NORTH CAROLINA DEPARTMENT OF STATE TREASURER



BRADFORD B. BRINER STATE TREASURER OF NORTH CAROLINA

Investment Management Division Major Initiatives

Investment Advisory Committee

February 26, 2025



2025 Major Initiatives

¢°	Rebalancing	Three (3) phased approach
	Investment governance	Consultant review (Statutory) Legislative agenda Staffing
	Asset Liability Study	Reflect 5-year experience study November 2025 presentation to Investment Advisory Committee







Investment Management Division

Rebalancing



Overview of Rebalance Process





NCRS January 31 Asset Allocation Stance

	Actual (1/31/25)*	Current SAA	+/-	SAA Prior to 2022
Growth	54.5%	55.0%	-0.5%	58.0%
Public Equity	42.0%	38.0%	+4.0%	42.0%
Private Equity	4.7%	7.0%	-2.3%	6.0%
Non-Core Real Estate	1.6%	3.0%	-1.4%	3.0%
Opportunistic Fixed Income	6.2%	7.0%	-0.8%	7.0%
Rates & Liquidity	33.9%	33.0%	+0.9%	29.0%
IG Fixed Income & Cash	26.7%	28.0%	-1.3%	28.0%
Pension Cash	7.2%	5.0%	+2.2%	1.0%
Inflation Sensitive & Diversifiers	9.5%	11.0%	-1.5%	11.0%
Inflation Sensitive	4.7%	6.0%	-1.3%	6.0%
Core Real Estate	4.9%	5.0%	-0.1%	5.0%
Multi-Strategy	2.1%	1.0%	+1.1%	2.0%

• 2022 ALM lowered Public Equity Target by 4% and increased cash Target by 4%

• Average public pension has 47% in Public Equity and 24% in Fixed Income and Cash



BRADFORD B. BRINER STATE TREASURER OF NORTH CAROLINA

Phase 1 Rebalance: Redeploy about 40% of Excess Cash

Growth	 350bps underweight is questionable given our investment horizon, despite Mag7 valuations Public Equity has a 4% underweight to the US and overweight to non-US growth
Investment Grade Fixed Income	 Cash has an implied yield of 4% over the next 12 months Longer duration IG is exposed to several key risks, but at current yields risk-adjusted returns are attractive over next 12 months
Opportunistic Fixed Income and Inflation Sensitive	 Focus on low duration ABS with material yield pick up and limited downside risk Calibrated credit risk according to asset class Deploy capital in 1 to 6 months and have option to harvest within 18-36 months



Phase 1 Rebalance: Sources and Uses

1/31/2025*					
	Port. Weight	Policy Weight	Relative Weight	Market Value (\$MM)	Sources/Uses (\$MM)
Total	100.0%	100.0%	0.0%	128,505	0
Growth	54.50%	58.0%	-3.50%	70,031	1,555
Public Equity	41.99%	42.0%	-0.01%	53,958	1,000
Opportunistic Fixed Income	6.17%	7.0%	-0.83%	7,925	555
Private Equity	4.73%	6.0%	-1.27%	6,074	0
Non-Core Real Estate	1.61%	3.0%	-1.39%	2,073	0
Rates & Liquidity	33.91%	29.0%	4.91%	43,574	(2,305)
IG Fixed Income	26.69%	28.0%	-1.31%	34,293	1,000
Pension Cash	7.22%	1.0%	6.22%	9,281	(3,305)
Inflation Sensitive & Diversifiers	9.53%	11.0%	-1.47%	12,247	750
Core Real Estate	4.87%	5.0%	-0.13%	6,257	0
Inflation Sensitive	4.66%	6.0%	-1.34%	5,990	750
Multi-Strategy	2.06%	2.0%	0.06%	2,653	0

Note: SAA has been adjusted to reflect pre 2022 status

- Amounts and timing for outflows to Opportunistic Fixed Income and Inflation Sensitive are based on tentative discussions with partners.
- No outflows are assumed for new CRE mortgage platforms that could be housed in Real Estate.



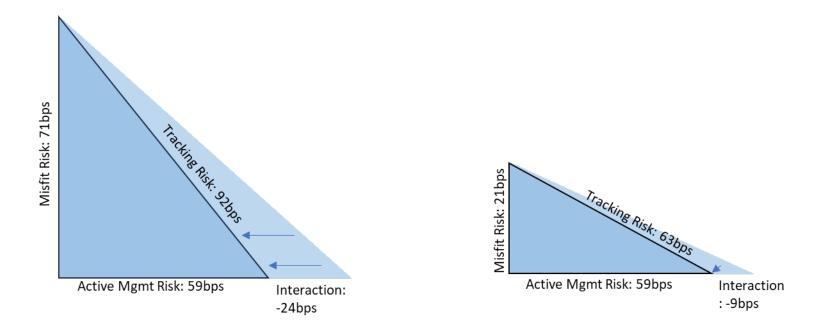
Phase 1 Rebalance: New Pro Forma Positions

1/31/2025*					
	Sources/Uses (\$MM)	Market Value (\$MM)	Port. Weight	Relative %	Relative \$ (\$MM)
Total	0	128,505	100.00%	0.0%	0
Growth	1,555	71,586	55.71%	-2.29%	(2,947)
Public Equity	1,000	54,958	42.77%	0.77%	986
Opportunistic Fixed Income	555	8,480	6.60%	-0.40%	(515)
Private Equity	0	6,074	4.73%	-1.27%	(1,636)
Non-Core Real Estate	0	2,073	1.61%	-1.39%	(1,782)
Rates & Liquidity	(2,305)	41,269	32.11%	3.11%	4,003
IG Fixed Income	1,000	35,293	27.46%	-0.54%	(688)
Pension Cash	(3,305)	5,976	4.65%	3.65%	4,691
Inflation Sensitive & Diversifiers	750	12,997	10.11%	-0.89%	(1,139)
Core Real Estate	0	6,257	4.87%	-0.13%	(168)
Inflation Sensitive	750	6,740	5.24%	-0.76%	(970)
Multi-Strategy	0	2,653	2.06%	0.06%	83

Note: SAA has been adjusted to reflect pre 2022 status



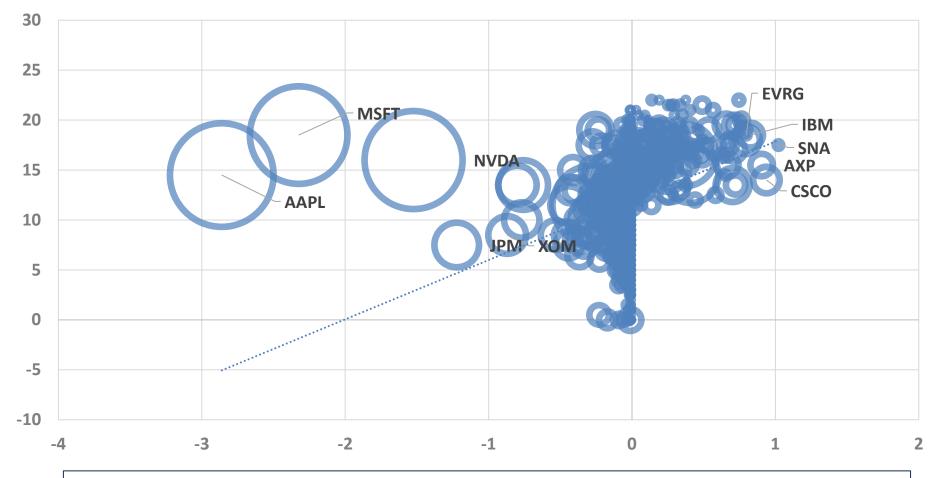
Rebalance Lowers Public Equity's Tracking Error



- Portfolio ex-ante tracking error decreases from 92bps to 63bps; largely due to US underweight changing from -4% to -1%
- Due to Mag7 valuation and concentration concerns, allocating to an internal Core Factor Tilt and small cap exposures
- A partial defunding of a large foreign growth manager also helps balance factor exposure



Core Factor Tilt: Raw Factor Score vs Active Weight

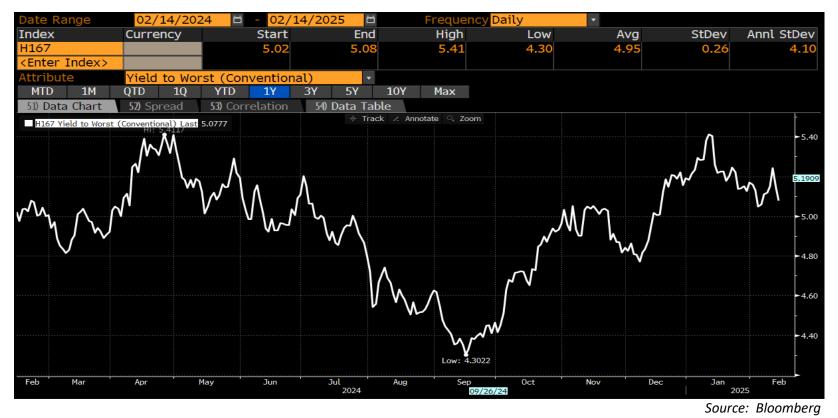


Core Factor Portfolio is structurally under-weight the largest stocks in the index.



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Investment Grade Bonds: Historically Attractive Yields



- Absolute yields for core IG market at the upper range of the last 20 years (core index 5.4%)
- Almost 100bp higher since mid September due to term premium repricing



LTIP Bonds have an Asymmetric Payoff over 12 Months

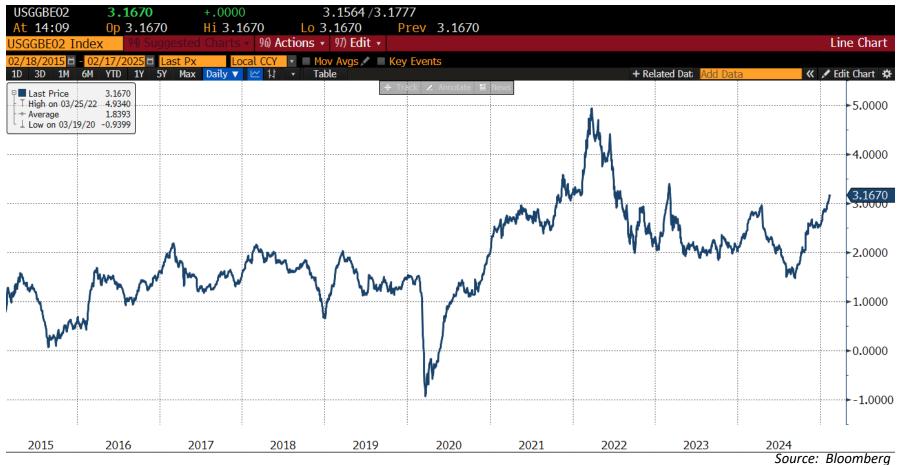
Yield Chg (bps)	Total Return	Income Return	Price Return	Ending YTW	Ending Avg Life	Ending Eff Dur	Ending Conv	Mkt Val (USD 000)
-150	17.134	5.221	11.913	3.627	10.695	7.606	0.399	35,541,639
-125	15.069	5.223	9.846	3.883	10.693	7.543	0.376	34,913,365
-100	13.046	5.227	7.819	4.141	10.711	7.512	0.361	34,301,276
-75	11.065	5.232	5.832	4.398	10.753	7.474	0.353	33,700,307
-50	9.122	5.237	3.885	4.652	10.809	7.431	0.344	33,110,511
-25	7.218	5.241	1.976	4.905	10.869	7.392	0.337	32,532,792
0	5.354	5.246	0.108	5.156	10.918	7.355	0.333	31,967,312
25	3.531	5.250	-1.719	5.403	10.965	7.315	0.337	31,414,238
50	1.752	5.254	-3.502	5.650	10.995	7.272	0.346	30,874,487
75	0.019	5.258	-5.239	5.897	10.989	7.228	0.354	30,348,736
100	-1.670	5.260	-6.930	6.138	10.976	7.174	0.358	29,835,957
125	-3.312	5.263	-8.575	6.373	10.957	7.108	0.354	29,336,044
150	-4.906	5.266	-10.172	6.627	10.942	7.055	0.350	28,854,307

Source: ICE BondEdge

- o On 12 Month horizon, income returns significantly dampen interest rate increase
- While IG credit spreads remain historically tight, credit fundamentals are good and demand for credit remains strong
- 100bps parallel KRD shift + 100 credit spread increase → -4.1% return on LTIP over 12 months



2 Year Breakeven Rate has Risen since Election



- Inflation rebounding is a concern, with uncertainty around US economic policies
- The 2 Year TIPS breakeven rate is now over 3%, although 5 Year breakeven remains lower and more stable



Inflation Sensitive Sample Strategy

Asset Class	Spread (bps)	Spread Perc- tile %	Yield %	Ex-Ante Risk (bps)	Downside Return %	Yield vs Risk
CMBS Floating SASB						
ΑΑΑ	180	14%	6.28	340	-4.09	12%
ΑΑ	267	16%	7.21	600	-5.31	11% Direct Lending
Α	322	16%	7.78	1099	-6.06	10%
						9%
CLO						© 8% CMBS CMBS
ΑΑΑ	113	11%	5.45	152	-3.48	SASD /
ΑΑ	151	1%	5.94	250	-6.22	7% CLO A-BBB • CMBS
A-BBB	248	1%	6.98	428	-10.18	6% CLO AA SASB AAA
						5% CLO AAA
Private Credit						4%
Direct Lending BDC	560		10.97	700	-6.04	0% 2% 4% 6% 8% 10% 12% Ex-Ante Risk
		_				

Note: January 2025 indicative data

Source: Blackrock

- Attractive yields in asset backed securities with low duration and high credit quality
- o Select CLO tranches offer high quality floating rate securities



Inflation Sensitive Sample Strategy

	Current Portfolio	Additional Allocation	Total Portfolio ¹		Current Portfolio	Additional Allocation	Total Portfolio ¹
Yield-to-Maturity	5.72%	6.12%	5.85%	Bank Loans	30.8%	0.0%	21.0%
Duration	0.11	0.42	0.21	CMBS ³	17.4%	58.0%	30.3%
Weighted Average Life	2.74	2.89	2.78	AAA CMBS	14.2%	44.8%	23.9%
Coupon	6.16%	6.30%	6.20%	Below-AAA CMBS	3.2%	13.2%	6.4%
Average Rating	A-	AA	А	CLO	25.3%	37.0%	29.0%
Average SEC Liquidity	Moderately	Moderately	Moderately	AAA CLO	11.3%	16.0%	12.8%
Score	Liquid	Liquid	Liquid	Below-AAA CLO	14.0%	21.0%	16.2%
% Govt Guaranteed	0.0%	0.0%	0.0%	Electric Utilities	10.5%	5.0%	8.8%
% Securitized Credit	42.9%	95.0%	59.5%	Other Private			
% Corporate Credit	30.8%	0.0%	21.0%	Markets	8.1%	0.0%	5.5%
% Other ²	18.4%	5.0%	14.1%	Equitization	7.9%	0.0%	5.4%
% Cash	7.9%	0.0%	5.4%	Total	100.0%	100.0%	100.0%
% Investment Grade	51.6%	95.0%	65.4%				
% Below Investment							
Grade	48.4%	5.0%	34.6%				

Note: January 2025 indicative data



Opportunistic Fixed Income: Public and Private Strategies

New Long Only Public Long/Short Portfolio

Characteristics	Exposure	Sector	Exposure
Yield-to-Maturity	9.35%	Communication Services	30%
Duration	1.00	Health Care	18%
Weighted Average Life	3.08	Consumer Discretionary	15%
Coupon	9.16%	Industrials	12%
Average Rating	B-/CCC	Information Technology	12%
Average SEC Liquidity Score	Moderately Liquid	Financials	6%
% Corporate Credit	100.0%	Real Estate	6%
% Investment Grade	0.0%	Total	100.0%
% Below Investment Grade	84.8%		
% Not Rated	15.2%		
# of Issuers	32		
# of Securities	32		

Note: January 2025 indicative data

Private

- o CMBS SASB (down to current BB) and Conduit Parameters (IG only)
- o Home Equity (CES/HELOCs), Student Loan ABS, and Prime Jumbo Securitization







Investment Management Division

Governance



2025 Governance Study to be conducted by RVK

- Every four years, a consultant evaluates the governance, operations, and investment practices of the State Treasurer.
- The State Treasurer must consult with the Investment Advisory Committee to develop the scope of the evaluation.

Principal Components of Working Scope						
Current Authority, Duties, and Laws	Policy and Process	Compliance Process	Transparency, Accountability, and Ethics			
General research and consulting on governance						

The consultant report shall be provided to the General Assembly within 30 days of receipt. § 147-69.10.(b) NCGS



Summary of Study's Working Scope (1 of 2)

- 1. Current Authority, Duties, and Laws. Review the sufficiency of current State authority and duties related to investing NCRS assets.
 - a. Compare applicable authority, duties and laws to common and best practices, including advising whether any provisions impede the ability of the IMD to carry out its functions
 - b. Review any changes to the general legal authority governing NCRS/DST since the 2021 study
- 2. Policy and Process Review. Compare key policies to industry common and best practices:
 - NCRS Investment Policy Statement
 Investment Manager Selection Policy
- **3.** Compliance Process Review. Conduct a "gap analysis" of internal trading and private market investment policies and procedures:

0	Information barriers	0	Pre-trade clearance process
0	Trading blackout period	0	Other trade controls



Summary of Study's Working Scope (2 of 2)

- b. Review and compare to best practices the trading process related to the internal portfolios including a review of middle/back office and valuation processes.
- c. For private market investment activity, review the practices for handling "material non-public information" and the process used to monitor insider trading.

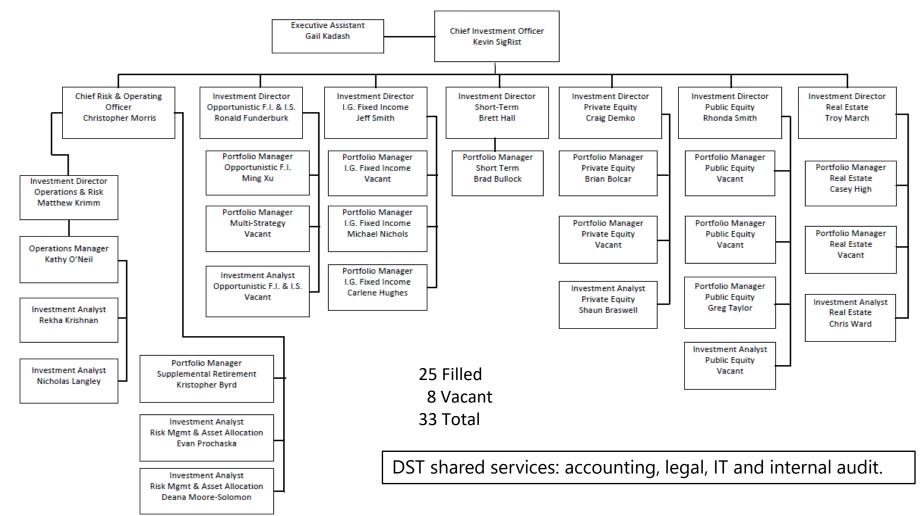
4. Transparency, Accountability, and Ethics.

- a. Compare to other public funds, information provided to stakeholders and advise whether it is adequate to foster transparency and accountability and ethics.
- b. Review the current level of delegation, including an evaluation of what authority is delegated and to whom at what level versus what is retained.
- c. Review and opine on the adequacy of the following policies :

0	Investment Transaction Disclosure Policy	0	IMD Code of Ethics and Conduct
0	Ethics and Conduct Policy (Tier 1)	0	IAC Code of Ethics
0	Supplemental Ethics Policy (Tier 2)	0	Insider and Personal Trader Policy



Current Organization Chart







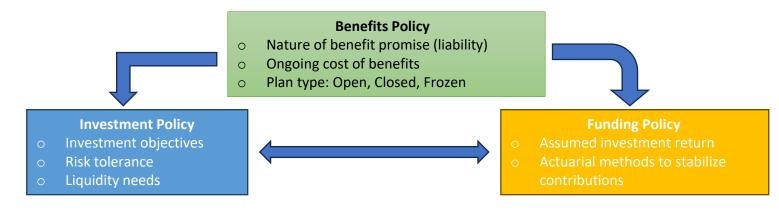


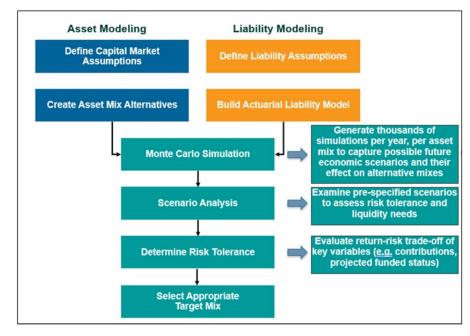
Investment Management Division

NCRS Asset Liability Study



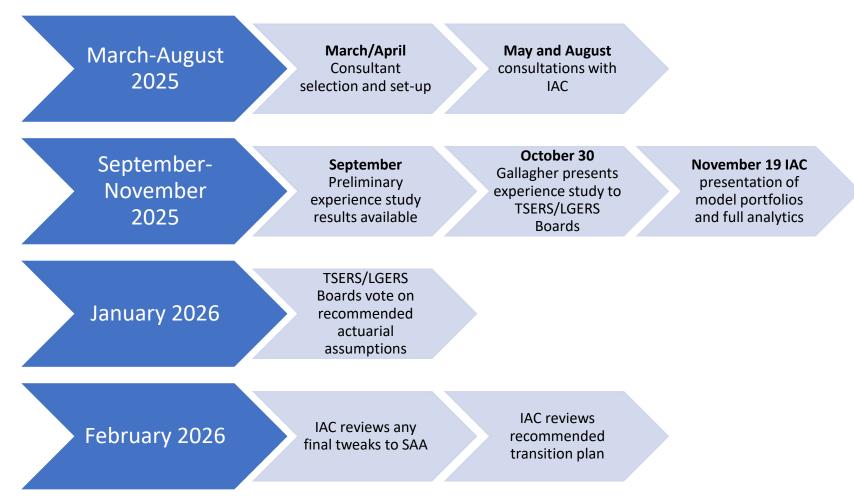
Asset Liability Study Connects Asset Allocation to Funding







2025-26 NCRS ALM Study: Key Dates/Activities





Strategic Asset Allocation – Asset Categories

Growth

- Global public equity (long-only and hedged equity)
- Private equity
- Non-core real estate
- Non-investment grade credit (direct lending, high yield, stressed/distressed, mezzanine, and long/short)

Rates and Liquidity

- Treasury, agency, corporate, and mortgage investment grade securities
- Cash/short duration

> Inflation Sensitive and Diversifiers

- Short duration TIPS and/or global inflation linked bonds
- Public/Private natural resources (commodities, energy, timberland, agriculture, etc.)
- Other real assets and diversifiers
- Core real estate (public and private)

Multi-Strategy

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