

NORTH CAROLINA
DEPARTMENT OF STATE TREASURER



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INVESTMENT MANAGEMENT DIVISION

NCRS Investment Policy Statement Review

May 25, 2022



Changes from Previous NCRS IPS

- Strategic Asset Allocation Targets and Policy Ranges
 - Based on outcome of the Asset Liability Study
- Updates to Projected Ranges of Investment Returns
 - Based on updates to both the Strategic Asset Allocation and revised Capital Market Assumptions
- Updates to specific asset class targets and ranges
 - to be more in line with current practice as well as long term objectives
- Added language recommended in Governance Review (completed in 2021)
 - Roles & Responsibilities, Benchmarks, Monitoring & Reporting, and Governance



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, agency, corporate, and mortgage securities
 - 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



Changes to Strategic Asset Allocation Targets

	Old Target	New Target	Change
Growth	58%	55%	-3%
<i>Public Equity</i>	42%	38%	-4%
<i>Private Equity</i>	6%	7%	+1%
<i>Non-Core Real Estate</i>	3%	3%	0%
<i>Opportunistic Fixed Income</i>	7%	7%	0%
Rates and Liquidity	29%	33%	+4%
<i>Investment Grade Fixed Income</i>	28%	28%	0%
<i>Pension Cash</i>	1%	5%	4%
Inflation Sensitive and Diversifiers	11%	11%	0%
<i>Inflation Sensitive</i>	6%	6%	0%
<i>Core Real Estate</i>	5%	5%	0%
Multi-Strategy	2%	1%	-1%



Strategic Asset Allocation Targets & Ranges

	Minimum	Policy Target	Maximum
Growth	37%	55%	68%
<i>Public Equity</i>	33%	38%	43%
<i>Private Equity</i>	0%	7%	8.75%
<i>Non-Core Real Estate</i>	0%	3%	8%
<i>Opportunistic Fixed Income</i>	0%	7%	7.5%
Rates and Liquidity	23%	33%	48%
<i>Investment Grade Fixed Income</i>	23%	28%	33%
<i>Pension Cash</i>	0%	5%	15%
Inflation Sensitive and Diversifiers	4%	11%	16%
<i>Inflation Sensitive</i>	2%	6%	7.5%
<i>Core Real Estate</i>	2%	5%	10%
Multi-Strategy	0%	1%	4%

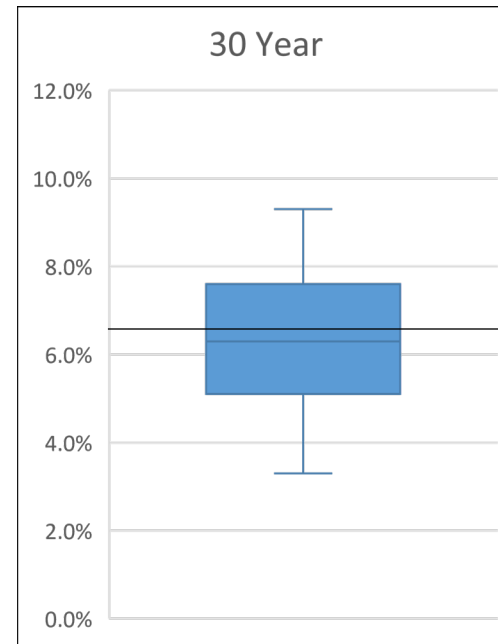
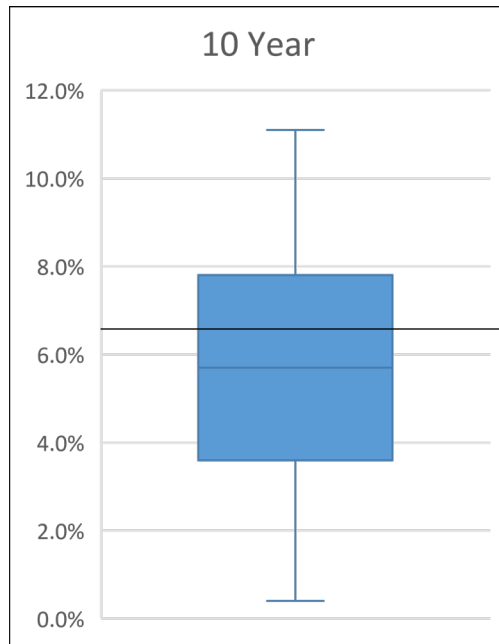


Strategic Asset Allocation - Deviation from Actual

3/31/2022	Market Value (\$000)	%	Target	Range		Relative %	Relative \$ (\$000)
				Minimum	Maximum		
Growth	\$58,645,869	49.19%	55.0%	37.0%	68.0%	-5.81%	(\$6,924,099)
Public Equity	41,244,611	34.60%	38.0%	33.0%	43.0%	-3.40%	(4,058,276)
Private Equity	7,498,888	6.29%	7.0%	0.0%	8.75%	-0.71%	(846,380)
Non Core Real Estate	2,661,970	2.23%	3.0%	0.0%	8.0%	-0.77%	(914,574)
Opportunistic Fixed Income	7,240,400	6.07%	7.0%	0.0%	7.5%	-0.93%	(1,104,869)
Rates & Liquidity	46,170,230	38.73%	33.0%	23.0%	48.0%	5.73%	6,828,250
IG Fixed Income & Cash	31,517,403	26.44%	28.0%	23.0%	33.0%	-1.56%	(1,863,671)
Pension Cash	14,652,828	12.29%	5.0%	0.0%	15.0%	7.29%	8,691,921
Inflation Sensitive & Diversifiers	12,099,669	10.15%	11.0%	4.0%	16.0%	-0.85%	(1,014,324)
Inflation Sensitive	5,512,045	4.62%	6.0%	2.0%	7.5%	-1.38%	(1,641,043)
Core Real Estate	6,587,625	5.53%	5.0%	2.0%	10.0%	0.53%	626,718
Multi-Strategy	2,302,354	1.93%	1.0%	0.0%	4.0%	0.93%	1,110,173
Grand Total	119,218,123	100.00%					



Projected ranges of Annualized Passive Investment Returns



Prob >= 6.5%	
10 yr	39%
30 yr	46%

Horizon	95 th Percentile	75 th Percentile	Expected (Average)	25 th Percentile	5 th Percentile
10 Years	0.4%	3.6%	5.7%	7.8%	11.1%
30 Years	3.3%	5.1%	6.3%	7.6%	9.3%



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: compares the performance of the Fund to a low cost, passive, publicly traded portfolio that represents the Fund's broad allocations to the core drivers of risk and return
 - 56% MSCI All Country World Investable Market Index, in dollar terms, net of withholding taxes on non-resident institutional investors
 - 28% ICE BofA 5+ Years U.S. Treasury Index
 - 5% ICE BofA 3 Month Treasury Bill Index
 - 6.5% Bloomberg Commodities Index
 - 4.5% ICE BofA 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%