various asset classes as part of the *OPERS Annual Investment Plan*. Estimates of active risk shall be performed periodically and reported to the Board to ensure compliance with the risk budget established.

D. Compliance monitoring

A process shall be established by which compliance with all elements of the investment policy and portfolio guidelines shall be monitored with exceptions being reported promptly 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.

A. Board of Trustees

The Board of Trustees is ultimately responsible for the investment of OPERS' assets. Specific responsibilities of the Board include:

1. **Asset allocation**

    a. Establishing the asset allocation policy for the portfolio, including target percentages and ranges.

    b. Approving asset classes for inclusion in the portfolio.

    c. Establishing a policy for rebalancing asset classes to conform to the asset allocation policy.

    d. Reviewing annually this, *Statement of Investment Objectives and Policies, Defined Benefit Fund*.

2. **Asset management**

    a. Approving the *OPERS Annual Investment Plan* to strategically manage the investments as described in Section X. (Annual Plan), including:

        i. Establishment of each new portfolio, as well as the dissolution of portfolios.

        ii. Investment guidelines for all internally managed portfolios and modifications thereto.

    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. Ensuring that securities 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 the staff's capability and performance.

   d. Retains investment advisors, actuaries and other consultants, as appropriate.

B. Investment committee

The Investment committee ("Committee") monitors investment activity. 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.

In addition to chairing meetings of the Committee, the investment committee chairperson serves as liaison between the Board, staff, and external advisors between meetings of the Committee or Board. In this capacity, the chairperson works with the Director-Investments in establishing the agenda for Committee meetings. If matters come to the attention of the committee 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

The 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 the staff to discharge its fiduciary responsibilities in managing OPERS' investments successfully and efficiently. Furthermore, the Board expects the staff to:

- Advise the Board when the staff believes action relative to investment policies or implementation is required of the Board.

- Establish and conduct an appropriate process for monitoring OPERS' investments and implementing the Board's decisions.

- Inform the Board of any and all matters the staff believes to be of sufficient materiality as to warrant the Board's attention.

All members of the staff are accountable to the Director-Investments. The Director-Investments is responsible for all staff actions relative to the management of OPERS' investments. In this regard, it is the responsibility of the Director-Investments to satisfy himself/herself that all policies and directives of the Board are carried out faithfully.

D. Custodian

Ohio's Treasurer of State ("Treasurer") acts as 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.
- 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 the 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 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 promised benefits as specified in Section 145.22 of the Revised Code of Ohio. 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*, 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 implementing investment strategy. The specific duties and responsibilities of each investment manager or its representatives are as follows:

- Managing the assets of the Defined Benefit Fund under their supervision in accordance with the guidelines and objectives contained within their written or published guidelines.

- Exercising full investment discretion in regards to buying, managing, and selling assets held in their respective portfolios.

- Communicating with the OPERS investment staff and the investment advisor, in writing, regarding all significant changes pertaining to the portfolio it manages or the firm itself.

X. ANNUAL PLAN

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

- Define the essential asset management characteristics for the total portfolio 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 the staff for various aspects of investment management.

- Identify resource (staffing and budgetary) requirements.

- Describe key initiatives for the year.

The Annual Plan is the principal, although not exclusive, vehicle by which the staff will describe asset allocation and investment strategies with related investment guidelines, and performance benchmarks. The Annual Plan will also be the principal vehicle by which the 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 periodically to ensure monitoring and compliance with the Board's policies and guidelines:

- Monthly review of asset allocation relative to targets – staff
- Quarterly performance report – Investment advisors and staff
- Quarterly report on compliance – staff
- Periodic 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