

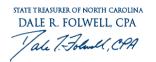


state treasurer of north carolina DALE R. FOLWELL, CPA

INVESTMENT MANAGEMENT DIVISION

Investment Policy Statement Review

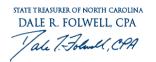
May 22, 2019



Investment Objectives

- Provide investment returns sufficient for the Fund to make timely payment of statutory benefits to current and future members and keep contribution rates at a reasonable level over the long-term. To achieve this, long-term projected investment returns should be generally consistent with the actuarial assumed rate of return, unless otherwise determined by the Treasurer
- Avoid excessive volatility in contribution rates over the intermediate-term by maintaining a moderate risk profile and diversifying with respect to economic and financial risk factors. It is acceptable to limit the use of return-seeking strategies in order to avoid excessive volatility
- Achieve cost-efficiency in the overall investment program
- Exceed composite benchmark returns for the Fund and broad categories of investments within reasonable risk limits and over market cycles
- Ensure sufficient liquidity to meet the Fund's obligations over all time periods
- Comply with all governing statutes as consistent with fiduciary obligations





Strategic Asset Allocation – Asset Categories

Growth

- Global public equity (long-only and hedged equity)
- Private equity
- Public/Private non investment grade credit (distressed, mezzanine, and long/short)
- Non-core real estate

Rates and Liquidity

- Treasury bonds, mortgage agency bonds, and investment grade credit
- Cash/short duration

Inflation Sensitive and Diversifiers

- Short duration TIPS and/or global ILB
- Core real estate (public and private)
- Public/Private natural resources (commodities, energy, timberland, agriculture, etc.)

Multi-Strategy







Strategic Asset Allocation Targets

	Minimum	Policy Target	Maximum
Growth	37%	58%	71%
Public Equity	37%	42%	47%
Private Equity	0%	6%	8.75%
Non-Core Real Estate	0%	3%	8%
Opportunistic Fixed Income	0%	7%	7.5%
Rates and Liquidity	24%	29%	42%
Investment Grade Fixed Income	24%	28%	32%
Pension Cash	0%	1%	10%
Inflation Sensitive and Diversifiers	4%	11%	16%
Inflation Sensitive	2%	6%	7.5%
Core Real Estate	2%	5%	10%
Multi-Strategy	0%	2%	4%

5/22/2019



Risk Management and Controls

- Risk Standards and Metrics
 - Annual volatility of Fund returns of 10%
 - Betas
 - Net of fees risk-adjusted returns
 - Net contributions as a ratio of Fund assets and Level 1 liquidity
 - Fund tracking error or active risk

Rebalancing

- Typically +/- 2%, but may deviate due to market movements, active positioning, or exogenous factors
- Cost-effectiveness
- Portfolio-level Guidelines
- Compliance

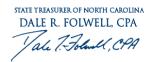




Fund Benchmarks

- Long-Term Policy Benchmark has roughly equivalent projected volatility as the Strategic Asset Allocation
 - 57% MSCI All Country World Investable Market Index, in dollar terms, net of withholding taxes on non-resident institutional investors
 - 33% Bank of America Merrill Lynch 5+ Years U.S. Treasury Index
 - 6% Dow Jones-UBS Commodities Index
 - 4% Bank of America Merrill Lynch 1-3 Years U.S. Inflation-Linked Treasury Index.
- Implementation Benchmark is a weighted performance of the Portfolios' individual benchmarks using the Target Allocations





Implementation Guidelines

- Interim Capital Allocation
- Active Management
- Internal and External Management
- Selection and Monitoring of Investment Managers
 - External Investment Manager and Vehicle Selection Policy and Procedures
 - Investment Manager and Vehicle Monitoring and Termination Policy



General Portfolio Guidelines

- Investment Vehicles
- Contracts
- Investor Protections, Transparency, and Alignment
- Diversification
- Geography
- Leverage
- Investment Firm Concentration
- Investment Strategy Concentration
- Fund Concentration
- Vintage Year
- Securities Lending
- Transition Management







Statutory Compliance

	Investment Policy Statement Portfolio	Subsection of General Statute	Limit
1	Investment Grade Fixed Income	NCGS 147-69.1(c), 147-69.2(b) (1)-(6b)	At least 20%
2	Public Equity (Long-Only Subcomponent)	NCGS 147-69.2(b)(8)(a.),(c.)	No more than 65%
3	Public Equity (Hedged Equity Subcomponent)	NCGS 147-69.2(b)(8)(b.)	No more than 8.5%
4	Private Equity and Multi-Strategy	NCGS 147-69.2(b)(9)	No more than 8.75%
5	Real Estate (Core and Non-Core)	NCGS 147-69.2(b)(7)	No more than 10%
6	Opportunistic Fixed Income	NCGS 147-69.2(b)(6c)	No more than 7.5%
7	Inflation Sensitive	NCGS 147-69.2(b)(9a)	No more than 7.5%
8	Aggregate Alternatives (Sum of rows 3 to 7)	NCGS 147-69.2(b)(10a)	No more than 35%

5/22/2019