

Introduction

The Orange County Employees Retirement System ("OCERS") was established in 1945 under the County Employees Retirement Law of 1937. OCERS exists to provide retirement, disability, and death benefits for qualified employees of Orange County and participating special districts.

As provided by its charter, the Investment Committee ("Committee") governs OCERS' investment program. The Committee has the sole authority over the investment portfolio and may delegate responsibilities to the investment staff and external advisors.

The purpose of the Investment Policy Statement is to assist the Committee in effectively supervising, monitoring, and evaluating the investment of the system's assets by:

- Stating the OCERS Investment Beliefs
- Establishing the investment goals, objectives, and risk tolerance of the system.
- Defining asset class allocations, targets and ranges.
- Creating oversight standards for policy implementation.
- Setting performance objectives and measurement criteria.

Investment Beliefs

Diversification - Diversification results in a more efficient portfolio and can help to mitigate a wide variety of risks. Over diversification should be avoided, and investments must be sizable enough to impact the overall portfolio.

Costs - Expensive active management must be evaluated in an effort to ensure that OCERS will be commensurately compensated for the higher fees. Whenever possible, passive alternatives should be utilized, and performance fees should be accompanied by hurdle rates. Additionally, OCERS believes in structuring active manager compensation to best align the managers' interests with those of OCERS.

Time Horizon - OCERS has a long-term investment horizon of 20 years.

Risk - An appropriate level of risk is necessary in order to achieve desired long-term investment returns. Risk should be discussed in terms of balancing desired returns with tolerance for volatility, and risk should be evaluated based on OCERS' capacity to recover from adverse market volatility. Since no single metric adequately conveys risk, OCERS will evaluate risk holistically, incorporating quantitative and qualitative assessments into management of the portfolio.

Active vs. Passive - In markets where evidence suggests that security prices are efficiently set, passive (indexed) market strategies will be employed. In less efficiently priced markets, OCERS is comfortable with the thoughtful use of active management strategies.



Private Markets/Illiquid Strategies - Private markets/illiquid strategies can add value when an appropriate illiquidity premium is expected to be captured. OCERS has the ability and risk tolerance to invest in illiquid strategies.

Tactical vs. Strategic - A long-term strategic asset allocation should be adopted, and assets should be rebalanced regularly. However, in times of extreme market dislocations, tactical adjustments should be considered. OCERS believes that, if properly compensated for the risk, opportunistic investments could also benefit the portfolio.

Performance Evaluation - Performance should be evaluated over long periods of time in the context of the actuarial assumed rate of return, the Policy Benchmark, and relative to peers. The influence of the market environment should be taken into account when evaluating performance.

Investment Goals and Objectives

OCERS' goal is to meet the promised retirement benefits due its members. OCERS invests the assets of the system solely for the benefit of plan participants and beneficiaries while minimizing employer contributions and investment and administration costs.

The long-term performance objective for the portfolio is to exceed the actuarially assumed rate of return net of fees and expenses, with a secondary objective of exceeding the return on an appropriate designated benchmark over a complete economic cycle and relevant longer periods, also net of fees and expenses.

Investment Policy Implementation

Investment Horizon

The Committee will periodically review the portfolio's alignment with the fund's pension liabilities. The investment policy and guidelines are based on an investment horizon of 20 years. The Committee will consider both intermediate-term and longer-term investment return horizons in formulating expected returns and assessing portfolio risk parameters. The system's strategic asset allocation is based on this longer-term perspective. Fluctuations of investment results in the interim should be viewed with an appropriate perspective.

Risk Tolerance

Investment opportunities in various asset classes have differing risk and return expectations. In general, investments with higher expected returns involve a higher level of risk. The Committee recognizes that some level of risk must be assumed to achieve the system's long-term investment objectives. The Committee shall establish risk tolerance parameters for the overall portfolio and its major asset classes. The Committee will attempt to achieve its investment return objective with an appropriate level of risk using an efficient combination of investable assets.



Liquidity Needs

Sufficient liquidity must be maintained to pay benefits and expenses. Investment income and contributions are expected to exceed projected benefit payments and expenses on an annual basis for the foreseeable future, making it possible to invest a reasonable portion of the portfolio in illiquid investments. The liquidity horizon shall be reviewed each time asset allocations and expected return projections are revised.

Asset Allocation

The Committee has adopted a strategic asset allocation plan based upon the fund's projected actuarial liabilities and liquidity needs, the Committee's risk tolerances and the risk/return expectations for various asset classes. This asset allocation plan seeks to optimize long-term returns for the level of risk that the Committee considers appropriate.

Since projected liability and risk/return expectations will change over time, the Committee will conduct a periodic review of the asset allocation plan to maintain an optimal allocation, and may also revise the asset allocation in response to significantly changing market conditions that have affected valuations and forward-looking expected returns of asset classes. At a minimum, a formal asset allocation review is required every three years.

The asset allocation study will detail the optimal investment structure and strategy, including discussion of geography, style, size, factor, active/passive biases, long-only vs. long/short preferences and any other execution drivers that may assist OCERS in achieving its goals. The current strategic asset allocation targets and ranges are detailed in Appendix 1.

Rebalancing

The Chief Investment Officer ("CIO") will monitor the asset allocation and rebalance to the approved ranges as and when necessary. Any such rebalancing will be reviewed with the Committee in the subsequent monthly report. Whenever practicable, major shifts in funds will be discussed in advance with the Committee.

The CIO may also recommend dynamic or tactical rebalancing strategies as appropriate under various market conditions, if appropriate and prudent.

Performance Objectives

The expected and actual investment returns of the total fund will depend on the asset allocation targets, the mix of investment styles within asset classes, and individual manager performance. Therefore, performance objectives have been set at three levels: total fund, asset class, and individual portfolios.



Total Fund

- Meet or exceed the actuarial rate of interest which has taken into account expected composite portfolio returns. Annualized investment returns (net of fees) should exceed the actuarial interest rate over most five-year periods and over complete economic cycles.
- Meet or exceed the policy benchmark. Annualized investment returns (net of fees) should exceed the policy benchmark over five-year periods. The policy benchmark is a composite of the benchmarks of the asset classes in the asset allocation policy. Composition of the policy benchmark is detailed in Appendix 1. Returns in excess of the policy benchmark should indicate that the investment program as a whole is successfully adding value.
- Comparison with peer group of funds with comparable metrics. No specific objective is set in terms of ranking because asset allocation, which primarily determines total fund returns, often varies widely between funds. However, the Committee will review rankings of the fund and its asset class components in a peer group for informational purposes.

Asset Class

Annualized returns (net of fees) for the asset classes should exceed their respective benchmarks over a five-year period. The asset class benchmarks will be broad market indices that are representative of the investment structure for that asset class. For example the Frank Russell 3000 index of U. S. stocks, is chosen as a benchmark for U.S. equities since it represents about 98% of the capitalization of the U.S. equity market, is composed of diversified investment styles, and is an investable index. Current benchmarks for the asset classes are shown in Appendix 1.

Individual Portfolios

Performance objectives for manager portfolios are stated in the respective investment manager agreements. Returns (net of fees) are expected to exceed the respective benchmarks over three- and five-year periods and rank above the median in a peer group. Manager benchmarks will be determined based upon the investment mandate.

Investment Fees and Expenses

All things equal, OCERS has a preference for low fee structures and will give preference to passive strategies over active strategies in the absence of the perceived ability of an investment manager to create valuable alpha with its strategy. OCERS staff, in coordination with its investment consultants and legal counsel, will negotiate fees with investment managers. In accordance with applicable law and in order to provide proper fiduciary oversight, the Committee will review all investment related fees at least annually.

OCERS will seek alignment of interests when negotiating fees while pursuing the best net of fees performance results. Fee structures could incorporate fixed fees, performance-based fees, high water marks, waterfalls, hurdles, floors and caps. OCERS may also incorporate multi-year performance periods with clawbacks as needed.



OCERS staff and consultants will review fees and expenses regularly to ensure market competitiveness and appropriateness.

Manager Due Diligence

The OCERS' staff and investment consultants will hold primary responsibility for this function, with the Committee and the Manager Monitoring Subcommittee ("MMS") providing oversight and guidance. The manager due diligence process is both qualitative and quantitative. The breadth and the depth of the process are critical in order to compare firms and strategies relative to peers and to assess the investment strategy relative to the market opportunity.

OCERS staff will implement due diligence procedures consistent with industry best practices that include, but are not limited to, reviews of: firm background, investment management style, performance track record, key persons, and most importantly, appropriateness relative to OCERS' goals and objectives.

Once invested, OCERS and its investment consultants will perform ongoing monitoring and regular due diligence. OCERS will express its findings to the Committee via a quarterly compliance report. Should an investment manager or strategy fail to meet compliance or performance expectations or come to the conclusion of its usefulness, OCERS may elect to place the manager/strategy on a Watch List, indicating the need for enhanced surveillance, or terminate the manager/strategy. OCERS staff will review its due diligence calendar with the Investment Committee at least annually.

Watch List and Termination

The Watch List is a tool to assist in the fiduciary oversight roles of the Board, the Committee, staff and consultants. It compels OCERS staff, consultants and the Manager Monitoring Subcommittee ("MMS") to direct its focus on those identified investment managers until OCERS has appropriate resolution of outstanding issues (e.g. performance, key man changes, legal issues), has renewed confidence in the manager or strategy, or has determined that the termination of the manager or strategy is appropriate.

The Watch List is the primary tool and preferred process for evaluating investment managers prior to any termination action and ensures that there is transparent, consistent and fair assessment of investment products and managers. Under circumstances that require immediate consideration and swift action, the CIO may terminate an investment manager or product with the approval of the CEO in consultation with the Chair and/or Vice-Chair if available.

Ultimately OCERS will not make termination decisions via formula. However, when termination of manager is the best course of action, OCERS will contact the custodian immediately to remove manager access to trading and/or beginning the process of termination/redemption as dictated by the investment structure and type.

In certain cases involving private capital strategies, OCERS may search for a redemption strategy via secondary markets and auction.

Currency Hedging



OCERS has an investment horizon of 20 years. OCERS believes that currency fluctuations do not have a material impact on its total portfolio over a 20-year time period and, as such, will not strategically hedge its portfolio against currency fluctuations. However, if there are medium-term market conditions that could adversely impact investments in the OCERS' portfolio, the Committee may authorize staff to hedge non-dollar assets for a finite period or until adverse conditions abate.

Use of Derivatives

A derivative is defined as a security whose price is dependent upon or derived from one or more underlying instruments or assets. The most common underlying instruments include stocks, bonds, commodities, currencies, interest rates and market indexes. Derivatives are generally used as an instrument to hedge risk, but can also be used for speculative purposes.

Derivatives are to be used for substitution, overlay, portfolio completion, risk control, diversified appreciation within specified position limits, and arbitrage but are prohibited for speculation. For this purpose, speculation does not inherently include diversified price appreciation strategies using derivatives under approved mandates by a fiduciary portfolio manager. The derivative instruments permitted include futures contracts, options, currency forward contracts, swaps, structured notes, warrants and credit default swaps.

Should OCERS enter a standalone, explicit derivatives position, such as a currency hedge, staff and the investment consultants will report on the position to the Committee at least quarterly.

Investment Policy Review

The Investment Committee will review this policy at least every three years to ensure that it remains relevant and appropriate.

Investment Policy History

The Board adopted this policy on May 11, 1992. It was revised on the following dates: February 22, 2000, November 21, 2005, November 19, 2007, February 17, 2009, November 23, 2009, September 26, 2012, October 24, 2012, April 1, 2013, August 28, 2013, June 25, 2014, October 29, 2014, February 25, 2015, June 24, 2015, October 26, 2016, January 25, 2017, January 24, 2018 and April 24, 2018.

Secretary's Certificate

I, the undersigned, the duly appointed Secretary of the Orange County Employees Retirement System, hereby certify the adoption of this policy.

Steve Delaney Secretary of the Board 4/24/2018

Date



Appendix 1

Total Fund Asset Allocation & Benchmarks

35	MSCI ACWI
8	Cambridge PE Index (1-qtr lag)
17	Fixed Income Custom Index*
13	Credit Custom Index*
22	Real Assets Custom Index*
5	Risk Mitigation Custom Index*
0	91-Day T-bills
100	
	17 13 22 5 0

* See the following Appendix pages for the composition of each Custom Benchmark.



Appendix 1A

Strategic Asset Allocation

ASSET CLASS	POLICY TARGET (%)	SUB-ASSET TARGET (%)	RANGE (%)*
Global Public Equity	35		28 - 42
U.S. Equity		17.5	14 - 20
International Developed Equity		10.5	9 - 13
Emerging Markets Equity		7.0	5 - 9
Private Equity	8		4 - 12
Fixed Income	17		12 - 22
Core Fixed Income		10.2	7 - 13
Core Plus Fixed Income		3.4	0 - 6.5
TIPS		3.4	0 - 6.5
Credit	13		8 - 18
Corporate Credit		5.2	2 - 8
Private Credit		2.6	1 - 5
Emerging Markets Debt		2.6	1 - 5
Opportunistic Credit		2.6	1 - 5
Real Assets	22		17 - 27
Real Return		12.0	9 - 15
Real Estate		10.0	7 - 13
Risk Mitigation	5		0 - 10
Cash	0		0 - 5
	100	100	

* Ranges for illiquid asset categories can be fulfilled by commitments that are not yet invested, so that policy compliance is fulfilled through capital commitments.



Global Public Equity Structure & Sub-Asset Class Benchmarks

SUB-ASSET CLASS	TARGET (% OF GLOBAL PUBLIC EQUITY PORTFOLIO)	BENCHMARK
U.S. Equity	50	Russell 3000
International Developed Equity	30	MSCI EAFE
Emerging Markets Equity	20	MSCI Emerging Markets
	100	



Appendix 1C

Fixed Income Structure & Sub-Asset Class Benchmarks

SUB-ASSET CLASS	TARGET (% OF FIXED INCOME PORTFOLIO)	CUSTOM BENCHMARK	CUSTOM BENCHMARK (%)
Core Fixed Income	60	Bloomberg Barclays U.S. Aggregate	60
Core Plus Fixed Income	20	Bloomberg Barclays U.S. Universal	20
TIPS	20	Bloomberg Barclays U.S. TIPS	20
	100		100



Appendix 1D

Credit Structure & Sub-Asset Class Benchmarks

SUB-ASSET CLASS	TARGET (% OF CREDIT PORTFOLIO)
Corporate Credit	40
Private Credit	20
Emerging Markets Debt	20
Opportunistic Credit	20
	100

SUB-ASSET CLASS	CUSTOM BENCHMARK (%)	CUSTOM BENCHMARK Bloomberg Barclays U.S. High Yield	
Corporate Credit	40		
Opportunistic/Private Credit	40	Credit Suisse Leveraged Loan	
Emerging Markets Debt	20	Emerging Markets Debt Custom Index*	
	100		

* Emerging Markets Debt Custom Index includes 65% JP Morgan GBI-EM Global Diversified (representing local currency debt) and 35% JP Morgan EMBI Global Diversified (representing hard currency/U.S. dollar debt)



Real Assets Structure & Sub-Asset Class Benchmarks

REAL ASSETS SUB-ASSET CLASS	TARGET (% OF REAL ASSETS PORTFOLIO)
Real Return	
Energy	27.5
Public Markets Strategies	13.8
Infrastructure	9.2
Agriculture	4.6
Real Estate	
Core/Core Plus	22.5
Value-Added/Opportunistic	22.5
	100
REAL ASSETS	CUSTOM BENCHMARK
CUSTOM INDEX	(%)
NCREIF ODCE (Real Estate)	45
Cambridge U.S. PE Energy (1-qtr lag)	36

13

6 100

Cambridge Infrastructure (1-qtr

lag)

NCREIF Farmland



Risk Mitigation Structure & Sub-Asset Class Benchmarks

SUB-ASSET CLASS	TARGET (% OF RISK MITIGATION PORTFOLIO)	CUSTOM BENCHMARK	CUSTOM BENCHMARK (%)
Long U.S. Treasury Bonds	50	Bloomberg Barclays Long-Term Treasury	50
Trend-Following/Global Macro	50	HFRI Macro: Systematic Diversified CTA	50
	100		100