

FLORIDA RETIREMENT SYSTEM DEFINED BENEFIT PLAN INVESTMENT POLICY STATEMENT

I. DEFINITIONS

Absolute Real Target Rate of Return - The total rate of return by which the FRS Portfolio must grow, in excess of inflation as reported by the U.S. Department of Labor, Bureau of Labor Statistics (Consumer Price Index – All Urban Consumers), in order to achieve the long-run investment objective.

Asset Class - An asset class is an aggregation of one or more portfolios with the same principal asset type.¹ For example, all of the portfolios whose principal asset type was stocks would be aggregated together as the Global Equity asset class. As such, it would contain primarily—but not exclusively—the principal asset type.

Asset Type - An asset type is a category of investment instrument such as common stock or bond.

Portfolio - A portfolio is the basic organization unit of the FRS Fund. Funds are managed within portfolios. A portfolio will typically contain one principal asset type (common stocks, for example), but may contain other asset types as well. The discretion for this mix of asset types is set out in guidelines for each portfolio.

II. OVERVIEW OF THE FRS AND SBA

The State Board of Administration (Board) provides investment management of assets contributed and held on behalf of the Florida Retirement System (FRS). The investment of retirement assets is one aspect of the activity involved in the overall administration of the Florida Retirement System. The Division of Retirement (DOR), the administrative agency for the FRS, provides full accounting and administration of benefits and contributions, commissions actuarial studies, and proposes rules and regulations for the administration of the FRS. The State Legislature has the responsibility of setting contribution and benefit levels, and providing the statutory guidance for the administration of the FRS.

III. THE BOARD

The State Board of Administration has the authority and responsibility for the investment of FRS assets. The Board consists of the Governor, as Chairman, the Chief Financial Officer, and the Attorney General. The Board has statutory responsibility for the investment of FRS assets, subject to limitations on investments as outlined in Section 215.47, Florida Statutes.

The Board shall discharge its fiduciary duties in accordance with the Florida statutory fiduciary standards of care as contained in Sections 215.44(2)(a) and 215.47(10), Florida Statutes.

¹ The Strategic Investments asset class is an exception, purposefully established to contain a variety of portfolios which may represent asset types and strategies not suitable for inclusion in other asset classes.

The Board delegates to the Executive Director the administrative and investment authority, within the statutory limitations and rules, to manage the investment of FRS assets. An Investment Advisory Council (IAC) is appointed by the Board. The IAC meets quarterly, and is charged with the review and study of general portfolio objectives, policies and strategies, including a review of investment performance.

The mission of the State Board of Administration is to provide superior investment management and trust services by proactively and comprehensively managing risk and adhering to the highest ethical, fiduciary and professional standards.

IV. THE EXECUTIVE DIRECTOR

The Executive Director is charged with the responsibility for managing and directing administrative, personnel, budgeting, and investment functions, including the strategic and tactical allocation of investment assets.

The Executive Director is charged with developing specific individual investment portfolio objectives and policy guidelines, and providing the Board with monthly and quarterly reports of investment activities.

The Executive Director has investment responsibility for maintaining diversified portfolios, and maximizing returns with respect to the broad diversified market standards of individual asset classes, consistent with appropriate risk constraints. The Executive Director will develop policies and procedures to:

- Identify, monitor and control/mitigate key investment and operational risks.
- Maintain an appropriate and effective risk management and compliance program that identifies, evaluates and manages risks within business units and at the enterprise level.
- Maintain an appropriate and effective control environment for SBA investment and operational responsibilities.
- Approve risk allocations and limits, including total fund and asset class risk budgets.

The Executive Director will appoint a Chief Risk and Compliance Officer, whose selection, compensation and termination will be affirmed by the Board, to assist in the execution of the responsibilities enumerated in the preceding list. For day-to-day executive and administrative purposes, the Chief Risk and Compliance Officer will proactively work with the Executive Director and designees to ensure that issues are promptly and thoroughly addressed by management. On at least a quarterly basis, the Chief Risk and Compliance Officer will provide reports to the Investment Advisory Council, Audit Committee and Board and is authorized to directly access these bodies at

any time as appropriate to ensure the integrity and effectiveness of risk management and compliance functions.

Pursuant to written SBA policy, the Executive Director will organize an Investment Oversight Group(s) to regularly review, document and formally escalate guideline compliance exceptions and events that may have a material impact on the Trust Fund. The Executive Director is delegated the authority and responsibility to prudently address any such compliance exceptions, with input from the Investment Advisory Council and Audit Committee as necessary and appropriate, unless otherwise required in this Investment Policy Statement.

The Executive Director is responsible for evaluating the appropriateness of the goals and objectives in this Plan in light of actuarial studies and recommending changes to the Board when appropriate.

V. INVESTMENT OBJECTIVES

The investment objective of the Board is to provide investment returns sufficient for the plan to be maintained in a manner that ensures the timely payment of promised benefits to current and future participants and keeps the plan cost at a reasonable level. To achieve this, a long-term real return approximating 4.0% per annum (compounded and net of investment expenses) should be attained. As additional considerations, the Board seeks to avoid excessive risk in long-term cost trends. To manage these risks, the volatility of annual returns should be reasonably controlled.

The Board's principal means for achieving this goal is through investment directives to the Executive Director. The main object of these investment directives is the asset class. The Board directs the Executive Director to manage the asset classes in ways that, in the Board's opinion, will maximize the likelihood of achieving the Board's investment objective within an appropriate risk management framework. The Board establishes asset classes, sets target allocations and reasonable ranges around them for each and establishes performance benchmarks for them. In addition, it establishes a performance benchmark for the total portfolio.

VI. TARGET PORTFOLIO AND ASSET ALLOCATION RANGES

The Board's investment objective is an absolute one: achieve a specific rate of return, the absolute real target rate of return. In order to achieve it, the Board sets a relative objective for the Executive Director: achieve or exceed the return on a performance benchmark known as the Target Portfolio over time. The Target Portfolio is a portfolio composed of a specific mix of the authorized asset classes. The return on this portfolio is a weighted-average of the returns to passive benchmarks for each of the asset classes. The expectation is that this return will equal or exceed the absolute real target rate of return long-term and will thus assure achievement of the Board's investment objective.

This relative return objective is developed in a risk management framework. Risk from the perspective of the Board is any shortfall of actual investment returns relative to the absolute real target rate of return over long periods of time, and the asset mix is developed to manage this risk. In selecting the Target Portfolio, the Board considers information from actuarial valuation reviews and asset/liability studies of the FRS, as well as asset class risk and return characteristics. In addition, the timing of cash demands on the portfolio to honor benefit payments and other liabilities are an important consideration. Potential asset mixes are thus evaluated with respect to their expected return, volatility, liquidity, and other risk and return measures as appropriate.

The Target Portfolio defined in Table 2 has a long-term expected compound annual real return that approximates the absolute real target rate of return. To achieve the absolute real target rate of return or actuarial return, material market risk must be borne (i.e., year to year volatility of returns). For example, in 2008 the Trust Fund's net managed real return was -26.81% compared to gains of 17.56% in 2009 and 21.48% in 2003. While downside risk is considerably greater over shorter horizons, the natural investment horizon for the Trust Fund is the long-term. Table 1 illustrates a modeled estimate of the Target Portfolio's potential range of real returns that could result over longer-term investment horizons. Over a 15-year investment horizon there is an 80 percent probability that the Target Portfolio will experience a compound annual real return between 0.47% and 8.73% and a 90 percent probability that the Target Portfolio will experience a compound annual real return between -0.65% and 9.96%.

Table 1: Expected Risk in Target Portfolio's Real Returns

Time Horizon	5 th Percentile Real Return	10 th Percentile Real Return	90 th Percentile Real Return	95 th Percentile Real Return
10 Years	-1.78%	-0.42%	9.71%	11.22%
15 Years	-0.65%	0.47%	8.73%	9.96%
20 Years	0.03%	1.00%	8.16%	9.22%
25 Years	0.49%	1.37%	7.77%	8.71%
30 Years	0.84%	1.64%	7.48%	8.34%

Although the Target Portfolio has an expected return and risk associated with it, it is important to note that this expected return is neither an explicit nor an implicit goal for the managers of the Florida Retirement System Trust Fund (FRSTF). These figures are used solely in developing directives for

fund management that will raise the probability of success in achieving the absolute real target rate of return. The Executive Director is held responsible not for specifically achieving the absolute real target rate of return in each period, but rather for doing at least as well as the market using the Target Portfolio's mix of assets.

In pursuit of incremental investment returns, the Executive Director may vary the asset mix from the target allocation based on market conditions and the investment environment for the individual asset classes. The Executive Director shall adopt an asset allocation policy guideline which specifies the process for making these tactical decisions. The guideline shall concentrate on the analysis of economic conditions, the absolute values of asset class investments and the relative values between asset classes. The Board establishes ranges for tactical allocations, as shown in Table 2.

Table 2: Authorized Asset Classes, Target Allocations and Policy Ranges

Asset Class	Target Allocation	Policy Range Low	Policy Range High
Global Equity	53%	45%	70%
Fixed Income	18%	10%	26%
Real Estate	10%	4%	16%
Private Equity	6%	2%	9%
Strategic Investments	12%	0%	16%
Cash Equivalents	1%	0.25%	5%
Total Fund	100%	--	--

For purposes of determining compliance with these policy ranges, an asset class is considered to be an aggregation of one or more portfolios with substantially the same principal asset type.² An asset type is a category of investment instrument such as common stock or bond. For example, all of the portfolios whose principal asset type is bonds would be aggregated together as the Fixed Income asset class. As such, it would contain primarily—but not exclusively—the principal asset type. As a standard management practice, portfolio managers are expected to meet their goals for all assets allocated to their portfolio.

It is expected that the FRS Portfolio will be managed in such a way that the actual allocation mix will remain within these ranges. Investment strategies or market conditions which result in an allocation position for any asset class outside of the enumerated ranges for a period exceeding thirty

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(30) consecutive business days shall be reported to the Board, together with a review of conditions causing the persistent deviation and a recommendation for subsequent investment action.

The asset allocation is established in concert with the investment objective, capital market expectations, projected actuarial liabilities, and resulting cash flows. Table 3 indicates estimated net cash flows (benefit payments less employer and employee contributions) and associated probabilities that are implicit in this policy statement, assuming the Legislature adheres to system funding provisions in current law. Additionally, the annualized income yield of the fund is projected to approximate 2% to 3%.

Table 3: Estimated Net Cash Outflow (\$ millions/ % Fund)

	In 5 Years		In 10 Years	
10 th Percentile	\$ 4,851	3.67%	\$ 3,497	3.14%
25 th Percentile	\$ 6,776	4.15%	\$ 6,329	4.03%
Median	\$ 7,466	4.54%	\$ 8,523	4.60%
75 th Percentile	\$ 8,079	5.04%	\$ 11,561	5.22%
90 th Percentile	\$ 10,690	5.96%	\$ 12,895	6.27%

VII. PERFORMANCE MEASUREMENT

Asset class performance is measured in accordance with a broad market index appropriate to the asset class. The indices identified in Table 4 are used as the primary benchmarks for the authorized asset classes.

Table 4: Authorized Target Indices

Asset Class	Index
Global Equity	A custom version of the MSCI All-Country World Investable Market Index (ACWI IMI), in dollar terms, net of withholding taxes on non-resident institutional investors, adjusted to reflect the provisions of the Protecting Florida's Investments Act
Fixed Income	The Barclays Capital U.S. Intermediate Aggregate Index
Real Estate	The core portion of the asset class is benchmarked to an average of the National Council of Real Estate Investment Fiduciaries (NCREIF) Fund Index – Open-ended Diversified Core Equity, NET of fees, weighted at 76.5%, and the non-core portion of the asset class is benchmarked to an average of the National Council of Real Estate Investment Fiduciaries (NCREIF) Fund Index – Open-ended Diversified Core Equity, NET of fees, weighted at 13.5%, plus a fixed return premium of 150 basis points per annum, and the FTSE EPRA/NAREIT Developed Index, in dollar terms, net of withholding taxes on non-resident institutional investors, weighted at 10% ³
Private Equity	The MSCI All Country World Investable Market Index (ACWI IMI), in dollar terms, net of withholding taxes on non-resident institutional investors, adjusted to reflect the provisions of the Protecting Florida's Investments Act, plus a fixed premium return of 300 basis points per annum
Strategic Investments	A weighted-average of individual portfolio level benchmark returns
Cash Equivalents	Bank of America Merrill Lynch 3-Month US Treasury Index

The return on the Target Portfolio shall be calculated as an average of the returns to the target indices indicated in Table 4 weighted by the target allocations indicated by Table 2, but adjusted for floating allocations. The policy allocations for the private market asset classes would all “float” against the

$$\begin{array}{c}
 \text{3} \quad \text{Core RE} \qquad \qquad \qquad \text{Non-Core RE} \qquad \qquad \qquad \text{Public RE} \\
 \text{(76.5\% * NFI-ODCE) + [13.5\% * (NFI-ODCE + 150 bps)] + (10\% * REIT Index)}
 \end{array}$$

public market asset classes (i.e., limited short-term liquidity available for rebalancing and benefit payments means that their policy allocations would equal their actual allocations) as identified in Table 5.

Table 5: Allocations of Private Market (Real Estate, Private Equity and Strategic Investments) Under and Overweights to Public Market (Global Equity, Fixed Income and Cash) Table 2 Target Allocations

Public Market Asset Classes	Float Allocation Limit	Private Market Asset Classes		
		Real Estate	Private Equity	Strategic Investments
Global Equity	N/A	50%	100%	75%
Fixed Income	N/A	50%	0%	25%

Measurement of asset allocation performance shall be made by comparing the actual asset allocation times the return for the appropriate indices to the target allocation times the index returns. For asset classes with floating allocations the basis of tactical measurement shall be the asset class's actual share.

Performance measurement of the effectiveness of the implementation of the Private Equity asset class shall be based on an internal rate of return (IRR) methodology, applied over significant periods of time. Performance measurement of the effectiveness of the implementation of the Private Equity, Strategic Investments, and Cash Equivalents asset classes shall be assessed relative to both the applicable index in Table 4 and:

- For Private Equity, the joint Cambridge Associates Global Private Equity and Venture Capital Index pooled return at peer group weights.
- For Strategic Investments, the CPI, as reported by the U.S. Department of Labor, Bureau of Labor Statistics (Consumer Price Index – All Urban Consumers), plus 4.0%.
- For Cash Equivalents, the iMoneyNet First Tier Institutional Money Market Funds Net Index

VIII. ASSET CLASS PORTFOLIO MANAGEMENT

General Asset Class and Portfolio Guidelines

The Executive Director is responsible for developing asset class and individual portfolio policies and guidelines which reflect the goals and objectives of this Investment Policy Statement. In doing so, he is authorized to use all investment authority spelled out in Section 215.47, Florida Statutes, except as limited by this Plan or SBA Rules. The Executive Director shall develop guidelines for the selection and retention of portfolios, and shall manage all external contractual relationships in accordance with the fiduciary responsibilities of the Board.

All asset classes shall be invested to achieve or exceed the return on their respective benchmarks over a long period of time. To obtain appropriate compensation for associated performance risks:

- Public market asset classes shall be well diversified with respect to their benchmarks and have a reliance on low cost passive strategies scaled according to the degree of efficiency in underlying securities markets, capacity in effective active strategies, and ongoing total fund liquidity requirements.
- Private Equity, Real Estate and Strategic Investments asset classes shall utilize a prudent process to maximize long-term access to attractive risk-adjusted investment opportunities through use of business partners with appropriate:
 - Financial, operational and investment expertise and resources;
 - Alignment of interests;
 - Transparency and repeatability of investment process; and
 - Controls on leverage.

Strategic Investments Guidelines

The objective of the asset class is to proactively identify and utilize non-traditional and multi-asset class investments, on an opportunistic and strategic basis, in order to accomplish one or more of the following:

- Generate long-term incremental returns in excess of a 4.0% annualized real rate of return, commensurate with risk.
- Reduce the volatility of FRS Pension Plan assets and improve the FRS Pension Plan's risk-adjusted return over multiple market cycles.
- Outperform the FRS Pension Plan during periods of significant market declines.
- Increase investment flexibility across market environments in order to access evolving or opportunistic investments outside of traditional asset classes and effective risk-adjusted portfolio management strategies.

Strategic Investments may include, but not be limited to, direct investments authorized by s. 215.47, Florida Statutes or investments in capital commitment partnerships, hedge funds or other vehicles that make or involve non-traditional, opportunistic and/or long or short investments in marketable and nonmarketable debt, equity, and/or real assets (e.g., real estate, infrastructure, or commodities). Leverage may be utilized subject to appropriate controls.

Other Guidelines

The Executive Director shall develop and implement policies as appropriate for the orderly and effective implementation of the provisions of Chapter 2007-88, Laws of Florida, the "Protecting

Florida's Investments Act." Actions taken and determinations made pursuant to said policies are hereby incorporated by reference into this Investment Policy Statement, as required by subsection 215.473(6), Florida Statutes.

The Executive Director shall develop and implement policies as appropriate for the orderly and effective implementation of the provisions of Chapter 2016-36, Laws of Florida, an act relating to companies that boycott Israel. Actions taken and determinations made pursuant to said policies are hereby incorporated by reference into this Investment Policy Statement, as required by subsection 215.4725(5), Florida Statutes.

The Executive Director shall develop and implement policies as appropriate for the orderly and effective implementation of the provisions of Chapter 2018-125, Laws of Florida, an act relating to state investments in or with the government of Venezuela. Actions taken and determinations made pursuant to said policies are hereby incorporated by reference into this Investment Policy Statement, as required by subsection 215.475(3)(a), Florida Statutes.

Subsection 215.475(3)(a) Florida Statutes is consistent with the Resolution adopted by the Trustees of the Board on August 16, 2017. At that meeting, the Board also included in the Resolution the specific direction that the SBA include in this Investment Policy Statement upon review of the IAC in accordance with Section 215.475(2) Florida Statutes, the following: "The SBA will not vote in favor of any proxy resolution advocating the support of the Maduro Regime in Venezuela."

IX. REPORTING

The Board directs the Executive Director to coordinate the preparation of quarterly reports of the investment performance of the FRS by the Board's independent performance evaluation consultant.

The following formal periodic reports to the Board shall be the responsibility of the Executive Director:

- An annual report on the SBA and its investment portfolios, including that of the FRS.
- A monthly report on performance and investment actions taken.
- Special investment reports pursuant to Section 215.44-215.53, Florida Statutes.

X. IMPLEMENTATION SCHEDULE

This policy statement shall be effective July 1, 2018.