

NEW YORK STATE
TEACHERS' RETIREMENT SYSTEM
10 CORPORATE WOODS DRIVE, ALBANY NY

Risk Committee Meeting

A meeting of the Risk Committee of the Retirement Board of the New York State Teachers' Retirement System was held on January 29, 2025. The meeting was called to order at 8:30 a.m. by Ruth Mahoney, Chair.

The following individuals were in attendance:

Committee Members: Paul Farfaglia, Ruth Mahoney, Oliver Robinson, Nicholas Smirensky

Board Members: Juliet Benaquisto, Phyllis Harrington, Eric Iberger, David Keefe, Donald A. Little III (via WebEx), Jennifer Longtin

NYSTRS' Staff: Thomas Lee, Don Ampansiri, Matt Albano, John Rosenburg, Ryan Warren, Ryan Ranado, Rick Jensen, Olivia Castle, Christia Edwards

Risk Committee Advisors: Sean Atkinson (via WebEx), Steve Huber (via WebEx), Peter Cosgrove (via WebEx)

Visitors via WebEx: Tom Cosmer, PineBridge

The following items were discussed:

1. Approval of the minutes of October 30, 2024

Upon motion of N. Smirensky, seconded by O. Robinson and unanimously carried, the meeting minutes of the October 30, 2024 were approved.

2. Risk Management and Key Deliverables

M. Albano reviewed key deliverables from the Risk Department (Appendix A, pp, 3-6)

3. Enterprise Risk and Compliance Update

M. Albano reviewed the Enterprise Risk and Compliance Update reports (Appendix B, pp. 7-8)

4. Annual Risk Assessment Update

M. Albano reviewed the risk management key risk indicators dashboard (Appendix C, pp. 9-19).

5. DFS and Grant Thornton Update

M. Albano provided an update on 2017 DFS Examination follow up item and the Grant Thornton recommendations for Risk Management (Appendix D, pp. 20-27)

6. Annual Office of Foreign Asset Control Risk Review Update

M. Albano and R. Ranado reviewed the results of the annual OFAC review and the proposed updates to the AML/OFAC Compliance section of the Investment Policy Manual (Appendix E, pp. 28-69)

7. Investment Risk Key Risk Indicators and Investment Risk Report

M. Albano and R. Ranado reviewed the key risk indicators report (Appendix F, pp. 70-81)

8. Quarterly Review of Risk Management Team

Upon motion of O. Robinson, seconded by P. Farfaglia and unanimously carried, the Committee went into Executive Session at 9:06 p.m. to discuss personnel matters.

There being no further business, and with unanimous consent, the Committee came out of Executive Session and adjourned at 9:14 a.m.

Respectfully submitted,

A large black rectangular redaction box covering the signature of Thomas K. Lee.

Thomas K. Lee



Appendix A

Risk Management Key Deliverables

Risk Committee January 29, 2025

Matthew Albano, CFA, Chief Risk Officer

Risk Management Key Deliverables

Enterprise Risk and Compliance

- **Annual Risk Assessment**
 - ✓ Annual Risk Assessment Training
 - ✓ Risk Factor Survey
- **Annual Insurance Renewal**
- **Annual and Quarterly Review of Regulatory Items**
 - ✓ Personal Trade Monitoring Procedures (PTMP)/Material Non-Public Information (MNPI) compliance review
 - ✓ Department of Financial Services (DFS) Annual Report for Placement Agent Disclosure
 - ✓ Annual PTMP/ MNPI Training
- **Securities Exchange Commission (SEC) Red Flags Review**
 - ✓ Broker Attestations
- **Annual Office of Foreign Assets Control (OFAC) Risk Assessment**
 - ✓ Annual OFAC Training
 - ✓ Quarterly OFAC Investment Manager Renewals

Risk Management Key Deliverables

Information Security

- **Annual Information Security Risk Assessment**
- **Annual Data Classification Survey**
- **Annual Training**
 - Board Security Training
 - Tabletop Review
 - Information Security Training
- **Semi-Annual Information Security Review**
 - ✓ Key Risk Indicator Review
 - ✓ Top Security Initiatives
- **Vendor Information Security Review**
 - ✓ Onboarding
 - ✓ Semi-Annual
- **Ad Hoc Information System Security Plan/Risk Assessments**

Risk Management Key Deliverables

Investment Risk

- **Annual Investment Policy Manual (IPM) Review**
- **Quarterly Investment Risk Reports**
 - ✓ Key Risk Indicator Review
 - ✓ Total Plan Risk Contribution
 - ✓ Scenario Analysis
- **Thermal Coal & Restricted List Updates**
 - ✓ Quarterly MSCI Index Rebalance Review
- **Portfolio Monitoring Reports**
 - ✓ Tracking Error
 - ✓ Cash Flow/Asset Allocation



Enterprise Risk and Compliance Update

Risk Committee: January 29, 2025

Matthew Albano, CFA, Chief Risk Officer

Matthew Tice, Director of Enterprise Risk

Regulatory Items Requiring Board Action

	Regulatory Item	Owner
January Meeting	Approval BCP/DRP	Administration
	Approval Internal Audit Plan	Internal Audit
	IPM Update*	Executive

	Regulatory Item	Owner
April Meeting	Approval OPEB Contribution	Actuary
	Transfer of Reserve Funds**	Actuary
	Approval Annual Operating Budget	Administration

* Approval of IPM is completed in October. This is an update based on process and regulatory changes.

** If required

Period of **October** Through **December**: **87** required regulatory items were due *and all* were completed by departments.



Annual Risk Assessment

Risk Committee: January 29, 2025

Matthew Albano, CFA, Chief Risk Officer

Matthew Tice, Director of Enterprise Risk

Agenda

- ❑ Aligning With Our Charter
- ❑ New Risk Assessment Methodology
- ❑ Introduction to Risk Pillars
- ❑ GRC Framework
- ❑ Risk Pillar Assessment Results
& Mitigation Strategies

Aligning With Our Charter

- ❑ Annually, the Enterprise Risk Management (ERM) department conducts an enterprise-wide risk assessment that is aligned with our charter to identify, measure, monitor, and report high level risks within and external to NYSTRS.
 - **Identify**: ERM reviews the System's risk register and updates as needed with input from staff
 - **Measure**: The assessment measures the likelihood and impact, at the residual level (after current controls are considered), of each risk within the System's risk register to provide a basis for risk response prioritization
 - **Monitor**: The ERM department meets with peers annually to discuss risks, reviews current risk studies in industries for applicability to the System, and uses the results to discuss additional or updated mitigation measures.
 - **Reporting**: ERM presents the final material to the Risk Committee of NYSTRS' board and shares the results of the annual risk assessment with Internal Audit and Executives.

New GRC Platform for 2024: Assessment Methodology

- ❑ New this year, the Annual Risk Assessment was administered via the Governance, Risk, and Compliance (GRC) platform at the “residual risk” level, defined as the risk that remains when mitigating controls in place at the time of the assessment are considered.
- ❑ Prior to distributing the 73 risk assessments, the ERM team met with risk owners at the Executive and Management levels of the organization to review both the six risk pillars and updated risk register containing 35 risks.
- ❑ The ERM department believes the six pillars and associated risks are appropriate given the System’s vision, mission, and environment in which the System operates.

Introduction to Risk Pillars

	Governance Framework Risk	Risk related to how NYSTRS' policies and procedures are developed and managed. i.e. How decisions are made and implemented.
	Information Security Risk	Risk related to NYSTRS' information systems due to the unauthorized access, use, disclosure, disruption, modification, or destruction of data.
	Financial Risk	Risks that prevent the System from achieving stable financial performance and making informed decisions.
	Operational Risk	Risk resulting from inadequate or failed internal processes, people and systems or external events.
	Workforce Risk	Risks to the System's operational, financial, and reputational outcomes related to staffing.
	Reputational Risk	Risk related to negative publicity, public perception or events that have an adverse impact of the System's brand or image.

Governance, Risk, and Compliance Framework



**New York State
Teachers'
Retirement
System**

Mission: To provide our members with a secure pension.

Vision: To be the model for pension fund excellence and exceptional customer service.

Values: Integrity, Excellence, Respect, Resourcefulness, Diversity, Diligence, Balance

**NYSTRS
Objectives**

- To Promote Exceptional Governance
- To Provide Exceptional Service
- To Produce Exceptional Teams

**Risk
Pillars**



**Governance
Framework
Risk**



**Information
Security
Risk**



**Financial
Risk**



**Operational
Risk**



**Workforce
Risk**



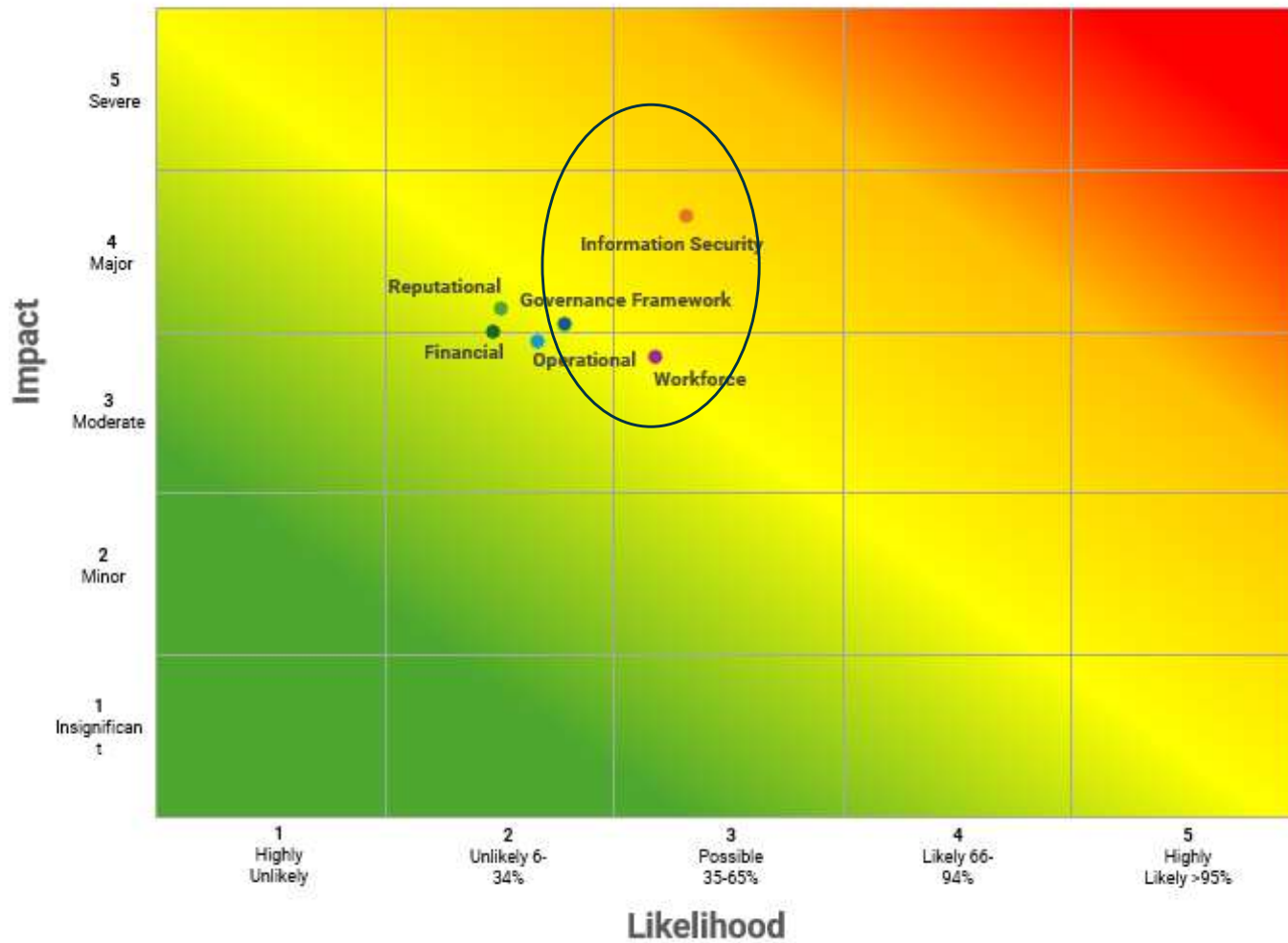
**Reputational
Risk**

Risks



Risk Pillar Assessment Results

Risk Pillar Assessment



- ❑ The **2024 Annual Risk Assessment** is the first assessment to use the GRC platform and as such the initial results provide a benchmark for future risk assessments to be measured against.
- ❑ It is ERM's opinion that management and staff address risks effectively, whether continuously through standard operating procedure or as new risks are identified.

Information Security: Current and Future Mitigation Strategy

Information security remains a risk management priority given the dynamic nature of the risk environment, the inherent complexity of information systems, and the sensitivity of NYSTRS' data.

Risk Management Areas of Continued Focus:

- ❑ Employee training and testing on Social Engineering and Phishing or other fraudulent methods.
- ❑ Enhancing NYSTRS security posture by staying current with established frameworks related to cyber security and hygiene.
- ❑ Testing and confirming NYSTRS information security infrastructure is secure by Vulnerability Assessment and Penetration Testing (VA/PT) testing and controls are reviewed and audited.
- ❑ Semi-annually NYSTRS' ISO (Information Security Officer) provides updates to the Risk Committee of the Board on the status of NYSTRS security posture and ongoing projects to upgrade or implement mitigations.

Workforce: Current & Future Mitigation Strategy

Workforce Risk mitigation includes mitigations related to strategic planning and implementation of practices to minimize disruptions, safeguard institutional knowledge, and build a resilient, diverse and engaged workforce.

Risk Management Areas of Continued Focus:

- Documentation of critical business processes
- Identifying and providing training on critical business processes
- Departments cross training staff on critical business processes
- Succession planning

Governance: Current & Future Mitigation Strategy

Monitoring risks to our Governance Framework aids the System in aligning policies and practices, maintains operational resilience, fosters trust and accountability while supporting our strategic objectives in the completion of our mission and vision.

Risk Management Areas of Continued Focus:

- ❑ Board Governance
 - ❑ Training and education on fiduciary focus
- ❑ NYSTRS Governance
 - ❑ Reviewing critical position staffing
 - ❑ Training and education on System policies and procedures for critical functions
 - ❑ Training and education on fiduciary focus

Questions?





Appendix D

DFS & Grant Thornton Follow-up

Risk Committee January 29, 2025

Matthew Albano, CFA, Chief Risk Officer

Matthew Tice, Director of Enterprise Risk



2017 DFS Examination Follow-up

DFS Overview

Report on Examination:

- 1 Recommendation related to Risk Management
- 1 Completed; 0 outstanding

Management Letter:

- 11 Recommendations related to Risk Management
- 10 Completed; 1 In Progress

DFS Management Letter Update

Status 1/2024	Status 1/2025	Grant Thornton Recommendation	Deliverable / Notes
		H. Management Agreement Compliance Monitoring	In Progress - 1/2025 Update: All Public Equity internal and external managed portfolios' management guidelines have been coded. Fixed Income internally managed portfolios have been coded and the external Fixed Income portfolios are in the process of being coded into the system.

2022 Grant Thornton ERM Maturity Assessment Follow-up

Grant Thornton Overview

Assessment Recommendations:

- ❑ 7 Recommendations related to Risk Management
- ❑ 5 Completed; 2 outstanding

Grant Thornton Update

Status 1/2024	Status 1/2025	Grant Thornton Recommendation	Deliverable / Notes
		Develop a scoring system to evaluate enterprise risks on both an inherent and residual scoring basis and key controls on the level of control effectiveness.	<p>In Progress - 1/2025 Update: The ERM department implemented a 5x5 risk rating system using Likelihood and Impact scores to evaluate risks in the 2024 Annual Risk Assessment. Due to the complexity of the subject matter, ERM will break out the control identification and inherent risk rating over the next 2 years as follows:</p> <p>Step 1 – Summer 2025, will add the identification of the controls for each risk.</p> <p>Step 2 – Summer of 2026, will add the evaluation of inherent risks.</p>
		Develop new summary reports and aggregate risk reporting views (trends, emerging risks, operational risks, KRIs, etc.) for the Board Risk Committee.	<p>Completed: New scoring system is complete, now using a 5x5 grid to rate risks on likelihood and impact. Trends for year-over year analysis will be forthcoming with an additional year of data.</p>

Grant Thornton Update

Status 1/2024	Status 1/2025	Grant Thornton Recommendation	Deliverable / Notes
		Track and monitor risk information (including a compressive risk register and key controls) through a centralized, automated tool (such as a GRC system or similar).	In Progress - 1/2025 Update: The ERM department created an expansive risk register within the GRC system to evaluate risks. The register was used as the basis for the 2024 Annual Risk Assessment that took place this year. Controls will be identified by summer of 2025.
		Update and conduct ERM training program and develop formal communication (and templates) for use in enacting consistent enterprise- wide ERM communication.	Completed: The ERM department implemented a comprehensive training program as part of new GRC methodology and software. This training included a review of risk terminology, the GRC framework, risk register, and the scoring system used. The GRC software will enhance communication for consistent enterprise-wide risk assessments.



Appendix E

Office of Foreign Assets Control Annual Risk Review

Risk Committee: January 29, 2025

Matthew Albano, CFA, Chief Risk Officer

Matthew Tice, Director of Enterprise Risk



Agenda

- ❑ Annual Risk Review Guidance
- ❑ The Results
- ❑ NYSTRS Screening– 2023 Year in Review
- ❑ OFAC Actions – 2023 Year in Review
- ❑ Sanctions Applicable to NYSTRS Operations

Annual Risk Review Guidance

The Enterprise Risk Management (ERM) Department conducted its annual risk review utilizing the following guidance provided by the US Department of the Treasury's Office of Foreign Assets Control (OFAC) as well as the ERM Department's knowledge of NYSTRS' operations.

- 1. A Framework for OFAC Compliance Commitments:** Compared NYSTRS' Sanction Compliance Program (SCP) framework to the US Department of the Treasury's OFAC Framework, including the top ten root causes of SCP failure.
- 2. Risk Factors for OFAC Compliance in the Securities Industry:** Assessed the likelihood and impact of risks related to the securities industry as identified by the US Department of the Treasury's OFAC.
- 3. Top 10 OFAC Risks:** Identified the top risks for NYSTRS' operations as identified by the ERM department. The risks were assessed for likelihood and impact and focused on payments made and received.

OFAC Framework Comparison

- ❑ The ERM department compared NYSTRS' SCP framework to the US Department of the Treasury's OFAC Framework.
- ❑ NYSTRS' SCP contains and **conforms** to the **five** essential components of compliance.

Five essential components of compliance	NYSTRS Compliance Program			
	Description	Conforms	Generally, Conforms	Developing
Management Commitment	Commitment and support is one of the most important factors in the program's success	✓		
Risk Assessment	Conduct a routine, and if appropriate, ongoing "risk assessment" for the purposes of identifying potential OFAC issues	✓		
Internal Controls	Policies and procedures in place	✓		
Testing and Auditing	Audits assess the effectiveness of current processes	✓		
Training	An effective training program is an integral component of a successful program	✓		

Top Ten Root Causes of SCP Failure

- ❑ The ERM department compared NYSTRS' SCP operations to the US Department of the Treasury's top ten root causes list.
- ❑ NYSTRS has policies, processes in place that mitigate the risk of a similar failure occurring within NYSTRS' SCP.

Root Causes of OFAC Sanction Compliance Program Breakdown or Deficiencies	NYSTRS' Acknowledgements	
	Policy/Program/Software In Place	Developing Policy
Lack of Formal OFAC Sanction Compliance Program (SCP)	☑	
Misinterpreting/failing to understand the applicability of OFAC's regulations	☑	
Facilitating transactions by non-US persons (including through or by overseas subsidiaries or affiliates)	☑	
Utilizing the US financial system, or processing payments to or through US financial institutions, for commercial transactions involving OFAC sanctioned persons or countries	☑	
Sanctions screening software or filter faults	☑	
Improper Due Diligence on Customers/Clients (e.g., Ownership, Business Dealings, etc.)	☑	
De-Centralized Compliance Functions and Inconsistent Application of an SCP	☑	
Utilizing Non-Standard Payment or Commercial Practices	☑	
Individual Liability	☑	

Risk Factors for OFAC Compliance in the Securities Industry

- ❑ While not all risks identified by the US Department of the Treasury's OFAC are applicable to NYSTRS' operations, we considered similar risks that NYSTRS might encounter. The highest rated impact scores are related to investment transactions. NYSTRS has in place processes and policies that reduce the likelihood of the securities industry risks to **low**.

Possible Risk Factors	Likelihood	Impact
International transactions, including wire transfers	Low	High
Foreign customers/accounts	Low	Low
Foreign broker-dealers who are not subject to OFAC regulations	Low	Low
Risks of Investments in Foreign Securities	Low	High
Personal Investment Corporations or Personal Holding Companies	Not Applicable	Not Applicable
Very High Net Worth Institutional Accounts, Hedge Funds, Funds of Hedge Funds and Other Alternative Investment Funds (Private Equity, Venture Capital Funds) and Intermediary Relationships	Low	High
Omnibus Accounts/Use of Intermediaries	Low	High
Third-Party Introduced Business	Not Applicable	Not Applicable
Confidential Accounts	Not Applicable	Not Applicable

NYSTRS' Top Ten OFAC Risks

- ❑ The ERM department identified the top ten OFAC risks facing NYSTRS' operations as viewed by the ERM department.
- ❑ The risks were assessed for likelihood and impact and focused on payments made and received. While the likelihood was assessed at low, the impact for payments made and received from investment transactions could be high due to the large dollar amount of the transactions.

Top Ten Compliance Program Deficiencies	Likelihood	Impact
Payments to Investment Partners	Low	High
Payments to members	Low	Low
Payments to beneficiaries or estates	Low	Low
Payments to vendors	Low	Low
Payments received from investment partners	Low	Medium
Payments from school districts	Low	Low
Payments from members	Low	Low
Payments from others	Low	Low
Investment alongside parties blocked by OFAC	Low	High
Investments in blocked securities or which are subsequently blocked	Low	Medium



NYSTRS OFAC Screening

2023 Year in Review

Investments Screened



2,453

Individuals and entities related to investment transactions against the OFAC's SDN and sanction list

Vendors Screened



141

Vendors were screened relating to non-investment transactions by NYSTRS Procurement Unit

Department Reviews



48 flags were reviewed and cleared by the ERM Department



21 OFAC Certifications were reviewed and approved by the Legal Department

NYSTRS Member OFAC Screening

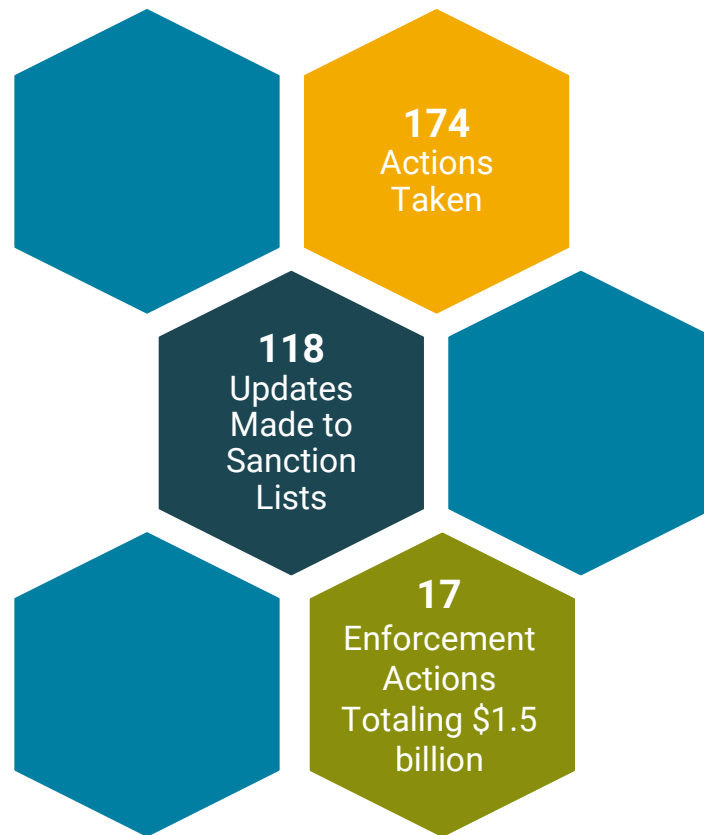
NYSTRS will screen members if the following criteria is met:

- Initial payment if member requests paper check
- Initial payment if member has a foreign address
- Lump sum retirement cash out (Section 537)

NYSTRS will screen non-members (Beneficiaries, Alternate Payee, etc.) if the following criteria is met:

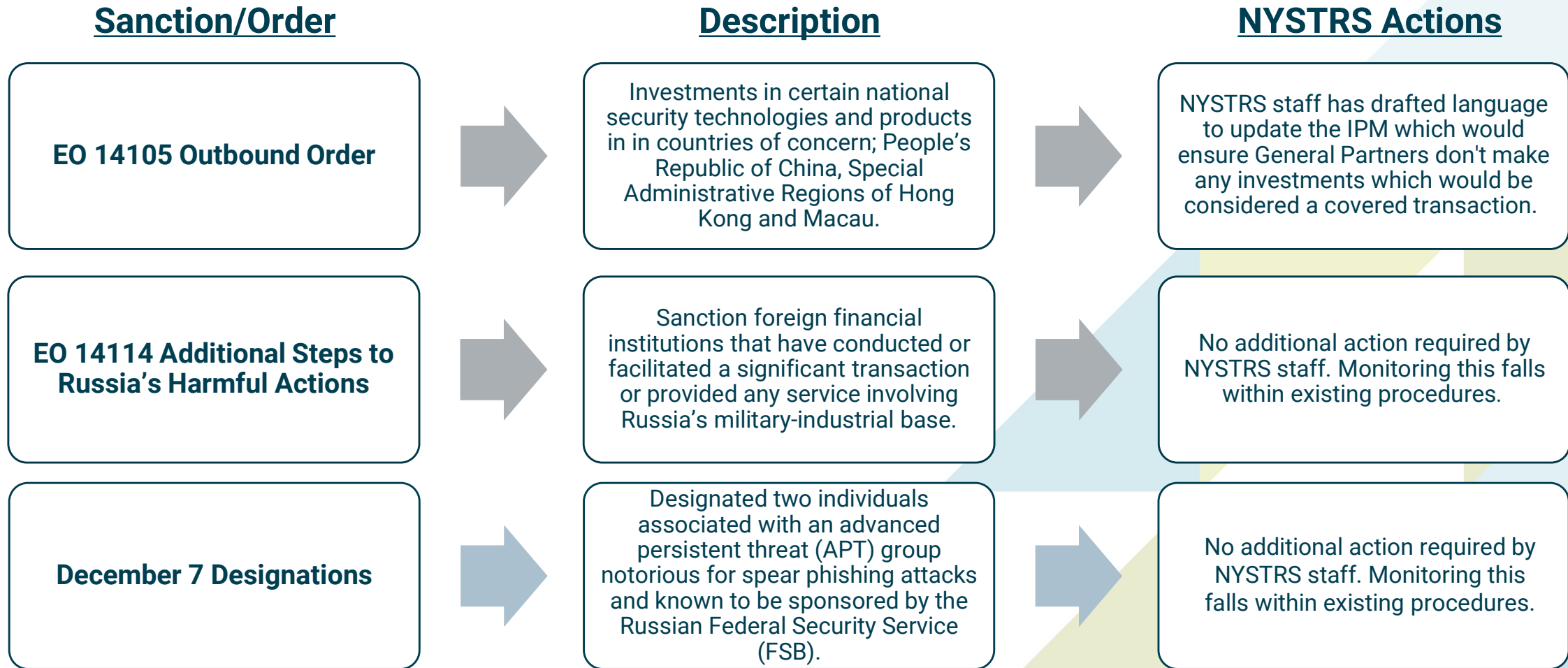
- Payee resides outside the United States
- Payment is made by paper check
- Lump sum greater than \$5,000
- Initial payment to beneficiary, if benefit is over \$5,000 per month
- Payee is a corporation, trust or religious organization

OFAC Actions 2023 Year in Review



- ❑ In **2023**, the Office of Foreign Assets Control took **174** actions that consisted of the following: updates to an SDN list, general license issuance, designations to an entity made by Treasury, posting of FAQ's to a previous designation, and settlements with the Treasury.
- ❑ Of those 174 actions, **118** were updates made to sanction lists which contains the names of individuals and entities subject to comprehensive or targeted restrictive measures under international and domestic sanctions regimes.
- ❑ In **2023**, 17 enforcement actions resulted in \$1.5 billion of civil penalties. The two most notable were \$508 million settlement with British American Tobacco and the \$968 million settlement with Binance Holdings Ltd.

Sanction List and Executive Orders Applicable to NYSTRS' Operations



Questions?



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I. INTRODUCTION

This policy addresses, implements and ensures System compliance with state and federal law and the avoidance of transactions in violation of applicable sanctions or anti-money laundering (“AML”) legislation, rule, regulation or order administered or promulgated by the US Department of the Treasury, including through the Office of Foreign Assets Control (“OFAC”), [Office of Investment Security](#), or the Financial Crimes Enforcement Network. The goal of this policy is to ensure that System assets are not used, invested or commingled by investment funds, managers or borrowers in transactions or accounts in violation of applicable AML and OFAC laws and regulations.

II. LEGAL AUTHORITY

- OFAC operates under the Executive Branch national emergency powers as well as authority granted by specific legislation including, but not limited to, the Trading With the Enemy Act, the International Emergency Economic Powers Act and the Antiterrorism and Effective Death Penalty Act to impose controls, prohibit transactions and trigger obligations upon US persons to block (freeze) assets under US jurisdiction. All US persons including all US citizens and permanent resident aliens regardless of location, all persons and entities within the US and all US incorporated entities and their foreign branches must comply with OFAC regulations. With certain OFAC sanction programs, all foreign subsidiaries owned or controlled by US companies must also comply.
- Related statutes such as the Bank Secrecy Act, the USA PATRIOT Act and the Foreign Corrupt Practices Act, along with various executive orders, provide the Department of the Treasury and federal regulators with additional authority to detect, deter, and disrupt prohibited transactions that violate applicable AML and OFAC laws and regulations.
- The New York State Department of Financial Services (“DFS”), as the System’s State regulator under New York State Insurance Law, possesses the authority to oversee and examine the adequacy of the System’s process, procedure and policy for compliance with AML and OFAC laws and regulations.

III. AML/OFAC COMPLIANCE PROCEDURES

In order to ensure compliance with US Department of the Treasury requirements and preclude the possibility of System funds and assets being invested in or commingled by investment funds, managers and borrowers in transactions or accounts in violation of applicable AML and OFAC laws and regulations, the System has determined to ban investments in, or transactions with, investment funds, managers and borrowers that do not comply with applicable AML and OFAC laws and regulations. Banning such investments will highlight to investment funds, managers, and borrowers that the System will not knowingly permit its funds and assets to be used in any manner that violates applicable AML and OFAC laws and regulations.

A. General Rule

As a matter of policy, the System will not invest in any fund, engage any investment manager or transact with any borrower where the fund, manager, or borrower does not comply with applicable AML and OFAC laws and regulations and who does not provide a certification of same as per Appendix B or Appendix C, as applicable.

B. Implementation

1. The System shall conduct an annual risk assessment specific to AML/OFAC compliance and, where warranted, amend and/or supplement this policy commensurate with the resulting risk profile.
2. Whenever System investment staff is considering investing in a private equity or real estate fund, engaging an external investment manager for a new investment opportunity, or transacting with a borrower, the above-referenced certification shall be required for the completion of staff due diligence and shall be a condition precedent for the investment and disbursement of System funds and assets. Thereafter, such certification/s and/or other evidence reaffirming AML/OFAC compliance shall be required to the extent necessary for compliance with any legal requirement or any other requirement of any Governmental Authority, or as may be reasonably determined by the System.

IV. CONTRACT AND CERTIFICATION PROVISIONS

In order to ensure System compliance with applicable AML and OFAC laws and regulations when investing with a private equity or real estate fund, external investment manager, or transacting with a borrower, the applicable contractual

documents for such investments and transactions shall contain a contract provision providing for the funds, managers, and borrowers to conduct their duties in compliance with law and applicable AML and OFAC regulations. Typically, in the case of fund investments, the provisions will be included in a side letter executed by the fund and the System.

The System's Legal Department has prepared model language for inclusion in fund side letters, investment manager contracts, and real estate mortgage documents as applicable (Appendix A) along with requisite certification language for fund investment and management contracts (Appendix B) and real estate mortgages (Appendix C).

Certifications shall be made by the investment fund, external investment manager, or borrower (or a borrower party applicant where borrower entity has yet to be formed, with additional certification from borrower once formed) to the System's Chief Risk Officer and the final executed form acceptable to the System must be submitted before or contemporaneous with the completion of business due diligence and prior to the commencement of legal due diligence and the negotiation of contract terms.

The investment fund, investment manager, or borrower (as applicable) shall be required to promptly notify the System's Chief Risk Officer upon any occurrence, change or development causing any component of the certification to become untrue, and the investment fund, investment manager, or borrower to be in noncompliance with this policy.

V. IMPLEMENTING PROCEDURES

- System investment staff shall be responsible for furnishing the investment funds, external investment manager candidates, and prospective borrowers with a copy of this policy. Additionally, System investment staff, as part of their due diligence, shall ascertain whether the investment fund, external investment manager candidate, or prospective borrower is ready, willing, and able to comply with the requirements of this policy and thereafter obtain the requisite certification.
- Outside counsel representing the System in any applicable transaction or agreement shall be furnished with a copy of this policy.
- The agreement of the investment fund, external investment manager candidate, or prospective borrower to comply with applicable AML and OFAC

laws and regulations, provide the contract provisions set forth in Appendix A and submission of an executed certification as per Appendix B or C (as applicable) and acceptable to the System shall be conditions precedent for the System's investment and engagement.

VI. APPLICABILITY

This policy applies to all private equity/private debt and real estate fund investment commitments, external investment manager agreements, and real estate mortgages authorized by the System. Nothing herein, however, is intended to suggest or imply that any statute, regulation, or policy applicable to the System and/or referred to herein were not in full force at any time prior to introduction of this policy.

VII. RESPONSIBILITIES AND CONTROLS

Responsible Party	Action
<p>Managing Directors of Each Asset Class</p>	<ol style="list-style-type: none"> 1. Ensure funds, investment managers, prospective borrowers, and outside counsels are made aware of System policy regarding AML and OFAC compliance. 2. Verify during due diligence that funds, investment managers, prospective borrowers, and their respective principals and 20% or more owners do not appear on the OFAC list of Specially Designated Nationals (“SDN”). 3. In concert with the Office of the General Counsel, ensure applicable side letter provisions set forth in Appendix A are included in each contract with newly engaged funds, investment managers, or borrowers. 4. Maintain an official copy of executed mortgages, loans, contracts, side letters, and subscription agreements with applicable AML and OFAC provisions and certifications.
<p>Funds, External Managers, and Borrowers</p>	<ol style="list-style-type: none"> 5. Comply with applicable AML and OFAC laws, regulations and requirements. 6. Provide certification/s and contract provisions as required by this policy. 7. Promptly notify the System’s Chief Risk Officer upon any occurrence, change, or development causing any component of the certification to become untrue and the investment fund, investment manager, and borrower to be in non-compliance with this policy.

Office of the General Counsel	<p>8. Draft (with outside counsel/s as necessary) and approve contract/side letter provisions required of investment funds, investment managers, and borrowers as applicable.</p> <p>9. In concert with Office of the Chief Risk Officer, receive, review, and approve the sufficiency of certifications from investment funds, investment managers, and borrowers prior to commencement of legal due diligence and negotiation of contract or mortgage terms.</p>
Chief Risk Officer	<p>10. Maintain an official copy of acceptable and executed certifications.</p> <p>11. Coordinate and conduct annual risk assessments of the System's AML and OFAC exposure and susceptibility.</p> <p>12. To the extent necessary for compliance with legal or regulatory requirements or as reasonably determined necessary by the System, obtain and maintain re-certifications and/or other evidence reaffirming AML/OFAC compliance from active and on-going funds, investment managers, and borrowers with whom the System has invested or transacted.</p> <p>13. File reports with OFAC and contemporaneously notify the System's Retirement Board of any known violation of applicable AML and OFAC laws and regulations involving System funds and assets.</p> <p>14. In concert with the Office of the General Counsel, receive, review, and approve the sufficiency of certifications from investment funds, investment managers, or borrowers.</p>

Finance Department and Investment Operations Department	15. Upon direction from the Risk Management Department and in consultation with the Office of the General Counsel, instruct the System's Custodian or depository institution to freeze, block, segregate, permit OFAC-authorized debits, report, and/or take other appropriate action with respect to the affected assets to comply with AML and OFAC laws and regulations.
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**APPENDIX A - MODEL SIDE LETTER PROVISIONS
AML/OFAC COMPLIANCE**

- a. The General Partner, external Investment Manager, or Borrower (as applicable) acknowledges that the Investor has provided it a copy of its written AML/OFAC compliance policy.
- b. The General Partner, external Investment Manager, or Borrower (as applicable), represents, warrants, and covenants that it shall conduct its duties and obligations hereunder in compliance with all applicable laws, rules, and regulations.
- c. Model Side Letter/Fund Investment and Manager Contracts: Pursuant to Investor's AML/OFAC compliance policy, the General Partner or Manager has executed and delivered a certification dated (__/__/____) acceptable to Investor, and the same is reiterated and incorporated as if fully set forth herein.
- d. Model Side Letter/Real Estate Mortgage Documents: None of Borrower, Guarantor, any other Constituent Borrower Parties, or, to their respective knowledge, any of their respective director, officer, employee, agent, or affiliate is an individual or entity ("Person") that is, or is owned or controlled by Persons that are: (i) the subject of any sanctions administered or enforced by the U.S. Department of the Treasury's Office of Foreign Asset Controls ("OFAC"), or the U.S. Department of State (collectively, "**Sanctions**"), or (ii) located, organized or resident in a country or territory that is, or whose government is, the subject of Sanctions..

The Borrower, Guarantor, and any other Constituent Borrower Parties and, to their respective knowledge, their respective directors, officers, employees and agents are in compliance with all applicable Sanctions and with the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the "FCPA") and any other applicable anti-corruption law, in all material respects.

The Borrower, Guarantor, and any other Constituent Borrower Parties will maintain in effect policies and procedures designed to promote compliance by them and their affiliates and their respective directors, officers, employees, and agents with applicable Sanctions and with the FCPA and any other applicable anti-corruption laws.

The Borrower, Guarantor, and any other Constituent Borrower Parties will not directly or indirectly, use the Loan proceeds, or lend, contribute, or otherwise make available such proceeds to any affiliate, partner entity, or other Person, (i) in furtherance of an offer, payment, promise to pay, or authorization of payment or giving of money, or anything else of value, to any Person in violation of any other applicable anti-

corruption law, or (ii) (A) to fund any activities or business of or with any Person, or in any country or territory, that, at the time of such funding, is, or whose government is, the subject of Sanctions, or (B) in any other manner that would result in a violation of Sanctions by any Person (including any Person participating in the transaction in any capacity, including but not limited to Lender).

The Lender to the extent subject to the PATRIOT ACT hereby notifies the Borrower, Guarantor, and any Constituent Borrower Parties that, pursuant to the requirements of the PATRIOT ACT, it may be required to obtain, verify and record information that identifies them, which information includes their name and addresses and other information that will allow such Lender to identify them in accordance with the PATRIOT Act.

Lender will not transfer any funds to, and will not accept any amounts from, a prospective Borrower, Guarantor, or any other Constituent Borrower Parties if such parties cannot make the foregoing representations and warranties or comply with the foregoing covenants or if Lender has reasonable basis for belief that any of such representations and warranties are not true or Borrower has breached any of the foregoing covenants. Borrower agrees to promptly notify Lender should Borrower become aware of any change in the information set forth in these representations and warranties. The foregoing representations and warranties must also be true and restated by Borrower as of the Closing Date and must remain true throughout the term of the Loan.

To the extent it is necessary for the Lender's compliance with any legal requirement or any other requirement of any Governmental Authority, or Lender's established compliance policy, Borrower further covenants and agrees to re-certify and deliver to Lender any such certification and/or other evidence as may be reasonably requested by Lender in Lender's reasonable discretion, reaffirming the above compliance.

e. The certification shall be addressed to:

[Name]
Chief Risk Officer
New York State Teachers' Retirement System
10 Corporate Woods Drive
Albany, NY 12211-2395
E-mail:

APPENDIX B – SAMPLE CERTIFICATION

AML/OFAC Compliance Certification – Fund Investment and Management Contracts

[Investment Company Name and Fund]
[Investment Company Address]

Chief Risk Officer
New York State Teachers' Retirement System
10 Corporate Woods Drive
Albany, NY 12211-2395
E-mail: nystsrcompliance@nystsr.org

- (a) The undersigned General Partner or external Investment Manager, as applicable, acknowledges the Investor has an established policy requiring AML/OFAC compliance and for General Partner or external Investment Manager, as applicable, to provide this certification of compliance. For purposes hereof, “General Partner/Investment Manager” shall mean and include the General Partner/external Investment Manager, their control persons and executive officers, and each affiliate, director, partner, member, officer, agent, employee, and shareholder who possesses or exercises management or investment authority and discretion with respect to the Fund/Account to which Investor may make a commitment of its funds or assets.
- (b) The General Partner/Investment Manager, as applicable, represents, warrants, covenants that it shall conduct its duties and obligations in compliance with applicable law, rules, and regulations, and further certifies that it shall cause the Partnership/Account to avoid transactions, including investments in the Fund/Account, that are:
- 1) in violation of any applicable sanctions or anti-money laundering legislation, rule, regulation, or order administered by the US Department of the Treasury, including through the Office of Foreign Assets Control (“OFAC”), [Office of Investment Security](#), or the Financial Crimes Enforcement Network, including Subtitle B, Chapters V and X of Title 31 of the U.S. Code of Federal Regulations, in each case as amended from time to time, or
 - 2) (i) with any person or entity appearing on the Specially Designated Nationals and Blocked Persons List of the OFAC as amended from time to time, (ii) with any person or entity known by the Partnership/Manager (after reasonable inquiry) to

be owned or controlled by any person or entity described in the foregoing item (i) with ownership of 20% or more of outstanding voting securities being presumptively a control position, or (iii) directly or indirectly with a country or region against which the U.S. maintains comprehensive economic sanctions, or with any person or entity having its principal place of business located in said country or region. For purposes of the foregoing, the Partnership/Manager's reliance on a representation or warranty made by a counterparty at or prior to the time of the investment or transaction and compliance with the General Partner's/Manager's internal AML and OFAC compliance policy will constitute reasonable inquiry.

- (c) The General Partner/external Investment Manager confirms the term "person or entity" includes governments, territories, and other political entities.
- (d) To the extent necessary for compliance with any legal requirement or any other requirement of any Governmental Authority or regulators, or NYSTRS'/Investor's established compliance policy, General Partner/Manager covenants and agrees to re-certify and deliver to NYSTRS'/Investor any such certification and/or other evidence as may be reasonably requested reaffirming the above compliance.
- (e) General Partner/Manager further covenants and agrees to promptly notify NYSTRS'/Investor's Chief Risk Officer upon any occurrence, change, or development causing any component of this certification or any other certification referred to in clause (d) above to become untrue.
- (f) Pursuant to Investor's AML/OFAC compliance policy, this certificate shall be attached to Investor's side letter/agreement relating to the Fund/Account, and all of the provisions of this certificate shall be incorporated by reference into such side letter/agreement as if fully set forth therein.

Fund:

General Partner:

By: _____

Name:

Title:

Date:

Investment Manager to Fund:

By: _____

Name:

Title:

Date:

APPENDIX C – SAMPLE CERTIFICATION

OFAC Compliance Certification – Real Estate Mortgages

Chief Risk Officer
New York State Teachers' Retirement System
10 Corporate Woods Drive
Albany, NY 12211-2395
E-mail: nystrscompliance@nystrs.org

(a) The undersigned Borrower/Applicant acknowledges the New York State Teachers' Retirement System ("NYSTRS") has an established policy requiring AML/OFAC compliance and for Borrower/Applicant to provide this certification of compliance with respect to Borrower, Guarantor, any other Constituent Borrower Parties, or any of their respective Affiliates. As used herein, "Constituent Borrower Parties" means (i) any person or entity who has a twenty percent (20%) greater direct or indirect legal, beneficial, or other ownership interest in Borrower, or the direct or indirect control or power to vote twenty percent (20%) or more of the outstanding shares or voting interests of the Borrower, (ii) any general partner, manager, managing member, trustee or person or entity exercising similar functions with respect to the Borrower, and (iii) any officer, director, executive employees, or other person or entity with the power to exercise, directly or indirectly, control over the management, policy, or activities of Borrower or major decisions regarding the operations and management of Borrower.

(b) The Borrower/Applicant represents and further certifies that none of Borrower, Guarantor, the Constituent Borrower Parties, or to their respective knowledge, any director, officer, employee, agent, or affiliate of the Borrower/Applicant is an individual or entity ("Person") that is, or is owned or controlled by Persons that are: (i) the subject of any sanctions administered or enforced by the United States Department of the Treasury's Office of Foreign Assets Control ("**OFAC**") , or the U.S. (collectively "**Sanctions**"); or (ii) located, organized or resident in a country or territory that is, or whose government is the subject of Sanctions.

The Borrower/Applicant, the Constituent Borrower Parties and their respective directors, officers, and employees and, to their respective knowledge, their agents are in compliance with all applicable Sanctions and with the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the "FCPA") and any other applicable anti-corruption law, in all material respects. The Borrower/Applicant will maintain in effect policies and procedures designed to promote compliance by them and their respective directors, officers, employees, and agents with applicable Sanctions and with the FCPA and any other anti-corruption laws. The Borrower/Applicant will not, directly or indirectly, use the investment or loan proceeds,

or lend, contribute, or otherwise make available such proceeds or other amounts advanced under any of the Loan Documents to any affiliate, joint venture partner, or other Person (i) in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any Person in violation of the FCRA or any other applicable anti-corruption law, or (ii) (A) fund any activities or business of or with any Person, or in any country or territory, that, at the time of such funding, is, or whose government is, the subject of Sanctions, or (B) in any other manner that would result in a violation of Sanctions by any Person (including any Person participating in the transaction in any capacity, including but not limited to Lender.)

The Lender to the extent subject to the PATRIOT ACT hereby notifies the Borrower/Applicant that, pursuant to the requirements of the PATRIOT Act, it may be required to obtain, verify and record information that identifies them, which information includes their name and address and other information that will allow such Lender to identify them in accordance with the PATRIOT ACT.

(c) The undersigned [Borrower/Applicant] further covenants and agrees to promptly notify NYSTRS' Chief Risk Officer upon any occurrence, change, or development causing any component of this certification or any other certification referred to clause (b) above to become untrue.

Pursuant to Investor's AML/OFAC compliance policy, this certificate shall, in Investor's sole discretion, be attached to the loan agreement, and all of the provisions of this certificate shall be incorporated by reference into such loan agreement as if fully set forth therein.

Borrowing Entity (please print)

Borrower/Applicant (please print)

Signature of Borrower/Applicant

Print Name

Date

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I. INTRODUCTION

This policy addresses, implements and ensures System compliance with state and federal law and the avoidance of transactions in violation of applicable sanctions or anti-money laundering (“AML”) legislation, rule, regulation or order administered or promulgated by the US Department of the Treasury, including through the Office of Foreign Assets Control (“OFAC”), Office of Investment Security, or the Financial Crimes Enforcement Network. The goal of this policy is to ensure that System assets are not used, invested or commingled by investment funds, managers or borrowers in transactions or accounts in violation of applicable AML and OFAC laws and regulations.

II. LEGAL AUTHORITY

- OFAC operates under the Executive Branch national emergency powers as well as authority granted by specific legislation including, but not limited to, the Trading With the Enemy Act, the International Emergency Economic Powers Act and the Antiterrorism and Effective Death Penalty Act to impose controls, prohibit transactions and trigger obligations upon US persons to block (freeze) assets under US jurisdiction. All US persons including all US citizens and permanent resident aliens regardless of location, all persons and entities within the US and all US incorporated entities and their foreign branches must comply with OFAC regulations. With certain OFAC sanction programs, all foreign subsidiaries owned or controlled by US companies must also comply.
- Related statutes such as the Bank Secrecy Act, the USA PATRIOT Act and the Foreign Corrupt Practices Act, along with various executive orders, provide the Department of the Treasury and federal regulators with additional authority to detect, deter, and disrupt prohibited transactions that violate applicable AML and OFAC laws and regulations.
- The New York State Department of Financial Services (“DFS”), as the System’s State regulator under New York State Insurance Law, possesses the authority to oversee and examine the adequacy of the System’s process, procedure and policy for compliance with AML and OFAC laws and regulations.

III. AML/OFAC COMPLIANCE PROCEDURES

In order to ensure compliance with US Department of the Treasury requirements and preclude the possibility of System funds and assets being invested in or commingled by investment funds, managers and borrowers in transactions or accounts in violation of applicable AML and OFAC laws and regulations, the System has determined to ban investments in, or transactions with, investment funds, managers and borrowers that do not comply with applicable AML and OFAC laws and regulations. Banning such investments will highlight to investment funds, managers, and borrowers that the System will not knowingly permit its funds and assets to be used in any manner that violates applicable AML and OFAC laws and regulations.

A. General Rule

As a matter of policy, the System will not invest in any fund, engage any investment manager or transact with any borrower where the fund, manager, or borrower does not comply with applicable AML and OFAC laws and regulations and who does not provide a certification of same as per Appendix B or Appendix C, as applicable.

B. Implementation

1. The System shall conduct an annual risk assessment specific to AML/OFAC compliance and, where warranted, amend and/or supplement this policy commensurate with the resulting risk profile.
2. Whenever System investment staff is considering investing in a private equity or real estate fund, engaging an external investment manager for a new investment opportunity, or transacting with a borrower, the above-referenced certification shall be required for the completion of staff due diligence and shall be a condition precedent for the investment and disbursement of System funds and assets. Thereafter, such certification/s and/or other evidence reaffirming AML/OFAC compliance shall be required to the extent necessary for compliance with any legal requirement or any other requirement of any Governmental Authority, or as may be reasonably determined by the System.

IV. CONTRACT AND CERTIFICATION PROVISIONS

In order to ensure System compliance with applicable AML and OFAC laws and regulations when investing with a private equity or real estate fund, external investment manager, or transacting with a borrower, the applicable contractual documents for such investments and transactions shall contain a contract provision providing for the funds, managers, and borrowers to conduct their duties in compliance with law and applicable AML and OFAC regulations. Typically, in the case of fund investments, the provisions will be included in a side letter executed by the fund and the System.

The System's Legal Department has prepared model language for inclusion in fund side letters, investment manager contracts, and real estate mortgage documents as applicable (Appendix A) along with requisite certification language for fund investment and management contracts (Appendix B) and real estate mortgages (Appendix C).

Certifications shall be made by the investment fund, external investment manager, or borrower (or a borrower party applicant where borrower entity has yet to be formed, with additional certification from borrower once formed) to the System's Chief Risk Officer and the final executed form acceptable to the System must be submitted before or contemporaneous with the completion of business due diligence and prior to the commencement of legal due diligence and the negotiation of contract terms.

The investment fund, investment manager, or borrower (as applicable) shall be required to promptly notify the System's Chief Risk Officer upon any occurrence, change or development causing any component of the certification to become untrue, and the investment fund, investment manager, or borrower to be in noncompliance with this policy.

V. IMPLEMENTING PROCEDURES

- System investment staff shall be responsible for furnishing the investment funds, external investment manager candidates, and prospective borrowers with a copy of this policy. Additionally, System investment staff, as part of their due diligence, shall ascertain whether the investment fund, external investment manager candidate, or prospective borrower is ready, willing, and able to comply with the requirements of this policy and thereafter obtain the requisite certification.

- Outside counsel representing the System in any applicable transaction or agreement shall be furnished with a copy of this policy.
- The agreement of the investment fund, external investment manager candidate, or prospective borrower to comply with applicable AML and OFAC laws and regulations, provide the contract provisions set forth in Appendix A and submission of an executed certification as per Appendix B or C (as applicable) and acceptable to the System shall be conditions precedent for the System's investment and engagement.

VI. APPLICABILITY

This policy applies to all private equity/private debt and real estate fund investment commitments, external investment manager agreements, and real estate mortgages authorized by the System. Nothing herein, however, is intended to suggest or imply that any statute, regulation, or policy applicable to the System and/or referred to herein were not in full force at any time prior to introduction of this policy.

VII. RESPONSIBILITIES AND CONTROLS

Responsible Party	Action
<p>Managing Directors of Each Asset Class</p>	<ol style="list-style-type: none"> 1. Ensure funds, investment managers, prospective borrowers, and outside counsels are made aware of System policy regarding AML and OFAC compliance. 2. Verify during due diligence that funds, investment managers, prospective borrowers, and their respective principals and 20% or more owners do not appear on the OFAC list of Specially Designated Nationals (“SDN”). 3. In concert with the Office of the General Counsel, ensure applicable side letter provisions set forth in Appendix A are included in each contract with newly engaged funds, investment managers, or borrowers. 4. Maintain an official copy of executed mortgages, loans, contracts, side letters, and subscription agreements with applicable AML and OFAC provisions and certifications.
<p>Funds, External Managers, and Borrowers</p>	<ol style="list-style-type: none"> 5. Comply with applicable AML and OFAC laws, regulations and requirements. 6. Provide certification/s and contract provisions as required by this policy. 7. Promptly notify the System’s Chief Risk Officer upon any occurrence, change, or development causing any component of the certification to become untrue and the investment fund, investment manager, and borrower to be in non-compliance with this policy.

Office of the General Counsel	<p>8. Draft (with outside counsel/s as necessary) and approve contract/side letter provisions required of investment funds, investment managers, and borrowers as applicable.</p> <p>9. In concert with Office of the Chief Risk Officer, receive, review, and approve the sufficiency of certifications from investment funds, investment managers, and borrowers prior to commencement of legal due diligence and negotiation of contract or mortgage terms.</p>
Chief Risk Officer	<p>10. Maintain an official copy of acceptable and executed certifications.</p> <p>11. Coordinate and conduct annual risk assessments of the System's AML and OFAC exposure and susceptibility.</p> <p>12. To the extent necessary for compliance with legal or regulatory requirements or as reasonably determined necessary by the System, obtain and maintain re-certifications and/or other evidence reaffirming AML/OFAC compliance from active and on-going funds, investment managers, and borrowers with whom the System has invested or transacted.</p> <p>13. File reports with OFAC and contemporaneously notify the System's Retirement Board of any known violation of applicable AML and OFAC laws and regulations involving System funds and assets.</p> <p>14. In concert with the Office of the General Counsel, receive, review, and approve the sufficiency of certifications from investment funds, investment managers, or borrowers.</p>

Finance Department and Investment Operations Department	15. Upon direction from the Risk Management Department and in consultation with the Office of the General Counsel, instruct the System's Custodian or depository institution to freeze, block, segregate, permit OFAC-authorized debits, report, and/or take other appropriate action with respect to the affected assets to comply with AML and OFAC laws and regulations.
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**APPENDIX A - MODEL SIDE LETTER PROVISIONS
AML/OFAC COMPLIANCE**

- a. The General Partner, external Investment Manager, or Borrower (as applicable) acknowledges that the Investor has provided it a copy of its written AML/OFAC compliance policy.
- b. The General Partner, external Investment Manager, or Borrower (as applicable), represents, warrants, and covenants that it shall conduct its duties and obligations hereunder in compliance with all applicable laws, rules, and regulations.
- c. Model Side Letter/Fund Investment and Manager Contracts: Pursuant to Investor's AML/OFAC compliance policy, the General Partner or Manager has executed and delivered a certification dated (___/___/___) acceptable to Investor, and the same is reiterated and incorporated as if fully set forth herein.
- d. Model Side Letter/Real Estate Mortgage Documents: None of Borrower, Guarantor, any other Constituent Borrower Parties, or, to their respective knowledge, any of their respective director, officer, employee, agent, or affiliate is an individual or entity ("Person") that is, or is owned or controlled by Persons that are: (i) the subject of any sanctions administered or enforced by the U.S. Department of the Treasury's Office of Foreign Asset Controls ("OFAC"), or the U.S. Department of State (collectively, "**Sanctions**"), or (ii) located, organized or resident in a country or territory that is, or whose government is, the subject of Sanctions..

The Borrower, Guarantor, and any other Constituent Borrower Parties and, to their respective knowledge, their respective directors, officers, employees and agents are in compliance with all applicable Sanctions and with the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the "FCPA") and any other applicable anti-corruption law, in all material respects.

The Borrower, Guarantor, and any other Constituent Borrower Parties will maintain in effect policies and procedures designed to promote compliance by them and their affiliates and their respective directors, officers, employees, and agents with applicable Sanctions and with the FCPA and any other applicable anti-corruption laws.

The Borrower, Guarantor, and any other Constituent Borrower Parties will not directly or indirectly, use the Loan proceeds, or lend, contribute, or otherwise make available such proceeds to any affiliate, partner entity, or other Person, (i) in furtherance of an offer, payment, promise to pay, or authorization of payment or giving of money, or anything else of value, to any Person in violation of any other applicable anti-

corruption law, or (ii) (A) to fund any activities or business of or with any Person, or in any country or territory, that, at the time of such funding, is, or whose government is, the subject of Sanctions, or (B) in any other manner that would result in a violation of Sanctions by any Person (including any Person participating in the transaction in any capacity, including but not limited to Lender).

The Lender to the extent subject to the PATRIOT ACT hereby notifies the Borrower, Guarantor, and any Constituent Borrower Parties that, pursuant to the requirements of the PATRIOT ACT, it may be required to obtain, verify and record information that identifies them, which information includes their name and addresses and other information that will allow such Lender to identify them in accordance with the PATRIOT Act.

Lender will not transfer any funds to, and will not accept any amounts from, a prospective Borrower, Guarantor, or any other Constituent Borrower Parties if such parties cannot make the foregoing representations and warranties or comply with the foregoing covenants or if Lender has reasonable basis for belief that any of such representations and warranties are not true or Borrower has breached any of the foregoing covenants. Borrower agrees to promptly notify Lender should Borrower become aware of any change in the information set forth in these representations and warranties. The foregoing representations and warranties must also be true and restated by Borrower as of the Closing Date and must remain true throughout the term of the Loan.

To the extent it is necessary for the Lender's compliance with any legal requirement or any other requirement of any Governmental Authority, or Lender's established compliance policy, Borrower further covenants and agrees to re-certify and deliver to Lender any such certification and/or other evidence as may be reasonably requested by Lender in Lender's reasonable discretion, reaffirming the above compliance.

- e. The certification shall be addressed to:

[Name]
Chief Risk Officer
New York State Teachers' Retirement System
10 Corporate Woods Drive
Albany, NY 12211-2395
E-mail:

APPENDIX B – SAMPLE CERTIFICATION

AML/OFAC Compliance Certification – Fund Investment and Management Contracts

[Investment Company Name and Fund]
[Investment Company Address]

Chief Risk Officer
New York State Teachers' Retirement System
10 Corporate Woods Drive
Albany, NY 12211-2395
E-mail: nystsrcompliance@nystsr.org

- (a) The undersigned General Partner or external Investment Manager, as applicable, acknowledges the Investor has an established policy requiring AML/OFAC compliance and for General Partner or external Investment Manager, as applicable, to provide this certification of compliance. For purposes hereof, “General Partner/Investment Manager” shall mean and include the General Partner/external Investment Manager, their control persons and executive officers, and each affiliate, director, partner, member, officer, agent, employee, and shareholder who possesses or exercises management or investment authority and discretion with respect to the Fund/Account to which Investor may make a commitment of its funds or assets.
- (b) The General Partner/Investment Manager, as applicable, represents, warrants, covenants that it shall conduct its duties and obligations in compliance with applicable law, rules, and regulations, and further certifies that it shall cause the Partnership/Account to avoid transactions, including investments in the Fund/Account, that are:
- 1) in violation of any applicable sanctions or anti-money laundering legislation, rule, regulation, or order administered by the US Department of the Treasury, including through the Office of Foreign Assets Control (“OFAC”), Office of Investment Security, or the Financial Crimes Enforcement Network, including Subtitle B, Chapters V and X of Title 31 of the U.S. Code of Federal Regulations, in each case as amended from time to time, or
 - 2) (i) with any person or entity appearing on the Specially Designated Nationals and Blocked Persons List of the OFAC as amended from time to time, (ii) with any person or entity known by the Partnership/Manager (after reasonable inquiry) to

be owned or controlled by any person or entity described in the foregoing item (i) with ownership of 20% or more of outstanding voting securities being presumptively a control position, or (iii) directly or indirectly with a country or region against which the U.S. maintains comprehensive economic sanctions, or with any person or entity having its principal place of business located in said country or region. For purposes of the foregoing, the Partnership/Manager's reliance on a representation or warranty made by a counterparty at or prior to the time of the investment or transaction and compliance with the General Partner's/Manager's internal AML and OFAC compliance policy will constitute reasonable inquiry.

- (c) The General Partner/external Investment Manager confirms the term "person or entity" includes governments, territories, and other political entities.
- (d) To the extent necessary for compliance with any legal requirement or any other requirement of any Governmental Authority or regulators, or NYSTRS'/Investor's established compliance policy, General Partner/Manager covenants and agrees to re-certify and deliver to NYSTRS'/Investor any such certification and/or other evidence as may be reasonably requested reaffirming the above compliance.
- (e) General Partner/Manager further covenants and agrees to promptly notify NYSTRS'/Investor's Chief Risk Officer upon any occurrence, change, or development causing any component of this certification or any other certification referred to in clause (d) above to become untrue.
- (f) Pursuant to Investor's AML/OFAC compliance policy, this certificate shall be attached to Investor's side letter/agreement relating to the Fund/Account, and all of the provisions of this certificate shall be incorporated by reference into such side letter/agreement as if fully set forth therein.

Fund:

General Partner:

By: _____

Name:

Title:

Date:

Investment Manager to Fund:

By: _____

Name:

Title:

Date:

APPENDIX C – SAMPLE CERTIFICATION

OFAC Compliance Certification – Real Estate Mortgages

Chief Risk Officer
New York State Teachers' Retirement System
10 Corporate Woods Drive
Albany, NY 12211-2395
E-mail: nystsrcompliance@nystsr.org

(a) The undersigned Borrower/Applicant acknowledges the New York State Teachers' Retirement System ("NYSTRS") has an established policy requiring AML/OFAC compliance and for Borrower/Applicant to provide this certification of compliance with respect to Borrower, Guarantor, any other Constituent Borrower Parties, or any of their respective Affiliates. As used herein, "Constituent Borrower Parties" means (i) any person or entity who has a twenty percent (20%) greater direct or indirect legal, beneficial, or other ownership interest in Borrower, or the direct or indirect control or power to vote twenty percent (20%) or more of the outstanding shares or voting interests of the Borrower, (ii) any general partner, manager, managing member, trustee or person or entity exercising similar functions with respect to the Borrower, and (iii) any officer, director, executive employees, or other person or entity with the power to exercise, directly or indirectly, control over the management, policy, or activities of Borrower or major decisions regarding the operations and management of Borrower.

(b) The Borrower/Applicant represents and further certifies that none of Borrower, Guarantor, the Constituent Borrower Parties, or to their respective knowledge, any director, officer, employee, agent, or affiliate of the Borrower/Applicant is an individual or entity ("Person") that is, or is owned or controlled by Persons that are: (i) the subject of any sanctions administered or enforced by the United States Department of the Treasury's Office of Foreign Assets Control ("**OFAC**") , or the U.S. (collectively "**Sanctions**"); or (ii) located, organized or resident in a country or territory that is, or whose government is the subject of Sanctions.

The Borrower/Applicant, the Constituent Borrower Parties and their respective directors, officers, and employees and, to their respective knowledge, their agents are in compliance with all applicable Sanctions and with the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the "FCPA") and any other applicable anti-corruption law, in all material respects. The Borrower/Applicant will maintain in effect policies and procedures designed to promote compliance by them and their respective directors, officers, employees, and agents with applicable Sanctions and with the FCPA and any other anti-corruption laws. The Borrower/Applicant will not, directly or indirectly, use the investment or loan proceeds,

or lend, contribute, or otherwise make available such proceeds or other amounts advanced under any of the Loan Documents to any affiliate, joint venture partner, or other Person (i) in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any Person in violation of the FCRA or any other applicable anti-corruption law, or (ii) (A) fund any activities or business of or with any Person, or in any country or territory, that, at the time of such funding, is, or whose government is, the subject of Sanctions, or (B) in any other manner that would result in a violation of Sanctions by any Person (including any Person participating in the transaction in any capacity, including but not limited to Lender.)

The Lender to the extent subject to the PATRIOT ACT hereby notifies the Borrower/Applicant that, pursuant to the requirements of the PATRIOT Act, it may be required to obtain, verify and record information that identifies them, which information includes their name and address and other information that will allow such Lender to identify them in accordance with the PATRIOT ACT.

(c) The undersigned [Borrower/Applicant] further covenants and agrees to promptly notify NYSTRS' Chief Risk Officer upon any occurrence, change, or development causing any component of this certification or any other certification referred to clause (b) above to become untrue.

Pursuant to Investor's AML/OFAC compliance policy, this certificate shall, in Investor's sole discretion, be attached to the loan agreement, and all of the provisions of this certificate shall be incorporated by reference into such loan agreement as if fully set forth therein.

Borrowing Entity (please print)

Borrower/Applicant (please print)

Signature of Borrower/Applicant

Print Name

Date



Investment Risk Update

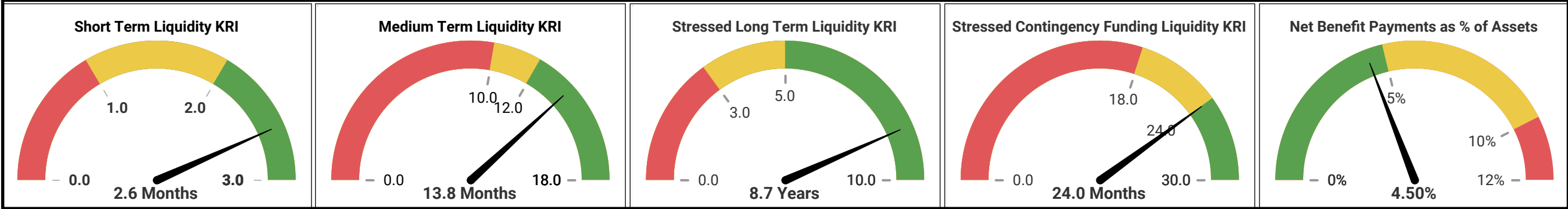
Risk Management

Risk Committee: January 29, 2025

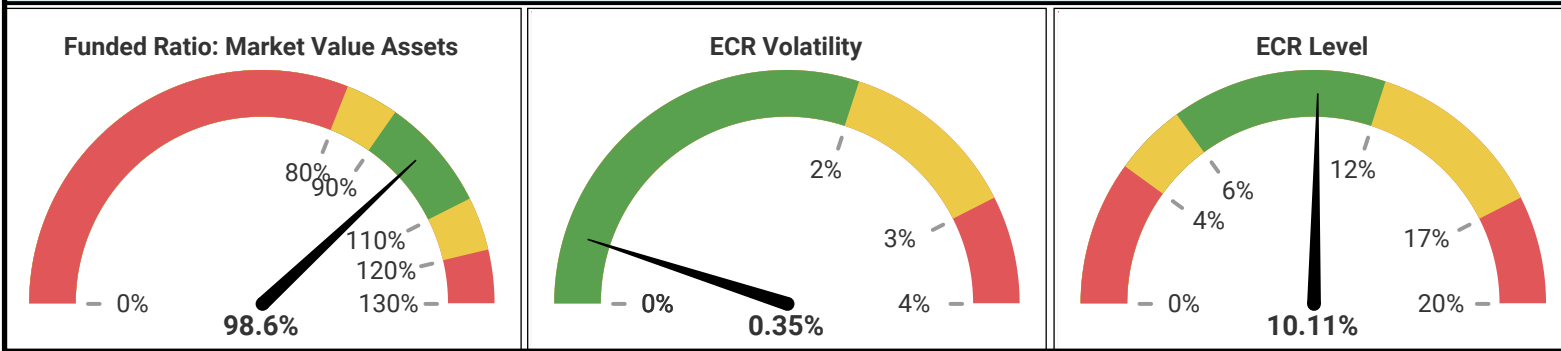
Matthew Albano, CFA, Chief Risk Officer

Ryan Ranado, CFA, Assistant Director of Investment Risk Management

Liquidity Key Risk Indicators



Unfunded Liability Key Risk Indicators



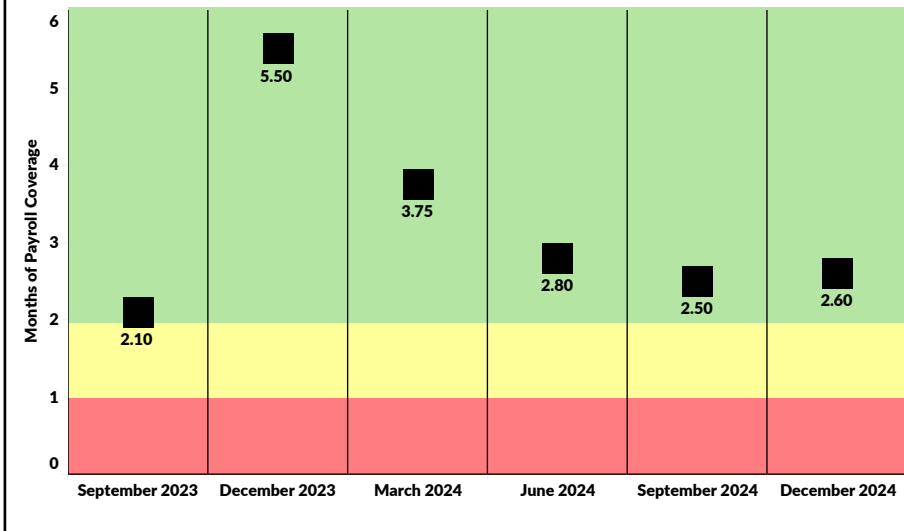
Investment Risk - Key Risk Indicators Summary

- All KRI's remain within our "Risk Appetite".
- All asset classes were within 1% of the target asset allocation level as of quarter-end.
- Total Plan Risk continues on a downward trajectory towards pre-covid levels

Key Risk Indicator	Outside Tolerance	Risk Tolerance	Risk Appetite	Current Assessment
Actuarial Valuation: Annual Independent Review (Valuation Process)	Adverse Opinion	Modified Opinion	Unmodified Opinion	Unmodified Opinion (10/31/2024)
Actuarial Valuation: Periodic Full Scope Audit (Valuation Process)	Replicated Liabilities >4% of NYSTRS' Calculation	Replicated Liabilities 1 - 4% of NYSTRS' Calculation	Replicated Liabilities <=1% of NYSTRS' Calculation	0.04% (4/16/2019)
Asset Allocation (Market Risk Management)	One or More Asset Classes Out of Bounds	One or More Asset Classes Outside of Policy During Transition Period	All Asset Classes within Policy Range	All Asset Classes within Policy Range

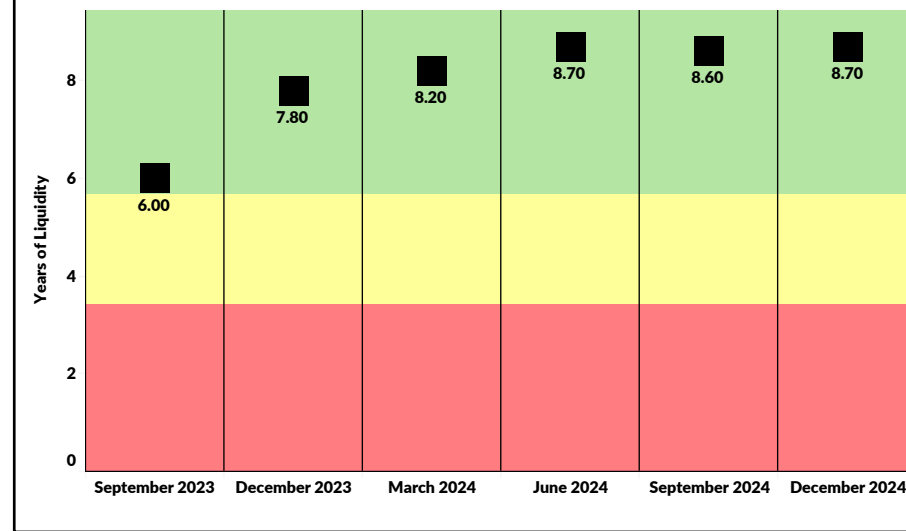
Liquidity Key Risk Indicators

Funding Liquidity - Short Term Payroll Coverage



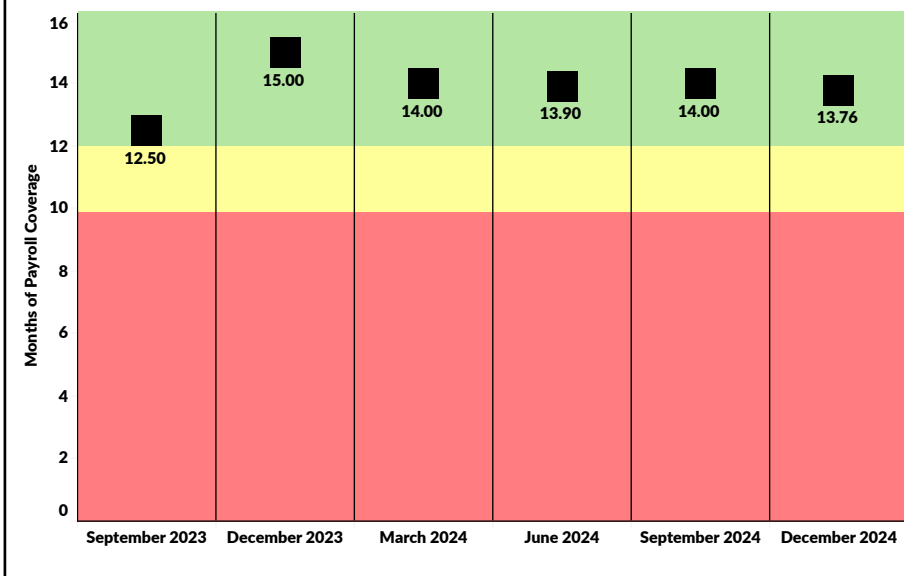
Short Term Payroll coverage calculates how many months of payroll we are carrying in cash.

Stressed Long Term Funding Liquidity - Allocation to Liquid Assets



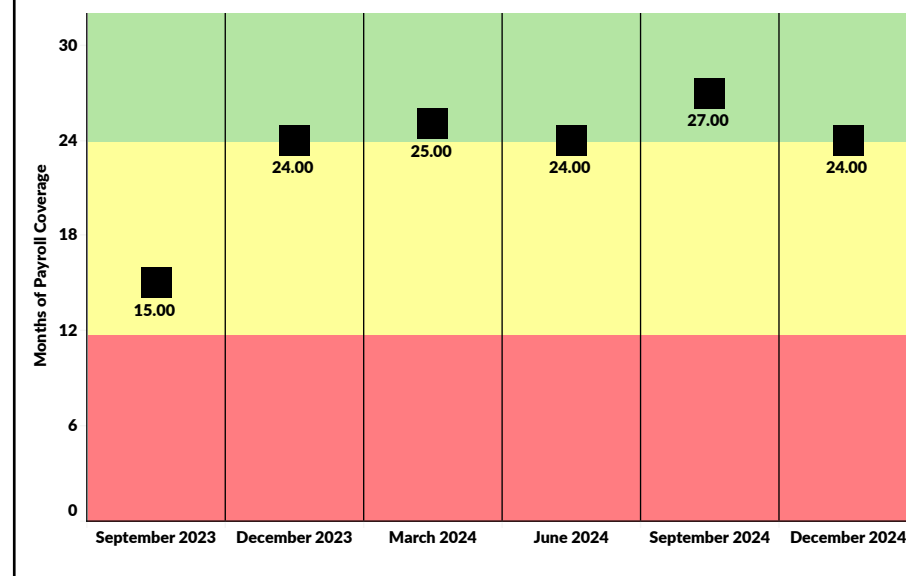
The Stressed Long Term Liquidity KRI assumes a hypothetical 40% portfolio loss then calculates years of required cash flow coverage from remaining public market assets and 12 months *estimated net cash flows (*includes stressed projections for: portfolio income, employer contributions and unfunded capital cal..

Funding Liquidity - Medium Term Payroll Coverage



Domestic Fixed Income included in payroll coverage observe the minimum allocation bound. Capital calls of 25% are indicative of a "non-stressed" market environment. Income and employer contributions are 12 month projections from the most recent quarter date depicted.

Stressed Funding Liquidity - Contingency Funding Plan

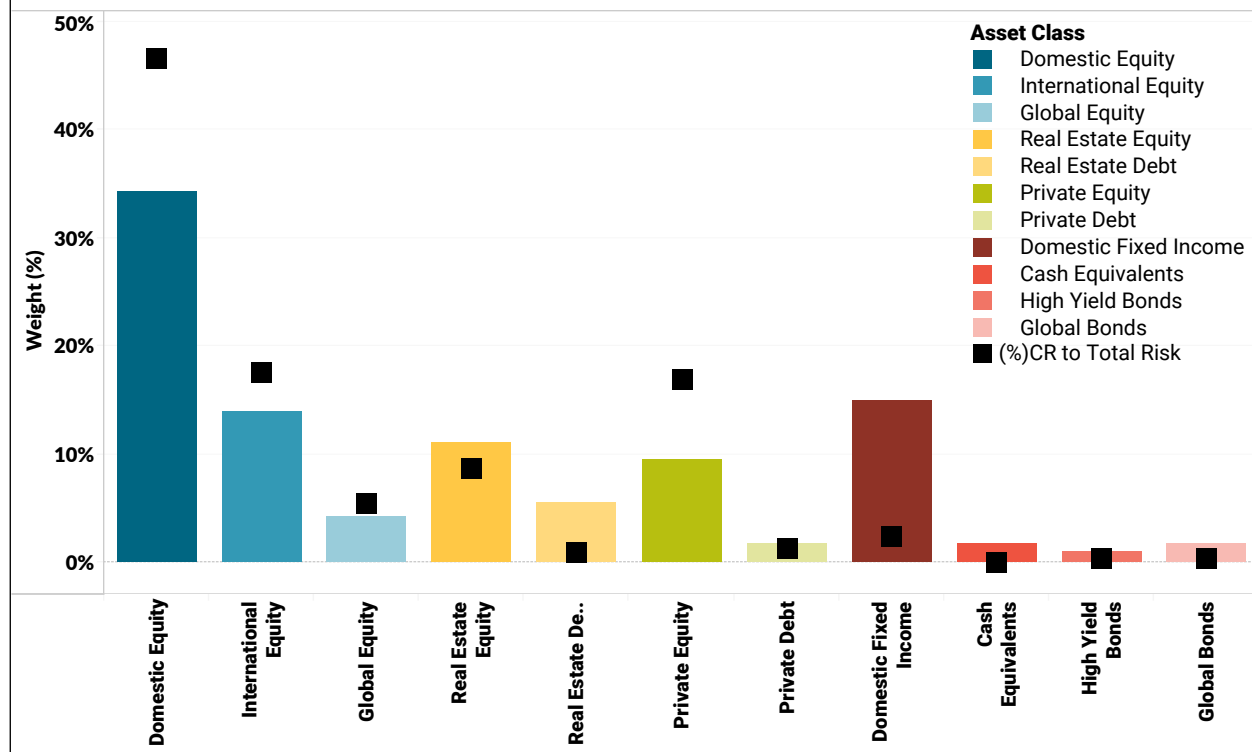


The Stressed Contingency Funding Liquidity KRI seeks to evaluate how many months of payroll can be made during a GFC like scenario before NYSTRS' CFP is triggered. GFC loss is experienced over 12 months with asset classes returning capital market assumptions years 2-5. Employer contributions are capped..

Observations:

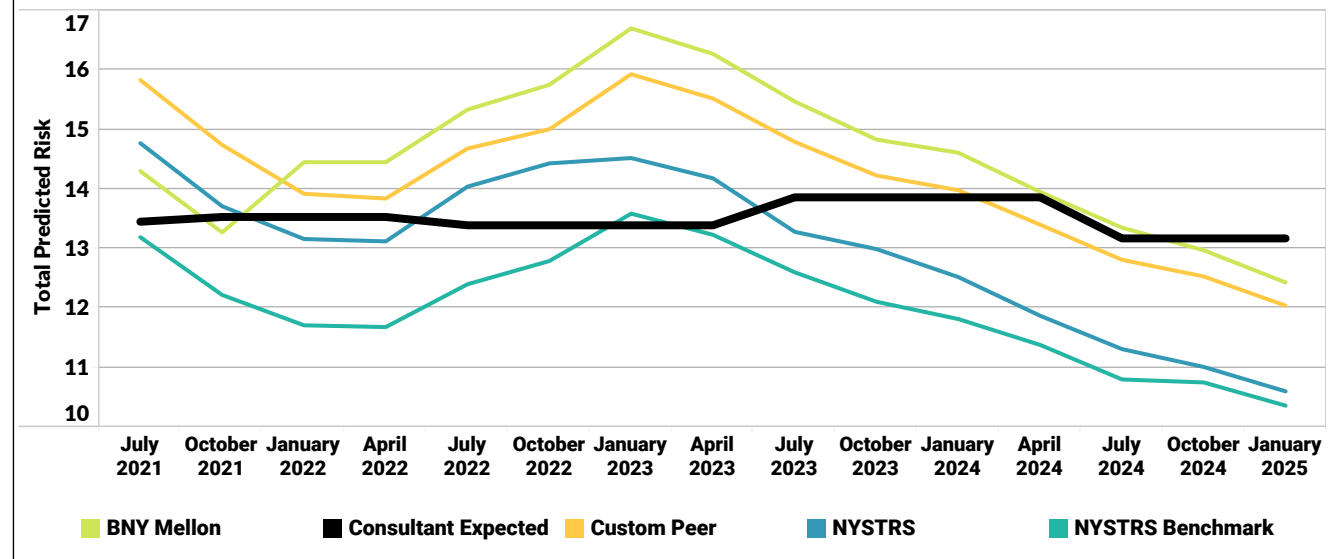
Total plan risk continued lower as it dropped to 10.60 from 11.31 last quarter. As the heightened volatility experienced during covid gets further behind us, it is weighted exponentially lower in the risk models, driving the predicted risk levels lower. As expected, equity investments continue to contribute the majority of total plan risk.

Total Predicted Risk by Asset Class

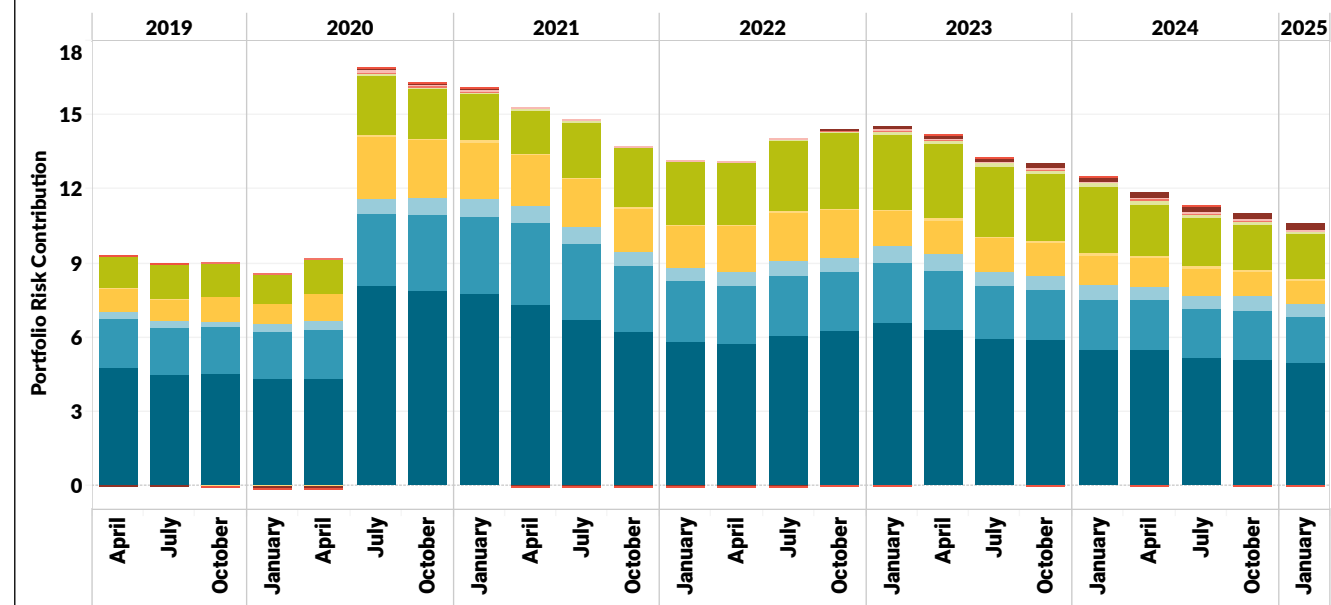


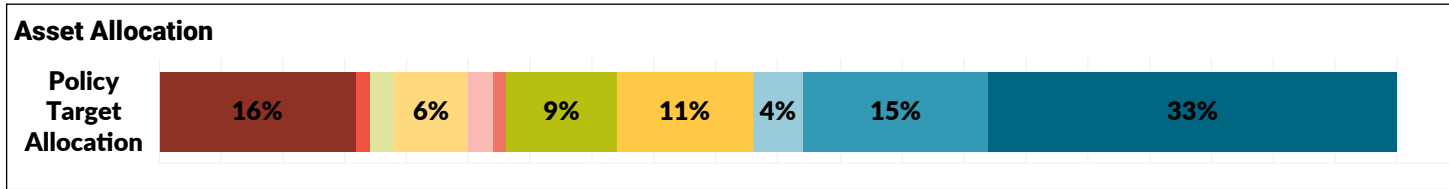
Asset Class	Market Value(\$M)	Weight(%)	(%)CR to Total Risk	Portfolio Risk Contribution	Total Risk
Total Plan	\$150,199	100.00%	100.00%	10.60	10.60
Domestic Equity	\$51,571	34.34%	46.58%	4.94	15.05
International Equity	\$21,025	14.00%	17.52%	1.86	14.92
Global Equity	\$6,328	4.21%	5.39%	0.57	14.01
Real Estate Equity	\$16,673	11.10%	8.67%	0.92	11.19
Real Estate Debt	\$8,212	5.47%	0.84%	0.09	3.61
Private Debt	\$2,699	1.80%	1.22%	0.13	8.43
Private Equity	\$14,317	9.53%	16.82%	1.78	23.25
Domestic Fixed Income	\$22,445	14.94%	2.32%	0.25	6.13
Cash Equivalents	\$2,697	1.80%	0.00%	0.00	0.06
High Yield Bonds	\$1,522	1.01%	0.31%	0.03	4.49
Global Bonds	\$2,711	1.80%	0.34%	0.04	5.16

Peer Comparison



Historical Predicted Risk



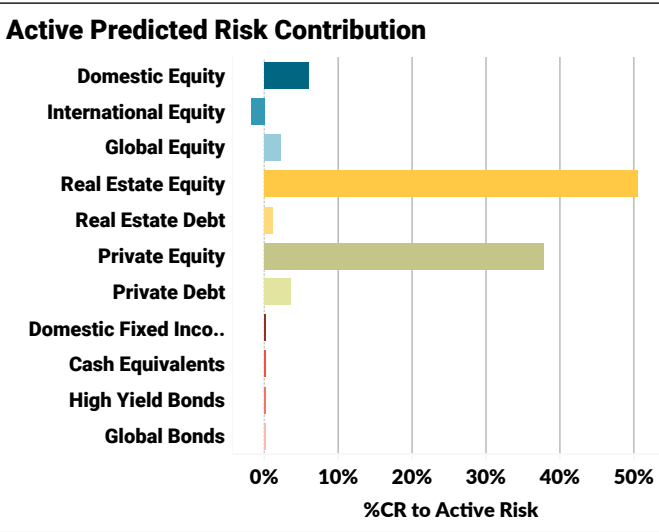
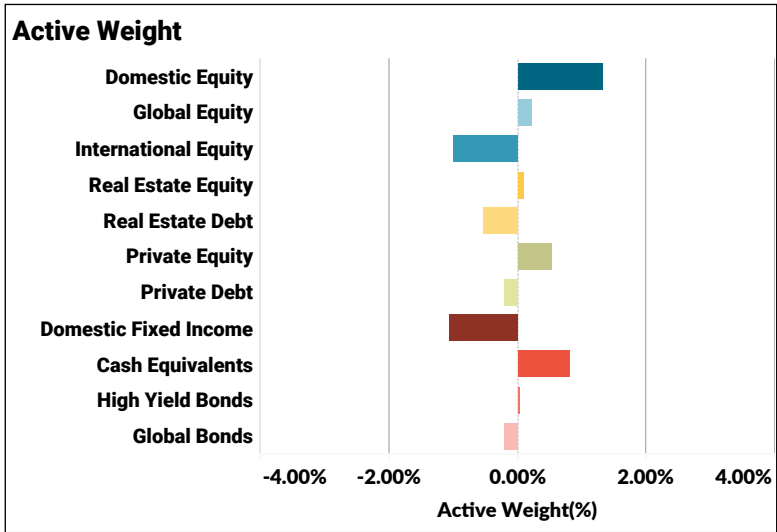


Active Predicted Risk:

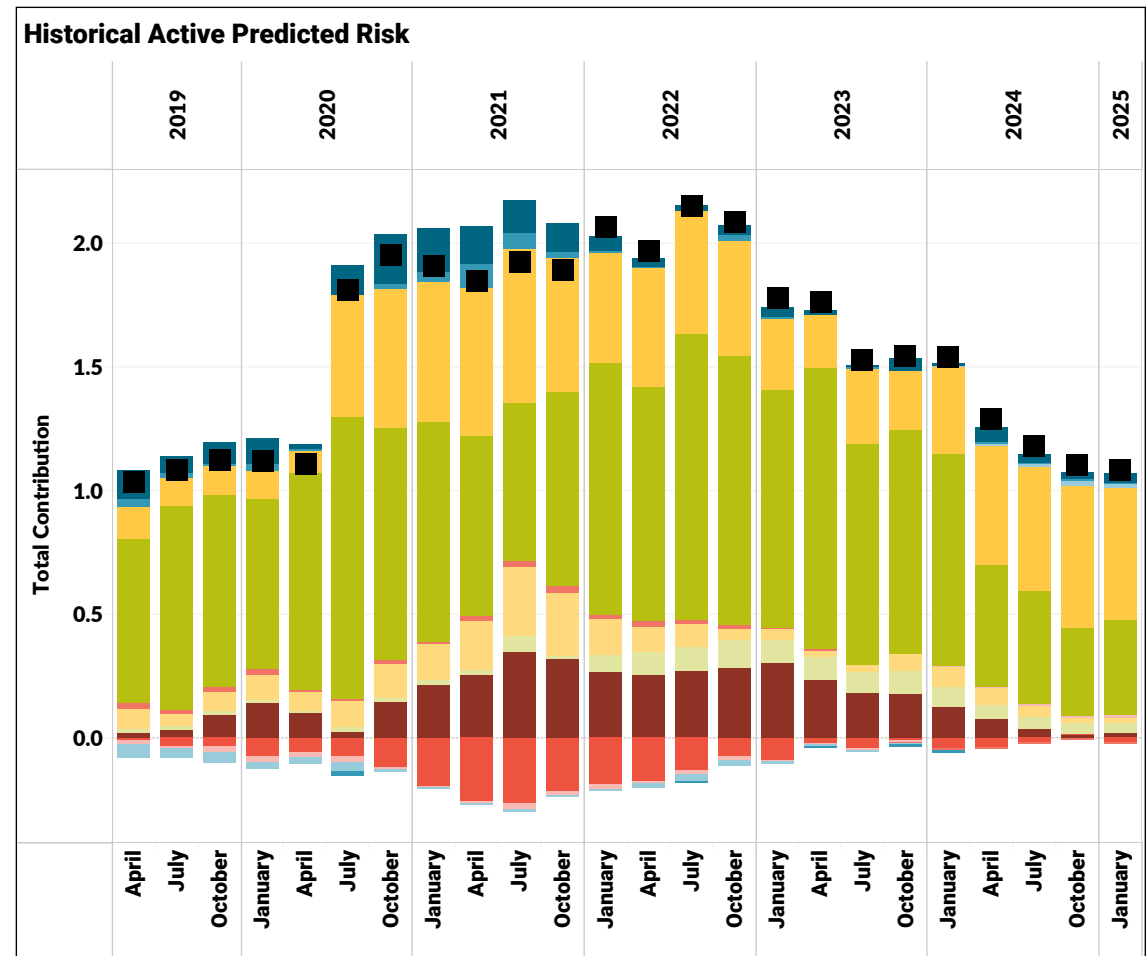
Active Predicted Risk is defined as the expected volatility of excess returns, and results from differences between actual portfolio weights and holdings vs. policy weights and holdings. Excess returns may be positive or negative.

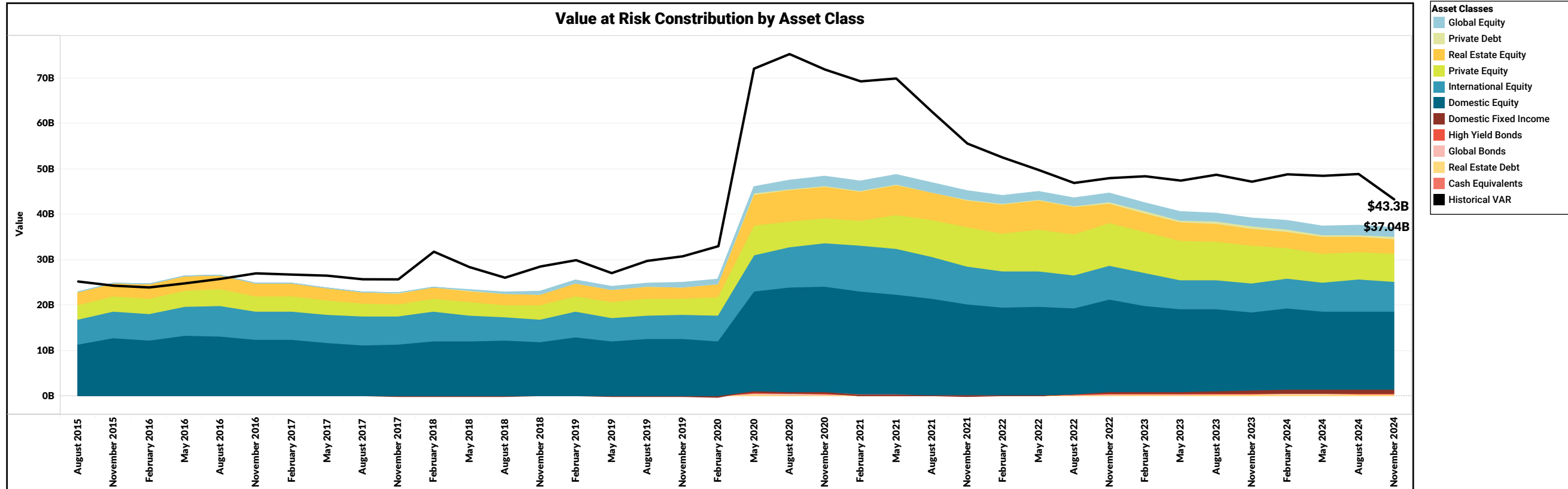
Active Risk for the Fund is largely controlled by limiting the difference between the actual and policy benchmark (target) weights for each asset class.

Benchmarking issues associated with private market portfolios also affect the measurement of 'active' risk. We see this most significantly with NYSTRS' private equity portfolio.



Asset Class	Weight(%)	Benchmark Weight(%)	Active Weight(%)	(%)CR to Active Risk	Total Contribution	Active Risk
Total Risk	100.00%	100.00%	0.00%	100.00%	1.05	1.05
Domestic Equity	34.34%	33.00%	1.34%	5.95%	0.04	0.11
International Equity	14.00%	15.00%	-1.00%	-1.74%	0.00	0.42
Global Equity	4.21%	4.00%	0.21%	2.26%	0.02	2.08
Real Estate Equity	11.10%	11.00%	0.10%	50.72%	0.53	7.34
Real Estate Debt	5.47%	6.00%	-0.53%	1.09%	0.02	0.96
Private Equity	9.53%	9.00%	0.53%	37.85%	0.39	5.85
Private Debt	1.80%	2.00%	-0.20%	3.66%	0.04	4.62
Domestic Fixed Income	14.94%	16.00%	-1.06%	0.01%	0.02	0.30
Cash Equivalents	1.80%	1.00%	0.80%	-0.01%	-0.02	0.06
High Yield Bonds	1.01%	1.00%	0.01%	-0.01%	0.00	0.41
Global Bonds	1.80%	2.00%	-0.20%	0.22%	0.01	0.45





Asset Class	Total Portfolio VaR (\$M)	Diversification Benefit	\$ Contribution to VaR (\$M)	(%)Contribution to VaR
Total Portfolio	\$44,403	(\$7,358)	\$37,045	100.00%
Domestic Equity	\$18,051		\$17,257	46.58%
Private Equity	\$7,743		\$6,233	16.82%
International Equity	\$7,296		\$6,489	17.52%
Real Estate Equity	\$4,341		\$3,210	8.67%
Domestic Fixed Income	\$3,202		\$858	2.32%
Global Equity	\$2,062		\$1,996	5.39%
Real Estate Debt	\$690		\$313	0.84%
Private Debt	\$529		\$451	1.22%
High Yield Bonds	\$159		\$114	0.31%
Global Bonds	\$326		\$125	0.34%
Cash Equivalents	\$4		\$0	0.00%

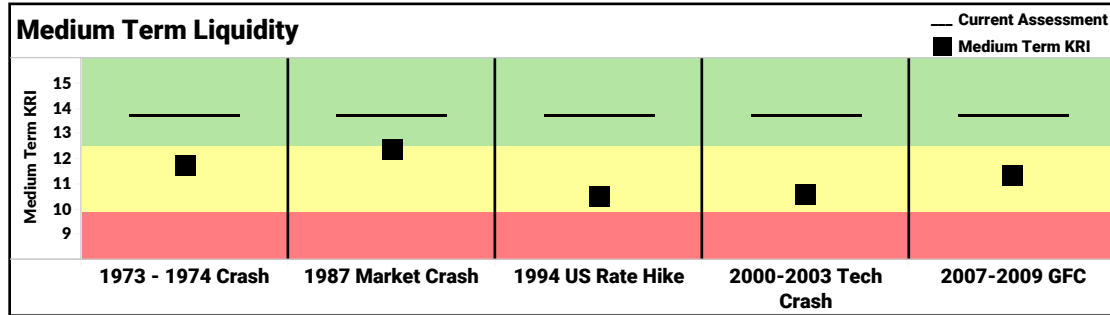
Value at Risk:
 Value at Risk (VaR) is an estimate of the maximum portfolio loss over a specified time period and confidence interval given normal market conditions. VaR can be expressed in % loss or dollar terms. In this analysis, we use a 1 year time horizon and a 99% confidence interval. VaR can also be stated as: There is a 99% chance that the portfolio's market value will not lose more than [VaR amount] over the next year.

Methods Used:
 ► Parametric VaR: $99\%VaR(\$) = 2.33\sigma * \text{Portfolio Market Value}$
 ► Historical Simulation VaR: $99\%VaR(\$) = \text{Simulated P\&L of portfolio utilizing empirical daily risk factor/price changes. 3 year lookback period (756 trading days) observed.}$

Drawbacks:
 Parametric VaR assumes asset returns are normally distributed which may not be realistic. This could underestimate the VaR due to unfavorable asset returns having a higher chance of occurring in real life.

 Historical Simulation VaR assumes past returns are indicative of future returns which may not be realistic. The specific return period analyzed directly impacts results which may or may not capture typical volatility, market extremes, or cyclicity.

Historical Scenario Analysis - Liquidity KRI



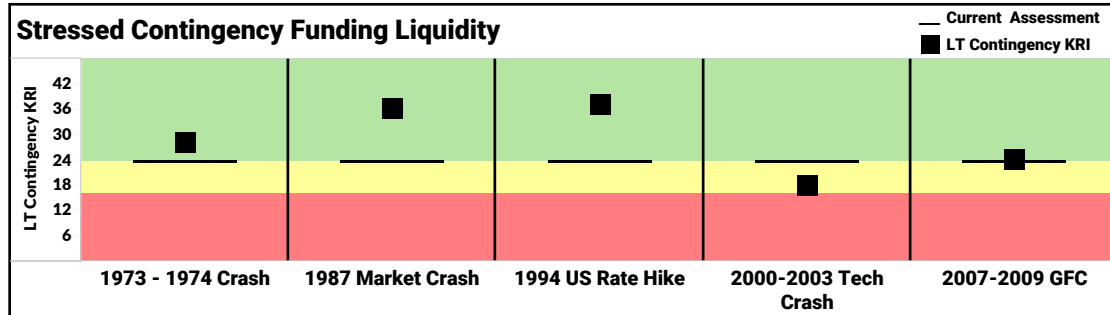
Scenario Analysis:

A scenario analysis seeks to determine how a portfolio may be affected by subjecting it to various historical or hypothetical market conditions. The charts to the left estimate how some of our liquidity KRI's would be impacted by the various historical scenarios.

Historical Scenarios:

The following historical scenarios apply market conditions experienced during their respective timeframes to NYSTRS' current portfolio over the course of a 1-year period. High level scenario inputs are provided below for context:

Historical Scenario	Date	Domestic Equity	UST Yields: 2y5y10y (bps)	Credit Spreads: AA/BB/CCC (bps)	Total Plan Loss
1973-1974 Stagflation & Rate Hikes	1/1/73 - 8/31/74	-35%	347	LIBOR 334	-23.45%
1987 Stock Market Crash	8/3/87 - 11/30/87	-27%	Unchanged	Unchanged	-12.98%
1994 US Rate Hike	1/31/94 - 12/13/94	-6%	162/152/131	2/36/0	-4.07%
Tech Crash & Recession	1/9/00 - 3/12/03	-47%	-488/-387/-281	-13/244/1151	-24.70%
Global Financial Crisis	9/30/07 - 3/4/09	-54%	-308/-226/-115	234/849/3779	-36.96%

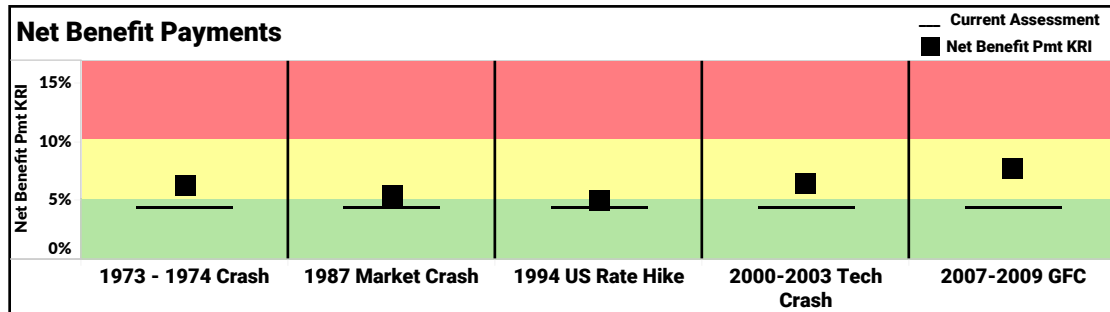


Medium Term Liquidity KRI:

The top chart depicts how each historical scenario would impact funding liquidity after a one-time rebalance to target policy weights. Cash and Domestic Fixed Income coverage represents how much of each asset class could be used to make payroll before lower asset allocation bounds were breached and additional rebalancing was required.

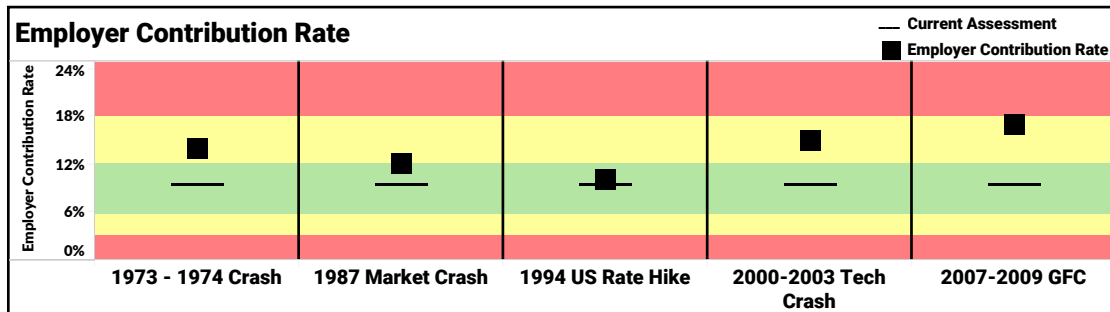
Stressed Contingency Funding Liquidity KRI :

The second chart depicts how each historical scenario would impact the Stressed Contingency Funding Liquidity KRI. This KRI is a measure which seeks to evaluate how many months of payroll can be made during one of these scenarios before NYSTRS' Contingency Funding Plan is triggered.



Net Benefit Payments as % of Assets:

The third chart depicts how each historical scenario would impact net benefit payments as a percentage of assets. Figures are representative of each scenarios market bottom and do not incorporate expected cash flows or market recovery. (*Net Benefit Payments=Annual Benefit Payments-Employer & Employee Contributions)

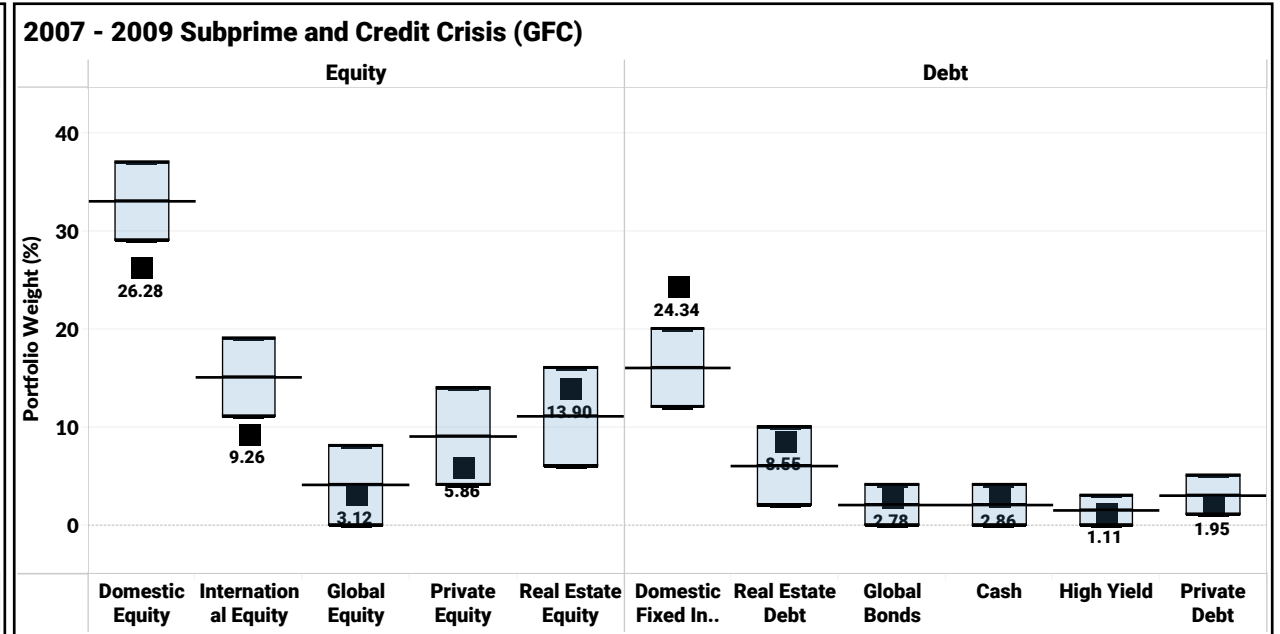
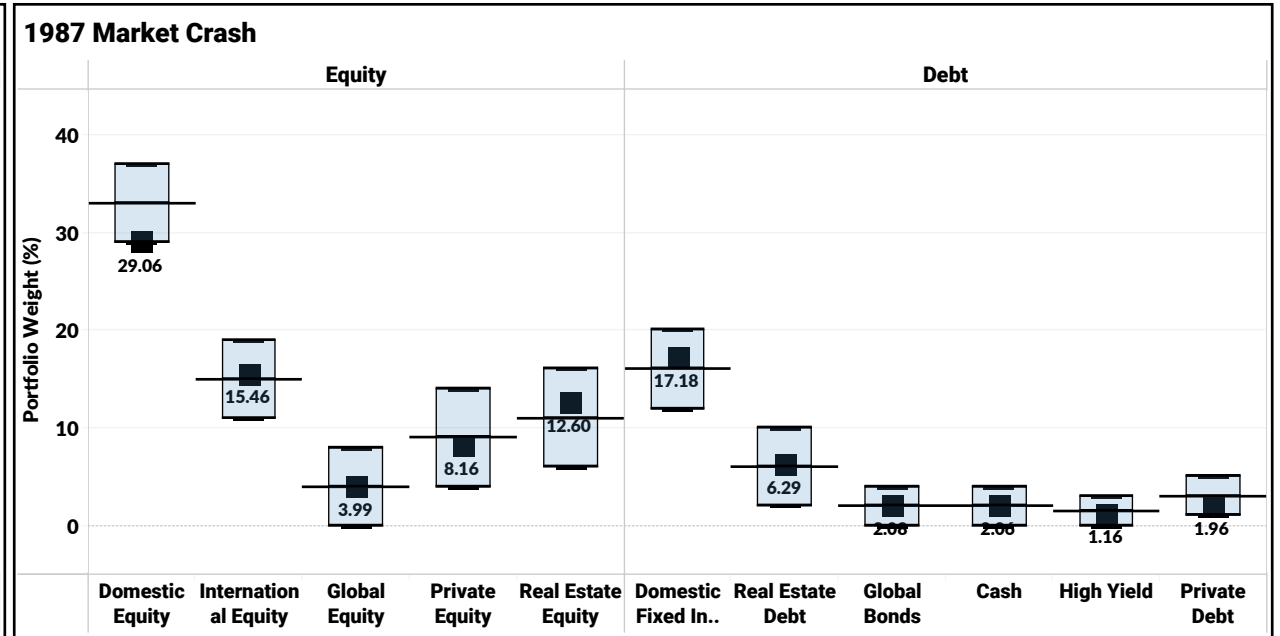
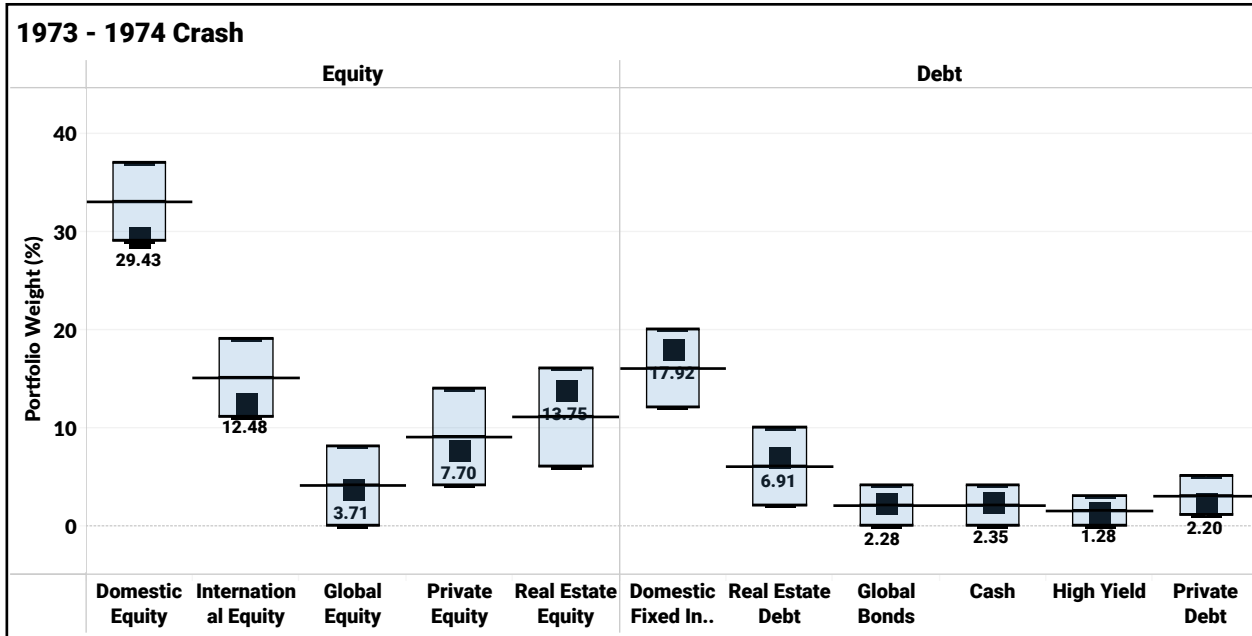


Employer Contribution Rate:

The bottom chart depicts how each historical scenario would immediately impact the Employer Contribution Rate (ECR) as a percentage of pay. Figures are representative of each scenario's market bottom and do not incorporate a market recovery. Note that absent a market recovery, the ECR would continue to increase in future years as the major asset loss continues to be smoothed in over the remainder of the five year smoothing period.

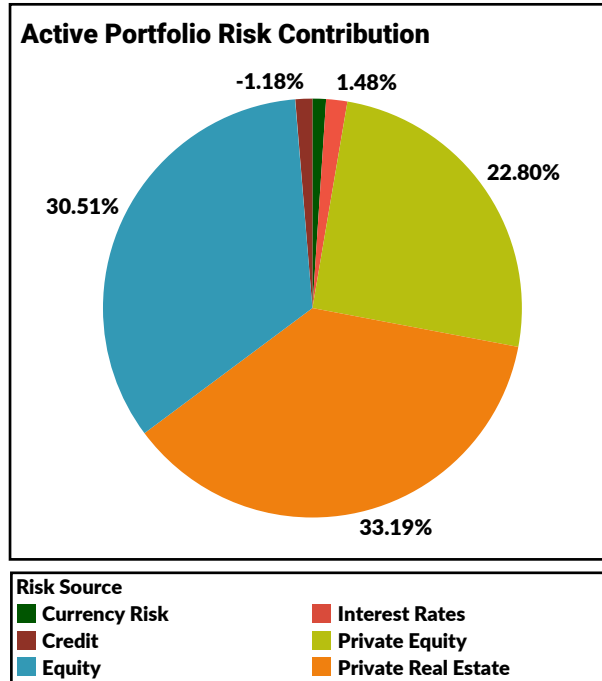
Scenario Analysis – Impact to Asset Allocation KRI

Data as of 11/29/2024



Predicted Risk by Risk Factor

Top 10 - Currency Total Exposure	
US Dollar	80.71
Euro	4.03
British Pound Sterling	2.51
Japanese Yen	2.41
Canadian Dollar	1.49
Hong Kong Dollar	1.25
Indian Rupee	1.01
Swiss Franc	0.98
Australian Dollar	0.88
New Taiwan Dollar	0.87



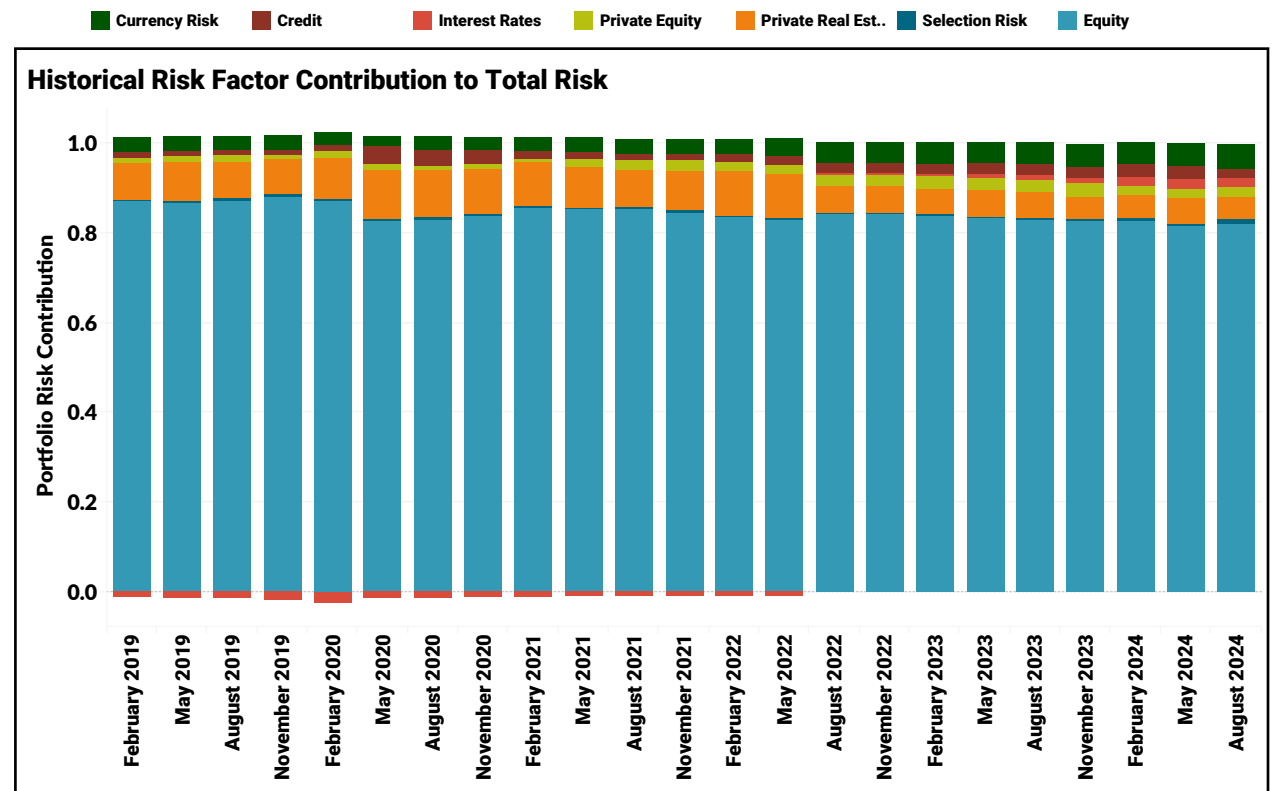
Risk Factors:

Risk factors are characteristics shared by a group of securities that influence their risk and return as well as their correlations. The five risk factor groups used for this analysis (equity, interest rates, credit, private equity, and private real estate) can be further decomposed into underlying factors such as industry, style, interest rate term structure, and geography. Each factor has an expected volatility and correlation with the other risk factors. All of NYSTRS holdings are modeled according to their exposures to individual risk factors.

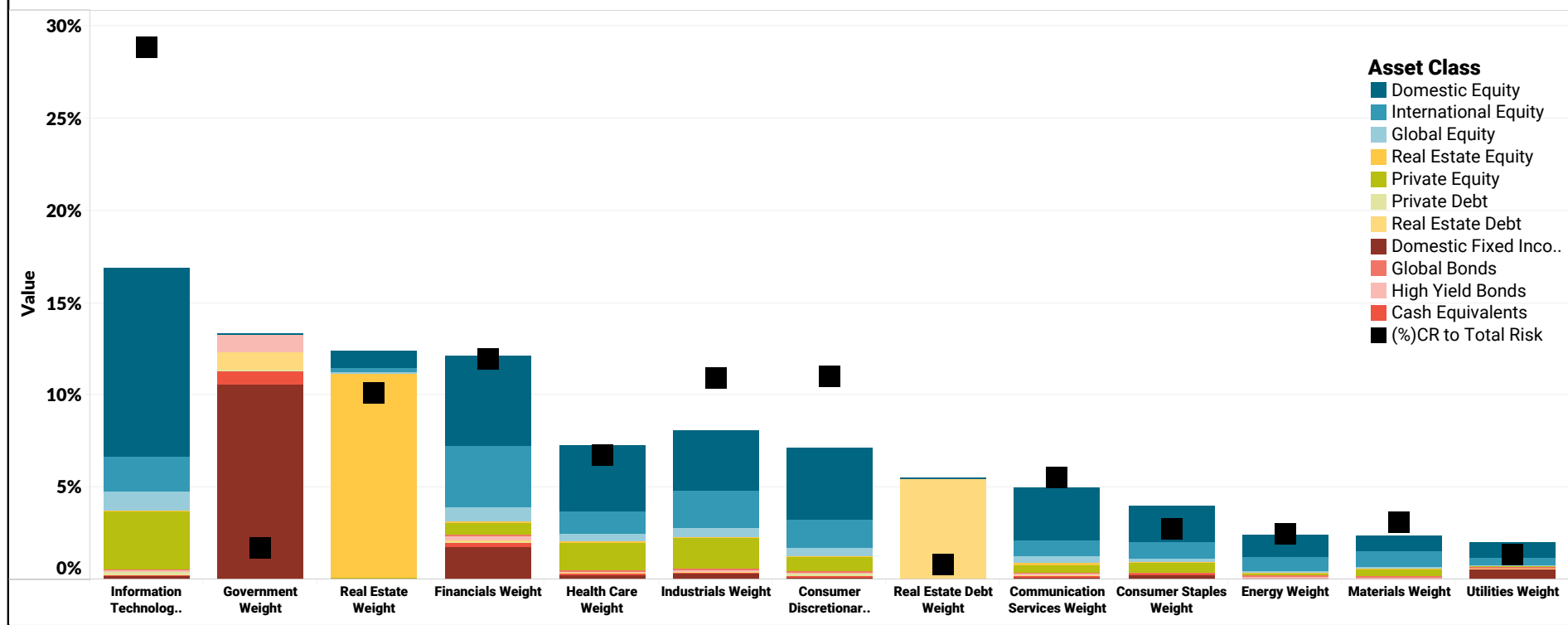
Observations:

As expected, Total Risk and Active Risk for the portfolio are both driven primarily by equity risk factors.

Risk Source	Portfolio Risk Contribution	Portfolio Risk Contribution (%)	Benchmark Risk Contribution	Benchmark Portfolio Risk Contribution (%)	Active Portfolio Risk Contribution (%)
Total Risk	10.60	100.00%	10.36	100.00%	100.00%
Local Market Risk	10.07	94.94%	9.85	95.09%	99.08%
Common Factor Risk	9.98	94.08%	9.75	94.14%	87.52%
Equity	8.66	81.70%	7.87	75.98%	30.51%
Interest Rates	0.23	2.16%	0.27	2.64%	1.48%
Credit	0.22	2.10%	0.27	2.58%	-1.18%
Private Equity	0.23	2.15%	0.11	1.07%	22.80%
Private Real Estate	0.58	5.45%	1.19	11.53%	33.19%
Selection Risk	0.09	0.86%	0.10	0.95%	11.55%
Currency Risk	0.54	5.06%	0.51	4.91%	0.92%



Sector Concentration Weight By Asset Class



NYSTRS Sector	Market Value(\$M)	Weight (%)	Portfolio Risk Contributi..	(%)CR to Total Risk	Total Risk
Total Plan	\$150,199	100.00%	10.60	100.00%	10.60
Information Technology	\$25,484	16.97%	3.06	28.85%	20.45
Real Estate Equity	\$18,586	12.37%	1.07	10.14%	11.33
Government	\$18,619	12.40%	0.18	1.71%	5.74
Financials	\$18,367	12.23%	1.27	11.95%	11.82
Industrials	\$12,424	8.27%	1.16	10.90%	14.92
Health Care	\$11,206	7.46%	0.72	6.74%	12.35
Consumer Discretionary	\$11,001	7.32%	1.17	11.05%	17.55
Real Estate Debt	\$8,212	5.47%	0.09	0.84%	3.61
Communication Services	\$7,340	4.92%	0.59	5.56%	14.76
Consumer Staples	\$6,169	4.11%	0.29	2.76%	9.64
Energy	\$3,946	2.63%	0.26	2.46%	17.33
Materials	\$3,627	2.41%	0.33	3.12%	15.62
Utilities	\$3,063	2.04%	0.15	1.37%	10.90

Observations:

Sector contribution to risk is in line with expectations. Information Technology continues to drive an outsized contribution to total risk relative to its weight in the portfolio.

Sectors:

In developing the sector schedule, NYSTRS began with industry recognized sectors used by MSCI and S&P. Five custom sectors were added to this base to accommodate the Fund’s allocation to Government, Real Estate Debt, Real Estate Equity, Cash and “Other” investments.

The bar chart representing weight for each sector was then further divided by asset class; with shades of blue denoting public equity asset classes, red denoting public fixed income asset classes, green denoting private equity and debt, and orange denoting real estate equity and debt.

Defensive sectors such as Utilities, and Consumer Staples tend to be more stable and less volatile regardless of the condition of the overall financial markets. Because these sectors are not highly correlated with the business cycle, they are also known as "non-cyclical". Cyclical sectors such as Consumer Discretionary and Materials tend to be correlated with the business cycle and can be more volatile than defensive sectors.

These characteristics can be seen in the chart. The risk contribution by the defensive sectors is less than their market value allocation and the risk contribution by the cyclical sectors is higher than their market value allocation.

Appendix:

MSCI ACWI & FRONTIER MARKETS INDEX									
MSCI ACWI INDEX					MSCI EMERGING & FRONTIER MARKETS INDEX				
MSCI WORLD INDEX			MSCI EMERGING MARKETS INDEX			MSCI FRONTIER MARKETS INDEX			
DEVELOPED MARKETS			EMERGING MARKETS			FRONTIER MARKETS			
Americas	Europe & Middle East	Pacific	Americas	Europe, Middle East & Africa	Asia	Europe	Africa	Middle East	Asia
Canada	Austria	Australia	Brazil	Czech Republic	China	Croatia	Kenya	Bahrain	Bangladesh
United States	Belgium	Hong Kong	Chile	Egypt	India	Estonia	Mauritius	Jordan	Pakistan
	Denmark	Japan	Colombia	Greece	Indonesia	Iceland	Morocco	Oman	Sri Lanka
	Finland	New Zealand	Mexico	Hungary	Korea	Lithuania	Nigeria		Vietnam
	France	Singapore	Peru	Kuwait	Malaysia	Kazakhstan	Tunisia		
	Germany			Poland	Philippines	Romania	WAEMU ²		
	Ireland			Qatar	Taiwan	Serbia			
	Israel			Saudi Arabia	Thailand	Slovenia			
	Italy			South Africa					
	Netherlands			Turkey					
	Norway			United Arab Emirates					
	Portugal								
	Spain								
	Sweden								
	Switzerland								
	United Kingdom								
MSCI STANDALONE MARKET INDEXES ¹									
						Americas	Europe	Africa	Middle East
						Argentina	Bosnia Herzegovina	Botswana	Lebanon
						Jamaica	Bulgaria	Zimbabwe	Palestine
						Panama	Malta		
						Trinidad & Tobago	Ukraine		

*MSCI.com/market-classification

**NEW YORK STATE
TEACHERS' RETIREMENT SYSTEM
INVESTMENT COMMITTEE MEETING
January 29, 2025**

INVESTMENT COMMITTEE MEETING
NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
10 Corporate Woods Drive, Albany NY

A meeting of the Investment Committee of the Retirement Board was held at the System on January 29, 2025. Nicholas Smirensky, Chair, called the meeting to order at 9:14 a.m.

The following individuals were in attendance:

Investment Committee Members

Juliet Benaquisto, Eric Iberger, David Keefe, Jennifer Longtin, Ruth Mahoney, Nicholas Smirensky

Board Members

Paul Farfaglia, Phyllis Harrington, Donald A. Little III (via WebEx), Oliver Robinson

Staff

Thomas Lee, Don Ampansiri, Dave Gillan, Kathy Ebert, Gerald Yahoudy, Miriam Dixon, Richard Young, Vijay Madala, Beth Dellea, Michael Federici, Danny Malavé, Matt Albano, Margaret Andriola, Emily Ekland, Han Yik, Chris Brown, Kevin Maloney, Heidi Brennan, Aaron VanDerwiel, Sarah Garrand, Matt Pinchinat, Binoop Unni, Joe Wood, Melody Prangle, Heather Marks, Tom King, Ben Keezer, Wanette Alston, Sheilish Hylton, Stacey Lesser Meehan

System Consultants

Callan: Tom Shingler, Lauren Mathias, Greg Allen, Carlo Stadlinger

StepStone: Scott Schwind

Visitors

Via WebEx: Tom Cosmer, PineBridge

Approval of Minutes

A. Approval of Minutes of October 30, 2024 Investment Committee Meeting

There being no additions or corrections to the minutes of the October 30, 2024 meeting, the minutes were approved with a motion made by D. Keefe, seconded by J. Longtin and unanimously carried.

Presentations

Upon motion of D. Keefe, seconded by J. Longtin and unanimously carried, the Committee went into Executive Session at 9:15 a.m. to hear a staff recommendation for General Investment Consultant. Upon motion of J. Benaquisto, seconded by R. Mahoney and unanimously carried, the Committee came out of Executive Session at 10:12 a.m.

The Committee heard reports and updates from staff and reviewed the following information regarding the System's investments and performance:

Review of Investments

1. Investment Committee Executive Summary (Appendix A, pp. 8-79)
 - a. Proposed Updates to Responsible Stewardship Policy – Appendix A: Stock Proxy Voting
2. Public Equities Update (Appendix B, p. 80-81)
3. Fixed Income Update (Appendix C, p. 82)
4. Real Estate Update (Appendix D, pp. 83-86)
5. Private Equity/Debt Update (Appendix E, pp. 87-88)

Policy Review and Action

A. Consent Agenda Recommendation Items (Appendix F, pp. 89-90)

N. Smirensky asked the Committee members if any of the consent agenda items should be moved to regular discussion items. Hearing no objections, the Committee proceeded to move the Consent Agenda Recommendation items (#1) together with one motion.

Upon motion of R. Mahoney, seconded by D. Keefe and unanimously carried by the Committee, the following consent agenda item resolutions were moved and unanimously recommended to the Retirement Board:

1. Renew Managers

- AEW Capital Management

RESOLVED, That the System's Executive Director and Chief Investment Officer is authorized to renew the agreement with AEW Capital Management, LP to manage a portion of the System's portfolio to be actively invested in the securities of real estate investment trusts ("REITs") and real estate operating companies ("REOCs") for a period of one year, effective April 15, 2025.

- Ariel Investments LLC

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with Ariel Investments LLC to manage a portion of the System's assets as an MSCI ACWI ex-US international equity manager for a period of one year, effective April 10, 2025.

- Arrowstreet

WHEREAS, Arrowstreet Capital LP was hired as an international equity manager on July 18, 2017 and as a global equity manager on March 26, 2019; now be it therefore

RESOLVED, That, the Executive Director and Chief Investment Officer is authorized to renew the agreement with Arrowstreet Capital LP for a period of one year, effective March 26, 2025, to manage (i) a portion of the System's assets as an international equity manager benchmarked to the

MSCI ACWI ex-US index, and (ii) a portion of the System's assets as a global equity manager benchmarked to the MSCI ACWI index.

- Bank of NY Mellon (Securities Lending)

RESOLVED, the Executive Director and Chief Investment Officer is authorized to renew the agreement with The Bank of New York Mellon to act as an agency securities lender for a portion of the System's public securities assets for a period of one year, effective March 17, 2025.

- Black Rock Financial Management, Inc. (CMBS)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with Black Rock Financial Management, Inc. to manage a portion of the System's assets in Commercial Mortgage Backed Securities ("CMBS"), for a period of one year, effective April 3, 2025.

- Cohen & Steers Capital Mgt – Multi Strategy

RESOLVED, That the System's Executive Director and Chief Investment Officer is authorized to renew the agreement with Cohen & Steers Capital Management, Inc. to manage a portion of the System's portfolio to be actively invested in the securities of real estate investment trusts ("REITs") and real estate operating companies ("REOCs") for a period of one year, effective February 12, 2025.

- PGIM, Inc.

RESOLVED, That the Executive Director and Chief Investment Officer, or designee, is authorized to renew the agreement with PGIM, INC. to manage a portion of the System's assets as an active U.S. high yield manager benchmarked to the Bloomberg US High Yield 1% Issuer Capped Index (I09038US) for a period of one year, effective February 21, 2025.

- J.P. Morgan Investment Management Inc.

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with J.P. Morgan Investment Management Inc. to manage a portion of the System's assets as an active U.S. high yield manager benchmarked to the ICE BofAML BB-B US High Yield Constrained Index (HUC4) (f/k/a Bank of America Merrill Lynch BB-B U.S. High Yield Constrained Index) for a period of one year, effective March 5, 2025.

- Principal Real Estate Investors

RESOLVED, That the System's Executive Director and Chief Investment Officer is authorized to renew the agreement with Principal Real Estate Investors, LLC to manage a portion of the System's portfolio to be actively invested in the securities of real estate investment trusts ("REITs") and real estate operating companies ("REOCs") for a period of one year, effective February 11, 2025

- Raith Capital Partners

RESOLVED, That the System's Executive Director and Chief Investment Officer is authorized to renew the agreement with Raith Capital Partners, LLC to act as a Debt separate account advisor and in such role to advise on the acquisition, management and exit of public and private opportunistic commercial real estate debt opportunities for a period of one year, effective February 7, 2025.

- RhumbLine Advisors

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with RhumbLine Advisors LP to manage a portion of the System's assets as a passive international equity manager, benchmarked to the MSCI ACWI ex-US Index, for a period of one year commencing March 30, 2025.

- Xponance (f/k/a FIS Group)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with Xponance (formerly known as FIS Group, Inc. with a name change to Xponance effective 4/1/20) to manage a portion of the System's assets as a manager of international equity managers, benchmarked to the ACWI ex-US Index, for a period of one year commencing April 25, 2025.

2. New Agreement

a. Resolution on General Investment Consultant

Upon motion of J. Longtin, seconded by J. Benaquisto and unanimously carried by the Committee, the following resolution was unanimously recommended to the Retirement Board:

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to contract with Callan LLC to act as a general investment consultant, to review the System's asset allocation and recommend any

changes therein, if necessary, and to monitor the performance of the System's external investment managers, for a period of one year, commencing May 1, 2025, at an annual cost of \$523,362 which includes the fee for an asset liability study.

3. Appointment to Investment Advisory Committee

a. Dhvani Shah

Upon motion of J. Longtin, seconded by R. Mahoney and unanimously carried by the Committee, the following resolution was unanimously recommended to the Retirement Board:

WHEREAS, Dhvani Shah has appropriate experience and background to serve as a member of the Investment Advisory Committee; be it

RESOLVED, That the Retirement Board hereby appoints Ms. Shah as a member of the Investment Advisory Committee, effective immediately and ending December 31, 2028.

4. Updates to the System Investment Policy Manual

a. Resolution on Updates to Responsible Stewardship Policy-Appendix A: Stock Proxy Voting

Upon motion of J. Longtin, seconded by R. Mahoney and unanimously carried by the Committee, the following resolution was unanimously recommended to the Retirement Board:

RESOLVED, That the updated Responsible Stewardship Policy—Appendix A: Stock Proxy Voting, as presented to the Retirement Board, reflecting clarifications to the stock proxy voting guidelines for U.S., Canada and other markets, is approved and accepted; and be it further

RESOLVED, That the updated sections of the Investment Policy Manual, under “International Equity Securities—VIII. Responsibilities & Controls” and “Global Equity Securities—VIII. Responsibilities & Controls,” as presented to the Retirement Board, removing the responsibility of external public equities managers to vote proxies on NYSTRS’ behalf for directly held securities, is approved and accepted.

b. Resolution on Update to AML/OFAC Compliance Policy

Upon motion of J. Longtin, seconded by R. Mahoney and unanimously carried by the Committee, the following resolution was unanimously recommended to the Retirement Board:

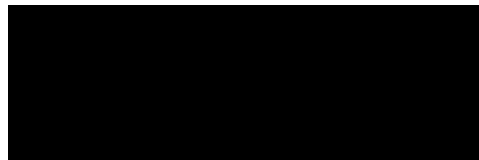
RESOLVED, That the AML/OFAC Compliance Policy and Appendix B: AML/OFAC Compliance Certification, as presented to the Investment Committee, reflecting the clarification and inclusion of the Office of Investment Security of the US Department of the Treasury, is approved and accepted.

Informational reports

- The Committee reviewed the following informational reports: EDCIO Investment Discretion Report (Appendix G, pp. 91-93) and Mail Vote Quarterly Board Report (Appendix H, p. 94) and REAC Quarterly Transactions Board Report (Appendix I p. 95).

Upon motion of J. Longtin, seconded by R. Mahoney and unanimously carried, the Committee went into Executive Session at 11:18 a.m. to discuss personnel matters. Upon motion of J. Longtin, seconded by R. Mahoney and unanimously carried, the Committee came out of Executive Session at 11:31 a.m. and adjourned.

Respectfully submitted,



Thomas K. Lee



Investment Committee Executive Summary

Investment Committee January 29, 2025

*Margaret Andriola, CIPM, CPA
Chief Financial Officer*

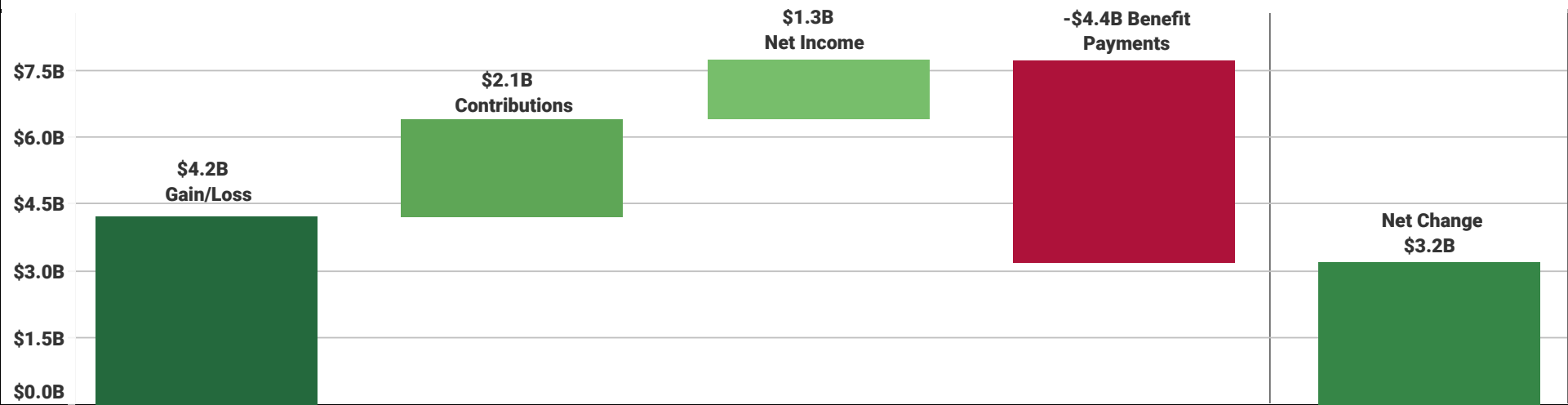
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Market Value Summary ('000s)

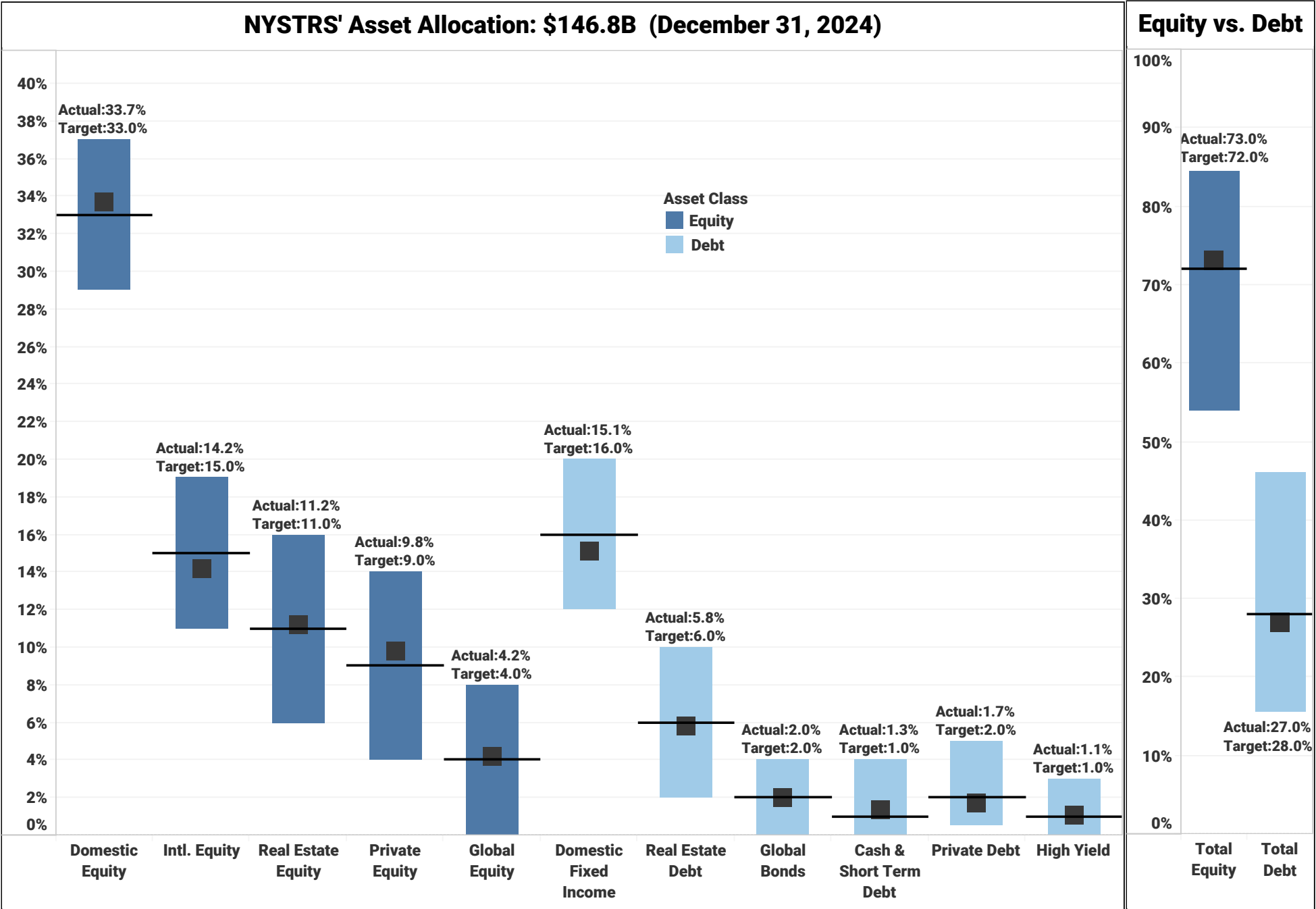
Asset Category	Asset Class	December 31, 2024		September 30, 2024		December 31, 2023	
		Net Asset Value	% Net Asset Value	Net Asset Value	% Net Asset Value	Net Asset Value	% Net Asset Value
Equity	Domestic Equity	\$49,463,616	33.7%	\$50,389,930	33.9%	\$46,352,658	33.5%
	International Equity	\$20,789,187	14.2%	\$22,385,442	15.0%	\$19,422,325	14.0%
	Global Equity	\$6,171,432	4.2%	\$6,250,440	4.2%	\$5,301,686	3.8%
	Real Estate Equity	\$16,468,362	11.2%	\$16,176,665	10.9%	\$16,782,617	12.1%
	Private Equity	\$14,335,588	9.8%	\$14,267,749	9.6%	\$13,166,925	9.5%
	Asset Category Subtotal	\$107,228,185	73.0%	\$109,470,226	73.6%	\$101,026,211	72.9%
Debt	Domestic Fixed Income	\$22,120,623	15.1%	\$22,712,316	15.3%	\$19,462,470	14.1%
	Global Bonds	\$2,887,884	2.0%	\$2,692,585	1.8%	\$2,814,976	2.0%
	High Yield	\$1,594,531	1.1%	\$1,594,076	1.1%	\$1,482,376	1.1%
	Real Estate Debt	\$8,511,505	5.8%	\$8,016,895	5.4%	\$7,443,472	5.4%
	Private Debt	\$2,557,413	1.7%	\$2,388,018	1.6%	\$2,189,990	1.6%
	Cash & Short Term Debt	\$1,947,249	1.3%	\$1,929,147	1.3%	\$4,079,787	2.9%
Asset Category Subtotal	\$39,619,205	27.0%	\$39,333,037	26.4%	\$37,473,070	27.1%	
Total Plan		\$146,847,391	100.0%	\$148,803,264	100.0%	\$138,499,280	100.0%

Due to rounding, numbers may not sum to 100%

Components of Change in Total Investments FYTD: 7/1/2024 to 12/31/2024 \$143.6B to \$146.8B



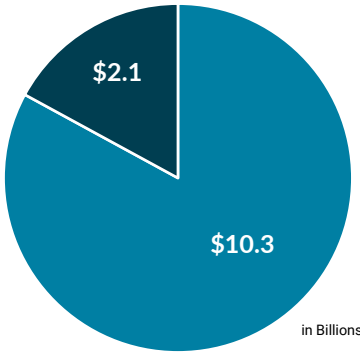
Investment Committee Executive Summary ¹⁰



Investment Committee Executive Summary ¹¹

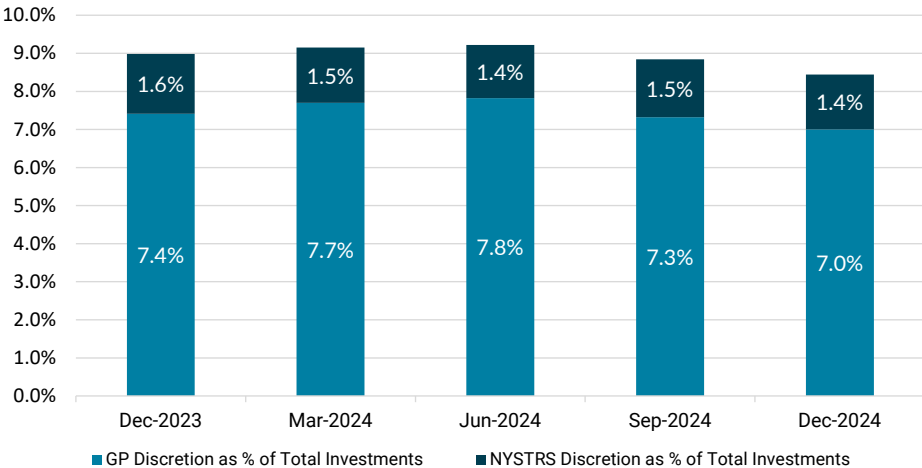
Unfunded Commitments - Private Assets

Total Unfunded Commitments at 12/31/2024 \$12.4B

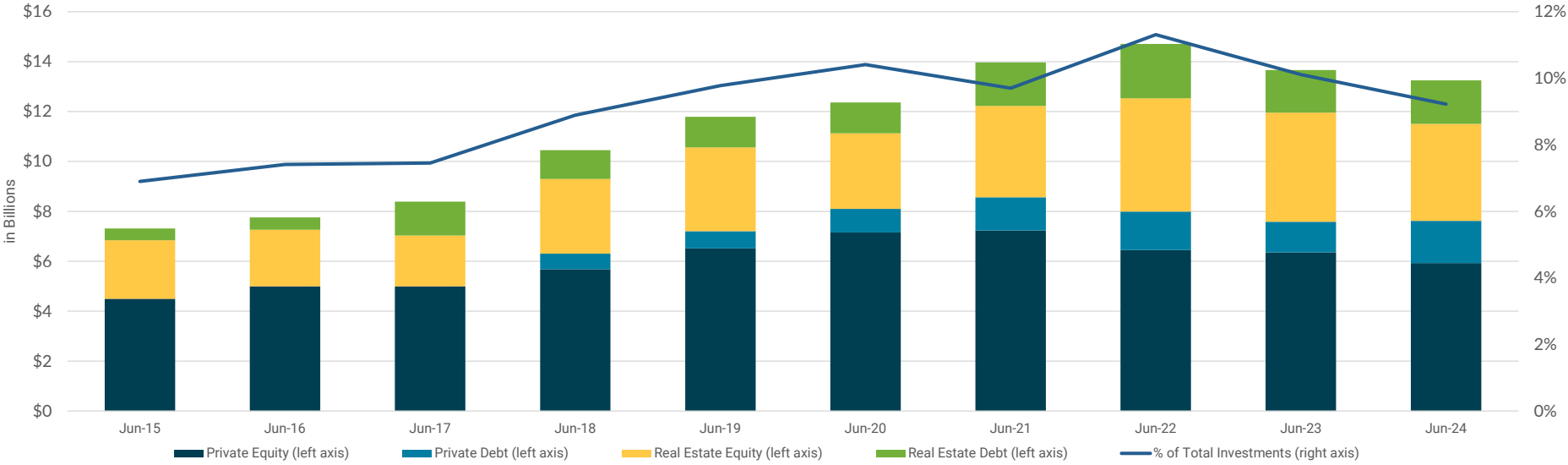


■ GP Discretion ■ NYSTRS Discretion

Unfunded Commitments - GP vs. NYSTRS Discretion

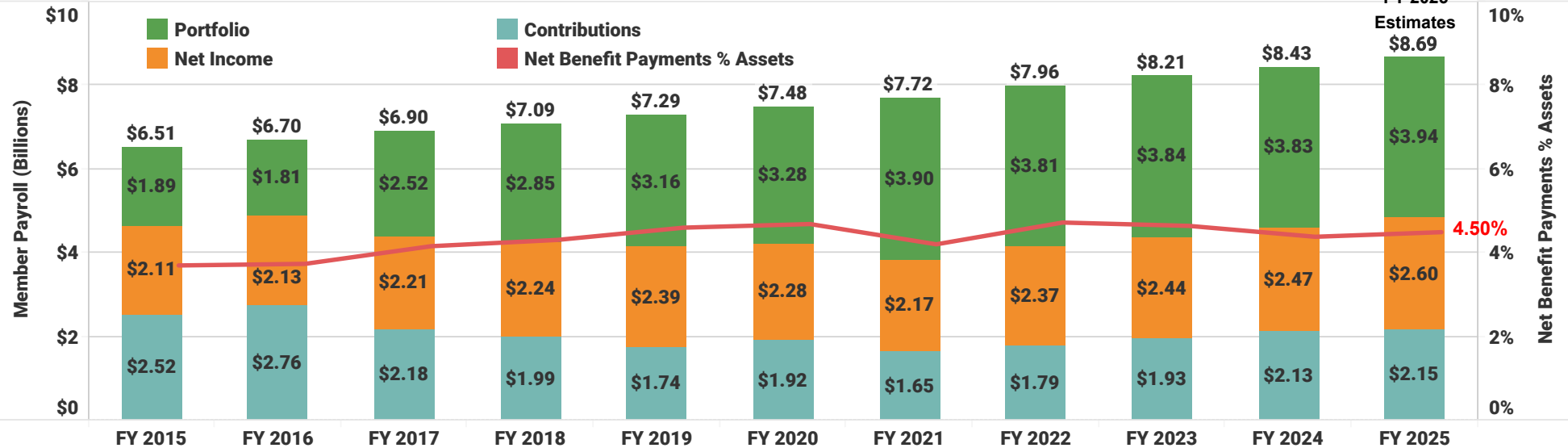


Unfunded Commitments - by Asset Class and % of Total Investments

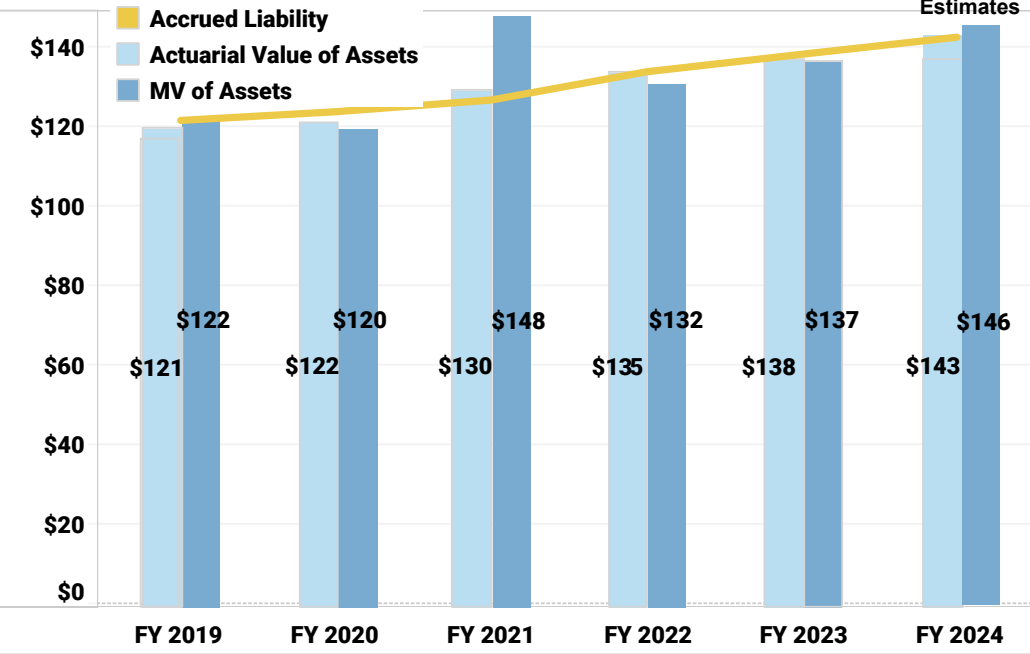


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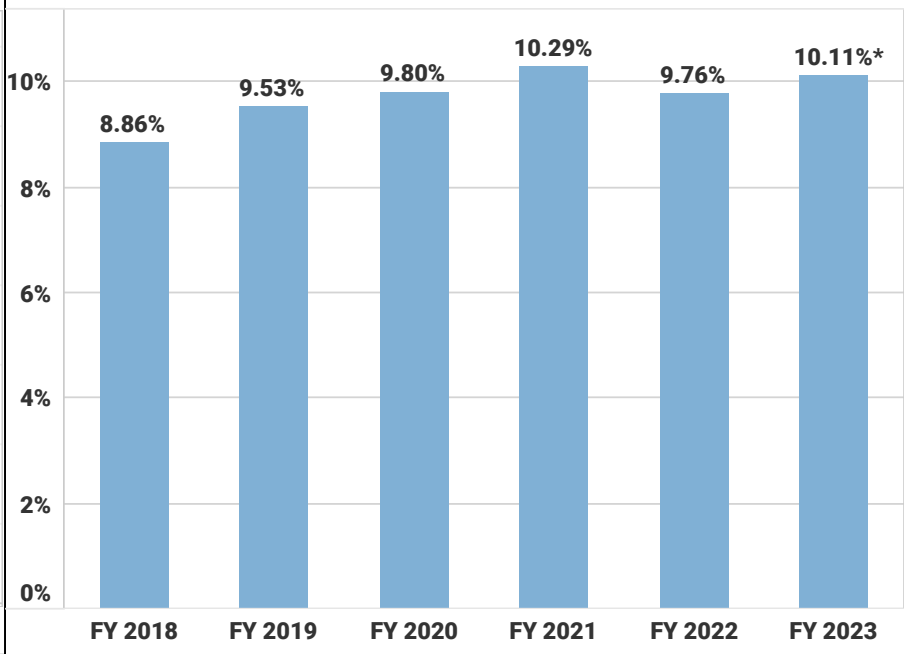
Member Payroll Funding Sources



Assets & Actuarial Accrued Liability (Billions)



Employer Contribution Rate

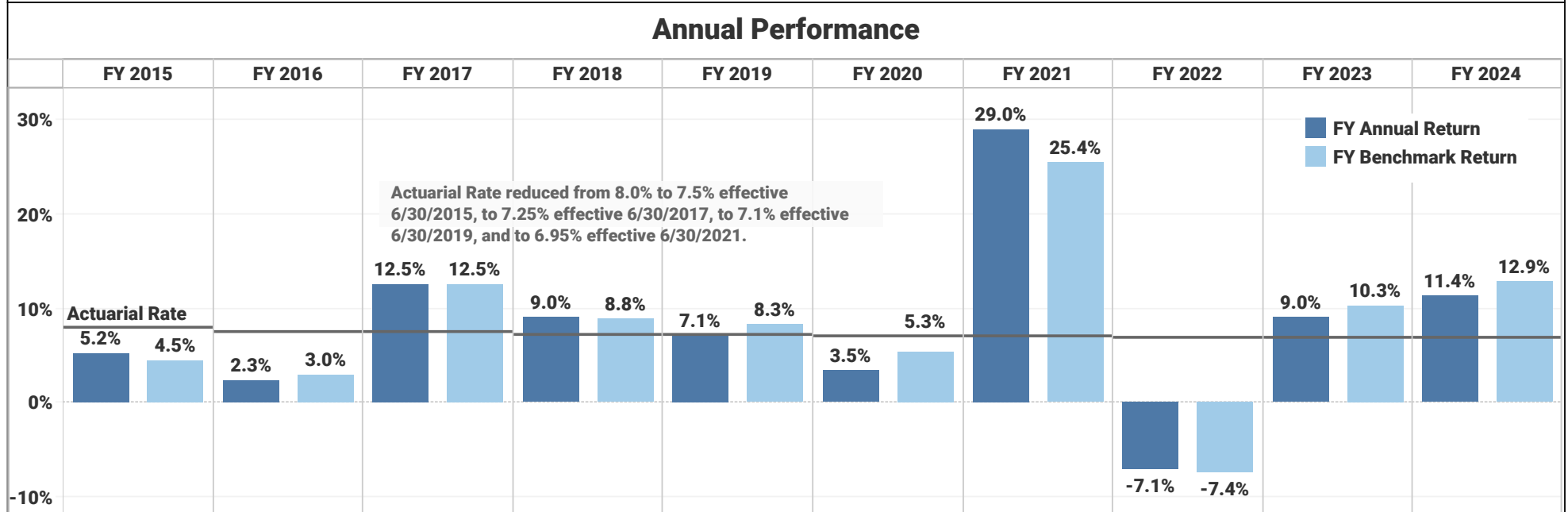


* The ECR applied to member payroll for the 7/1/24-6/30/25 school year will be 10.11%, collected in Fall 2025.

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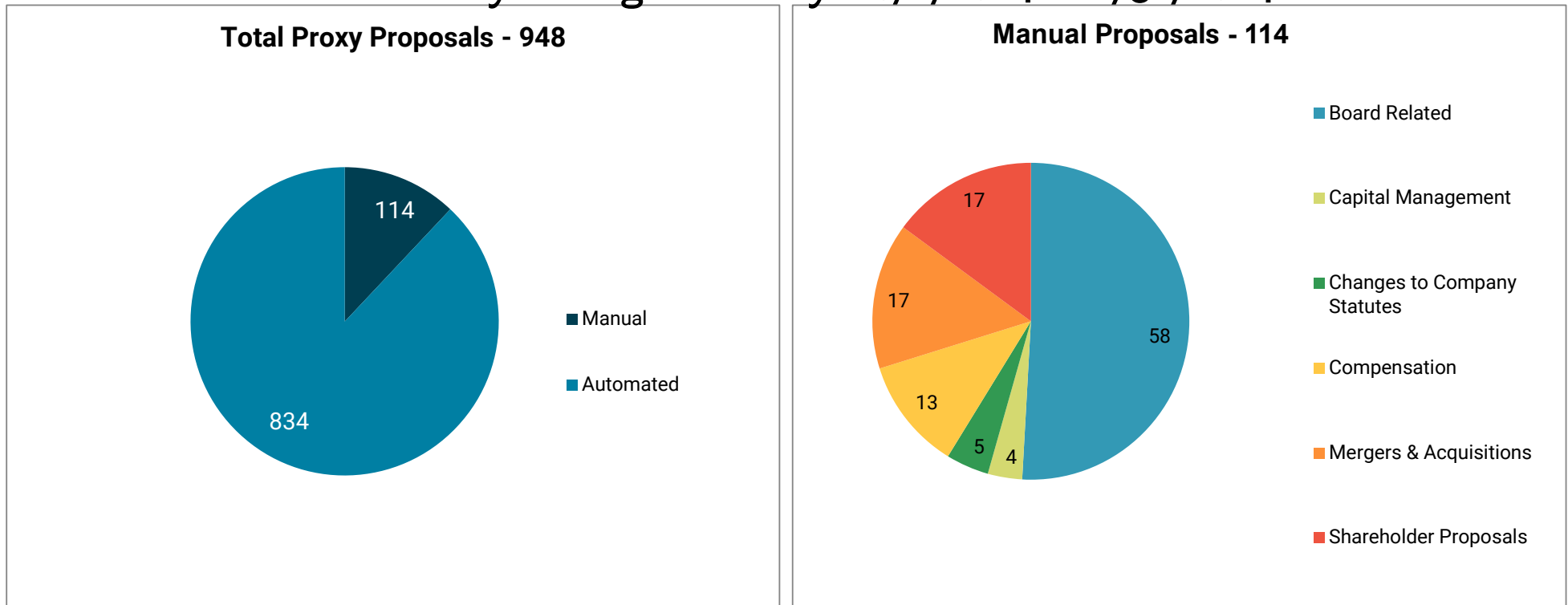
Public Market Performance as of December 31, 2024			Total Fund Performance as of September 30, 2024					
Asset Class	Current QTR		QTR		FYTD		10YR	
	Net Return	Excess Return	Net Return	Excess Return	Net Return	Excess Return	Net Return	Excess Return
Domestic Equity	2.3%	0.0%	6.0%	-0.1%	6.0%	-0.1%	13.0%	-0.1%
International Equity	-7.2%	0.4%	7.5%	-0.6%	7.5%	-0.6%	5.7%	0.5%
Global Equity	-1.4%	-0.4%	5.6%	-1.0%	5.6%	-1.0%	N/A	N/A
Private Equity	N/A	N/A	1.9%	-5.2%	1.9%	-5.2%	14.1%	-4.3%
Real Estate Equity	-6.5%	-0.3%	1.9%	1.8%	1.9%	1.8%	7.0%	1.7%
Domestic Fixed Income	-3.1%	-0.1%	5.2%	0.1%	5.2%	0.1%	1.9%	0.0%
Global Bonds	-1.9%	-0.5%	4.8%	0.2%	4.8%	0.2%	2.5%	0.3%
High Yield Bonds	0.0%	0.1%	4.6%	0.3%	4.6%	0.3%	N/A	N/A
Private Debt	N/A	N/A	2.1%	-0.7%	2.1%	-0.7%	N/A	N/A
Real Estate Debt	0.6%	1.3%	2.9%	-1.8%	2.9%	-1.8%	3.8%	0.4%
Short Term	1.2%	0.1%	1.4%	0.1%	1.4%	0.1%	1.8%	0.4%
Total Public Markets	-1.3%	0.1%	4.9%	-0.5%	4.9%	-0.5%	8.4%	-0.3%

RE Equity is REITs only and RE Debt is CMBS only.
For additional performance information see Supplemental Materials.



Investment Committee Executive Summary ¹⁴

Proxy Voting Summary: 10/1/2024 - 12/31/2024



The System has implemented automated voting for those issues that can reliably be voted according to NYSTRS' Stock Proxy Voting policy without review. Those requiring review are voted manually utilizing research provided by our proxy advisory service to support the decision. In general, the System supports corporate management if management's position appears reasonable, is not detrimental to the long range economic prospects of the company, and does not tend to diminish shareholder rights. Should a complex issue arise which is not included in the Stock Proxy Voting policy, the Executive Director and Chief Investment Officer or his designee is authorized to exercise best judgment in voting such issue.

Board Related - The System supports independent and diverse directors.

Capital Management - The System generally supports proposals that provide the company with flexibility provided they do not limit shareholder rights.

Changes to Company Statutes - The System generally supports proposals relating to bylaw or organizational changes provided they do not limit shareholder rights.

Compensation - The System generally supports reasonable compensation plans which are tied to objective performance measures. Stock option plans should be used to motivate corporate personnel.

Mergers & Acquisitions - Proposals are reviewed on a case by case basis.

Shareholder Proposals (type & number) - Compensation: 1, Environment: 2, Governance: 5, and Social: 9.



Responsible Stewardship Policy

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Responsible Stewardship Policy

I. Introduction

NYSTRS' Retirement Board developed Investment Beliefs to provide a consistent and transparent framework to guide NYSTRS' investment decision-making processes.

As fiduciaries, NYSTRS must be responsible and thoughtful stewards of the Fund, acting for the exclusive benefit of NYSTRS' members and beneficiaries.

This document serves as an outline of the priorities and process for effective stewardship of the fund. It articulates NYSTRS' belief on stewardship, the character of the fund, and offers guidelines for assessing and responding to risk in the fund.

II. Stewardship Belief

Responsible stewardship includes:

- Making prudent investment choices, consistent with our fiduciary duties under a disciplined risk-controlled strategy.
- Promoting responsible corporate governance, consistent with our Duty of Loyalty to act for the exclusive benefit of NYSTRS' members and beneficiaries.
- Being active owners of public and private companies, including but not limited to:
 - Voting proxies.
 - Participating on Limited Partner Advisory Committees.
 - Capitalizing on the System's assets to achieve investment goals and objectives in a responsible manner.
- Collaborating with other institutional investors to harness collective influence in engagement efforts.
- Actively participating with external organizations to help shape future rules and regulations related to sustainable investing. (e.g., The International Financial Reporting Standards Foundation efforts to advocate for uniform reporting and disclosure templates)

NYSTRS also believes that the most significant contributor to a fund's long-term investment performance is asset allocation. As part of the asset allocation decision, NYSTRS is a universal owner of the global public markets, with a highly diversified, long-term portfolio. NYSTRS holds the following convictions about the capital markets:

Responsible Stewardship Policy

- Markets are generally efficient.
- Passive management provides broad, diversified exposure, while active management can yield benefits when the investment manager has an informational, technical or operational advantage.
- Alternative investments allow the System to expand the opportunity set beyond public markets and can be used as a return enhancer and risk diversifier.

III. Stewardship Policy

This policy sets forth the guidelines for identifying, assessing and addressing material risks through proxy voting and engagement with the companies, and, when all other reasonable options have been exhausted, divestment. These guidelines are consistent with NYSTRS' Investment Beliefs and memorialized in NYSTRS' Board Governance Manual.

The scope of this policy applies to the following categories:

- Public market investments where NYSTRS assets are internally managed, or held in a separately managed account and NYSTRS controls the investment guidelines
- Private market investments held in a separate account or partnership fund structure for which NYSTRS may exercise any negotiated opt-out rights for future relevant investments to protect against the types of financial risks identified in this policy

This policy generally excludes public market securities held in a commingled structure where NYSTRS does not control investment guidelines, or private market partnership fund structures where NYSTRS does not have opt-out rights.

a. Risk Identification

From time to time, the NYSTRS Board of Trustees will be asked to assess whether there are risks to the portfolio that should be addressed through engagement or potential divestment action, with a particular focus on risks for which NYSTRS does not reasonably expect to be compensated over the long term. In order for a risk to be considered at the Board level, NYSTRS' staff must have determined that the risk has quantifiable and material current and/or long-term financial impact on the Fund. Stakeholder issues brought to NYSTRS' attention also may be considered through this lens.

b. Analysis and Recommendation

NYSTRS' staff shall provide a comprehensive and balanced analysis of the risks for consideration by the Board's Investment Committee along with a recommendation regarding engagement and/or divestment. The analysis should evaluate the impact of any action on the System's investment portfolio, including transaction costs and potential for increased tracking error, consistent with fiduciary duty and NYSTRS' investment policies and objectives. The parameters of the analysis will include identifying the companies that may be subject to action, based on clearly established criteria.

Responsible Stewardship Policy

Recommendations approved by the Investment Committee shall be submitted to the Retirement Board for consideration and appropriate action.

c. Proxy Voting, Engagement and Divestment Process

NYSTRS staff will establish key performance indicators (KPI) that characterize an asset's risk exposure to the Fund. These KPIs will form the basis for evaluation of company performance to address and mitigate the risk. NYSTRS may address this risk in the following ways:

1. NYSTRS may restrict further investment in any company identified as having material exposure to the risk.
2. NYSTRS will vote proxies to promote responsible corporate policies and activities which enhance a corporation's financial prospects and to address the risks identified through the KPIs, and in accordance with Appendix A: Stock Proxy Voting.
3. NYSTRS may seek to directly engage with the company and/or file a shareholder proposal, including taking the following actions:
 - a. NYSTRS may send a letter to the senior management and/or the Board of Directors of the identified company that outlines NYSTRS' concerns regarding the risk and related KPIs, and which seeks a written response outlining the company's strategy to address the risk.
 - b. NYSTRS may request a meeting with corporate senior management to address and more fully understand the corporate strategy to address the risk.
 - c. NYSTRS may file a shareholder proposal with the company, seeking action by the company to address the risk in a timely manner.
 - d. NYSTRS may collaborate with other institutional investors in engagement efforts. This may include participation in sign-on statements, letter writing campaigns, dialogue with companies, co-filing shareholder proposals and building votes for proposals that support NYSTRS' stewardship objectives.
4. NYSTRS may consider for divestment any company that continues to fail to address the identified risk after engagement steps have been taken, or when engagement has not resulted in a meaningful risk mitigation plan.
5. NYSTRS may consider for divestment any company that it determines, based on thorough due diligence, has a quantifiable and material current and/or potential negative financial impact on the Fund that cannot be resolved through engagement.

Responsible Stewardship Policy

IV. Divestment

A decision to divest is at the discretion of the Board, consistent with applicable fiduciary standards and statutory and regulatory requirements. In general, any company considered for divestment will be evaluated on the basis of the Board's overriding fiduciary responsibilities and with consideration for the economic risks presented to the System. If the Board determines engagement would be futile or the Board believes it has exhausted all practicable engagement options without achieving satisfactory progress or resolution, the Board may consider divestment. Evaluation of a divestment decision will be based on information provided by Staff, investment consultants, investment managers and/or other third parties such as market research services. The Board shall also obtain advice from outside fiduciary counsel and/or its general counsel on whether a divestment initiative is consistent with fiduciary standards.

Analysis may include:

- The investment impact of divestment on characteristics such as return and risk, including portfolio standard deviation and tracking error;
- The investment impact of divestment on portfolio characteristics using holdings-based analysis, including security-level diversification, sector-level diversification, investment style exposures, and factor exposures;
- The anticipated transaction costs and timeline required for prudent divestment;
- The ability to maintain sufficient diversification on an ex-post basis, including where the proceeds of divested securities may be invested to maintain comparable or equivalent risk-return characteristics;
- Whether divestment is consistent with the System's investment policy and objectives.

NYSTRS Staff, in consultation with System investment managers and investment consultants, will evaluate whether custom or substitute benchmarks should be instituted at the total fund, asset class, sub-asset class, and/or manager level to reflect the reduced opportunity set resulting from the divestment. Any use of custom or substitute benchmarks shall require Board approval.

V. Divestment Execution

A final Board resolution approving a divestment initiative shall describe the scope and conditions of the divestment, including the investment criteria upon which the divestment decision was made, and may include specifications regarding the projected divestment timeline, the duration of the divestment period, the asset class(es) and investment strategies impacted, and where assets may be reinvested in the near and long-term, depending on the scope of the divestment.

Staff will communicate restrictions and/or divestment decisions to external managers and monitor the investment managers' compliance.

**Responsible Stewardship Policy**

Staff will report back to the Board once divestment has been completed.

VI. Ongoing Monitoring

Staff will provide a status update regarding engagement efforts and a current list of approved divestments to the Board annually, which may include relevant risk and return performance impacts resulting from the divestment and any developments indicating that such risks have been or are being mitigated.

Staff may provide interim updates more frequently, upon request from the Board. Staff also may recommend to the Board changes in any divestment action to reflect a change in circumstances affecting the divested company.



Responsible Stewardship Policy

VII. Responsibilities and Controls

Responsible Party	Action
Chief Risk Officer	<ul style="list-style-type: none"> • Quantify systemwide exposure to identified risk • Maintain and periodically update internal list of companies that fall under restriction and/or divestment criteria • Contribute to analysis of potential impact of identified risk on NYSTRS' investment portfolio • Participate in engagement efforts • Monitor compliance with divestment and/or restriction criteria
System Investment Managing Directors	<ul style="list-style-type: none"> • Analyze and report on potential impact of identified risk • Implement divestment and/or restriction criteria • Communicate with external managers on divestment and/or restriction criteria • Monitor compliance with divestment and/or restriction criteria • Report on performance impact from divestment and/or restriction criteria • Participate in engagement efforts
Investment Operations Department	<ul style="list-style-type: none"> • Monitor compliance with divestment and/or restriction criteria • Contribute proxy voting data for engagement efforts and reporting • Ensure proxies are voted in line with the stock proxy voting policy and engagement efforts • Participate in engagement efforts

Responsible Stewardship Policy

<p>Office of the General Counsel</p>	<ul style="list-style-type: none"> • Act as liaison with outside attorneys as necessary • Act as liaison with Legislative stakeholders as necessary • Participate in and provide legal advice on engagement efforts and other stewardship initiatives as necessary
<p>Senior Advisor to the Executive Director and Chief Investment Officer - Stewardship</p>	<ul style="list-style-type: none"> • Develop, document and implement procedures and processes related to the Systems' Responsible Stewardship program • Contribute to development and maintenance of divestment and/or restricted criteria • Coordinate all engagement and divestment efforts • Participate in engagement efforts • Ensure proxies are voted in line with the stock proxy voting policy and engagement efforts • Periodically provide reports to the Retirement Board on the System's Responsible Stewardship program
<p>Executive Director and Chief Investment Officer</p>	<ul style="list-style-type: none"> • Provide recommendation to the Board on divestment

Responsible Stewardship Policy

Appendix A: Stock Proxy Voting

I. Introduction

Proxy voting is one facet of NYSTRS' investment stewardship program.

II. Purpose

The System's Stock Proxy Voting policy has been established to protect the System's long-term investment interests and to promote responsible corporate policies and activities which enhance a corporation's financial prospects.

III. Management Structure

The Stock Proxy Voting policy is administered internally by the Investment Operations Department in accordance with these guidelines.

When voting proxies for companies in the U.S. and Canada, NYSTRS will generally vote in accordance with the Proxy Voting Guidelines in Section IV below. When voting proxies for companies in other countries, NYSTRS will generally vote in accordance with the benchmark policy recommendations of NYSTRS' independent proxy advisor. Notwithstanding the foregoing, Complex issues which require additional consideration or those which do not fall within these relevant guidelines may be submitted to the System's Executive Director and Chief Investment Officer, or designee, who is authorized to exercise best judgment in voting such issues.

NYSTRS engages an independent proxy advisor to provide vote execution services, proxy research, analysis, and recommendations, and automation of NYSTRS voting policy to the extent possible.

NYSTRS may confer with the company, other investors, or obtain additional research as needed when casting votes.

IV. Proxy Voting Guidelines/Definitions

A proxy is a written power of attorney given by a shareholder of a corporation authorizing a specific vote on its behalf at corporate meetings. A proxy will normally pertain to election of members of the corporation's board of directors or to various resolutions submitted for shareholder approval.

When voting proxies, the System generally supports corporate management if management's position appears reasonable, is not detrimental to the long-range economic prospects of the company and does not tend to diminish or truncate the rights or prerogatives of shareholders.

**Responsible Stewardship Policy**

NYSTRS will withhold support from proposals when:

1. The underlying factors are not reasonably deemed material to the company or its operations
2. The company already substantially complies with the resolution
3. The cost outweighs the benefit, or the request is otherwise not reasonable

Proxy proposals are divided into the following general categories: management issues, executive compensation, shareholder rights, anti-takeover measures, environmental, and social issues.

A. **Management Issues:** Management issues which involve routine corporate operational and administrative issues are generally voted with management.

1. **Auditors:** Companies are not legally required to allow shareholders to ratify the selection of auditors. However, even if not required, many companies seek shareholder ratification of auditors. The most important issue relating to auditor selection is the independence of the auditing process. The auditor's independence from the firm being audited reduces the potential for abuse. The SEC has defined "independent" as an accountant's ability to exercise "objective and impartial judgment on all issues encompassed within the accountant's engagement." The System will not ratify an auditor if independence has been impaired or any of the following conditions exist:
 - a. Non-audit fees exceed audit fees
 - b. There was a previous failure to detect a material internal control weakness
 - c. The contract between the company and the auditor has provisions that would fully prevent or otherwise limit the company's ability to seek relief for damages by any means permissible by law
2. **Annual Meetings:** Issues relative to the general logistics of annual meetings such as location, time, frequency, selection of firms to count ballots, etc., are reviewed on a case-by-case basis.
3. **Corporate Contributions:** The System supports the concept of corporate philanthropy, when such philanthropy is in the best interests of the corporation and general public.
4. **Board Related Matters:**

Responsible Stewardship Policy

Boards are responsible for oversight and management of material risks faced by the company; significant risks and controversies and the company's efforts to address them should be disclosed.

Boards should respond meaningfully to shareholder concerns supported by a simple majority of shareholder votes cast and should be willing to engage with shareholders on significant issues.

Boards should oversee and disclose the company's political and charitable contributions and its lobbying activity and ensure alignment with the company's stated policies and objectives.

Requirements for Board membership are, within reason, considered a management prerogative and the System generally supports management's candidates for Board membership. The System believes an independent and diverse Board of Directors with members selected outside of management is beneficial to the overall effectiveness of corporate operations and supports proposals calling for outside directors.

The System generally votes for shareholder proposals asking that the Chairman of the Board and CEO positions be separate unless the company has a strong countervailing governance structure, such as a designated lead director elected by and from the independent Board members with clearly delineated duties that provides oversight of the CEO.

Votes should be withheld from directors that fail to adequately fulfill assigned duties, including the general responsibilities of the Board as outlined above, as well as those directors that:

- a. Attend less than seventy-five percent (75%) of the board and committee meetings without a valid excuse for the absences
- b. Implement or renew a poison pill without shareholder approval
- c. Have failed to act on takeover offers when the majority of shares have been tendered
- d. Are not independent and sit on the audit, compensation, stock option, nominating or other committee which should be comprised solely of independent directors
- e. Engage in significant related-party transactions with the company or have interlocking relationships which appear to affect their objectivity
- f. Serve on more than four (4) other public company boards or serve on two (2) other public company boards while serving as a chief executive at a public company

Responsible Stewardship Policy

- g. Serve as chair of the nominating or governance committee and:
 - i. Diversity is not considered when nominating directors
 - ii. There are no women or diverse candidates on the company's board and no timetable provided to address the issue
 - iii. Board demographic data has been requested but not disclosed
 - iv. There is no independent chair or assigned independent lead director and countervailing governance structure
 - v. Nominate directors to the audit, compensation or nominating committee that are not independent
- h. Serve as chair of the audit committee when there were material misstatements, material weaknesses or restated financials due to lack of controls
- i. Serve as chair of the compensation committee during a time of executive pay practices receiving a poor grade for performance from the System's independent advisory service

While the System does not feel ownership of stock in a corporation is necessary for Board membership, the System does support reasonable stock ownership plans for directors.

- 5. Stakeholder Proposals: Stakeholder proposals permit directors, when taking action, to weigh the interest of constituencies other than shareholders in the process of corporate decision making. These proposals allow directors to consider nearly any factor they deem relevant in discharging their duties.

The System does not support "stakeholder proposals" which give corporations broad discretion when considering business propositions. "Stakeholder proposals" can easily result in the replacement of shareholder rights by the interests of other constituencies and the System believes the interests of the shareholder should retain primacy.

- 6. Preemptive Rights: The System generally does not favor the maintenance or restoration of preemptive rights. Preemptive rights require a corporation to offer rights to existing shareholders when new shares are issued, allowing these shareholders to retain the same ownership percentage. The System feels, in an era of high capitalization, little purpose is served by preemptive rights and providing such rights is costly to the companies.

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7. Linked or Bundled Proposals: The System does not support proposals which link unrelated issues or bundle multiple issues in one proposal. These proposals often link or bundle proposals that benefit the shareholder with proposals that do not.
 8. Limiting of Liability and Increasing Indemnification: The System favors management's right to limit the liability of, and to increase indemnification for, its directors.
 9. Increased Authorized Common Stock: The System will support authorization for additional common stock when required for financing or other legitimate corporate purposes. Generally, the System opposes increases of more than one hundred percent (100%) of the authorized shares.
- B. Executive Compensation: The System generally supports management's right to provide compensation plans intended to motivate management unless a shareholder resolution is submitted to correct an obvious abuse in executive compensation.

Under provisions of Dodd-Frank implemented in 2011, shareholders now have non-binding advisory votes related to both the amount of executive compensation (Say-On-Pay) and the frequency of intervals of such voting (Say-On-Frequency). The System supports Say-On-Pay votes which occur at one-year intervals.

1. Performance Measures: The System supports reasonable compensation programs which are tied to objective performance measures.
 - a. To be considered reasonable, the compensation package must not be excessive in terms of incentives for superior performance on an absolute basis or relative to industry peers.
 - b. The measure should include relevant sustainability performance objectives; these objectives and the rationale for selecting them should be disclosed.
 - c. The System will vote against executive pay proposals that are given a poor grade for performance by the System's independent advisory service.
2. Stock Option Plans: The System believes stock option plans should be used solely for the purpose of motivating corporate personnel. The following are various types of stock option plans and the System's position on each.
 - a. The System generally supports reasonable incentive stock option plans predicated on individual performance.
 - b. The System supports reasonable stock options to outside directors.

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- c. The System generally supports employee stock option plans available to all employees offered at no less than eighty-five percent (85%) of market price.
 - d. A plan with a four percent (4%) shareholder dilution, or less, is usually supported. Shareholder dilution in excess of 4% is not supported except in cases where dilution is capped and consideration given to extenuating factors such as company size, performance and executives' compensation.
 - e. The System does not support option plans to key personnel offered at below market price.
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 - g. The System does not support providing broad authority to a company's Compensation Committee to grant incentive programs. This broad authority usually bypasses shareholder approval.
 - h. The System supports certain stock option plans which offer stock appreciation rights. Those plans allow individuals to receive the difference between the option and the market price without acquiring ownership of the stock.
 - i. The System does not support stock options which allow pyramiding. Pyramiding is a form of cashless exercise, similar to stock appreciation rights. It involves repeated simultaneous exchanges of an individual's existing appreciated shares for a larger number of new shares under the option plan.
 - j. The System does not support a compensation plan that permits the repricing of underwater stock options without seeking shareholder approval.
3. Change of Control Payments (Golden Parachutes): Change of Control Payments are compensation arrangements that pay corporate managers after they leave their positions. The System opposes unusually favorable compensation structures established in advance of the sale of a company.
4. Golden Coffins: A Golden Coffin is a death-benefit package awarded to the heirs of high-ranking executives who die while still employed with a company. The System opposes Golden Coffins and other payment structures not tied to actual service to the Company.
- C. Shareholder Rights: The System does not support management proposals which tend to limit or diminish the System's rights as a shareholder.
- 1. Confidential Voting: The System supports shareholder resolutions calling for secret ballots.

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2. Cumulative Voting: The System votes for shareholder resolutions to establish cumulative voting for directors and against management proposals to end existing cumulative voting plans. Most corporations provide that shareholders are entitled to cast one (1) vote for each director for each share owned, the so-called "one share, one vote" standard. Cumulative voting for directors permits shareholders to distribute the total number of votes in any manner when electing directors.
3. Unequal Voting Rights Plan: The System opposes any proposal to establish unequal voting rights plans since they tend to reduce the voting power of public shareholders and enhance the control of management.
4. Bylaw Amendments: Generally, shareholders have the right to propose amendments to a company's bylaws unless prohibited by the charter. Some companies have adopted provisions to limit or eliminate the right of shareholders to propose bylaw amendments. The System opposes any proposal to limit or eliminate shareholder rights to propose bylaw amendments.
5. Charter/Certificate of Incorporation: The System does not support proposals by management to change the state of incorporation in order to take advantage of laws more favorable to management interests as opposed to shareholder interests.
6. Access to Management's Proxy: The System generally supports proposals which ask management to allow large shareholders equal access to management's proxy in order to discuss and evaluate management's director nominees and/or nominate and discuss shareholders nominees to the board. The System is generally in favor of resolutions that reform access, provide disclosures to identify sponsors of shareholder resolutions and especially efforts on behalf of shareholders with the SEC to achieve access to management proxies.
7. Special Meetings and Written Consent: Shareholders should be able to call special meetings or act by written consent.

D. Anti-Takeover Measures:

1. Classified Boards: A classified board is one in which the directors are divided into separate classes, with one class of directors elected each year, thus providing for staggered terms. The only real motive for board classification is to make it more difficult to change control of the board.

The System opposes the creation of staggered or classified boards and votes against management efforts to create them and in favor of shareholder proposals to abolish them.

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2. Fair Price Provisions: Fair price provisions prevent two-tier offers in which a buyer offers a premium price for only enough shares to obtain a controlling interest of a company. The common requirement of a “fair price” is to pay minority shareholders at least as much per share as the offeror paid to gain a controlling position of the company.

The System supports fair price provisions provided no other anti-takeover provision is included. Quite often, fair price provisions require a supermajority vote to circumvent the pricing guidelines. The System will vote against the provisions with supermajorities proposed by management and for shareholder resolutions to reduce supermajority percentages.

3. Greenmail: When a company’s management buys back a block of the company’s stock held by a shareholder deemed to be a “threat” to the company (or to management’s tenure), the transaction is often called the payment of greenmail. The System opposes the payment of greenmail and supports shareholder resolutions to end this practice.
4. Poison Pills (Shareholder Rights Plans): Poison pills are a wide variety of provisions adopted by boards, without shareholder approval, to make it financially unattractive for a shareholder to purchase more than a small percentage of the company’s stock. The System:
 - a. Supports shareholder resolutions calling for corporations to submit Poison Pills to shareholder votes
 - b. Generally supports shareholder resolutions calling for corporations to rescind Poison Pills
 - c. Opposes management proposals to create Poison Pills when submitted to a vote
 - d. Will review company proposals to determine if they might benefit shareholders over the long run, especially for chewable pills. A chewable pill is a poison pill defense clause that gives common stock shareholders the right to revoke the pill in the face of a bona fide takeover offer, or which automatically nullifies the pill if the offer meets certain predefined criteria.
5. Stock Authorization Increasing Authorized Common or Preferred Shares: The System does not support such increases when the increased stock is issued in a private placement as an anti-takeover measure. The System also opposes any type of increase in blank check preferred stock.

E. Environmental Issues:

1. Companies should disclose the environmental sustainability policies and practices most closely tied to the company’s ability to create long-term value for investors.

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2. Significant risks and opportunities related to climate change and other environmental factors should be disclosed, as well as how the company identifies, measures and manages these risks and opportunities. These risks should include relevant physical and transition risks and opportunities.
3. Companies with significant GHG emissions or other negative environmental impacts should disclose plans for transitioning to a more sustainable business model, including GHG emissions and explicit reduction targets where such emissions are material.

F. Social Issues:

1. Animal Testing: The System votes on a case-by-case basis on proposals to restrict the use of animals in product testing.
2. Economic Conversion: The System does not support shareholder resolutions asking companies to report on plans to diversify or convert to the production of civilian goods and services in lieu of military production. We believe this should be a management decision.
3. Human Rights and Human Capital Management:
 - a. The System supports reasonable requests for corporate accountability related to human rights and human capital management.
 - b. Companies should disclose their diversity, equity and inclusion policies, efforts to promote a diverse, equitable and inclusive culture, and workforce demographics.
 - c. Significant risks and opportunities related to human capital management and human rights factors, and the impact on its operations and products should be disclosed, as well as how the company identifies, measures and manages these risks and opportunities.

V. Risk Management

NYSTRS engages an external proxy advisor to provide, among other things, analysis and recommendations on proxy matters and automation of the policy to ensure votes are cast consistently with these guidelines.

VI. Communications

The Investment Operations Department will provide a report to the Retirement Board annually showing the number of proxies voted by category and how the System voted (for or against).



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VII. Responsibilities & Controls

Responsible Party	Action
Investment Operations Department	<ol style="list-style-type: none"> 1. Receive Proxy Statement from company and proxy materials from proxy advisory service 2. Review proxy materials 3. Request guidance from the System's Executive Director and Chief Investment Officer or designee, for complex issues which require additional consideration or those which do not fall within these guidelines 4. Vote proxies according to guidelines 5. Prepare proxy report for the Board annually 6. Semi-annually, disclose the System's proxy voting record for domestic and Canadian portfolios.
Retirement Board	<ol style="list-style-type: none"> 7. Review proxy voting guidelines annually 8. Review annual proxy report received from the Investment Operations Department 9. Provide oversight to ensure alignment of proxy voting policy with NYSTRS' investment beliefs
Executive Director and Chief Investment Officer or designee	<ol style="list-style-type: none"> 10. Provide guidance to the Investment Operations Department on complex issues that require additional consideration or are not clearly defined in the proxy guidelines



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Responsible Stewardship Policy

I. Introduction

NYSTRS' Retirement Board developed Investment Beliefs to provide a consistent and transparent framework to guide NYSTRS' investment decision-making processes.

As fiduciaries, NYSTRS must be responsible and thoughtful stewards of the Fund, acting for the exclusive benefit of NYSTRS' members and beneficiaries.

This document serves as an outline of the priorities and process for effective stewardship of the fund. It articulates NYSTRS' belief on stewardship, the character of the fund, and offers guidelines for assessing and responding to risk in the fund.

II. Stewardship Belief

Responsible stewardship includes:

- Making prudent investment choices, consistent with our fiduciary duties under a disciplined risk-controlled strategy.
- Promoting responsible corporate governance, consistent with our Duty of Loyalty to act for the exclusive benefit of NYSTRS' members and beneficiaries.
- Being active owners of public and private companies, including but not limited to:
 - Voting proxies.
 - Participating on Limited Partner Advisory Committees.
 - Capitalizing on the System's assets to achieve investment goals and objectives in a responsible manner.
- Collaborating with other institutional investors to harness collective influence in engagement efforts.
- Actively participating with external organizations to help shape future rules and regulations related to sustainable investing. (e.g., The International Financial Reporting Standards Foundation efforts to advocate for uniform reporting and disclosure templates)

NYSTRS also believes that the most significant contributor to a fund's long-term investment performance is asset allocation. As part of the asset allocation decision, NYSTRS is a universal owner of the global public markets, with a highly diversified, long-term portfolio. NYSTRS holds the following convictions about the capital markets:

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- Markets are generally efficient.
- Passive management provides broad, diversified exposure, while active management can yield benefits when the investment manager has an informational, technical or operational advantage.
- Alternative investments allow the System to expand the opportunity set beyond public markets and can be used as a return enhancer and risk diversifier.

III. Stewardship Policy

This policy sets forth the guidelines for identifying, assessing and addressing material risks through proxy voting and engagement with the companies, and, when all other reasonable options have been exhausted, divestment. These guidelines are consistent with NYSTRS' Investment Beliefs and memorialized in NYSTRS' Board Governance Manual.

The scope of this policy applies to the following categories:

- Public market investments where NYSTRS assets are internally managed, or held in a separately managed account and NYSTRS controls the investment guidelines
- Private market investments held in a separate account or partnership fund structure for which NYSTRS may exercise any negotiated opt-out rights for future relevant investments to protect against the types of financial risks identified in this policy

This policy generally excludes public market securities held in a commingled structure where NYSTRS does not control investment guidelines, or private market partnership fund structures where NYSTRS does not have opt-out rights.

a. Risk Identification

From time to time, the NYSTRS Board of Trustees will be asked to assess whether there are risks to the portfolio that should be addressed through engagement or potential divestment action, with a particular focus on risks for which NYSTRS does not reasonably expect to be compensated over the long term. In order for a risk to be considered at the Board level, NYSTRS' staff must have determined that the risk has quantifiable and material current and/or long-term financial impact on the Fund. Stakeholder issues brought to NYSTRS' attention also may be considered through this lens.

b. Analysis and Recommendation

NYSTRS' staff shall provide a comprehensive and balanced analysis of the risks for consideration by the Board's Investment Committee along with a recommendation regarding engagement and/or divestment. The analysis should evaluate the impact of any action on the System's investment portfolio, including transaction costs and potential for increased tracking error, consistent with fiduciary duty and NYSTRS' investment policies and objectives. The parameters of the analysis will include identifying the companies that may be subject to action, based on clearly established criteria.

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Recommendations approved by the Investment Committee shall be submitted to the Retirement Board for consideration and appropriate action.

c. Proxy Voting, Engagement and Divestment Process

NYSTRS staff will establish key performance indicators (KPI) that characterize an asset's risk exposure to the Fund. These KPIs will form the basis for evaluation of company performance to address and mitigate the risk. NYSTRS may address this risk in the following ways:

1. NYSTRS may restrict further investment in any company identified as having material exposure to the risk.
2. NYSTRS will vote proxies to promote responsible corporate policies and activities which enhance a corporation's financial prospects and to address the risks identified through the KPIs, and in accordance with Appendix A: Stock Proxy Voting.
3. NYSTRS may seek to directly engage with the company and/or file a shareholder proposal, including taking the following actions:
 - a. NYSTRS may send a letter to the senior management and/or the Board of Directors of the identified company that outlines NYSTRS' concerns regarding the risk and related KPIs, and which seeks a written response outlining the company's strategy to address the risk.
 - b. NYSTRS may request a meeting with corporate senior management to address and more fully understand the corporate strategy to address the risk.
 - c. NYSTRS may file a shareholder proposal with the company, seeking action by the company to address the risk in a timely manner.
 - d. NYSTRS may collaborate with other institutional investors in engagement efforts. This may include participation in sign-on statements, letter writing campaigns, dialogue with companies, co-filing shareholder proposals and building votes for proposals that support NYSTRS' stewardship objectives.
4. NYSTRS may consider for divestment any company that continues to fail to address the identified risk after engagement steps have been taken, or when engagement has not resulted in a meaningful risk mitigation plan.
5. NYSTRS may consider for divestment any company that it determines, based on thorough due diligence, has a quantifiable and material current and/or potential negative financial impact on the Fund that cannot be resolved through engagement.

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IV. Divestment

A decision to divest is at the discretion of the Board, consistent with applicable fiduciary standards and statutory and regulatory requirements. In general, any company considered for divestment will be evaluated on the basis of the Board's overriding fiduciary responsibilities and with consideration for the economic risks presented to the System. If the Board determines engagement would be futile or the Board believes it has exhausted all practicable engagement options without achieving satisfactory progress or resolution, the Board may consider divestment. Evaluation of a divestment decision will be based on information provided by Staff, investment consultants, investment managers and/or other third parties such as market research services. The Board shall also obtain advice from outside fiduciary counsel and/or its general counsel on whether a divestment initiative is consistent with fiduciary standards.

Analysis may include:

- The investment impact of divestment on characteristics such as return and risk, including portfolio standard deviation and tracking error;
- The investment impact of divestment on portfolio characteristics using holdings-based analysis, including security-level diversification, sector-level diversification, investment style exposures, and factor exposures;
- The anticipated transaction costs and timeline required for prudent divestment;
- The ability to maintain sufficient diversification on an ex-post basis, including where the proceeds of divested securities may be invested to maintain comparable or equivalent risk-return characteristics;
- Whether divestment is consistent with the System's investment policy and objectives.

NYSTRS Staff, in consultation with System investment managers and investment consultants, will evaluate whether custom or substitute benchmarks should be instituted at the total fund, asset class, sub-asset class, and/or manager level to reflect the reduced opportunity set resulting from the divestment. Any use of custom or substitute benchmarks shall require Board approval.

V. Divestment Execution

A final Board resolution approving a divestment initiative shall describe the scope and conditions of the divestment, including the investment criteria upon which the divestment decision was made, and may include specifications regarding the projected divestment timeline, the duration of the divestment period, the asset class(es) and investment strategies impacted, and where assets may be reinvested in the near and long-term, depending on the scope of the divestment.

Staff will communicate restrictions and/or divestment decisions to external managers and monitor the investment managers' compliance.

**Responsible Stewardship Policy**

Staff will report back to the Board once divestment has been completed.

VI. Ongoing Monitoring

Staff will provide a status update regarding engagement efforts and a current list of approved divestments to the Board annually, which may include relevant risk and return performance impacts resulting from the divestment and any developments indicating that such risks have been or are being mitigated.

Staff may provide interim updates more frequently, upon request from the Board. Staff also may recommend to the Board changes in any divestment action to reflect a change in circumstances affecting the divested company.



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VII. Responsibilities and Controls

Responsible Party	Action
Chief Risk Officer	<ul style="list-style-type: none"> • Quantify systemwide exposure to identified risk • Maintain and periodically update internal list of companies that fall under restriction and/or divestment criteria • Contribute to analysis of potential impact of identified risk on NYSTRS' investment portfolio • Participate in engagement efforts • Monitor compliance with divestment and/or restriction criteria
System Investment Managing Directors	<ul style="list-style-type: none"> • Analyze and report on potential impact of identified risk • Implement divestment and/or restriction criteria • Communicate with external managers on divestment and/or restriction criteria • Monitor compliance with divestment and/or restriction criteria • Report on performance impact from divestment and/or restriction criteria • Participate in engagement efforts
Investment Operations Department	<ul style="list-style-type: none"> • Monitor compliance with divestment and/or restriction criteria • Contribute proxy voting data for engagement efforts and reporting • Ensure proxies are voted in line with the stock proxy voting policy and engagement efforts • Participate in engagement efforts

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<p>Office of the General Counsel</p>	<ul style="list-style-type: none"> • Act as liaison with outside attorneys as necessary • Act as liaison with Legislative stakeholders as necessary • Participate in and provide legal advice on engagement efforts and other stewardship initiatives as necessary
<p>Senior Advisor to the Executive Director and Chief Investment Officer - Stewardship</p>	<ul style="list-style-type: none"> • Develop, document and implement procedures and processes related to the Systems' Responsible Stewardship program • Contribute to development and maintenance of divestment and/or restricted criteria • Coordinate all engagement and divestment efforts • Participate in engagement efforts • Ensure proxies are voted in line with the stock proxy voting policy and engagement efforts • Periodically provide reports to the Retirement Board on the System's Responsible Stewardship program
<p>Executive Director and Chief Investment Officer</p>	<ul style="list-style-type: none"> • Provide recommendation to the Board on divestment

**Responsible Stewardship Policy**

Appendix A: Stock Proxy Voting**I. Introduction**

Proxy voting is one facet of NYSTRS' investment stewardship program.

II. Purpose

The System's Stock Proxy Voting policy has been established to protect the System's long-term investment interests and to promote responsible corporate policies and activities which enhance a corporation's financial prospects.

III. Management Structure

The Stock Proxy Voting policy is administered internally by the Investment Operations Department in accordance with these guidelines.

When voting proxies for companies in the U.S. and Canada, NYSTRS will generally vote in accordance with the Proxy Voting Guidelines in Section IV below. When voting proxies for companies in other countries, NYSTRS will generally vote in accordance with the benchmark policy recommendations of NYSTRS' independent proxy advisor. Notwithstanding the foregoing, complex issues which require additional consideration or those which do not fall within the relevant guidelines may be submitted to the System's Executive Director and Chief Investment Officer, or designee, who is authorized to exercise best judgment in voting such issues.

NYSTRS engages an independent proxy advisor to provide vote execution services, proxy research, analysis, and recommendations, and automation of NYSTRS voting policy to the extent possible.

NYSTRS may confer with the company, other investors, or obtain additional research as needed when casting votes.

IV. Proxy Voting Guidelines/Definitions

A proxy is a written power of attorney given by a shareholder of a corporation authorizing a specific vote on its behalf at corporate meetings. A proxy will normally pertain to election of members of the corporation's board of directors or to various resolutions submitted for shareholder approval.

When voting proxies, the System generally supports corporate management if management's position appears reasonable, is not detrimental to the long-range economic prospects of the company and does not tend to diminish or truncate the rights or prerogatives of shareholders.

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NYSTRS will withhold support from proposals when:

1. The underlying factors are not reasonably deemed material to the company or its operations
2. The company already substantially complies with the resolution
3. The cost outweighs the benefit, or the request is otherwise not reasonable

Proxy proposals are divided into the following general categories: management issues, executive compensation, shareholder rights, anti-takeover measures, environmental, and social issues.

A. **Management Issues:** Management issues which involve routine corporate operational and administrative issues are generally voted with management.

1. **Auditors:** Companies are not legally required to allow shareholders to ratify the selection of auditors. However, even if not required, many companies seek shareholder ratification of auditors. The most important issue relating to auditor selection is the independence of the auditing process. The auditor's independence from the firm being audited reduces the potential for abuse. The SEC has defined "independent" as an accountant's ability to exercise "objective and impartial judgment on all issues encompassed within the accountant's engagement." The System will not ratify an auditor if independence has been impaired or any of the following conditions exist:
 - a. Non-audit fees exceed audit fees
 - b. There was a previous failure to detect a material internal control weakness
 - c. The contract between the company and the auditor has provisions that would fully prevent or otherwise limit the company's ability to seek relief for damages by any means permissible by law
2. **Annual Meetings:** Issues relative to the general logistics of annual meetings such as location, time, frequency, selection of firms to count ballots, etc., are reviewed on a case-by-case basis.
3. **Corporate Contributions:** The System supports the concept of corporate philanthropy, when such philanthropy is in the best interests of the corporation and general public.
4. **Board Related Matters:**

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Boards are responsible for oversight and management of material risks faced by the company; significant risks and controversies and the company's efforts to address them should be disclosed.

Boards should respond meaningfully to shareholder concerns supported by a simple majority of shareholder votes cast and should be willing to engage with shareholders on significant issues.

Boards should oversee and disclose the company's political and charitable contributions and its lobbying activity and ensure alignment with the company's stated policies and objectives.

Requirements for Board membership are, within reason, considered a management prerogative and the System generally supports management's candidates for Board membership. The System believes an independent and diverse Board of Directors with members selected outside of management is beneficial to the overall effectiveness of corporate operations and supports proposals calling for outside directors.

The System generally votes for shareholder proposals asking that the Chairman of the Board and CEO positions be separate unless the company has a strong countervailing governance structure, such as a designated lead director elected by and from the independent Board members with clearly delineated duties that provides oversight of the CEO.

Votes should be withheld from directors that fail to adequately fulfill assigned duties, including the general responsibilities of the Board as outlined above, as well as those directors that:

- a. Attend less than seventy-five percent (75%) of the board and committee meetings without a valid excuse for the absences
- b. Implement or renew a poison pill without shareholder approval
- c. Have failed to act on takeover offers when the majority of shares have been tendered
- d. Are not independent and sit on the audit, compensation, stock option, nominating or other committee which should be comprised solely of independent directors
- e. Engage in significant related-party transactions with the company or have interlocking relationships which appear to affect their objectivity
- f. Serve on more than four (4) other public company boards or serve on two (2) other public company boards while serving as a chief executive at a public company

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- g. Serve as chair of the nominating or governance committee and:
 - i. Diversity is not considered when nominating directors
 - ii. There are no women or diverse candidates on the company's board and no timetable provided to address the issue
 - iii. Board demographic data has been requested but not disclosed
 - iv. There is no independent chair or assigned independent lead director and countervailing governance structure
 - v. Nominate directors to the audit, compensation or nominating committee that are not independent
- h. Serve as chair of the audit committee when there were material misstatements, material weaknesses or restated financials due to lack of controls
- i. Serve as chair of the compensation committee during a time of executive pay practices receiving a poor grade for performance from the System's independent advisory service

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- 6. Preemptive Rights: The System generally does not favor the maintenance or restoration of preemptive rights. Preemptive rights require a corporation to offer rights to existing shareholders when new shares are issued, allowing these shareholders to retain the same ownership percentage. The System feels, in an era of high capitalization, little purpose is served by preemptive rights and providing such rights is costly to the companies.

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 - b. The System supports reasonable stock options to outside directors.

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- c. The System generally supports employee stock option plans available to all employees offered at no less than eighty-five percent (85%) of market price.
 - d. A plan with a four percent (4%) shareholder dilution, or less, is usually supported. Shareholder dilution in excess of 4% is not supported except in cases where dilution is capped and consideration given to extenuating factors such as company size, performance and executives' compensation.
 - e. The System does not support option plans to key personnel offered at below market price.
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2. Cumulative Voting: The System votes for shareholder resolutions to establish cumulative voting for directors and against management proposals to end existing cumulative voting plans. Most corporations provide that shareholders are entitled to cast one (1) vote for each director for each share owned, the so-called “one share, one vote” standard. Cumulative voting for directors permits shareholders to distribute the total number of votes in any manner when electing directors.
3. Unequal Voting Rights Plan: The System opposes any proposal to establish unequal voting rights plans since they tend to reduce the voting power of public shareholders and enhance the control of management.
4. Bylaw Amendments: Generally, shareholders have the right to propose amendments to a company’s bylaws unless prohibited by the charter. Some companies have adopted provisions to limit or eliminate the right of shareholders to propose bylaw amendments. The System opposes any proposal to limit or eliminate shareholder rights to propose bylaw amendments.
5. Charter/Certificate of Incorporation: The System does not support proposals by management to change the state of incorporation in order to take advantage of laws more favorable to management interests as opposed to shareholder interests.
6. Access to Management’s Proxy: The System generally supports proposals which ask management to allow large shareholders equal access to management’s proxy in order to discuss and evaluate management’s director nominees and/or nominate and discuss shareholders nominees to the board. The System is generally in favor of resolutions that reform access, provide disclosures to identify sponsors of shareholder resolutions and especially efforts on behalf of shareholders with the SEC to achieve access to management proxies.
7. Special Meetings and Written Consent: Shareholders should be able to call special meetings or act by written consent.

D. Anti-Takeover Measures:

1. Classified Boards: A classified board is one in which the directors are divided into separate classes, with one class of directors elected each year, thus providing for staggered terms. The only real motive for board classification is to make it more difficult to change control of the board.

The System opposes the creation of staggered or classified boards and votes against management efforts to create them and in favor of shareholder proposals to abolish them.

Responsible Stewardship Policy

2. Fair Price Provisions: Fair price provisions prevent two-tier offers in which a buyer offers a premium price for only enough shares to obtain a controlling interest of a company. The common requirement of a “fair price” is to pay minority shareholders at least as much per share as the offeror paid to gain a controlling position of the company.

The System supports fair price provisions provided no other anti-takeover provision is included. Quite often, fair price provisions require a supermajority vote to circumvent the pricing guidelines. The System will vote against the provisions with supermajorities proposed by management and for shareholder resolutions to reduce supermajority percentages.

3. Greenmail: When a company’s management buys back a block of the company’s stock held by a shareholder deemed to be a “threat” to the company (or to management’s tenure), the transaction is often called the payment of greenmail. The System opposes the payment of greenmail and supports shareholder resolutions to end this practice.
4. Poison Pills (Shareholder Rights Plans): Poison pills are a wide variety of provisions adopted by boards, without shareholder approval, to make it financially unattractive for a shareholder to purchase more than a small percentage of the company’s stock. The System:
 - a. Supports shareholder resolutions calling for corporations to submit Poison Pills to shareholder votes
 - b. Generally supports shareholder resolutions calling for corporations to rescind Poison Pills
 - c. Opposes management proposals to create Poison Pills when submitted to a vote
 - d. Will review company proposals to determine if they might benefit shareholders over the long run, especially for chewable pills. A chewable pill is a poison pill defense clause that gives common stock shareholders the right to revoke the pill in the face of a bona fide takeover offer, or which automatically nullifies the pill if the offer meets certain predefined criteria.
5. Stock Authorization Increasing Authorized Common or Preferred Shares: The System does not support such increases when the increased stock is issued in a private placement as an anti-takeover measure. The System also opposes any type of increase in blank check preferred stock.

E. Environmental Issues:

1. Companies should disclose the environmental sustainability policies and practices most closely tied to the company’s ability to create long-term value for investors.

Responsible Stewardship Policy

2. Significant risks and opportunities related to climate change and other environmental factors should be disclosed, as well as how the company identifies, measures and manages these risks and opportunities. These risks should include relevant physical and transition risks and opportunities.
3. Companies with significant GHG emissions or other negative environmental impacts should disclose plans for transitioning to a more sustainable business model, including GHG emissions and explicit reduction targets where such emissions are material.

F. Social Issues:

1. Animal Testing: The System votes on a case-by-case basis on proposals to restrict the use of animals in product testing.
2. Economic Conversion: The System does not support shareholder resolutions asking companies to report on plans to diversify or convert to the production of civilian goods and services in lieu of military production. We believe this should be a management decision.
3. Human Rights and Human Capital Management:
 - a. The System supports reasonable requests for corporate accountability related to human rights and human capital management.
 - b. Companies should disclose their diversity, equity and inclusion policies, efforts to promote a diverse, equitable and inclusive culture, and workforce demographics.
 - c. Significant risks and opportunities related to human capital management and human rights factors, and the impact on its operations and products should be disclosed, as well as how the company identifies, measures and manages these risks and opportunities.

V. Risk Management

NYSTRS engages an external proxy advisor to provide, among other things, analysis and recommendations on proxy matters and automation of the policy to ensure votes are cast consistently with these guidelines.

VI. Communications

The Investment Operations Department will provide a report to the Retirement Board annually showing the number of proxies voted by category and how the System voted (for or against).



Responsible Stewardship Policy

VII. Responsibilities & Controls

Responsible Party	Action
Investment Operations Department	<ol style="list-style-type: none"> 1. Receive Proxy Statement from company and proxy materials from proxy advisory service 2. Review proxy materials 3. Request guidance from the System's Executive Director and Chief Investment Officer or designee, for complex issues which require additional consideration or those which do not fall within these guidelines 4. Vote proxies according to guidelines 5. Prepare proxy report for the Board annually 6. Semi-annually, disclose the System's proxy voting record for domestic and Canadian portfolios.
Retirement Board	<ol style="list-style-type: none"> 7. Review proxy voting guidelines annually 8. Review annual proxy report received from the Investment Operations Department 9. Provide oversight to ensure alignment of proxy voting policy with NYSTRS' investment beliefs
Executive Director and Chief Investment Officer or designee	<ol style="list-style-type: none"> 10. Provide guidance to the Investment Operations Department on complex issues that require additional consideration or are not clearly defined in the proxy guidelines



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Global Equity Securities

I. Introduction

The System's global equity portfolio consists of actively managed strategies that may be structured as separate or commingled accounts, or a combination of the two.

II. Purpose

To maximize long-term total return within acceptable risk parameters while diversifying the overall System portfolio.

III. Performance Objective

A. Externally managed portfolios

The System's externally managed global equity portfolios are measured against the un-hedged MSCI All Country World Index ("MSCI ACWI") and are expected to exceed the return of the benchmark over a full market cycle.

B. Internally managed portfolios

The System currently has no internally managed global equity portfolios.

IV. Management Structure

The Executive Director and Chief Investment Officer or his designee is authorized to take certain actions as described in the "Delegation of Investment Authority" section of the Investment Policy Manual, which, among other things, sets forth the investment discretion duly delegated by the Retirement Board to the Executive Director and Chief Investment Officer or his designees.

The Managing Director of Public Equities, with the assistance of investment consultants as the Managing Director deems necessary, shall oversee the System's global public equity portfolios.

Pursuant to the Retirement Board's direction (based upon the investment consultant's recommendation) the allocation to global equities is intended to be 100% active.

1. Active managers actively manage country, currency, industry and security selection. If permitted by their investment guidelines, managers may use currency forwards, index futures, and exchange traded funds to actively manage country and currency exposures.
2. External investment managers may be engaged to operate as a manager of managers, hiring other external investment managers.

Global Equity Securities

3. The System's externally managed global equity portfolios may be managed in separate or commingled vehicles.
4. The System may engage in securities lending or invest in commingled funds that lend securities.
5. Commingled vehicles are maintained in the custody and safekeeping of the commingled funds' custodian banks, which may appoint one or more foreign entities as their agent to hold and register foreign securities.
6. Separate accounts are maintained in the custody and safekeeping of NYSTRS' custodian.

V. Legally Permissible Investments

The System's global equity portfolios may invest in both domestic and international securities and are, therefore, generally subject to the same legal criteria described in this Investment Policy Manual for domestic and international securities: See "Domestic Equity Securities-Legally Permissible Investments" and "International Equity Securities-Legally Permissible Investments."

VI. Risk Management

A. Market Risk:

1. Diversification: The System's global equity strategies contribute to the diversification of the overall System portfolio. The asset allocation target is 4% with an allowable range of 0 to 8%. Investing relative to the global equity policy benchmark (MSCI ACWI) helps diversify among a large universe of countries, currencies, stocks and industries. In addition, the System may invest in funds, or other approved investment vehicles, that use derivatives such as currency forwards and index futures to manage currency and country exposures, in accordance with their respective investment guidelines.
2. Careful selection of external investment managers, including consultation with an investment consultant as necessary to provide advice regarding the impact of various changes at the global equity manager's firm. (See Selection, Monitoring and Termination of External Investment Managers for Publicly Traded Securities.)

B. Political Risk: The System is exposed to the risk of nationalization or other unfavorable government action in the foreign countries in which it invests. This risk is mitigated to the extent possible by maintaining a well-diversified country exposure.



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- C. Operational Risk: The Communications and Responsibilities & Controls sections will delineate the measures implemented to control operational risks.

VII. Communications

A. Retirement Board Reporting:

1. The Investment Operations Department and master custodian (currently State Street Bank) provides a summary of performance.
2. The Public Equities investment team shall take such steps as are necessary to monitor investment performance.

B. External Investment Manager Reporting:

1. External investment managers shall provide monthly reports about the System's holdings/participation units, market values, income and performance.
2. External investment managers will report to the Investment Advisory Committee and/or the Retirement Board upon request.



Global Equity Securities

VIII. Responsibilities & Controls

Responsible Party	Action
<p><u>PROGRAM FUNDING:</u> Investment Operations Department</p>	<p>1. Prepare a twelve (12) month cash flow forecast for the Internal Investment Committee on a monthly basis. This forecast brings together cash available to invest with planned program investments and targeted asset allocations while contemplating the benefit payment and operational cash needs of the System. By focusing on significant sources or uses of cash, the Internal Investment Committee assures coordination of investment strategies, funding of annuitant benefits and adherence to asset allocation ranges and targets.</p>
<p>Managing Director of Public Equities or designee</p>	<p>2. Review the cash flow forecast and coordinate with asset allocation analysis to determine whether the rebalancing program will incorporate further funding, status quo, or a sell program. This analysis is coordinated with the Executive Director and Chief Investment Officer.</p> <p>3. Instruct the Investment Operations Department via warrant to disburse funds to external investment managers as authorized. Warrants are automatically posted to the General Ledger and retained electronically.</p>
<p>Authorized Signatory</p>	<p>4. Authorize warrants to disburse funds.</p>
<p><u>INVESTMENT PROCESS:</u> <u>(External Management)</u> External Investment Managers</p>	<p>5. As fiduciaries for the System and in compliance with System policies and governing agreements, manage the global equity portfolios on a day-to-day basis according to the terms of the investment management agreement. This includes, but is not limited to, selecting securities, executing trades with brokers, and trading currencies. Global equity external managers will be responsible to vote proxy ballots on behalf of the System in accordance with the terms of their investment management agreements with the System.</p>
<p>Managing Director of Public Equities or designee</p>	<p>6. Act as a liaison between global equity managers and the System.</p>
<p><u>MONITORING:</u> Managing Director of Public Equities or designee</p>	<p>7. Oversee qualitative aspects of the program such as strategy and process. (See Selection, Monitoring and Termination of External Investment Managers for Publicly Traded Securities)</p>



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Responsible Party	Action
	8. Maintain reports and correspondence files.
Investment Operations Department <i>(External Management)</i>	9. Receive commingled fund audited financial statements annually and ensure audited statements reconcile to external manager financial reports used to record the System's portion of investment holdings. 10. Determine that portfolio holdings comply with statutory limitations. 11. Maintain reports, reconciliations and related correspondence. 12. Perform all investment related accounting and reporting, applying appropriate accounting controls. In conjunction with custodian bank, ensure all required documentation is completed and filed to reduce or eliminate the amount of foreign taxes withheld and to enable the System to reclaim the maximum allowable when taxes are withheld.
Custodian	13. Perform all investment accounting and reporting, applying appropriate accounting controls required to maintain the official Accounting Book of Record (ABOR) for each investment portfolio. 14. Calculate investment rates of return, monthly.
Investment Operations Department	15. Reviews investment rates of return summary for reasonableness and determines and resolves any differences. Publishes investment rates of return monthly for NYSTRS management and quarterly for NYSTRS Board.
Legal Department	16. With the assistance of outside counsel as needed, review and negotiate contracts with external managers and advisors. Review derivatives trading agreements as needed. 17. Render advice on various legal questions and engage outside legal counsel, as needed.

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Global Equity Securities

I. Introduction

The System's global equity portfolio consists of actively managed strategies that may be structured as separate or commingled accounts, or a combination of the two.

II. Purpose

To maximize long-term total return within acceptable risk parameters while diversifying the overall System portfolio.

III. Performance Objective

A. Externally managed portfolios

The System's externally managed global equity portfolios are measured against the un-hedged MSCI All Country World Index ("MSCI ACWI") and are expected to exceed the return of the benchmark over a full market cycle.

B. Internally managed portfolios

The System currently has no internally managed global equity portfolios.

IV. Management Structure

The Executive Director and Chief Investment Officer or his designee is authorized to take certain actions as described in the "Delegation of Investment Authority" section of the Investment Policy Manual, which, among other things, sets forth the investment discretion duly delegated by the Retirement Board to the Executive Director and Chief Investment Officer or his designees.

The Managing Director of Public Equities, with the assistance of investment consultants as the Managing Director deems necessary, shall oversee the System's global public equity portfolios.

Pursuant to the Retirement Board's direction (based upon the investment consultant's recommendation) the allocation to global equities is intended to be 100% active.

1. Active managers actively manage country, currency, industry and security selection. If permitted by their investment guidelines, managers may use currency forwards, index futures, and exchange traded funds to actively manage country and currency exposures.
2. External investment managers may be engaged to operate as a manager of managers, hiring other external investment managers.

Global Equity Securities

3. The System's externally managed global equity portfolios may be managed in separate or commingled vehicles.
4. The System may engage in securities lending or invest in commingled funds that lend securities.
5. Commingled vehicles are maintained in the custody and safekeeping of the commingled funds' custodian banks, which may appoint one or more foreign entities as their agent to hold and register foreign securities.
6. Separate accounts are maintained in the custody and safekeeping of NYSTRS' custodian.

V. Legally Permissible Investments

The System's global equity portfolios may invest in both domestic and international securities and are, therefore, generally subject to the same legal criteria described in this Investment Policy Manual for domestic and international securities: See "Domestic Equity Securities-Legally Permissible Investments" and "International Equity Securities-Legally Permissible Investments."

VI. Risk Management

A. Market Risk:

1. **Diversification:** The System's global equity strategies contribute to the diversification of the overall System portfolio. The asset allocation target is 4% with an allowable range of 0 to 8%. Investing relative to the global equity policy benchmark (MSCI ACWI) helps diversify among a large universe of countries, currencies, stocks and industries. In addition, the System may invest in funds, or other approved investment vehicles, that use derivatives such as currency forwards and index futures to manage currency and country exposures, in accordance with their respective investment guidelines.
2. Careful selection of external investment managers, including consultation with an investment consultant as necessary to provide advice regarding the impact of various changes at the global equity manager's firm. (See Selection, Monitoring and Termination of External Investment Managers for Publicly Traded Securities.)

- B. **Political Risk:** The System is exposed to the risk of nationalization or other unfavorable government action in the foreign countries in which it invests. This risk is mitigated to the extent possible by maintaining a well-diversified country exposure.



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- C. Operational Risk: The Communications and Responsibilities & Controls sections will delineate the measures implemented to control operational risks.

VII. Communications

A. Retirement Board Reporting:

1. The Investment Operations Department and master custodian (currently State Street Bank) provides a summary of performance.
2. The Public Equities investment team shall take such steps as are necessary to monitor investment performance.

B. External Investment Manager Reporting:

1. External investment managers shall provide monthly reports about the System's holdings/participation units, market values, income and performance.
2. External investment managers will report to the Investment Advisory Committee and/or the Retirement Board upon request.



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VIII. Responsibilities & Controls

Responsible Party	Action
<p><u>PROGRAM FUNDING:</u> Investment Operations Department</p>	<p>1. Prepare a twelve (12) month cash flow forecast for the Internal Investment Committee on a monthly basis. This forecast brings together cash available to invest with planned program investments and targeted asset allocations while contemplating the benefit payment and operational cash needs of the System. By focusing on significant sources or uses of cash, the Internal Investment Committee assures coordination of investment strategies, funding of annuitant benefits and adherence to asset allocation ranges and targets.</p>
<p>Managing Director of Public Equities or designee</p>	<p>2. Review the cash flow forecast and coordinate with asset allocation analysis to determine whether the rebalancing program will incorporate further funding, status quo, or a sell program. This analysis is coordinated with the Executive Director and Chief Investment Officer.</p> <p>3. Instruct the Investment Operations Department via warrant to disburse funds to external investment managers as authorized. Warrants are automatically posted to the General Ledger and retained electronically.</p>
<p>Authorized Signatory</p>	<p>4. Authorize warrants to disburse funds.</p>
<p><u>INVESTMENT PROCESS:</u> <i>(External Management)</i> External Investment Managers</p>	<p>5. As fiduciaries for the System and in compliance with System policies and governing agreements, manage the global equity portfolios on a day-to-day basis according to the terms of the investment management agreement. This includes, but is not limited to, selecting securities, executing trades with brokers, and trading currencies.</p>
<p>Managing Director of Public Equities or designee</p>	<p>6. Act as a liaison between global equity managers and the System.</p>
<p><u>MONITORING:</u> Managing Director of Public Equities or designee</p>	<p>7. Oversee qualitative aspects of the program such as strategy and process. (See Selection, Monitoring and Termination of External Investment Managers for Publicly Traded Securities)</p> <p>8. Maintain reports and correspondence files.</p>



Global Equity Securities

Responsible Party	Action
Investment Operations Department <i>(External Management)</i>	<p>9. Receive commingled fund audited financial statements annually and ensure audited statements reconcile to external manager financial reports used to record the System's portion of investment holdings.</p> <p>10. Determine that portfolio holdings comply with statutory limitations.</p> <p>11. Maintain reports, reconciliations and related correspondence.</p> <p>12. Perform all investment related accounting and reporting, applying appropriate accounting controls. In conjunction with custodian bank, ensure all required documentation is completed and filed to reduce or eliminate the amount of foreign taxes withheld and to enable the System to reclaim the maximum allowable when taxes are withheld.</p>
Custodian	<p>13. Perform all investment accounting and reporting, applying appropriate accounting controls required to maintain the official Accounting Book of Record (ABOR) for each investment portfolio.</p> <p>14. Calculate investment rates of return, monthly.</p>
Investment Operations Department	<p>15. Reviews investment rates of return summary for reasonableness and determines and resolves any differences. Publishes investment rates of return monthly for NYSTRS management and quarterly for NYSTRS Board.</p>
Legal Department	<p>16. With the assistance of outside counsel as needed, review and negotiate contracts with external managers and advisors. Review derivatives trading agreements as needed.</p> <p>17. Render advice on various legal questions and engage outside legal counsel, as needed.</p>

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International Equity Securities

I. Introduction

The System's international equity portfolio consists of passively and actively managed strategies that may be structured as separate or commingled accounts or a combination of the two and may be managed internally or externally.

II. Purpose

To maximize long-term total return within acceptable risk parameters while diversifying the overall System portfolio.

III. Performance Objective

A. Externally managed portfolios

The System's externally managed international equity portfolios are measured against the un-hedged MSCI ACWI (All Country World Index) Ex-U.S., MSCI EAFE (Europe, Australasia and the Far East) Stock Index and the MSCI EM (Emerging Markets) Index. New actively managed portfolios will be measured against the MSCI ACWI Ex-U.S., EAFE, EM, India IMI or another international equity benchmark as appropriate. Passive portfolios are expected to achieve minimal tracking error against the benchmark and active portfolios are expected to exceed the return of the benchmark over a full market cycle.

B. Internally managed portfolios

The System currently manages one international equity portfolio internally. The Canadian Equity portfolio is passively managed and is therefore expected to perform with minimal tracking error relative to its benchmark, the MSCI Canada Index.

IV. Management Structure

The Executive Director and Chief Investment Officer or his designee is authorized to take certain actions as described in the "Delegation of Investment Authority" section of the Investment Policy Manual, which, among other things, sets forth the investment discretion duly delegated by the Retirement Board to the Executive Director and Chief Investment Officer or his designees.

The Managing Director of Public Equities, with the assistance of investment consultants as the Managing Director deems necessary, shall oversee the System's internally and externally managed international public equity portfolios.

Pursuant to the Retirement Board's direction (based upon the investment consultant's recommendation) the target allocations for international equities are: Passive 75%, Active 25%.

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1. Passive: Managers passively manage country, currency, industry and security selection. If permitted by their guidelines, they may use currency forwards, index futures and exchange traded funds.
2. Active: Managers actively manage country, currency, industry and security selection. If permitted by their guidelines, external managers may also use currency forwards, index futures, and exchange traded funds to actively manage country and currency exposures.
3. External investment managers may be engaged to operate as a manager of managers, hiring other external investment managers.
4. The System's externally managed international equity portfolios may be managed in separate or commingled vehicles.
5. The System may engage in securities lending or invest in commingled funds that lend securities.
6. Commingled vehicles are maintained in the custody and safekeeping of the commingled funds' custodian banks, which may appoint one or more foreign entities as their agent to hold and register foreign securities.
7. Separate accounts are maintained in the custody and safekeeping of NYSTRS' custodian.

V. Legally Permissible Investments

Investment in international equity securities is permitted under Retirement and Social Security Law (RSSL) §177(8).

A. Pursuant to RSSL §177(8), no more than ten percent (10%) of the System's assets may be invested in international equity securities, including emerging market equity securities. Investments in international equities must be included with the System's domestic equities for the purpose of the seventy percent (70%) overall limitation and the fifteen percent (15%) per year limitation contained in RSSL §177(2). In addition, under RSSL §177(8), an international equity may only be acquired if:

1. The security is registered:
 - a. On a national exchange under the Securities and Exchange Act of 1934 or otherwise registered pursuant to said act, and, if the security is so otherwise registered, price quotations must be furnished through a nationwide quotation system (see RSSL s. 177(8)(a) for legal requirements); or

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- b. On a foreign exchange organized and regulated under the jurisdiction of such exchange
- B. The issuing corporation shall have (a) averaged at least \$1 billion in annual sales for the three consecutive years preceding the year in which the investment is made, or (b) a market capitalization of at least \$1 billion at the time of investment.
- C. Otherwise, the security may be acquired under the Leeway Clause (RSSL §177(9)) if prudent.

VI. Risk Management

A. Market Risk:

- 1. Diversification: The international equity portfolios contribute to the diversification of the overall portfolio. The asset allocation target is 15% with an allowable range of 11 to 19%. Within the international equity sector, diversification is achieved by:
 - a. Investing in broad market indices such as the MSCI ACWI Ex-U.S., MSCI EAFE and the MSCI EM helps diversify among a large universe of countries, currencies, stocks and industries.
 - b. The System may invest in funds or other approved investment vehicles that use derivatives like currency forwards and index futures to manage currency and country exposures in accordance with their respective investment guidelines.
 - c. Use of internally managed portfolios.
- 2. Careful selection of external investment managers, including consultation with an investment consultant as necessary to provide advice regarding the impact of various changes at the external international equity manager's firm. (See Selection, Monitoring and Termination of External Investment Managers for Publicly Traded Securities.)
- B. Political Risk: The System is exposed to the risk of nationalization or other unfavorable government action in the foreign countries in which it invests. This risk is mitigated to the extent possible by maintaining a well-diversified country exposure.
- C. Operational Risk: The Communications and Responsibilities & Controls sections will delineate the measures implemented to control operational risks.



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VII. Communications

A. Retirement Board Reporting:

1. The Investment Operations Department and master custodian (currently State Street Bank) provides a summary of performance.
2. The Public Equities investment team shall take such steps as are necessary to monitor investment performance.

B. External Investment Manager Reporting:

1. External investment managers shall provide monthly reports about the System's holdings/participation units, market values, income and performance.
2. External investment managers will report to the Investment Advisory Committee and/or the Retirement Board upon request.



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VIII. Responsibilities & Controls

Responsible Party	Action
<p><u>PROGRAM FUNDING:</u></p> <p>Investment Operations Department</p>	<p>1. Prepare a twelve (12) month cash flow forecast for the Internal Investment Committee on a monthly basis. This forecast brings together cash available to invest with planned program investments and targeted asset allocations while contemplating the benefit payment and operational cash needs of the System. By focusing on significant sources or uses of cash, the Internal Investment Committee assures coordination of investment strategies, funding of annuitant benefits and adherence to asset allocation ranges and targets.</p>
<p>Managing Director of Public Equities or designee</p>	<p>2. Review the cash flow forecast and coordinate with asset allocation analysis to determine whether the rebalancing program will incorporate further funding, status quo, or a sell program. This analysis is coordinated with the Executive Director and Chief Investment Officer.</p> <p>3. Instruct the Investment Operations Department via warrant to disburse funds to external investment managers as authorized. Warrants are automatically posted to the General Ledger and retained electronically.</p>
<p>Authorized Signatory</p>	<p>4. Authorize warrants to disburse funds.</p>
<p><u>INVESTMENT PROCESS:</u> <u>(External Management)</u></p> <p>External Investment Managers</p>	<p>5. As fiduciaries for the System and in compliance with System policies and governing agreements, manage the international equity portfolios on a day-to-day basis according to the terms of the investment management agreement. This includes, but is not limited to, selecting securities, executing trades with brokers, and trading currencies. International equity external managers will be responsible to vote proxy ballots on behalf of the System in accordance with the terms of their investment management agreements with the System.</p>
<p>Managing Director of Public Equities or designee</p>	<p>6. Act as a liaison between international equity managers and the System.</p>

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Responsible Party	Action
<p><u>INVESTMENT PROCESS:</u> <i>(Internal Management)</i></p> <p>Managing Director of Public Equities or designee</p>	<p>7. Develop the optimal rebalancing program. The result of this process is a recommended buy and sell list.</p> <p>8. Review overall trade recommendations.</p> <p>9. Place buy and sell orders with brokers.</p> <p>10. Communicate trade details to the Investment Operations Department</p> <p>11. Oversee qualitative aspects of the program such as strategy and process.</p> <p>12. Manage cash balances and execute foreign exchange transactions to facilitate settlement of equity trades for internally managed equity portfolios.</p>
<p>Investment Operations Department</p>	<p>13. For internally managed portfolios, communicate trade information to securities clearing house and/or custodian bank. Prepare warrants and assure settlement and funding of trades. Warrants are posted to the General Ledger and retained electronically.</p> <p>14. Verify internally managed trades have been settled correctly and resolve any discrepancies.</p> <p>15. Ensure accurate holdings for the internally managed Canadian Equity portfolio and resolve discrepancies with the Custodian.</p>
<p>Custodian Bank</p>	<p>16. Settle equity and foreign exchange trades and pay or receive funds in accordance with the customary or established securities trading or securities processing practices and procedures in the jurisdiction or market in which the trade occurs.</p>
<p><u>MONITORING:</u></p> <p>Managing Director of Public Equities or designee</p>	<p>17. Oversee qualitative aspects of the program such as strategy and process. (See Selection, Monitoring and Termination of External Investment Managers for Publicly Traded Securities)</p> <p>18. Maintain reports and correspondence files.</p>

**International Equity Securities**

Responsible Party	Action
Investment Operations Department <i>(External Management)</i>	<p>19. Receive commingled fund audited financial statements annually and ensure audited statements reconcile to external manager financial reports used to record the System's portion of investment holdings.</p> <p>20. Determine that portfolio holdings comply with statutory limitations.</p> <p>21. Maintain reports, reconciliations and related correspondence.</p> <p>22. Perform all investment related accounting and reporting, applying appropriate accounting controls. In conjunction with custodian bank, ensure all required documentation is completed and filed to reduce or eliminate the amount of foreign taxes withheld and to enable the System to reclaim the maximum allowable when taxes are withheld.</p>
Custodian	23. Perform all investment accounting and reporting, applying appropriate accounting controls required to maintain the official Accounting Book of Record (ABOR) for each investment portfolio.
Custodian	24. Calculate investment rates of return, monthly.
Investment Operations Department	25. Reviews investment rates of return summary for reasonableness and determines and resolves any differences. Publishes investment rates of return monthly for NYSTRS management and quarterly for NYSTRS Board.
Legal Department	<p>26. With the assistance of outside counsel as needed, review and negotiate contracts with external managers and advisors. Review derivatives agreements as needed.</p> <p>27. Render advice on various legal questions, as needed.</p>

**International Equity Securities**

I.	INTRODUCTION	2
II.	PURPOSE	2
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IV.	MANAGEMENT STRUCTURE	2
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International Equity Securities

I. Introduction

The System's international equity portfolio consists of passively and actively managed strategies that may be structured as separate or commingled accounts or a combination of the two and may be managed internally or externally.

II. Purpose

To maximize long-term total return within acceptable risk parameters while diversifying the overall System portfolio.

III. Performance Objective

A. Externally managed portfolios

The System's externally managed international equity portfolios are measured against the un-hedged MSCI ACWI (All Country World Index) Ex-U.S., MSCI EAFE (Europe, Australasia and the Far East) Stock Index and the MSCI EM (Emerging Markets) Index. New actively managed portfolios will be measured against the MSCI ACWI Ex-U.S., EAFE, EM, India IMI or another international equity benchmark as appropriate. Passive portfolios are expected to achieve minimal tracking error against the benchmark and active portfolios are expected to exceed the return of the benchmark over a full market cycle.

B. Internally managed portfolios

The System currently manages one international equity portfolio internally. The Canadian Equity portfolio is passively managed and is therefore expected to perform with minimal tracking error relative to its benchmark, the MSCI Canada Index.

IV. Management Structure

The Executive Director and Chief Investment Officer or his designee is authorized to take certain actions as described in the "Delegation of Investment Authority" section of the Investment Policy Manual, which, among other things, sets forth the investment discretion duly delegated by the Retirement Board to the Executive Director and Chief Investment Officer or his designees.

The Managing Director of Public Equities, with the assistance of investment consultants as the Managing Director deems necessary, shall oversee the System's internally and externally managed international public equity portfolios.

Pursuant to the Retirement Board's direction (based upon the investment consultant's recommendation) the target allocations for international equities are: Passive 75%, Active 25%.

International Equity Securities

1. **Passive:** Managers passively manage country, currency, industry and security selection. If permitted by their guidelines, they may use currency forwards, index futures and exchange traded funds.
2. **Active:** Managers actively manage country, currency, industry and security selection. If permitted by their guidelines, external managers may also use currency forwards, index futures, and exchange traded funds to actively manage country and currency exposures.
3. External investment managers may be engaged to operate as a manager of managers, hiring other external investment managers.
4. The System's externally managed international equity portfolios may be managed in separate or commingled vehicles.
5. The System may engage in securities lending or invest in commingled funds that lend securities.
6. Commingled vehicles are maintained in the custody and safekeeping of the commingled funds' custodian banks, which may appoint one or more foreign entities as their agent to hold and register foreign securities.
7. Separate accounts are maintained in the custody and safekeeping of NYSTRS' custodian.

V. Legally Permissible Investments

Investment in international equity securities is permitted under Retirement and Social Security Law (RSSL) §177(8).

A. Pursuant to RSSL §177(8), no more than ten percent (10%) of the System's assets may be invested in international equity securities, including emerging market equity securities. Investments in international equities must be included with the System's domestic equities for the purpose of the seventy percent (70%) overall limitation and the fifteen percent (15%) per year limitation contained in RSSL §177(2). In addition, under RSSL §177(8), an international equity may only be acquired if:

1. The security is registered:
 - a. On a national exchange under the Securities and Exchange Act of 1934 or otherwise registered pursuant to said act, and, if the security is so otherwise registered, price quotations must be furnished through a nationwide quotation system (see RSSL s. 177(8)(a) for legal requirements); or

International Equity Securities

- b. On a foreign exchange organized and regulated under the jurisdiction of such exchange
- B. The issuing corporation shall have (a) averaged at least \$1 billion in annual sales for the three consecutive years preceding the year in which the investment is made, or (b) a market capitalization of at least \$1 billion at the time of investment.
- C. Otherwise, the security may be acquired under the Leeway Clause (RSSL §177(9)) if prudent.

VI. Risk Management

A. Market Risk:

- 1. Diversification: The international equity portfolios contribute to the diversification of the overall portfolio. The asset allocation target is 15% with an allowable range of 11 to 19%. Within the international equity sector, diversification is achieved by:
 - a. Investing in broad market indices such as the MSCI ACWI Ex-U.S., MSCI EAFE and the MSCI EM helps diversify among a large universe of countries, currencies, stocks and industries.
 - b. The System may invest in funds or other approved investment vehicles that use derivatives like currency forwards and index futures to manage currency and country exposures in accordance with their respective investment guidelines.
 - c. Use of internally managed portfolios.
- 2. Careful selection of external investment managers, including consultation with an investment consultant as necessary to provide advice regarding the impact of various changes at the external international equity manager's firm. (See Selection, Monitoring and Termination of External Investment Managers for Publicly Traded Securities.)
- B. Political Risk: The System is exposed to the risk of nationalization or other unfavorable government action in the foreign countries in which it invests. This risk is mitigated to the extent possible by maintaining a well-diversified country exposure.
- C. Operational Risk: The Communications and Responsibilities & Controls sections will delineate the measures implemented to control operational risks.



International Equity Securities

VII. Communications

A. Retirement Board Reporting:

1. The Investment Operations Department and master custodian (currently State Street Bank) provides a summary of performance.
2. The Public Equities investment team shall take such steps as are necessary to monitor investment performance.

B. External Investment Manager Reporting:

1. External investment managers shall provide monthly reports about the System's holdings/participation units, market values, income and performance.
2. External investment managers will report to the Investment Advisory Committee and/or the Retirement Board upon request.



International Equity Securities

VIII. Responsibilities & Controls

Responsible Party	Action
<p><u>PROGRAM FUNDING:</u></p> <p>Investment Operations Department</p>	<p>1. Prepare a twelve (12) month cash flow forecast for the Internal Investment Committee on a monthly basis. This forecast brings together cash available to invest with planned program investments and targeted asset allocations while contemplating the benefit payment and operational cash needs of the System. By focusing on significant sources or uses of cash, the Internal Investment Committee assures coordination of investment strategies, funding of annuitant benefits and adherence to asset allocation ranges and targets.</p>
<p>Managing Director of Public Equities or designee</p>	<p>2. Review the cash flow forecast and coordinate with asset allocation analysis to determine whether the rebalancing program will incorporate further funding, status quo, or a sell program. This analysis is coordinated with the Executive Director and Chief Investment Officer.</p> <p>3. Instruct the Investment Operations Department via warrant to disburse funds to external investment managers as authorized. Warrants are automatically posted to the General Ledger and retained electronically.</p>
<p>Authorized Signatory</p>	<p>4. Authorize warrants to disburse funds.</p>
<p><u>INVESTMENT PROCESS:</u> <i>(External Management)</i></p> <p>External Investment Managers</p>	<p>5. As fiduciaries for the System and in compliance with System policies and governing agreements, manage the international equity portfolios on a day-to-day basis according to the terms of the investment management agreement. This includes, but is not limited to, selecting securities, executing trades with brokers, and trading currencies.</p>
<p>Managing Director of Public Equities or designee</p>	<p>6. Act as a liaison between international equity managers and the System.</p>
<p><u>INVESTMENT PROCESS:</u> <i>(Internal Management)</i></p>	<p>7. Develop the optimal rebalancing program. The result of this process is a recommended buy and sell list.</p> <p>8. Review overall trade recommendations.</p>



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

International Equity Securities

Responsible Party	Action
Managing Director of Public Equities or designee	<p>9. Place buy and sell orders with brokers.</p> <p>10. Communicate trade details to the Investment Operations Department</p> <p>11. Oversee qualitative aspects of the program such as strategy and process.</p> <p>12. Manage cash balances and execute foreign exchange transactions to facilitate settlement of equity trades for internally managed equity portfolios.</p>
Investment Operations Department	<p>13. For internally managed portfolios, communicate trade information to securities clearing house and/or custodian bank. Prepare warrants and assure settlement and funding of trades. Warrants are posted to the General Ledger and retained electronically.</p> <p>14. Verify internally managed trades have been settled correctly and resolve any discrepancies.</p> <p>15. Ensure accurate holdings for the internally managed Canadian Equity portfolio and resolve discrepancies with the Custodian.</p>
Custodian Bank	<p>16. Settle equity and foreign exchange trades and pay or receive funds in accordance with the customary or established securities trading or securities processing practices and procedures in the jurisdiction or market in which the trade occurs.</p>
<p><u>MONITORING:</u></p> <p>Managing Director of Public Equities or designee</p>	<p>17. Oversee qualitative aspects of the program such as strategy and process. (See Selection, Monitoring and Termination of External Investment Managers for Publicly Traded Securities)</p> <p>18. Maintain reports and correspondence files.</p>



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

International Equity Securities

Responsible Party	Action
Investment Operations Department <i>(External Management)</i>	<p>19. Receive commingled fund audited financial statements annually and ensure audited statements reconcile to external manager financial reports used to record the System's portion of investment holdings.</p> <p>20. Determine that portfolio holdings comply with statutory limitations.</p> <p>21. Maintain reports, reconciliations and related correspondence.</p> <p>22. Perform all investment related accounting and reporting, applying appropriate accounting controls. In conjunction with custodian bank, ensure all required documentation is completed and filed to reduce or eliminate the amount of foreign taxes withheld and to enable the System to reclaim the maximum allowable when taxes are withheld.</p>
Custodian	23. Perform all investment accounting and reporting, applying appropriate accounting controls required to maintain the official Accounting Book of Record (ABOR) for each investment portfolio.
Custodian	24. Calculate investment rates of return, monthly.
Investment Operations Department	25. Reviews investment rates of return summary for reasonableness and determines and resolves any differences. Publishes investment rates of return monthly for NYSTRS management and quarterly for NYSTRS Board.
Legal Department	<p>26. With the assistance of outside counsel as needed, review and negotiate contracts with external managers and advisors. Review derivatives agreements as needed.</p> <p>27. Render advice on various legal questions, as needed.</p>



Appendix B

Public Equities Managing Director Update

Investment Committee January 29, 2025

Binoop Unni, CFA, CAIA
Public Equities

	Mkt Val	Asset Allocation %			Portfolio Net Returns %					Excess Returns %				
	\$B*	Actual	Target	Range	Qtr	FYTD	1Y	3Y Ann	5Y Ann	Qtr	FYTD	1Y	3Y Ann	5Y Ann
Public Equities	\$ 76.4				-0.71	5.62	18.32	6.32	11.12	0.18	-0.09	0.36	0.20	0.25
Domestic Equities	\$ 49.5	33.7	33	29-37	2.27	8.40	24.19	8.68	14.21	0.05	0.00	0.24	0.14	0.08
<i>Domestic Passive</i>	\$ 42.6				2.25	8.42	24.03	8.58	14.19	0.02	0.02	0.08	0.04	0.06
<i>Domestic Active</i>	\$ 6.8				2.43	8.24	25.39	9.39	14.39	0.21	-0.16	1.44	0.85	0.25
International Equities	\$ 20.8	14.2	15	11-19	-7.17	-0.23	6.12	1.27	4.74	0.43	-0.08	0.58	0.45	0.63
<i>International Passive</i>	\$ 13.9				-7.57	-0.12	5.70	1.03	4.32	0.03	0.02	0.16	0.20	0.21
<i>International Active</i>	\$ 6.9				-6.34	-0.45	6.99	1.69	5.79	1.26	-0.31	1.46	0.87	1.69
Global Equities	\$ 6.2	4.2	4	0-8	-1.36	4.19	15.95	5.02	10.39	-0.37	-1.37	-1.54	-0.41	0.33

* Due to rounding, market values may not sum.

Market Commentary:

- Key themes during the quarter included Fed rate cuts and US elections.
- Global equity markets experienced a challenging quarter, posting a return of -1%.
- US equities posted a 2.2% return for the quarter, with growth stocks outperforming value, marking a reversal from the prior quarter. Strong performance over the past two years.
- International markets dropped -7.6%, with weakness across all major regions.

Portfolio Activity & Asset Allocation:

- The portfolio ended the quarter at \$76.4B, an increase of \$5.4B from a year prior.
- The public equity asset classes remain close to their respective targets and well within their asset allocation ranges.
- Rebalanced \$140M to GSAM India strategy from AQR International strategy.
- \$1.6B was raised from domestic equities during the quarter.

Portfolio Performance & Positioning:

- The portfolio posted a negative return for the quarter, though it outperformed the benchmark and delivered positive results over longer time frames.
- The portfolio's passive strategies continue to perform in-line with expectations. Active strategies performed well in the US but were challenged in our Global strategies.
- Staff visited Ariel, BlackRock, Leading Edge, LSV, Baillie Gifford and William Blair.

	Mkt Val	Asset Allocation %			Portfolio Net Returns %					Excess Returns %				
	\$B	Actual	Target	Range	Qtr	FYTD	1Y	3Y Ann	5Y Ann	Qtr	FYTD	1Y	3Y Ann	5Y Ann
Internally Managed	\$ 24.1	16.4	17											
<i>Domestic Fixed Income</i>	\$ 22.1	15.1	16	12-20	-3.09	1.95	1.71	-1.10	0.28	-0.09	-0.03	0.38	1.28	0.56
<i>Short-Term Bond</i>	\$ 1.9	1.3	1	0-4	1.20	2.57	5.34	4.09	2.59	0.09	0.21	0.40	0.39	0.33
Externally Managed	\$ 4.5	3.1	3											
<i>Global Bonds</i>	\$ 2.9	2.0	2	0-4	-1.91	2.77	2.41	-1.32	0.44	-0.47	-0.26	-0.19	0.12	0.45
<i>High Yield</i>	\$ 1.6	1.1	1	0-3	-0.04	4.60	7.23	2.86	3.64	0.13	0.38	0.39	0.40	0.01

Note: Global Bonds includes externally managed Global Aggregate & Carbon Transition portfolio and internally managed Emerging Market Debt

Qtr. Market Commentary:

- **US inv. grade:** negative as macro data signal fewer rate cuts/higher yields; spreads to record lows
- **Short-term:** annualized yield should remain near 5% over the current quarter
- **Global bond** returns led by stronger Asia/Euro markets vs. US; hedging added 3.6% to returns
- **High yield:** flat returns as income outpaced price declines; spreads hit 17-year lows

Asset Allocation & Positioning:

- All within asset allocation ranges
- Added net \$278 million to Domestic towards 16% target
- Continue to tilt Domestic portfolio away from corporate bonds due to relative value
- Started new EM debt portfolio with net \$251 million (of \$500 target)
- Funded new high yield manager (Advent)

Excess Performance in Qtr.:

- **Domestic:** -9bp mostly from yield curve positioning
- **Short-term:** +21bp from allocation to high quality credit versus US govt.
- **Global:** -47bp excess returns from mix of rate and credit positioning and trading costs for new EM debt portfolio set-up
- **High Yield:** +13bp excess from security selection that outweighed duration positioning

Macro and Team Updates:

- **Policy:** After 100bps of Fed cuts, a pause is likely. Headlines on tariff, immigration, and tax will drive markets & US debt outlook
- **Credit:** spreads near record lows signal risk of reversal
- “Bond vigilantes”—major markets (UK/France/US) coming under some stress from budget deficits and spiraling debt levels
- New Investment Officer



Commercial Real Estate (CRE) Equity and Debt Investments Managing Director Update

Investment Committee January 29, 2025

David C. Gillan, CPA
Managing Director of Real Estate

CRE Equity Portfolio	12/31/24 Value	Target	Range	Actual	w/Commitments	
	\$16,468	11%	6%-16%	11.2%	13.2%	
Performance for Periods Ended September 30, 2024						
Strategy (Inception Date)	Net Asset Value	Current Quarter	1 Year	5 Year	10 Year	Since Inception
Direct Properties (2/90)	\$6,047	-2.3%	-7.5%	3.4%	6.7%	8.8%
Core Funds (7/85)	\$1,436	-1.0%	-9.0%	-1.5%	2.0%	5.8%
Value Added (12/89)	\$1,769	0.2%	-4.4%	10.1%	14.0%	11.4%
Opportunistic (3/99)	\$3,374	1.1%	-0.1%	6.8%	8.2%	10.4%
U.S. RE Securities (7/95)	\$2,315	14.2%	31.6%	6.4%	8.5%	11.2%
Global RE Securities (9/17)	\$835	16.6%	30.0%	2.8%	-	4.3%
Timber (12/98)	\$241	0.6%	27.6%	11.8%	7.8%	5.5%
Total CRE Equity Portfolio	\$16,017	1.9%	1.0%	4.2%	7.0%	7.9%
NCREIF-ODCE (Spliced)	-	0.0%	-8.0%	2.0%	5.4%	6.0%

Market Commentary:

- Green Street's CPPI (unlevered US commercial property values) reflected a 4.8% increase over the prior twelve months. The CPPI now sits 17.8% below the 2022 peak. Office valuations may have bottomed, reflecting an increase of 1.4% over the prior quarter and ending the calendar year with a 1% decline.
- Public markets are generally in line with private market pricing with REITS trading at a 1% premium to underlying real estate values on average. At the sector level, there is wide dispersion. According to Green Street, data center REITS are trading at a 24% premium to asset values while cold storage REITS are trading at a 25% discount.
- While CRE prices overall appear to be on firm footing, the recent rise in rates is a concern and point to a relatively flat growth environment over the next year, making cash-yielding opportunities more attractive.

Portfolio Activity:

- Staff screen for opportunities that offer resilient cash flow in locations with durable long term demand profiles and focus on partnering with managers experienced in strategies with robust demand drivers such as data centers and digital infrastructure.
- Staff continue to monitor financing rates and pay off or forego leverage when not accretive.
- Insurance costs remain a concern. Asset management staff regularly monitor coverage to ensure adequacy and cost. Acquisitions maintains a conservative view in forecasting insurance expense increases in underwriting.
- Closed on the \$168 million acquisition of a core multifamily property in the Washington, DC MSA, a \$42 million industrial property in the Atlanta MSA and an additional \$300 million commitment to a grocery anchored shopping center company.

Portfolio Performance & Positioning:

- Over the last 12 months, the CRE Equity portfolio produced a total net return of 1.0%, which outperformed the NCREIF ODCE policy benchmark.
- Drivers of the lower nominal performance have primarily been the continued valuation declines in urban office properties and cold storage.
- Drivers of the positive relative performance to the benchmark include opportunistic timber sales and the performance of our public security portfolios driven by residential and retail strategies.

CRE Debt Portfolio	12/31/24 Value	Target	Range	Actual	w/Commitments	
	\$8,512	6%	2%-10%	5.8%	6.9%	
Performance for Periods Ended September 30, 2024						
Strategy (Inception Date)	Net Asset Value	Current Quarter	1 Year	5 Years	10 Years	Since Inception
First Mortgages (7/85)	\$2,076	3.7%	9.3%	3.0%	3.7%	7.7%
Commercial MBS (4/01)	\$3,341	3.9%	12.7%	1.6%	3.1%	4.5%
Core Plus Strategies (8/04)	\$1,998	1.5%	5.9%	2.8%	4.7%	3.7%
Opportunistic Debt (9/01)	\$679	-0.1%	3.8%	4.7%	6.6%	1.3%
Total CRE Debt Portfolio	\$8,094	2.9%	9.0%	2.8%	3.8%	7.6%
GL Custom Index (Spliced)	-	4.7%	11.1%	2.1%	3.4%	7.7%

Market Commentary:

- Interest rates continue to be volatile.
 - The 10-year Treasury yield is currently 4.6%. U.S. Treasury yields significantly increased (approximately 80 bps) since the end of the third quarter 2024.
 - The expectation is that the Federal Reserve Board will pause any rate cuts at the next meeting.
- The Basel III re-proposal that goes into effect in July 2025 has eased bank reserve requirements allowing the banks to increase commercial lending allocations.
- The new Administration proposals on tariffs and deportations creates uncertainty regarding inflation, interest rates, and construction labor costs.

Portfolio Activity:

- Staff will continue to focus on the most attractive opportunities based on yield, credit and duration.
- Real estate debt investments continue to provide relatively strong risk adjusted returns.
 - Five-to-seven-year mortgage loans on stabilized assets provide yields in the 5.75%-6.00% range.
 - Investment grade CMBS securities provide yields in the 5.75%-7.75% range.
 - Senior mezzanine and bridge loans provide net yields in excess of 7.00%.
- During the 4th quarter, the System closed on a \$125 million first mortgage on a stabilized industrial asset in Riverside, California, and a \$200 million first mortgage on a stabilized industrial asset in Fontana, California.

Portfolio Performance & Positioning:

- Over the last 12 months, the CRE Debt Portfolio produced a total net return of 9.0% which underperformed the Giliberto-Levy benchmark.
- CMBS and first mortgages were the main drivers of positive portfolio performance. CMBS performance was driven by I.G. spread compression while mortgage performance benefitted from Treasury declines through Sept 2024 (e.g. 5-year Treasury yields declined 100 bps over this period).
- The existing first mortgage portfolio continues to have a large concentration of office loans that were originated between 2014 and 2017. We continue to work with our existing borrowers to address these loans through short-term extensions, focused on principal paydowns, reserves and cash sweeps.

Commercial Real Estate (CRE) Investments – MD Update

Equity Real Estate Performance for Periods Ended September 30, 2024						
Strategy (Inception Date)	Net Asset Value	Current Quarter	1 Year	5 Year	10 Year	Since Inception
Direct Properties (2/90)	\$6,047	-2.3%	-7.5%	3.4%	6.7%	8.8%
Core Funds (7/85)	\$1,436	-1.0%	-9.0%	-1.5%	2.0%	5.8%
Value Added (12/89)	\$1,769	0.2%	-4.4%	10.1%	14.0%	11.4%
Opportunistic (3/99)	\$3,374	1.1%	-0.1%	6.8%	8.2%	10.4%
U.S. RE Securities (7/95)	\$2,315	14.2%	31.6%	6.4%	8.5%	11.2%
Global RE Securities (9/17)	\$835	16.6%	30.0%	2.8%	-	4.3%
Timber (12/98)	\$241	0.6%	27.6%	11.8%	7.8%	5.5%
Total CRE Equity Portfolio	\$16,017	1.9%	1.0%	4.2%	7.0%	7.9%
Blended Benchmark*	-	2.9%	-0.3%	1.5%	5.1%	6.0%

Debt Real Estate Performance for Periods Ended September 30, 2024						
Strategy (Inception Date)	Net Asset Value	Current Quarter	1 Year	5 Years	10 Years	Since Inception
First Mortgages (7/85)	\$2,076	3.7%	9.3%	3.0%	3.7%	7.7%
Commercial MBS (4/01)	\$3,341	3.9%	12.7%	1.6%	3.1%	4.5%
Core Plus Strategies (8/04)	\$1,998	1.5%	5.9%	2.8%	4.7%	3.7%
Opportunistic Debt (9/01)	\$679	-0.1%	3.8%	4.7%	6.6%	1.3%
Total CRE Debt Portfolio	\$8,094	2.9%	9.0%	2.8%	3.8%	7.6%
Blended Benchmark*	-	4.8%	11.7%	1.9%	3.3%	7.7%

* The Blended Benchmarks used here represent the market-value weighted average of the underlying benchmarks for all of the public/private strategies. The System's Real Estate Policy benchmark is the NCREIF-ODCE for the Real Estate Equity Portfolio, and the Giliberto-Levy Custom Index for the Real Estate Debt Portfolio.



Appendix E

Private Equity & Private Debt Managing Director Update

Investment Committee January 29, 2025

*Gerald J. Yahoudy II, CAIA, FDP
Private Equity & Private Debt*

Private Equity & Private Debt MD Update

	Mkt Val	Asset Allocation %			Benchmark	Net Returns % (as of 9/30/24)						Excess Returns %					
	\$B	Actual	Target	Range		1Y	3Y	5Y	10Y	20Y	30Y	1Y	3Y	5Y	10Y	20Y	30Y
Private Equity	\$ 14.30	9.6	9	4-14	S&P 500 + 5%	7.1	3.1	14.2	14.1	14.1	13.5	-34.3	-13.8	-6.8	-4.3	-1.6	-2.3
Private Debt	\$ 2.40	1.6	2	0.5-5	Morningstar LSTA + 3%	9.5	8.4	9.6	-	-	-	-3.1	-1.1	0.9	-	-	-

Note: Market Values and Asset Allocation %'s as of 12/31/24

Market Commentary:

- Market activity remains below long-term averages, but there has been a slight year over year pickup in activity as expectations normalize.
- Private credit continues to be the dominate source for buyouts and M&A. However, recent bank lending activity has increased competition slightly impacting ending terms in favor of the borrowers.

Portfolio Activity & Asset Allocation:

- Quarterly valuations for both private equity and private debt increased 1.9% and 2.1% respectively from 6/30/24.
- During the quarter, three new commitments were made in PD; one new relationship and two with existing relationships.
- Cash flows for the second quarter of the fiscal year was positive for PE and negative for PD but overall, positive for both asset classes combined.

Portfolio Performance & Positioning:

- Overall, returns are positive. PE has outperformed the public markets over the long run but underperformed in the shorter term. PD outperformed the benchmark over the five-year period.
- We started to implement the addition of new PD relationships focused on opportunistic credit for diversification purposes as previously reported.

Other Updates:

- Nothing to report.



Appendix F

Investment Committee Meeting – Agenda pp. 83-84

January 29, 2025

COMMITTEE MEMBERS

Nicholas Smirensky, Chair
Juliet Benaquisto, Eric Iberger, David Keefe, Jennifer Longtin, Ruth Mahoney

MINUTES

A. Approval of Minutes of October 30, 2024 Meeting pp. 85-93

PRESENTATIONS

1. General Investment Consultant Recommendation (motion for **Executive Session** pursuant to Open Meetings Law section 105(1)(f) to discuss matters leading to the appointment or employment of a particular person or corporation) pp. 94-152

UPDATES

- A. Investment Comm Exec Summary – M. Andriola pp. 153-159
 - 1. Proposed Updates to NYSTRS' Responsible Stewardship Policy—Appendix A: Stock Proxy Voting pp. 160-224
- B. Public Equities Update – B. Unni pp. 225-226
- C. Fixed Income Update – M. Federici p. 227
- D. Real Estate Update – D. Gillan pp. 228-231
- E. Private Equity/Debt Update – G. Yahoudy p. 232-233

INVESTMENT COMMITTEE ACTION REQUIRED

- A. **Consent Agenda Recommendation Items A-1** pp. 234-245
 - 1. Renew Managers:
 - a. AEW Capital Management p. 234
 - b. Ariel Investments (Active Int'l Equity) LLC p. 235
 - c. Arrowstreet (Active Int'l Equity) p. 236
 - d. Bank of New York Mellon (Securities Lending) p. 237
 - e. BlackRock Financial Management, Inc (CMBS) p. 238
 - f. Cohen & Steers Capital Mgt-Multi Strategy p. 239
 - g. PGIM (High Yield) p. 240
 - h. J.P. Morgan Investment Management Inc p. 241
 - i. Principal Real Estate Investors p. 242
 - j. Raith Capital Partners p. 243
 - k. RhumbLine Advisors LP (Passive Int'l Equity) p. 244
 - l. Xponance (f/k/a FIS Group) (Active Int'l Equity) p. 245

2. New Agreements
 - a. Resolution on General Investment Consultant p. 246
3. Appointment to Investment Advisory Committee
 - a. Dhvani Shah pp. 247-250
4. Updates to Investment Policy Manual
 - a. Resolution on Updates to NYSTRS' Responsible Stewardship Policy—Appendix A: Stock Proxy Voting p. 251
 - b. Resolution on Update to the AML/OFAC Compliance Policy p.252

Informational Reports

1. EDCIO Investment Discretion Report pp. 253-255
2. Mail Vote Quarterly Board Report p. 256
3. REAC Quarterly Transactions Board Report p. 257



Appendix G

TO: Retirement Board

FROM: T. Lee

SUBJECT: Quarterly Report of Executive Director and Chief Investment Officer Investment Discretion Exercised October - December 2024

Fixed Income

Period	Action Taken	Amount
Q/E 12/31/24	Net cash and securities reallocated into internally managed Long-Term Bonds	\$278.1 M
Q/E 12/31/24	Net cash and securities reallocated into internally managed Emerging Market Debt	\$251.5 M
Q/E 12/31/24	Net cash reallocated out of an externally managed High Yield account (CMIA)	\$75.0 M
Q/E 12/31/24	Net cash reallocated into an externally managed High Yield account (Advent)	\$75.0 M

Public Equities

Period	Action Taken	Amount
Q/E 12/31/2024	Net cash reallocated out of internally managed domestic equity portfolios	\$1.6B
Q/E 12/31/2024	Cash reallocated out of externally managed international equity portfolios (AQR, International strategy)	\$140M
Q/E 12/31/2024	Cash reallocated into externally managed international equity portfolios (Goldman Sachs Asset Management, India strategy)	\$140M



TO: Retirement Board
FROM: T. Lee
SUBJECT: Quarterly Report of Executive Director and Chief Investment Officer Investment Discretion Exercised October - December 2024

Real Estate - New Commitments

Date of Internal Inv. Comm. Approval	Investment Name	Amount	New or Renew
October 4 2024	Gables Palma Vista	\$19M	JV Partner Loan
October 18 2024	Brentford at the Mile	\$168.4M	Direct Equity Acquisition
November 14 2024	1250 Terminus Dr	\$43.4M	Direct Equity Acquisition
November 14 2024	I-15 Logistics	\$200M	Mortgage

Real Estate

Period	Action Taken	Amount
Q/E 12/31/2024	Net cash reallocated into externally managed CMBS portfolio (Blackrock)	\$50M



TO: Retirement Board
FROM: T. Lee
SUBJECT: Quarterly Report of Executive Director and Chief Investment Officer Investment Discretion Exercised October – December 2024

Private Equity/Debt – New Commitments

Date of Internal Inv. Comm. Approval	Investment Name	Amount	New or Renew
Oct 10 2024	Turning Rock Partners Fund III	\$120M	New
Dec 10 2024	Monomoy Credit Opportunities Fund III	\$200M	Renew



**New York State
Teachers'
Retirement
System**

Memorandum

Appendix H

TO: Retirement Board
FROM: T. Lee
SUBJECT: Quarterly Board Report of Mail Votesⁱ for the period October – December 2024

Date	Type (Full Board Vote or Investment Committee Vote)	Transaction
December 12, 2024	Investment Committee	Edens Investment Trust

ⁱ "...The Board may act by a unanimous vote of its members taken by mail and/or e-mail and other electronic means approved by the System, or by telephone confirmed by mail and/or other electronic means approved by the System, on occasional matters determined by the President to be non-controversial in nature so as not to require a special meeting of the Board but having circumstances which make it impractical to delay action until the next annual or stated meeting of the Board..." from NYSTRS' Bylaws



Appendix I

TO: Retirement Board
FROM: T. Lee
SUBJECT: REAC Quarterly Transactions Board Report of for the period October – December 2024

Transaction	Approved by REAC	ED/CIO Discretion Exercised
Veterans Industrial Park 215 – Direct Mortgage	Yes – 9/4/24	\$125M
Gables Palma Vista JV Partner Loan – Debt Investment	Yes – 10/8/24	\$19M
Brentford at the Mile – Direct Equity	Yes – 10/16/24	\$168.4M
1250 Terminus Drive – Direct Equity	Yes – 11/12/24	\$43.4M
I-15 Logistics Center – Direct Mortgage	Yes – 11/12/24	\$200M
Edens Investment Upsize – Direct Equity	Yes – 12/12/24	\$300M

NEW YORK STATE
TEACHERS' RETIREMENT SYSTEM
10 CORPORATE WOODS DRIVE, ALBANY NY

Disability Review Committee Meeting

A meeting of the Disability Review Committee of the Retirement Board was held at the System on January 29, 2025. The meeting was called to order at 11:32 p.m. by Eric Iberger, Chair.

The following individuals were in attendance:

Committee Members: Juliet Benaquisto, Paul Farfaglia, Eric Iberger, Donald A. Little III (via WebEx), David Keefe, Ruth Mahoney, Oliver Robinson

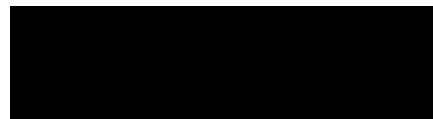
Board Members: Phyllis Harrington, Jennifer Longtin, Nicholas Smirensky

Upon motion of O. Robinson, seconded by R. Mahoney and unanimously carried, the meeting minutes of October 30, 2024 were approved.

E. Iberger, Chair, reported that the System's Medical Board had met monthly over the prior three months and that a disability denial resolution, a disability rescission resolution Tier 1 and a disability rescission resolution Tier 3 would be brought before the Board at its meeting on January 30, 2025.

There being no further business, the Committee unanimously adjourned at 11:35 p.m.

Respectfully submitted,

A solid black rectangular box used to redact the signature of the person submitting the document.

Thomas K. Lee

NEW YORK STATE
TEACHERS' RETIREMENT SYSTEM
10 Corporate Woods Drive, Albany NY

Ethics Committee Meeting

A meeting of the Ethics Committee of the Retirement Board was held at the System on January 29, 2025. The meeting was called to order by Paul Farfaglia, Chair, at 11:36 a.m.

The following individuals were in attendance:

Committee Members: Juliet Benaquisto, Paul Farfaglia, Oliver Robinson
Thomas Lee, Don Ampansiri

Board Members: Phyllis Harrington, David Keefe, Donald A. Little III (via WebEx),
Jennifer Longtin, Ruth Mahoney, Oliver Robinson, Nicholas
Smirensky

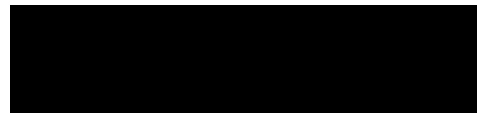
NYSTRS Staff: Miriam Dixon

Upon motion of J. Benaquisto, seconded by O. Robinson and unanimously carried, the minutes from the October 31, 2024 meeting were approved.

D. Ampansiri and M. Dixon reported that the Annual Disclosure Statements and EDCIO quarterly disclosures had been reviewed with no issues. There is one outstanding annual disclosure yet to be received and is expected shortly. A follow up report on the outstanding disclosure will be made at the next Ethics Committee meeting.

There being no further business, and with unanimous consent, the meeting adjourned at 11:37 a.m.

Respectfully submitted,

A solid black rectangular box used to redact the signature of the official.

Thomas K. Lee

NEW YORK STATE
TEACHERS' RETIREMENT SYSTEM
10 CORPORATE WOODS DRIVE, ALBANY NY

Executive Committee Meeting

A meeting of the Executive Committee of the Retirement Board of the New York State Teachers' Retirement System was held at the System on January 29, 2025.

The following individuals were in attendance:

Committee Members: David Keefe, Phyllis Harrington, Oliver Robinson, Nicholas Smirensky

Board Members: Juliet Benaquisto, Paul Farfaglia, Eric Iberger, Donald A. Little III (via WebEx), Jennifer Longtin, Ruth Mahoney

NYSTRS' Staff: Thomas K. Lee, Don Ampansiri, Miriam Dixon, Vijay Madala

The meeting was called to order by D. Keefe, Chair, at 12:29 p.m.

The following items were discussed:

1. Approval of minutes from October 30, 2024 meeting

Upon motion of P. Harrington, seconded by O. Robinson and unanimously carried, the minutes of the October 30, 2024 meeting were approved.

2. Legislative Update

D. Ampansiri reviewed 2024 Legislation of Interest, Program Bill 24-2 which was signed into law and the 2025 Legislative Program (Appendix A, pp. 3-13)

3. Finance Reports

The Committee members reviewed System financial reports (Appendix B, pp. 14-18).

4. Quarterly Signatory Additions and Deletions

The Committee members reviewed the quarterly signatory report (Appendix C, p. 19)

5. Business Continuity Plan Update and Disaster Response

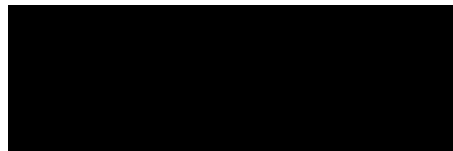
Upon motion of O. Robinson, seconded by N. Smirensky and unanimously carried, the Committee went into Executive Session at 12:43 p.m. to hear Business Continuity Plan updates given by M. Dixon and V. Madala.

Upon motion of P. Harrington, seconded by O. Robinson and unanimously carried, the Committee came out of Executive Session at 1:13 p.m.

The Committee will review the full Business Continuity Plan before the April Board meeting and will consider a motion to accept the plan as presented at the April Board meeting.

Having no further business, the Committee unanimously adjourned the meeting at 1:15 p.m.

Respectfully submitted,

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Thomas K. Lee



To: Retirement Board
From: D. Ampansiri, Jr./ K. Vrbanac
CC: T. Lee
Date: January 21, 2025
Re: NYSTRS 2025 Legislative Update

At each January Board meeting, staff provides a legislative update on legislation of interest for the previous year, any program bills signed into law, the legislative program for the current year, and any pertinent legislation of interest introduced thus far in the current legislative session that may have a significant impact on the System. Attached with this memorandum, please find the 2024 Legislation of Interest chart and the 2024 Legislative Program Grid. Please note that the Legislation of Interest chart lists only bills that passed either one or both houses and special interest bills of NYSTRS' members and retirees.

2024 Legislative Program

Program Bill 24-2, (2 year benefit recalculation bill S7492B/A10529). Governor Hochul signed Program Bill 24-2 on December 13, 2024 as Chapter 578 of the Laws of 2024. Chapter 578 amends Education Law Section 503 to allow retirees of the New York State Teachers' Retirement System who suspend retirement and return to work the option of a benefit recalculation after 2 additional years of creditable service, as opposed to 5 years. This Chapter takes effect on the sixtieth day after its signing (or February 11, 2025). Chapter 578 applies to any member who retires on or after February 11, 2025 as well as any member who is currently retired, suspends their retirement under 503.11 and re-retires on or after February 11, 2025.

2025 Legislative Program

The 2025 Legislative Program proposes one new bill 25-1 (MWBE Report). This bill would amend Education Law Section 508-a subdivision 2(b) to change the date in which NYSTRS is required to submit its MWBE report from 60 days after fiscal year end (June 30), or effectively on or before September 1, to on or before December 31 of the current year.

Staff is working to schedule meetings with Senator Robert Jackson, Chair of the Senate Civil Service and Pensions Committee and Assembly Member Stacey Pheffer Amato, Chair of Assembly Government Employees Committee to present and discuss our 2025 Legislative Program and seek introduction of program bill 25-1 in each respective committee.

2025 Legislation of Interest that may affect NYSTRS

For the fifth consecutive year, the commencement of the Legislative Session included the introduction of the Teachers' Fossil Fuel Divestment Act (S954/A1580). The Senate Civil Service and Pensions committee introduced the proposed bill on January 8, 2025, and the Assembly

Government Employees committee introduced a “same as” version on January 10, 2025⁴. This proposed bill did not pass either house in any of the prior 2021, 2022, 2023, and 2024 Legislative Sessions. Staff will continue to monitor and report back to the Board with any material movement on this bill and any other legislation that may have an impact on the System.

Highlights of the Proposed Legislation:

- Within 6 months of law being enacted, it requires the Retirement Board to create an exclusion list of all coal producers and oil and gas producers whose stocks, securities, equities, fixed income, assets or other obligations the System has monies/assets directly invested.
- The completed list shall be made available to the public and copy provided to the Senate and Assembly leadership.
- Retirement Board is required to notify any corporation or company on the exclusion list and the law requiring it.
- At the Retirement Board’s discretion, but no later than 2 years after the exclusion list is completed, and no less than every 2 years thereafter, the Board shall update the exclusion list to:
 - remove those no longer considered a coal producer
 - remove those no longer considered an oil and gas producer
 - add company or corporation meeting definition

2024 LEGISLATION OF INTEREST TO NYSTRS

Senate No. Assembly No.	Subject	Introduced By
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I. BUDGET

S8305C A8805C (Part M)	<p>Amends Labor Law Section 196-b to require employers to provide employees twenty hours of paid prenatal personal leave for health care services related to the employee's pregnancy during any fifty-two week calendar period which may be taken in hourly increments. Effective January 1, 2025.</p> <p>Last Action: 04/18/24 Passed Senate 04/18/24 Passed Assembly 04/19/24 Delivered to the Governor 04/20/24 Signed by the Governor [Chapter 55 of the Laws of 2024]</p>	Article VII (PPGG)
S8305C A8805C (Part GG)	<p>Amends Retirement and Social Security Law to waive the §211 and §212 income limitations allowing NYSTRS retirees to be employed in school districts and BOCES and earn compensation without suspension or diminution of their retirement allowance until June 30, 2025. Part GG is a one-year extension of Chapter 55 of the Laws of 2023 (Part V).</p> <p>Last Action: 04/18/24 Passed Senate 04/18/24 Passed Assembly 04/19/24 Delivered to the Governor 04/20/24 Signed by the Governor [Chapter 55 of the Laws of 2024]</p>	Article VII (PPGG)
S8305C A8805C (Part KK)	<p>Amends Retirement and Social Security Law to extend the period during which the calculation of the employee contribution rate for Tier 6 members is to be calculated using only a member's annual base wages for contributions to be made during fiscal years ending June 30, 2025 and June 30, 2026. Compensation earned for extracurricular programs, or any other pensionable earnings paid in addition to the annual base wages, will not be included in the employee contribution rate determination. Implementation date: school year July 1, 2024.</p> <p>Last Action: 04/18/24 Passed Senate 04/18/24 Passed Assembly 04/19/24 Delivered to the Governor 04/20/24 Signed by the Governor [Chapter 55 of the Laws of 2024]</p>	Article VII (PPGG)

January 21, 2025

Committees: GE = Assembly Governmental Employees;
W&M = Ways and Means; CS = Senate Civil Service and Pensions

<p>S8308C A8808C (Part KK)</p>	<p>Amends Public Officers Law to permit a public body, in their discretion, to use videoconferencing and remote participation in public meetings, regardless of emergency. Effective immediately and shall expire and deemed repealed July 1, 2026. Part KK is a two-year extension of Part WW of Chapter 56 of the Laws of 2022.</p> <p>Last Action: 04/18/24 Passed Senate 04/18/24 Passed Assembly 04/19/24 Delivered to the Governor 04/20/24 Signed by the Governor [Chapter 58 of the Laws of 2024]</p>	<p>Article VII (Part TED)</p>
<p>S8306C A8806C (Part J)</p>	<p>Amends Labor Law Section 206-c to require employers to provide employees thirty minutes of paid break time to express breast milk for such employee's nursing child each time employee has a reasonable need for up to three years following child birth. Effective the sixtieth day after it becomes law.</p> <p>Last Action: 04/19/24 Passed Senate 04/19/24 Passed Assembly 04/20/24 Delivered to the Governor 04/20/24 Signed by the Governor [Chapter 56 of the Laws of 2024]</p>	<p>Article VII (ELFA)</p>
<p>S8306C A8806C (Part M)</p>	<p>Amends Chapter 25 of the Laws of 2020 to provide sick leave for employees when such employee is subject to a mandatory or precautionary order of quarantine or isolation due to COVID-19. Effective immediately and shall expire and be deemed repealed July 31, 2025.</p> <p>Last Action: 04/19/24 Passed Senate 04/19/24 Passed Assembly 04/20/24 Delivered to the Governor 04/20/24 Signed by the Governor [Chapter 56 of the Laws of 2024]</p>	<p>Article VII (ELFA)</p>
<p>S8306C A8806C (Part QQ)</p>	<p>Amends Retirement and Social Security Law to change the definition of the final average salary for Tier 6 members to be based on the wages earned during any three consecutive years which provide the highest average wages. It also reduces the lookback to the same as Tiers 3, 4 and 5; if the salary for any year used in the period exceeds that of the average of the prior two years by more than 10%, the amount in excess of 10% shall be excluded from the computation. Effective immediately.</p> <p>Last Action: 04/19/24 Passed Senate 04/19/24 Passed Assembly 04/20/24 Delivered to the Governor 04/20/24 Signed by the Governor [Chapter 56 of the Laws of 2024]</p>	<p>Article VII (ELFA)</p>

January 21, 2025

Committees: GE = Governmental Employees;
W&M = Ways and Means; CS = Civil Service and Pensions

II. AMENDMENTS TO THE RETIREMENT AND SOCIAL SECURITY LAW

S5131 A5629	<p>Allows a retired member of a public retirement system to change their option election or beneficiary designation where the beneficiary has been convicted of domestic violence against the retired member.</p> <p>Last Action: 01/03/24 Referred to GE (Assembly) 05/14/24 Passed Senate 05/14/24 Delivered to Assembly and Referred to GE</p>	Webb Reyes
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III. AMENDMENTS TO THE EDUCATION LAW

S6361A A556A	<p>Requires employees of a New York state public retirement system, who are employed by their district to work for a not-for-profit, to provide written acknowledgement of membership termination in the retirement system.</p> <p>Last Action: 01/03/24 Referred to GE (Assembly) 03/01/24 Amend and Recommit to GE, Print# 556A (Assembly) 05/29/24 Passed Senate 05/29/24 Delivered to Assembly and Referred to GE (Assembly)</p>	Brouk Bronson
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IV. AMENDMENTS TO THE CIVIL SERVICE LAW

S8079 A8514	<p>Clarifies that an employee's time working in a provisional title shall count towards any required probationary period when the permanent appointment immediately follows the provisional appointment.</p> <p>Last Action: 01/16/24 Passed Assembly 01/16/24 Passed Senate 01/26/24 Delivered to the Governor 01/26/24 Signed by the Governor [Chapter 5 of the Laws of 2024]</p>	Pheffer Amato Jackson
S8216A A8876	<p>Allows individuals that are within 12 months of meeting the minimum age or education requirements for a competitive class civil service position to take the exam.</p> <p>Last Action: 03/04/24 Passed Assembly 03/13/24 Passed Senate 03/13/24 Returned to Assembly 09/04/24 Delivered to the Governor 09/04/24 Signed by the Governor [Chapter 303 of the Laws of 2024]</p>	Jackson Pheffer Amato

January 21, 2025

Committees: GE = Governmental Employees;
W&M = Ways and Means; CS = Civil Service and Pensions

S8557 A9386	Requires time spent as a provisional employee count towards any required term to qualify an employee to take a competitive examination accessible in their title. Last Action: 03/13/24 Passed Senate 05/06/24 Passed Assembly 05/06/24 Returned to Senate 09/04/24 Delivered to the Governor 09/04/24 Signed by the Governor [Chapter 307 of the Laws of 2024]	Jackson Pheffer Amato
S8948 A9935	Requires employers to disclose all information to an employee relating to allegations that such employee is unable to perform their duties due to a non-work related disability. Last Action: 05/30/24 Passed Assembly 06/04/24 Passed Senate 06/04/24 Returned to Assembly 09/04/24 Delivered to the Governor 09/04/24 Signed by the Governor [Chapter 306 of the Laws of 2024]	Jackson Pheffer Amato

V. PUBLIC OFFICERS LAW

S5500B A6146B	Provides public employees notice when their personnel record has been released to the public under the Freedom of Information Law. Last Action: 06/04/24 Passed Assembly 06/05/24 Passed Senate 06/05/24 Returned to Assembly 09/04/24 Delivered to Governor 09/04/24 Signed by the Governor [Chapter 302 of the Laws of 2024]	Skoufis Buttenschon
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VI. STATE TECHNOLOGY LAW

S5007B A5736B	Establishes the "Secure Our Data Act" to ensure the New York state government is taking necessary steps to protect the personal information that it collects and maintains. Last Action: 01/03/24 Referred to GE (Assembly) 03/18/24 Passed Senate 03/18/24 Referred to Governmental Operations (Assembly)	Gonzalez Solages
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January 21, 2025

Committees: GE = Governmental Employees;
W&M = Ways and Means; CS = Civil Service and Pensions

S8090 A8549	Requires all state agencies to use gender neutral terminology for website content, including forms and documents accessible through the website. Effective the one hundred eightieth day after it becomes law. Last Action: 01/16/24 Passed Senate 01/23/24 Passed Assembly 01/26/24 Delivered to Governor 01/26/24 Signed by the Governor [Chapter 21 of the Laws of 2024]	Cleare Rosenthal
S8021 A8564	Requires state agency websites be made mobile friendly if and when changes to the form and function of such websites are being made until January 1, 2027, after which point, all state agencies should be made mobile friendly. Last Action: 01/23/24 Passed Assembly 01/30/24 Passed Senate 02/07/24 Delivered to Governor 02/07/24 Signed by the Governor [Chapter 45 of the Laws of 2024]	Fernandez Otis

VII. OTHERS

S5615 A2833	Amends State Finance Law to require all state agencies to procure all “end point devices” that meet the National Institute of Standards and Technology guidelines for computer security. Effective the ninetieth day after it becomes law. Last Action: 05/30/24 Passed Assembly 06/03/24 Passed Senate 06/03/24 Returned to Assembly 12/12/24 Delivered to Governor 12/21/24 Signed by the Governor [Chapter 608 of the Laws of 2024]	Thomas Otis
S1424A A7810A	Amends Executive Law to direct contracting state agencies to develop a three-year growth plan to increase MWBE participation. Last Action: 05/16/24 Passed Senate 05/16/24 Delivered to Assembly 05/16/24 Referred to Governmental Operations (Assembly) 05/17/24 Amend and Recommit to Governmental Operations, Print#7810A (Assembly)	Baily Cruz

January 21, 2025

Committees: GE = Governmental Employees;
W&M = Ways and Means; CS = Civil Service and Pensions

S2449 A5178	Amends Executive Law to prohibit any employer or licensing agency from requiring a prospective employee to disclose their age, date of birth or date of graduation from an educational institution on an initial employment application or during an interview, unless it is for an occupational qualification or need. Last Action: 01/03/24 Referred to Governmental Operations (Assembly) 02/12/24 Passed Senate 02/12/24 Referred to Governmental Operations (Assembly)	Krueger Kim
S99A	Amends Labor Law to provide all private and public employees access to their personnel records and notification when a negative report is filed against them. Last Action: 04/16/24 Amend and Recommit to Labor, Print# 1959A (Assembly) 05/13/24 Passed Senate 05/13/24 Delivered to Assembly and Referred to Labor (Assembly)	Gounardes Gonzalez- Rojas
S3260 A10019	Amends Estates, Powers and Trusts Law to disqualify a surviving spouse in the event a decree or judgment of annulment or nullity or dissolving of a marriage is issued after the deceased spouse died; the marriage is then deemed a nullity immediately prior to the death of such spouse. Last Action: 04/17/24 Passed Senate 04/17/24 Delivered to Assembly and Referred to Judiciary (Assembly) 05/01/24 Referred to Judiciary (Assembly)	Hoylman- Sigal Braunstein
S1860	Amends Labor Law to require employers to provide employees with information on mental health issues and resources and to destigmatize mental health in the workplace. Last Action: 05/14/24 Passed Senate 05/14/24 Delivery to Assembly and Referred to labor (Assembly)	Brouck
S9369 A9768	Amends Labor Law to extend the provisions of Chapter 301 of 2022 for an additional two years to allow an employer, with consent of employee, to deduct wages from employee's paycheck to cover specified goods and services. Last Action: 04/16/24 Passed Assembly 05/28/24 Passed Senate 06/26/24 Delivered to Governor 06/28/24 Signed by the Governor [Chapter 142 of the Laws of 2024]	Ramos Raga

January 21, 2025

Committees: GE = Governmental Employees;
W&M = Ways and Means; CS = Civil Service and Pensions

S8663 A7241A	Amends Executive Law to exclude non-electronic notarial acts from the record-keeping rules and regulations set forth by the Department of State. Last Action: 05/06/24 Passed Assembly 06/05/24 Passed Senate 06/05/24 Returned to Assembly 11/15/24 Delivered to the Governor 11/22/24 Vetoed by the Governor, Memo 36	Hoylman-Sigal Lavine
S8979 A7091	Amends Public Authorities Law to require electric charging stations and electric vehicle capable parking spaces to accommodate wheelchair accessible vehicles. Effective the sixtieth date after it becomes law. Last Action: 04/02/24 Passed Assembly 06/04/24 Passed Senate 06/04/24 Returned to Assembly 12/12/24 Delivered to Governor 12/21/24 Signed by the Governor [Chapter 618 of the Laws of 2024]	Persaud Simon
S3065B A8934A	Amends Labor Law to require all employers to develop and implement programs to prevent workplace violence and bullying. Last Action: 05/30/24 Passed Senate 06/03/24 Passed Assembly 06/03/24 Returned to Senate 12/12/24 Delivered to the Governor 12/21/24 Vetoed by the Governor, Memo 130	Ramos Bronson
S6635 A5745	Amends Workers' Compensation Law to expand the ability to all workers to receive PTSD coverage for mental injury premised upon work-related stress under NYS Workers' Compensation Coverage. Last Action: 04/04/24 Passed Senate 06/05/24 Passed Senate 06/05/24 Returned to Senate 12/05/24 Delivered to Governor 12/06/24 Signed by the Governor [Chapter 546 of the Laws of 2024]	Ramos Reyes

VIII. SPECIAL INTEREST MEMBER BILLS

S5235A	Grants James Demarco retroactive membership in NYSTRS from Tier 2 to Tier 1 based on time he was a non-member for seasonal employment in July 1969. Last Action: 01/03/24 Referred to CS (Senate) 03/11/24 Amend and Recommit to CS, Print#5235A	Gallivan
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January 21, 2025

Committees: GE = Governmental Employees;
W&M = Ways and Means; CS = Civil Service and Pensions

A9494	<p>Grants Susan Ruscitto additional service credit in NYSTRS to recalculate her retirement benefit with 20 years and 2 months, which was the original service credit reported by her employer; her actual verified service credit was 19 years and 8 months.</p> <p>Last Action: 03/14/24 Referred to GE</p>	Santabarbara
S5290A A5110A	<p>Grants Eileen Saumell service credit based on her employment for the period of August 8, 1994 to August 27, 2004 with the Nassau County Demonstration Project, a non-participating employer.</p> <p>Last Action: 01/03/24 Referred to CS 03/28/24 Amend and Recommit to CS, Print#5290A 04/02/24 Amend and Recommit to GE, Print#5110A</p>	Weik Gandolfo
S5318A A5111A	<p>Allows Carl Spatola to receive a refund of his accumulated 3% contributions paid to NYSTRS for the period in which the transfer from NYCTRS to NYSTRS was not initiated and the cessation date was not established.</p> <p>Last Action: 01/03/24 Referred to CS (Senate) 03/28/24 Amend and Recommit to CS, Print#5318A (Senate) 04/02/24 Amend and Recommit to GE, Print#5111A (Assembly)</p>	Weik Gandolfo
S5361A A5887A	<p>Allows Peter Guarino to be reclassified as a Tier 4 member with a date of membership of June 13, 2008, based on time he was a non-member but employed as a substitute teacher with the Lansing Central School District, Newfield City School District and Ithaca City School District.</p> <p>Last Action: 01/03/24 Referred to GE (Assembly) 04/29/24 Amend and Recommit not GE, Print#5887A (Assembly) 05/22/24 Passed Senate 05/22/24 Delivered to Assembly and Referred to GE (Assembly)</p>	Manion
S9129	<p>Allows Christine Hasseler, retired Tier 1 member of NYSTRS, to have her retirement benefit recalculated to include retirement incentive payments that her employer failed to pay her within the required timeframe, before the end of her retirement year.</p> <p>Last Action: 04/29/24 Referred to CS (Senate) 05/17/24 Referred to GE (Assembly)</p>	Helming
S9803 A10547	<p>Allows Jeffrey Alva Beall, who retired as a Tier 4 from NYSTRS before Chapter 41 of the Laws of 2016 was signed into law, to purchase 3 years of military service for the period of active duty service between April 17, 1984 to February 27, 1987, retroactive to his effective date of retirement.</p> <p>Last Action: 05/30/24 Referred to CS (Senate) 06/03/24 Referred to GE (Assembly)</p>	Helming

January 21, 2025

Committees: GE = Governmental Employees;
W&M = Ways and Means; CS = Civil Service and Pensions

NYSTRS 2024 LEGISLATIVE PROGRAM GRID

Subject	2024 Bill No.	Sponsor	Com. Ref.	Report 1 st /2 nd	3 RD Reading	Passed	To Gov.	Gov.'s Action
24-2 Allows retirees of the New York State Teachers' Retirement System who suspend retirement the option of a benefit recalculation after 2 years of creditable service. Cost - Negligible	S7462B	Ryan	CS 01/03/24 05/01/24 05/07/24 Finance 06/03/24 Finance 06/04/24 Rules 06/04/24	06/04/24 Ordered to Third Reading	06/04/24 CAL. 1703	06/06/24	12/02/24	Signed by the Governor on December 13, 2024 as Chapter 578 of the Laws of 2024 Effective Date: February 11, 2025
	----- A10529	----- Burke	----- GE 06/06/24 W&M	----- 06/06/24 Ordered to Third Reading	----- 06/06/24 CAL. 519	----- 06/06/24	----- 12/02/24	

January 21, 2025

Committees: GE = Assembly Governmental Employees Committee;
CS = Senate Civil Service and Pensions Committee; W&M = Assembly Ways and Means

NEW YORK STATE
TEACHERS' RETIREMENT SYSTEM

MEMORANDUM

TO: T. Lee

FROM: Office of the CFO / Finance Department

DATE: January 29, 2025

SUBJECT: Retirement Board Package

Attached are the System's quarterly financial statements and related schedules for the quarters ended December 31, 2024 and 2023.

The following is a list of the documents included:

1. Statements of Fiduciary Net Position (Unaudited)
2. Statements of Changes in Fiduciary Net Position (Unaudited)
3. Schedule of Administrative Expenses (Unaudited)



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
Statements of Fiduciary Net Position (Unaudited)

December 31, 2024 and 2023

Assets	<u>2024</u>	<u>2023</u>
Investments at fair value:		
Domestic equity	\$ 49,431,222,593	\$ 46,308,255,702
International equity	20,693,317,003	19,327,018,990
Global equity	6,158,238,474	5,298,450,582
Real estate equity	16,453,145,721	16,765,720,409
Private equity	14,335,588,052	13,166,925,476
Domestic fixed income	21,962,730,958	19,338,897,434
High-yield bonds	1,571,793,182	1,459,168,748
Global bonds	2,889,618,413	2,739,220,723
Real estate debt	8,498,257,868	7,433,620,635
Private debt	2,557,413,107	2,189,989,787
Cash equivalents	1,946,326,933	4,381,464,256
Total investments	<u>146,497,652,304</u>	<u>138,408,732,742</u>
Receivables:		
Employer	976,961,387	912,096,004
Member	116,864,567	99,678,631
Investment income	398,790,862	357,929,208
Investment sales	68,810,249	222,397,623
Total receivables	<u>1,561,427,065</u>	<u>1,592,101,466</u>
Other assets:		
Securities lending collateral, invested	254,158,169	407,414,507
Member loans	283,064,908	266,562,870
Net investment in capital assets	23,831,188	23,004,387
Miscellaneous assets	5,752,814	5,797,027
Total other assets	<u>566,807,079</u>	<u>702,778,791</u>
Total assets	<u>148,625,886,448</u>	<u>140,703,612,999</u>
Deferred outflows of resources:		
Changes in net OPEB liability	15,718,775	15,103,133
Changes in net pension liability	12,201,645	15,366,904
Total deferred outflows of resources	<u>27,920,420</u>	<u>30,470,037</u>
Liabilities		
Securities lending collateral, due to borrowers	252,842,956	405,855,799
Investment purchases payable	110,368,537	481,264,028
Mortgage escrows and deposits, net of investments	14,035,000	2,072,379
Net OPEB liability	50,667,926	48,846,994
Other liabilities	204,212,190	157,862,038
Total liabilities	<u>632,126,609</u>	<u>1,095,901,238</u>
Deferred inflows of resources:		
Changes in net OPEB liability	1,280,285	2,249,463
Changes in net pension liability	9,080,289	1,305,207
Total deferred inflows of resources	<u>10,360,574</u>	<u>3,554,670</u>
Net position restricted for pensions	<u>\$148,011,319,685</u>	<u>\$139,634,627,128</u>



For the six months ending December 31, 2024 and 2023

Additions:	<u>2024</u>	<u>2023</u>
Investment income:		
Net increase in fair value of investments	\$ 4,186,777,041	\$ 4,486,715,173
Interest	634,014,163	511,055,086
Dividends	614,540,763	610,953,627
Real estate, net operating income	272,504,031	243,836,287
Securities lending, gross earnings	8,550,645	11,605,257
Other (net)	(2,092,606)	2,516,271
	<u>5,714,294,037</u>	<u>5,866,681,701</u>
Less: Investment expenses	218,900,556	249,155,204
Securities lending:		
Broker rebates	7,007,563	8,998,573
Management fees	223,041	382,133
Depreciation on collateral	204,395	242,699
Net investment income	<u>5,487,958,482</u>	<u>5,607,903,092</u>
Contributions:		
Employer	971,650,033	950,085,055
Member	128,122,768	111,441,512
Transfers (to)/from other systems	5,583,293	7,920,768
Total contributions	<u>1,105,356,094</u>	<u>1,069,447,335</u>
Net additions	<u>6,593,314,576</u>	<u>6,677,350,427</u>
Deductions:		
Retirement benefit payments, periodic	4,308,484,757	4,181,378,399
Beneficiary payments	38,229,743	31,347,209
Return of contributions	10,811,406	11,859,659
Administrative expenses	45,903,765	39,674,974
Total deductions	<u>4,403,429,671</u>	<u>4,264,260,241</u>
Net increase in net position	2,189,884,905	2,413,090,186
Net position restricted for pensions, beginning of year	<u>145,821,434,780</u>	<u>137,221,536,942</u>
Net position restricted for pensions, end of period	<u>\$148,011,319,685</u>	<u>\$139,634,627,128</u>



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
Schedule of Administrative Expenses (Unaudited)
Compared to Budget Appropriations for 2024-2025

	Budget Appropriations 2024-2025	Expenses and Encumbrances YTD 12/31/2024	Remaining Balance 12/31/2024	Actual Expenses YTD 12/31/2024
Salaries:				
Salaries	\$ 52,402,705	\$ 23,335,335	\$ 29,067,370	\$ 23,335,335
Overtime salaries	65,000	63,991	1,009	63,991
Social Security	3,675,395	1,533,725	2,141,670	1,533,725
Subtotal Salaries	56,143,100	24,933,051	31,210,049	24,933,051
Benefits				
Employees retirement	7,325,761	3,866,448	3,459,313	3,866,448
Dental insurance	380,827	167,958	212,869	167,958
Health insurance	9,509,399	3,887,550	5,621,849	3,882,515
OPEB contribution	6,804,000	3,402,000	3,402,000	3,402,000
Civil service	62,000	73,690	(11,690)	73,690
Subtotal Benefits	24,081,987	11,397,646	12,684,341	11,392,611
Total salaries and benefits	80,225,087	36,330,697	43,894,390	36,325,662
Building occupancy:				
Building security and vending	396,000	344,769	51,231	167,378
Building supplies and expenses	155,000	123,348	31,652	103,096
Heat, light and power	530,000	155,728	374,272	155,728
Insurance	483,308	452,703	30,605	452,703
Municipal assessments	199,000	67,340	131,660	67,340
Office supplies and expenses	160,350	117,133	43,217	116,354
Storage	68,880	62,000	6,880	22,020
Telephone	585,000	286,809	298,191	241,209
Total building occupancy	2,577,538	1,609,830	967,708	1,325,828
Computer:				
IT Hardware Purchases	1,222,600	245,848	976,752	125,234
IT Software Purchases	702,500	558,111	144,389	497,479
Software and support services	4,704,995	3,581,807	1,123,188	2,016,462
Project Costs - Hardware and Software	336,000	35,865	300,135	35,865
Total computer	6,966,095	4,421,631	2,544,464	2,675,040
Personnel and meeting:				
Board - meetings, travel and education	150,000	27,303	122,697	27,303
Delegates meeting	70,000	119,276	(49,276)	119,276
Dues	465,685	115,265	350,420	115,265
Employee Engagement	58,500	20,137	38,363	20,137



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
 Schedule of Administrative Expenses (Unaudited) (Continued)

Compared to Budget Appropriations for 2024-2025

	Budget Appropriations 2024-2025	Expenses and Encumbrances YTD 12/31/2024	Remaining Balance 12/31/2024	Actual Expenses YTD 12/31/2024
Personnel and meeting (continued):				
Library	\$ 52,175	\$ 11,081	\$ 41,094	\$ 10,406
Overtime meals	2,500	1,480	1,020	1,480
Personnel expenses	359,850	165,011	194,839	152,456
Pre-retirement seminars	76,000	54,477	21,523	54,477
Staff schooling	863,721	566,472	297,249	376,330
Travel and automobile expense	554,380	218,995	335,385	218,995
Tuition assistance	50,000	6,948	43,052	6,948
Wellness fund	9,250	2,887	6,363	162
Meeting Expense	10,450	5,641	4,809	5,641
Total personnel and meeting	<u>2,722,511</u>	<u>1,314,973</u>	<u>1,407,538</u>	<u>1,108,876</u>
Professional and governmental services:				
Auditors - financial	429,700	397,700	32,000	331,780
Disability medical examinations	100,000	49,517	50,483	49,517
Postage and cartage	1,020,200	572,734	447,466	507,659
Professional fees and services	2,002,984	1,173,133	829,851	614,558
Publications	234,000	119,005	114,995	81,911
Project Costs - Professional Fees	1,493,000	2,452,568	(959,568)	1,013,914
Statutory custodian charges	150,000	76,250	73,750	76,250
Total professional and governmental services	<u>5,429,884</u>	<u>4,840,907</u>	<u>588,977</u>	<u>2,675,589</u>
Capital improvement program:				
Depreciation - building and improvements	1,715,883	920,359	795,524	920,359
Depreciation - equipment	308,310	153,590	154,720	153,590
Amort./depreciation - computer micro	1,505,999	493,220	1,012,779	493,220
Building improvement expense	273,000	145,853	127,147	80,626
Building maintenance contracts	847,571	754,343	93,228	104,418
Equipment	143,000	4,429	138,571	4,429
Equipment maintenance	67,000	43,779	23,221	24,855
Fleet maintenance	40,000	11,273	28,727	11,273
Capital contingency	228,502	—	228,502	—
SBITA Asset Amortization Expense	120,736	—	120,736	—
Total capital improvement program	<u>5,250,001</u>	<u>2,526,846</u>	<u>2,723,155</u>	<u>1,792,770</u>
Total Administration Expenses	<u>\$ 103,171,116</u>	<u>\$ 51,044,884</u>	<u>\$ 52,126,232</u>	<u>\$ 45,903,765</u>



Quarterly Signatory Additions & Deletions

For Quarter Ended December 31, 2024

Division	Name	Position	Warrant Signatory	Document Signatory

No changes for the quarter ended December 31, 2024

Appendix C

NEW YORK STATE
TEACHERS' RETIREMENT SYSTEM
Audit Committee Meeting

A meeting of the Audit Committee of the New York State Teachers' Retirement System was held at the System on January 29, 2025.

Committee Members: Juliet Benaquisto, Phyllis Harrington, Eric Iberger,
Jennifer Longtin, Oliver Robinson

Board Members: Paul Farfaglia, David Keefe, Donald A. Little III (via WebEx),
Ruth Mahoney, Nicholas Smirensky

NYSTRS Staff: Thomas K. Lee, Don Ampansiri, Kathy Ebert, Bruce Woolley,
Teddi Kaczmarek, Darlene Dempsey

Audit Committee Advisor: Sue Landauer (via WebEx)

O. Robinson, Chair, called the meeting to order at 1:15 p.m.

1. Approval of Minutes from December 11, 2024

Upon motion of J. Benaquisto seconded by E. Iberger and unanimously carried, the Committee approved the minutes of the December 11, 2024 meeting.

2. Internal Audit Report for the year ending December 31, 2024

K. Ebert and B. Woolley reviewed the report.

3. Internal Audit Plan for the year ending December 31, 2025

K. Ebert presented the Internal Audit plan for the audit of the year ending December 31, 2025.

4. Resolution to Approve the Internal Audit Plan

Upon motion of J. Longtin, seconded by J. Benaquisto and unanimously carried, the Audit Committee approved the following resolution:

WHEREAS, System staff has presented to the Audit Committee of the Retirement Board a proposed internal audit plan for the year

ending December 31, 2025, a copy of which is annexed hereto and made a part hereof as Appendix A, attached; be it

RESOLVED, That the Internal Audit Plan for the year ending December 31, 2025 is approved as presented.

5. Executive Session

Upon motion of J. Longtin, seconded by E. Iberger and unanimously carried, the Committee went into Executive Session at 1:39 p.m. to discuss personnel matters. Upon motion of J. Longtin, seconded by J. Benaquisto and unanimously carried, the Committee came out of Executive Session at 1:58 p.m.

There being no further business, and with unanimous consent, the meeting adjourned at 1:58 p.m.

Respectfully submitted,

A solid black rectangular box redacting the signature of the person submitting the document.

Thomas K. Lee

Appendix A: 2025 Audit Plan

	Type	Auditable Entity	Engagement Objective To provide reasonable assurance that controls are properly designed and operating effectively to support the underlying processes
1	RA	Participating Employer Review	Verify salary, service and demographic information with a sample of participating employers agrees to System records
2	RA	Loans	Verify the receipt and recording of payments to a member's outstanding loan balance are accurate and timely
3	RA	Disability Retirement	Create disability retirement payments and review earnings after retirement
4	RA	Death Benefit	Create active member death benefits that are accurate and complete
5	RA	Refunds	Refund of member contributions are in compliance with policy and procedures
6	RA	Retirement Benefit	Create retirement benefits that are accurate and complete
7	AM	Mortgage Servicing	Verify mortgage servicing, including mortgage transactions and monitoring the portfolio for compliance with loan documents and IPM
8	GA	Annual Actuarial Valuation	Evaluate the Actuarial Valuation as of June 30, 2024
9	GA	Contract Management	Procurement of goods and services in compliance with existing policies
10	GA	Operating Expenses	Verify purchase from p-cards are in compliance with existing policy and procedures
11	GA	Accounts Payable	Travel expenses in compliance with existing policies
12	GA	Business Continuity	Ensure the organization is prepared for unexpected disruptions and to continue essential operations
13	GA/RA	Accounts Receivable	Record collections and write-offs in the financial system accurately, completely, and in a timely manner
14	GA/RA	Billing to Participating Employers	Create bills to participating employers in compliance with policy and procedures, and recorded accurately, completely and timely
15	GA/RA	Cash Control - Finance	Receipt of funds for transfer reserves and posting service to a member's account are accurate and complete
16	IT	Application Controls	Manage user access rights to application and services
17	IT	IT General Controls	Maintain and dispose of devices used by staff to access information systems
18	IT	IT Governance	Evaluate IT policies for third party solutions are in accordance with regulatory, legal, risk, environmental, and operational requirements
19	RA	Transfer Service Credit	Transfer service credit to another eligible retirement system
20	RA	Member Service Credit	Verify prior service credit posted to a member's account
21	GA	Governance	Performance and management of risk using National Conference on Public Employee Retirement Systems best practices
22	GA	Compliance	Adhere to laws, regulations, policies and contractual obligations
23	GA	Financial Accounting	Manage and record the acquisition and disposition of assets
24	AM	Public Equity Portfolio Management	Invest and oversee the internally managed funds
25	AM	FI External Fund Management	Select and monitor fixed income external fund managers
26	AM/GA	Warrants	Evaluate process for proper controls and efficiencies

Key

18	Committed engagement
8	Additional pipeline
26	Total engagements

**NEW YORK STATE
TEACHERS' RETIREMENT SYSTEM**

**BOARD MEETING
January 30, 2025**

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NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
10 CORPORATE WOODS DRIVE, ALBANY, NY

THE ANNUAL MEETING OF THE NEW YORK STATE TEACHERS' RETIREMENT BOARD was held at the System on January 30, 2025. The meeting was called to order at 8:30 a.m. by President David Keefe. Juliet Benaquisto led the group in the Pledge of Allegiance.

ATTENDANCE:

Present: Juliet Benaquisto, Paul Farfaglia, Phyllis Harrington, Eric Iberger, David Keefe, Donald A. Little III (via WebEx), Jennifer Longtin, Ruth Mahoney, Oliver Robinson, Nicholas Smirensky and Thomas Lee

A. Election of Retirement Board Officers

P. Farfaglia nominated D. Keefe for President and O. Robinson for Vice-President. There were no further nominations. Upon motion of P. Farfaglia, and unanimously seconded and carried, D. Keefe and O. Robinson were elected as President and Vice President of the Board.

B. Introduction of Visitors

T. Lee introduced the following visitors: Steve Greenberg, Greenberg PR; John Daley, NYSSBA; Pete Savage, NYSUT (via WebEx); McCyril Espanol, WithIntelligence (via WebEx); Robert Steyer, Pensions & Investments

C. Correspondence

None.

D. Approval of Board Minutes: October 31, 2024

There being no additions or corrections to the minutes of October 31, 2024, the minutes were approved with a motion made by N. Smirensky, seconded by P. Harrington and unanimously carried.

Committee Reports/Action Items

A. Audit Committee

O. Robinson, Chair, reported that the Committee had met on December 11,

2024 and January 29, 2025 and had reviewed audit reports and the 2025 Audit Plan.

1. Resolution on Audit Committee Charter (R1)

J. Longtin offered the following resolution, seconded by E. Iberger and

unanimously carried by the Board:

RESOLVED, That the amended Audit Committee Charter, as presented to and reviewed by the Retirement Board, is hereby approved and adopted as the charter of the Retirement System's Audit Committee.

2. Resolution on Internal Audit Plan 2025 (R2)

J. Benaquisto offered the following resolution, seconded by J. Longtin and

unanimously carried by the Board:

WHEREAS, System staff has presented to the Audit Committee of the Retirement Board a proposed internal audit plan for the year ending December 31, 2025, a copy of which is annexed hereto and made a part hereof as Appendix A p. 9; be it

RESOLVED, That the Internal Audit Plan for the year ending December 31, 2025 is approved as presented.

B. Disability Review Committee

1. Disability Denial Resolution (R3)

P. Farfaglia offered the following resolution, seconded by J. Benaquisto and

unanimously carried by the Board:

WHEREAS, After reviewing the medical information submitted in connection with the following members, the Medical Board has determined the members are not incapacitated for the performance of gainful employment and has recommended the members applications be denied, be it

RESOLVED, That the applications for retirement on account of disability submitted by the following members be denied as recommended by the Medical Board:



2. Disability Rescission Resolution – Tier 1 (R4)

R. Mahoney offered the following resolution, seconded by J. Benaquisto and

unanimously carried by the Board:

WHEREAS, After reviewing the physician's report of the following annuitant who has retired for disability, the Medical Board believes they are improved and no longer incapacitated for the performance of duty and recommended they be restored to active membership, therefore, be it

RESOLVED, That upon recommendation of the Medical Board, the action taken in retiring the following member for disability be rescinded and they be restored to active membership on the date indicated:

<u>EmplID</u>	<u>Date Retired</u>	<u>Date Restored</u>
[REDACTED]	11/14/1996	12/12/2024

3. Disability Rescission Resolution – Tier 3 (R5)

J. Benaquisto offered the following resolution, seconded by P. Farfaglia and

unanimously carried by the Board:

WHEREAS, After reviewing the physician's report of the following annuitant who has retired for disability, the Medical Board believes they are improved and no longer incapacitated for the performance of all gainful employment and recommends they be restored to active membership; therefore, be it

RESOLVED, That upon recommendation of the Medical Board, the action taken in retiring the following member for disability be rescinded and they be restored to active membership on the date indicated:

<u>EmplID</u>	<u>Date Retired</u>	<u>Date Restored</u>
[REDACTED]	04/28/2004	1/09/2025

C. Executive Committee

D. Keefe said the Committee met January 29, 2025 and reviewed Legislative updates, System financials, a signatory report and heard a presentation on the System Business Continuity Plan. The Board will review the full Business Continuity Plan and take action on it at the April 2025 Board meeting.

D. Ethics Committee

P. Farfaglia, Chair, reported that the Committee had met on January 29, 2025 to hear reports on annual disclosure statements and EDCIO quarterly disclosures.

E. Investment Committee

1. Consent Agenda Items A (Appendix B, pp. 10-11)

N. Smirensky, Chair, asked the Board members if any of the consent agenda items should be moved to regular discussion items. Hearing no objections, the Board proceeded to move the Consent Agenda Items #1 A together with one motion.

R. Mahoney offered the following consent agenda resolutions, seconded by E.

Iberger and unanimously carried by the Board:

A. Renew Managers

- AEW Capital Management (R6)

RESOLVED, That the System's Executive Director and Chief Investment Officer is authorized to renew the agreement with AEW Capital Management, LP to manage a portion of the System's portfolio to be actively invested in the securities of real estate investment trusts ("REITs") and real estate operating companies ("REOCs") for a period of one year, effective April 15, 2025.

- Ariel Investments LLC (R7)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with Ariel Investments LLC to manage a portion of the System's assets as an MSCI ACWI ex-US international equity manager for a period of one year, effective April 10, 2025.

- Arrowstreet Capital LP (R8)

WHEREAS, Arrowstreet Capital LP was hired as an international equity manager on July 18, 2017 and as a global equity manager on March 26, 2019; now be it therefore

RESOLVED, That, the Executive Director and Chief Investment Officer is authorized to renew the agreement with Arrowstreet Capital LP for a period of one year, effective March 26, 2025, to manage (i) a portion of the System's assets as an international equity manager benchmarked to the MSCI ACWI ex-US index, and (ii) a portion of the System's assets as a global equity manager benchmarked to the MSCI ACWI index.

- Bank of NY Mellon (Securities Lending) (R9)

RESOLVED, the Executive Director and Chief Investment Officer is authorized to renew the agreement with The Bank of New York Mellon to act as an agency securities lender for a portion of the System's public securities assets for a period of one year, effective March 17, 2025.

- Black Rock Financial Management, Inc. (CMBS) (R10)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with Black Rock Financial Management,

Inc. to manage a portion of the System's assets in Commercial Mortgage Backed Securities ("CMBS"), for a period of one year, effective April 3, 2025.

- Cohen & Steers Capital Mgt – Multi Strategy (R11)

RESOLVED, That the System's Executive Director and Chief Investment Officer is authorized to renew the agreement with Cohen & Steers Capital Management, Inc. to manage a portion of the System's portfolio to be actively invested in the securities of real estate investment trusts ("REITs") and real estate operating companies ("REOCs") for a period of one year, effective February 12, 2025.

- J.P. Morgan Investment Management Inc. (R12)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with J.P. Morgan Investment Management Inc. to manage a portion of the System's assets as an active U.S. high yield manager benchmarked to the ICE BofAML BB-B US High Yield Constrained Index (HUC4) (f/k/a Bank of America Merrill Lynch BB-B U.S. High Yield Constrained Index) for a period of one year, effective March 5, 2025.

- PGIM, Inc. (R13)

RESOLVED, That the Executive Director and Chief Investment Officer, or designee, is authorized to renew the agreement with PGIM, INC. to manage a portion of the System's assets as an active U.S. high yield manager benchmarked to the Bloomberg US High Yield 1% Issuer Capped Index (I09038US) for a period of one year, effective February 21, 2025.

- Principal Real Estate Investors (R14)

RESOLVED, That the System's Executive Director and Chief Investment Officer is authorized to renew the agreement with Principal Real Estate Investors, LLC to manage a portion of the System's portfolio to be actively invested in the securities of real estate investment trusts ("REITs") and real estate operating companies ("REOCs") for a period of one year, effective February 11, 2025.

- Raith Capital Partners (R15)

RESOLVED, That the System's Executive Director and Chief Investment Officer is authorized to renew the agreement with Raith Capital Partners, LLC to act as a Debt separate account advisor and in such role to advise on the acquisition, management and exit of public and private opportunistic commercial real estate debt opportunities for a period of one year, effective February 7, 2025.

- RhumbLine Advisors (R16)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with RhumbLine Advisors LP to manage a portion of the System's assets as a passive international equity manager, benchmarked to the MSCI ACWI ex-US Index, for a period of one year commencing March 30, 2025.

- Xponance (f/k/a FIS Group) (R17)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with Xponance (formerly known as FIS Group, Inc. with a name change to Xponance effective 4/1/20) to manage a portion of the System's assets as a manager of international equity managers, benchmarked to the ACWI ex-US Index, for a period of one year commencing April 25, 2025.

2. New Agreement

- a. Resolution on General Investment Consultant (R18)

J. Longtin offered the following resolution, seconded by R. Mahoney and unanimously carried by the Board:

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to contract with Callan LLC to act as a general investment consultant, to review the System's asset allocation and recommend any changes therein, if necessary, and to monitor the performance of the System's external investment managers, for a period of one year, commencing May 1, 2025, at an annual cost of \$523,362 which includes the fee for an asset liability study.

3. Appointment to Investment Advisory Committee (R19)

- a. Dhvani Shah

J. Longtin offered the following resolution, seconded by R. Mahoney and unanimously carried by the Board:

WHEREAS, Dhvani Shah has appropriate experience and background to serve as a member of the Investment Advisory Committee; be it

RESOLVED, That the Retirement Board hereby appoints Ms. Shah as a member of the Investment Advisory Committee, effective immediately and ending December 31, 2028.

4. Updates to the System Investment Policy Manual

- a. Resolution on Updates to Responsible Stewardship Policy-Appendix A:Stock Proxy Voting (R20)

O. Robinson offered the following resolution, seconded by J. Longtin and unanimously carried by the Board:

RESOLVED, That the updated Responsible Stewardship Policy—Appendix A: Stock Proxy Voting, as presented to the Retirement Board, reflecting clarifications to the stock proxy voting guidelines for U.S., Canada and other markets, is approved and accepted; and be it further

RESOLVED, That the updated sections of the Investment Policy Manual, under “International Equity Securities—VIII. Responsibilities & Controls” and “Global Equity Securities—VIII. Responsibilities & Controls,” as presented to the Retirement Board, removing the responsibility of external public equities managers to vote proxies on NYSTRS’ behalf for directly held securities, is approved and accepted.

b. Resolution on Update to AML/OFAC Compliance Policy (R21)

J. Longtin offered the following resolution, seconded by R. Mahoney and unanimously carried by the Board:

RESOLVED, That the AML/OFAC Compliance Policy and Appendix B: AML/OFAC Compliance Certification, as presented to the Investment Committee, reflecting the clarification and inclusion of the Office of Investment Security of the US Department of the Treasury, is approved and accepted.

F. Risk Committee

R. Mahoney, Chair, reported that the Committee had met on January 29, 2025 and had heard updates on key risk indicators, annual risk assessment, OFAC compliance, DFS and Grant Thornton.

Staff Reports

A. Old Business – none.

B. New Business

1. Litigation

Don Ampansiri reviewed the Litigation report (Appendix C, p. 12).

2. Member Relations Update

Beth Dellea provided a Member Relations update and Shannon Bonesteel and Andy Whitney gave a quality assurance update (Appendix D, pp. 13-21).

3. Artificial Intelligence

V. Madala presented a high level overview of artificial intelligence and how it might be used at NYSTRS in the future.

4. DEI Strategic Plan Update

Danny Malavé and Matt Pinchinat provided an update on DEI activities over the last quarter (Appendix E, pp. 22-27).

5. Stewardship Update

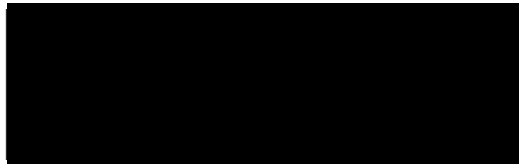
Han Yik provided the Board with an update on the stewardship report Appendix F, pp. 28-39)

6. Estimated Employer Contribution Rate

Richard Young and Melody Pranglely gave an update on the estimated Employer Contribution Rate (Appendix G, pp. 40-55)

There being no further business and with unanimous consent, the Board meeting adjourned at 10:15 a.m.

Respectfully submitted,

A large black rectangular redaction box covering the signature of the person submitting the document.

Thomas K. Lee

Appendix A: 2025 Audit Plan

Type		Auditable Entity	Engagement Objective To provide reasonable assurance that controls are properly designed and operating effectively to support the underlying processes
1	RA	Participating Employer Review	Verify salary, service and demographic information with a sample of participating employers agrees to System records
2	RA	Loans	Verify the receipt and recording of payments to a member's outstanding loan balance are accurate and timely
3	RA	Disability Retirement	Create disability retirement payments and review earnings after retirement
4	RA	Death Benefit	Create active member death benefits that are accurate and complete
5	RA	Refunds	Refund of member contributions are in compliance with policy and procedures
6	RA	Retirement Benefit	Create retirement benefits that are accurate and complete
7	AM	Mortgage Servicing	Verify mortgage servicing, including mortgage transactions and monitoring the portfolio for compliance with loan documents and IPM
8	GA	Annual Actuarial Valuation	Evaluate the Actuarial Valuation as of June 30, 2024
9	GA	Contract Management	Procurement of goods and services in compliance with existing policies
10	GA	Operating Expenses	Verify purchase from p-cards are in compliance with existing policy and procedures
11	GA	Accounts Payable	Travel expenses in compliance with existing policies
12	GA	Business Continuity	Ensure the organization is prepared for unexpected disruptions and to continue essential operations
13	GA/RA	Accounts Receivable	Record collections and write-offs in the financial system accurately, completely, and in a timely manner
14	GA/RA	Billing to Participating Employers	Create bills to participating employers in compliance with policy and procedures, and recorded accurately, completely and timely
15	GA/RA	Cash Control - Finance	Receipt of funds for transfer reserves and posting service to a member's account are accurate and complete
16	IT	Application Controls	Manage user access rights to application and services
17	IT	IT General Controls	Maintain and dispose of devices used by staff to access information systems
18	IT	IT Governance	Evaluate IT policies for third party solutions are in accordance with regulatory, legal, risk, environmental, and operational requirements
19	RA	Transfer Service Credit	Transfer service credit to another eligible retirement system
20	RA	Member Service Credit	Verify prior service credit posted to a member's account
21	GA	Governance	Performance and management of risk using National Conference on Public Employee Retirement Systems best practices
22	GA	Compliance	Adhere to laws, regulations, policies and contractual obligations
23	GA	Financial Accounting	Manage and record the acquisition and disposition of assets
24	AM	Public Equity Portfolio Management	Invest and oversee the internally managed funds
25	AM	FI External Fund Management	Select and monitor fixed income external fund managers
26	AM/GA	Warrants	Evaluate process for proper controls and efficiencies

Appendix A

Key

18	Committed engagement
8	Additional pipeline
26	Total engagements



Annual Retirement Board Meeting – Agenda pp. 1-2

January 30, 2025

Call to Order by President

- A. Election of Officers
- B. Introduction of Visitors
- C. Correspondence - None
- D. Approval of Minutes of October 31, 2024 Meeting pp. 3-14

COMMITTEE REPORTS & ACTION ITEMS

- A. Audit Committee – O. Robinson, Chair
 - 1. Chair's Report
 - 2. Resolution on Audit Committee Charter (R1, p. 15)
 - 3. Resolution Approving Internal Audit Plan 2025 (R,2 pp. 16)
- B. Disability Review Committee – E. Iberger, Chair
 - 1. Disability Denial Resolution (R3, p. 17)
 - 2. Disability Rescission Resolution – Tier 1 (R4, p. 18)
 - 3. Disability Rescission Resolution – Tier 3 (R5, p. 19)
- C. Executive Committee – D. Keefe, Chair
 - 1. ~~Resolution Accepting Changes to Business Continuity Plan (R6, p. 20)~~ pulled;no action
- D. Ethics Committee – P. Farfaglia, Chair
- E. Investment Committee – N. Smirensky, Chair
 - 1. **Consent Agenda Items A 1-12** pp. 21-32
 - A. Renew Agreements:
 - 1. AEW Capital Management (R7, p. 21)
 - 2. Ariel Investments LLC (R8, p. 22)
 - 3. Arrowstreet (R9, p. 23)
 - 4. Bank of New York Mellon (Securities Lending) (R10, p. 24)
 - 5. BlackRock Financial Management, Inc. (CMBS) (R11, p. 25)
 - 6. Cohen & Steers Capital Mgt-Multi Strategy (R12, p. 26)
 - 7. J.P. Morgan Investment Management Inc. (R13, p. 27)
 - 8. PGIM (R14, p. 28)
 - 9. Principal Real Estate Investors (R15, p. 29)
 - 10. Raith Capital Partners (R16, p. 30)
 - 11. RhumbLine Advisors LP (R17, p. 31)
 - 12. Xponance (f/k/a FIS Group) (R18, p. 32)
 - B. New Agreements
 - 1. Resolution on General Investment Consultant (R19, p. 33)
 - C. Appointment to Investment Advisory Committee
 - 1. Dhvani Shah (R20, p. 34)
 - D. Updates to the Investment Policy Manual
 - 1. Resolution on Updates to NYSTRS' Responsible Stewardship Policy—Appendix A: Stock Proxy Voting (R21, p. 35)
 - 2. Resolution on Update to the AML/OFAC Compliance Policy (R22, p.36)
- F. Risk Committee – R. Mahoney, Chair
 - 1. Chair's Report

STAFF REPORTS

- A. Old Business
- B. New Business
 - 1. Litigation – D. Ampansiri p. 37
 - 2. Member Relations Update – B. Dellea pp. 38-43
 - a. Quality Assurance Update – S. Bonesteel, A. Whitney pp. 44-52
 - 3. Artificial Intelligence – V. Madala pp.53-68
 - 4. DEI Strategic Plan Update – D. Malavé, M. Pinchinat pp. 69-74
 - 5. Stewardship Update – H. Yik pp. 75-86
 - 6. Estimated Employer Contribution Rate Presentation – R. Young, M. Pranglely pp. 87-102



**New York State
Teachers'
Retirement
System**

Appendix C

To: Retirement Board
From: D. Ampansiri, Jr./ J. Graham
CC: T. Lee
Date: January 21, 2025
Re: Status of System Litigation as of January 21, 2025

UPDATE ON PENDING LAWSUITS SINCE THE LAST REPORT

Michael Bellarosa v. New York State Teachers' Retirement System

Action commenced: 9/8/2022

Favorable Article 78 decision: 5/12/2023

Favorable Appellate Division decision issued: 7/18/2024

UPDATE: On July 18, 2024, the Appellate Division (Third Department), in a unanimous 5-0 decision, affirmed the Supreme Court's May 12, 2023, favorable ruling regarding the System's determination to exclude certain payments from inclusion in Petitioner's pension calculation as well as the application of the 10% cap on increases to his earnings in the FAS period.

In August 2024, Petitioner moved for leave to appeal to the Court of Appeals. The Attorney General filed an opposition to the motion on NYSTRS' behalf. We continue to await the Court's decision on the motion.

Summary of the case/background information:

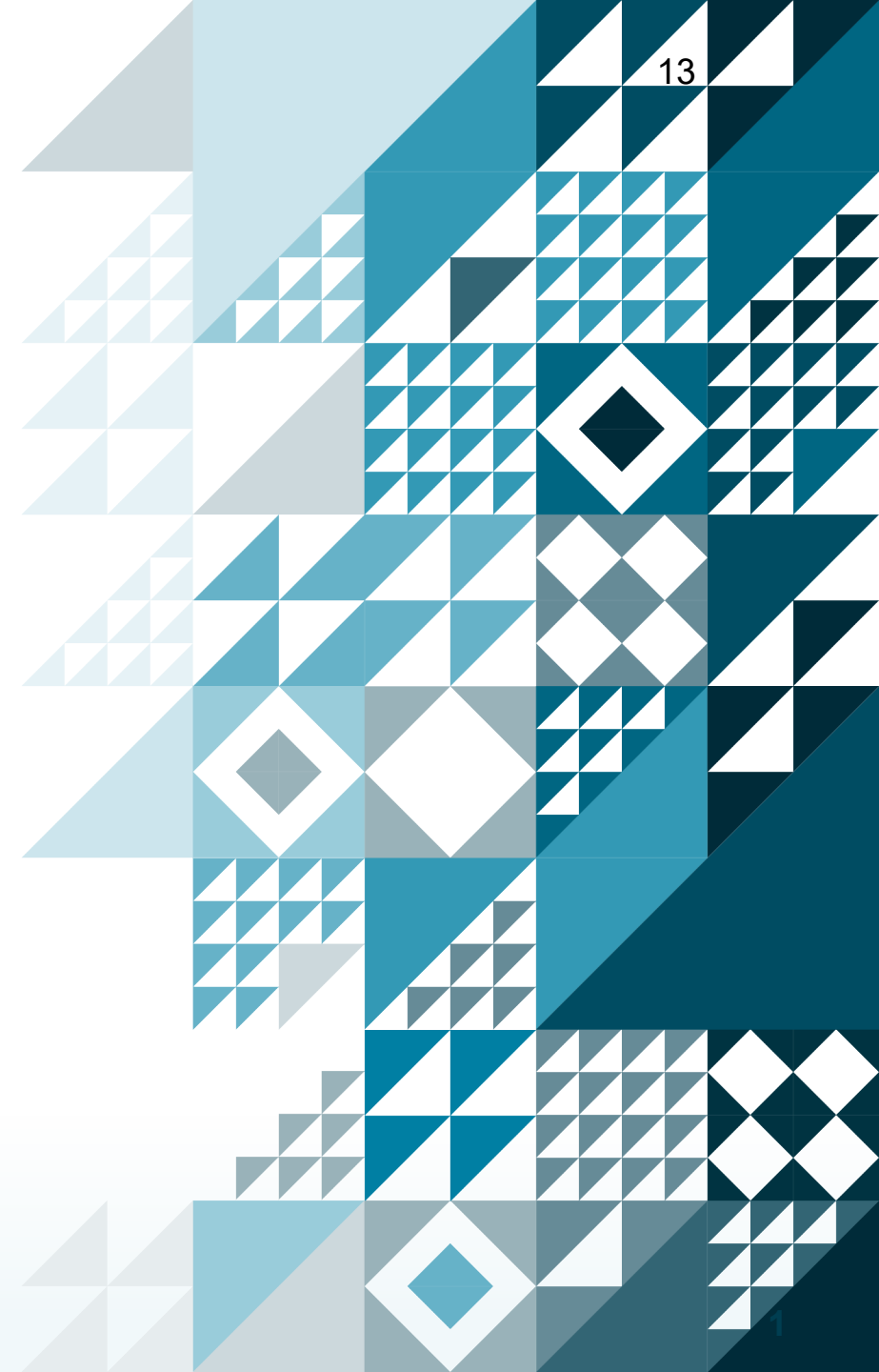
Petitioner, a Tier 4 member, is challenging the System's determination excluding for pension purposes payments made to Petitioner for a Technology/ Wellness/ Transportation Allowance and Vacation by the Valley Central School District (the District). The District converted the Technology/ Wellness/Transportation Allowance and unused vacation days into salary. The conversion of these benefits into salary on the eve of retirement has the effect of artificially inflating the pension benefit. As such, these payments are not considered regular salary and NYSTRS contends the payments are excluded from the pension calculation. Petitioner also challenged the application of the statutory requirement that we cap the increases in petitioner's salary for the 3 years used to calculate the FAS at 10% of the average salary for the preceding 2 years.

LAWSUITS COMMENCED SINCE THE LAST REPORT - None

Quality Assurance & Support (QAS) Update

Board presentation January 2025

Appendix D



Agenda



What's new in QAS



Results of QAS Service Retirement Monthly Review



Items reported to NYS Department of Financial Services (DFS)

QAS Accomplishments

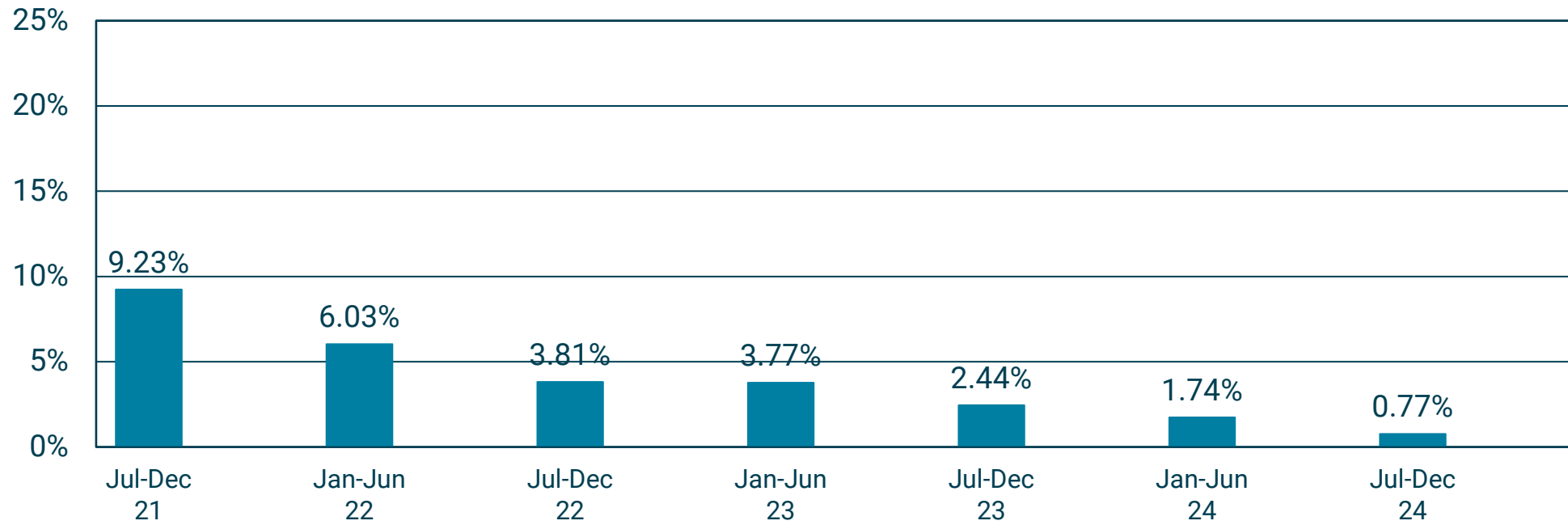
- Andy Whitney was appointed Manager of QAS.
- Established processes and procedures for the review of part-time service credit.
- Continued developing new trainings focused on service credit and file reviews.
- Completed reviews on 433 service retirement closeout files.

QAS Service Retirement Monthly Review

Review a total of 10% of final service retirement benefits created in a month:

- High risk areas discussed with management from Member Benefits
 - ✓ 100% of Tier 1 members
 - ✓ 100% of Lump-sum distributions
 - ✓ After training period for new staff to ensure understanding of the process to create a benefit
- Random sample

Percentage of Completed Files Resulting in Revision, Change in Benefits*¹⁷



	Jul-Dec 21	Jan-Jun 22	Jul-Dec 22	Jan-Jun 23	Jul-Dec 23	Jan-Jun 24	Jul-Dec 24
Service Retirement Closeouts	4,218	3,594	3,637	4,171	3,105	2,825	2,940
Selected for QAS Review	455	365	368	425	416	475	442
Percent QAS Review Complete	100.00%	100.00%	99.73%	99.76%	98.32%	96.84%	88.01%
Revised, Change in Benefit	42	22	14	16	10	8	3

*As of December 31, 2024

Items Reported to DFS

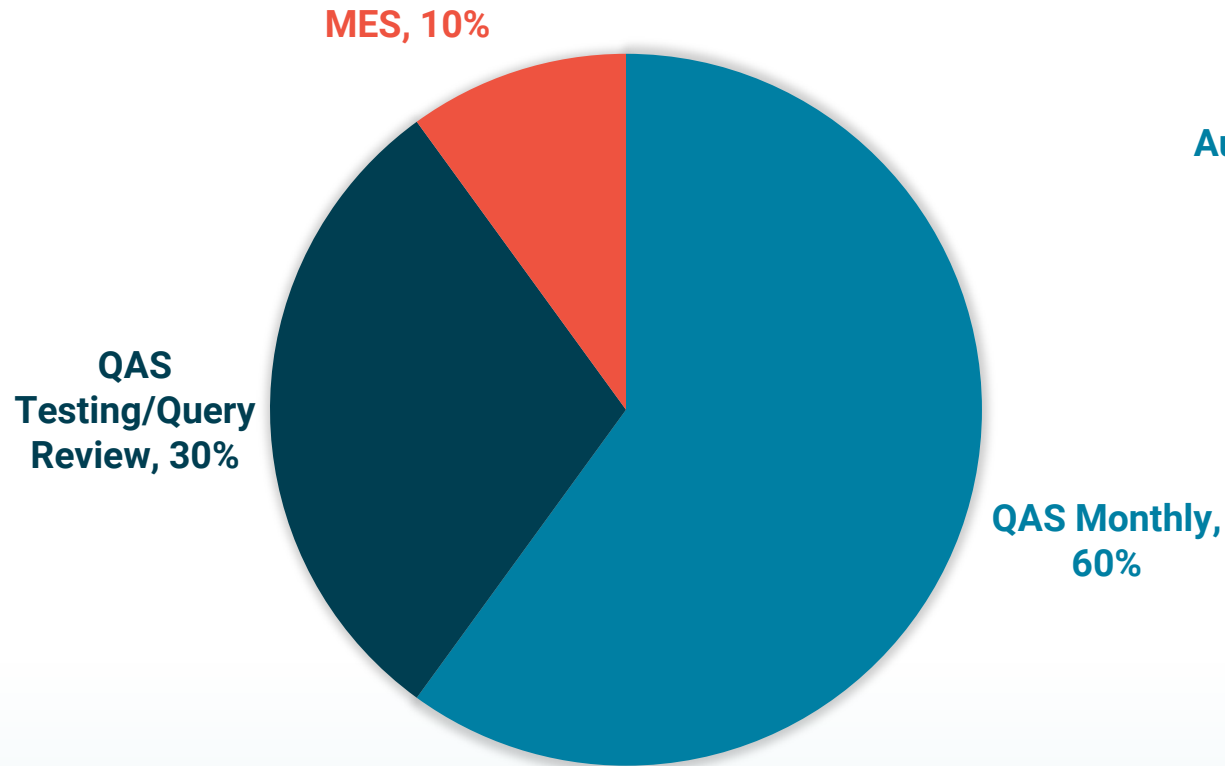
July-December 2024

Administrative error – An error by the System (either manual or automated) that requires revision to finalized benefit payments. This would not include revisions to estimated benefits, errors or revisions made by participating employers, members or other parties.

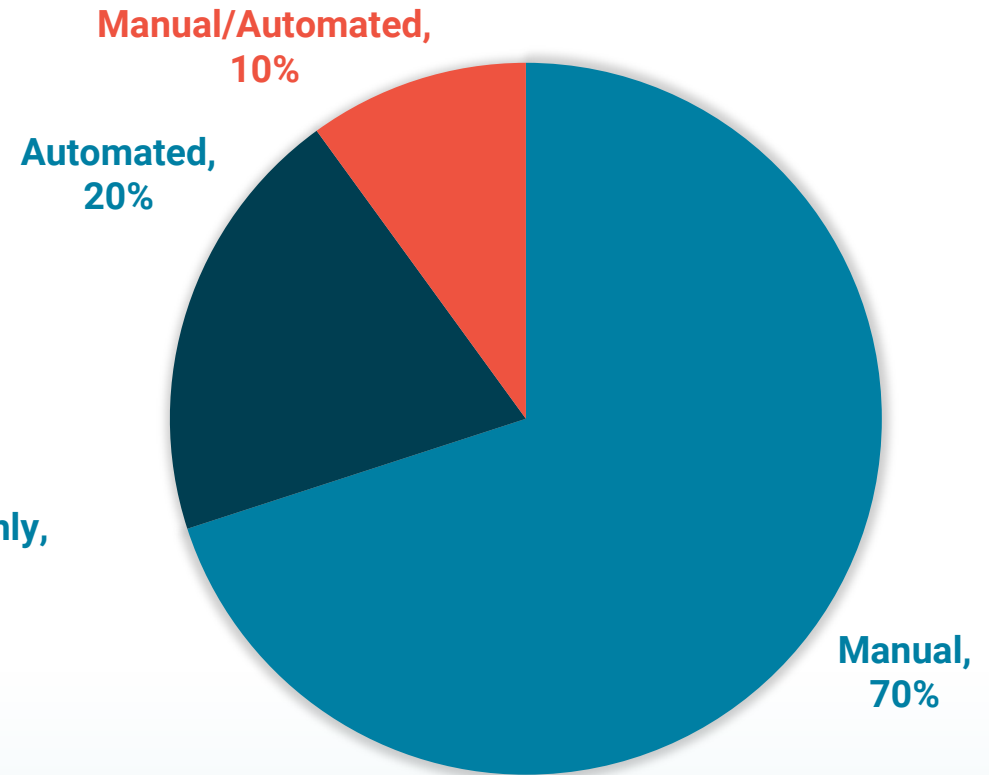
July 2024	3
August 2024	0
September 2024	0
October 2024	7
November 2024	0
December 2024	0
<hr/> Total	10

July-December 2024 DFS Items

REPORTING DEPARTMENT

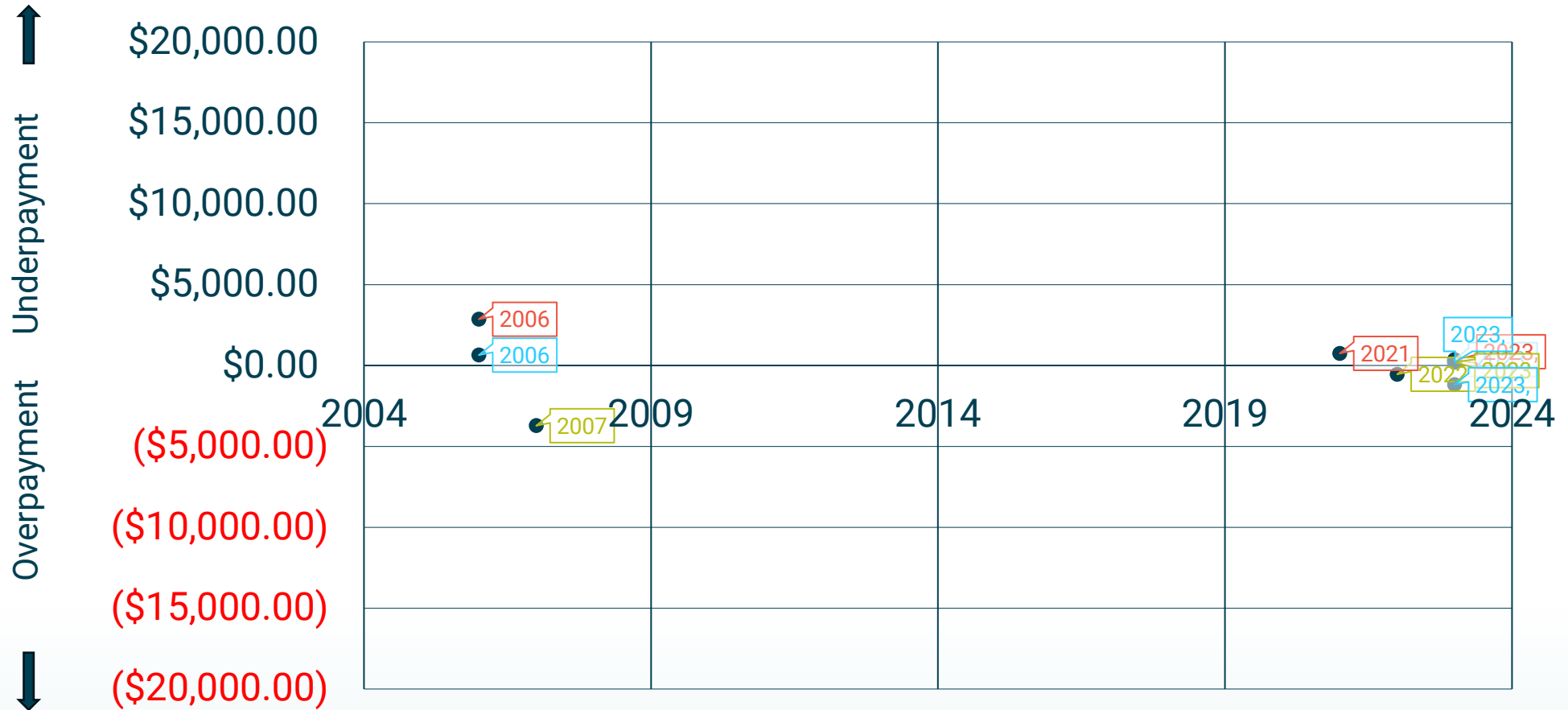


ERROR TYPE



July-December 2024 DFS Items

Amount Underpaid/Overpaid by Calendar Year of Retirement



Questions?



Appendix E

Diversity, Equity, & Inclusion Division Update

January 30, 2025

Danny Malavé, Managing Director, Diversity, Equity, & Inclusion

Matthew Pinchinat, Deputy Managing Director, Diversity, Equity, & Inclusion

DEI: Quarter-in-Review

Workforce DEI Culture & Learning

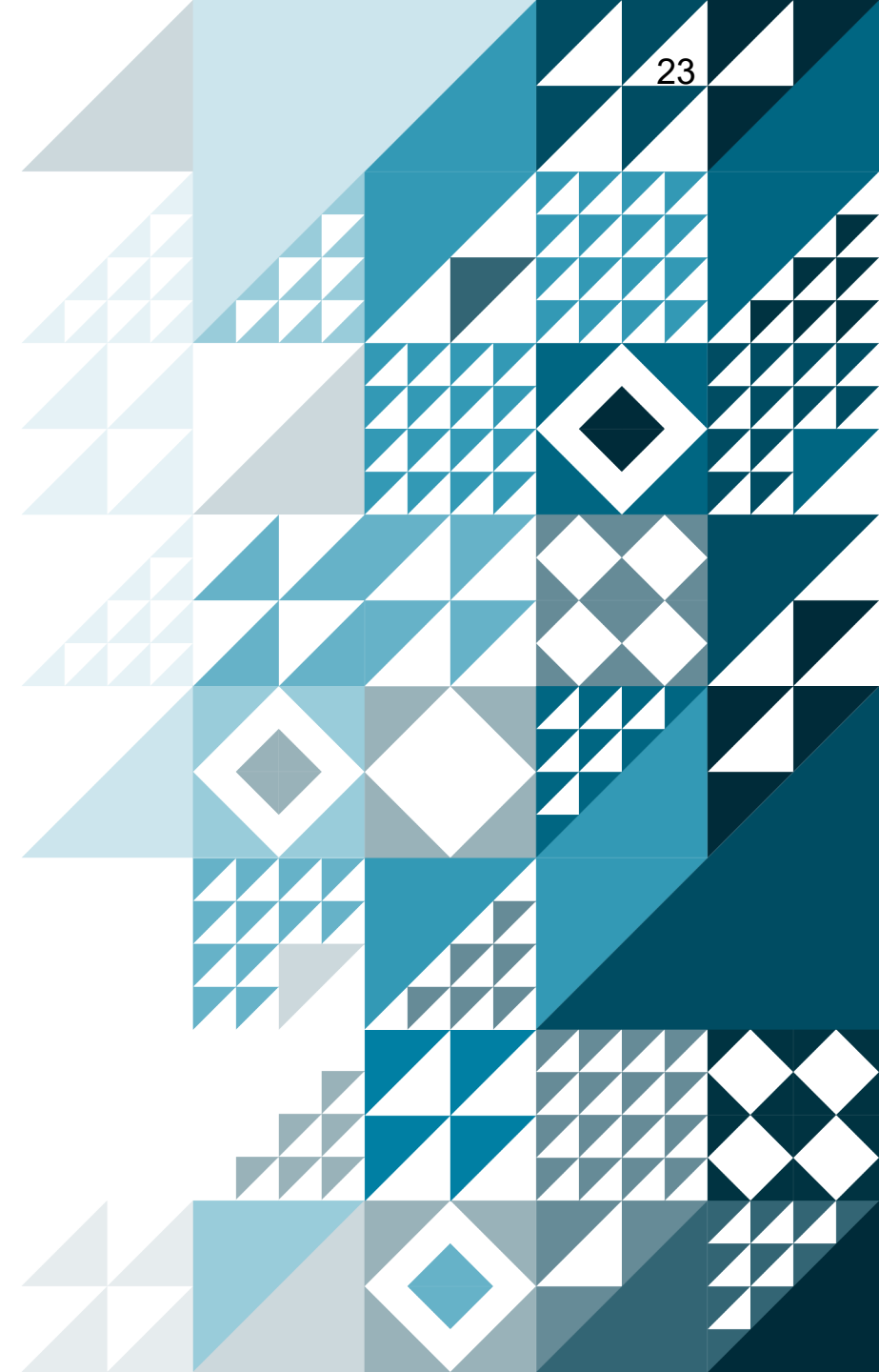
- Voluntary Workforce Education – Empowerment Series (Ongoing)
- Employee Networking Group (ENG) Collaborative Initiatives
- NYSTRS DEI Advisory Council – *NEW FY25/26*

External/Partner Engagement

- 2024 MWBE Certification
- Peer Engagement – *Emerging Manager Week* Collaboration

DEI Division/Team

- Staffing Update



DEI: Voluntary Learning – Empowerment Series (Ongoing)

Series Description

- Annual series of voluntary workforce education sessions centering the theme of empowerment.
- The series features a collaborative and varied approach to employee learning centering community reflection and reciprocity.

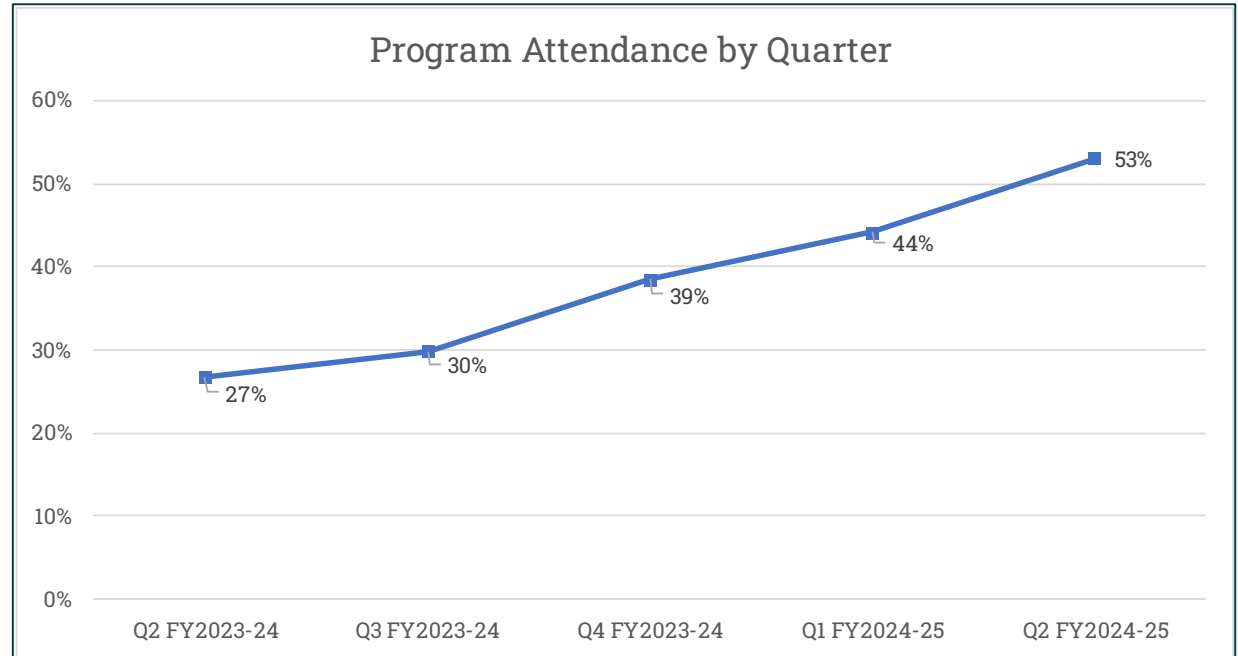
Example Programs

- Veterans Day Breakfast
- Exploring the Intersections of Identity & Work
- Cultural Exchange – BEN Collaboration (ENG)

Voluntary Education Considerations

- Department Specific Needs
- Expanded Active Engagement
- Expanded Educational Technology

Session	Employee Feedback
11/19	“The session was incredibly informative and very entertaining- I learned a lot”
11/19	“Be kind, we don't know what others have been through and it is important to know our history, good and bad.”
12/17	“NYSTRS cares about promoting cultural sensitivity and expanded knowledge so that we can better relate to our colleagues and participate in their lives.”
12/17	“I really appreciate all DEI's efforts on educating us about things outside of some of our own norms”



Program Attendance by Quarter

- Percentage reflects total workforce attendance at one or more voluntary DEI programs by quarter





New York State
Teachers'
Retirement
System

MWBE 2025

Investments & Professional Services Conference

Conference Overview

Date: February 13, 2025

Location: Albany Marriott, Albany NY

Theme: A Seat at the Table

New Additions: Expanded Preconference Offerings; Private Debt Breakout

MWBE 2025

Investments & Professional Services Conference

Agenda Highlights

Preconference Offerings (8:30AM)

General Conference Opening/Welcome (11AM)

Featured Speaker – *Cathy Marcus, PGIM Real Estate (11:30AM)*

Featured Speaker – *Maggie Arvedlund, Turning Rock Partners (1PM)*

Breakouts Sessions (2PM)

Closing (4:30PM)

DEI: FY2025-26 Priorities & Planning

Workforce Culture & Learning Strategy

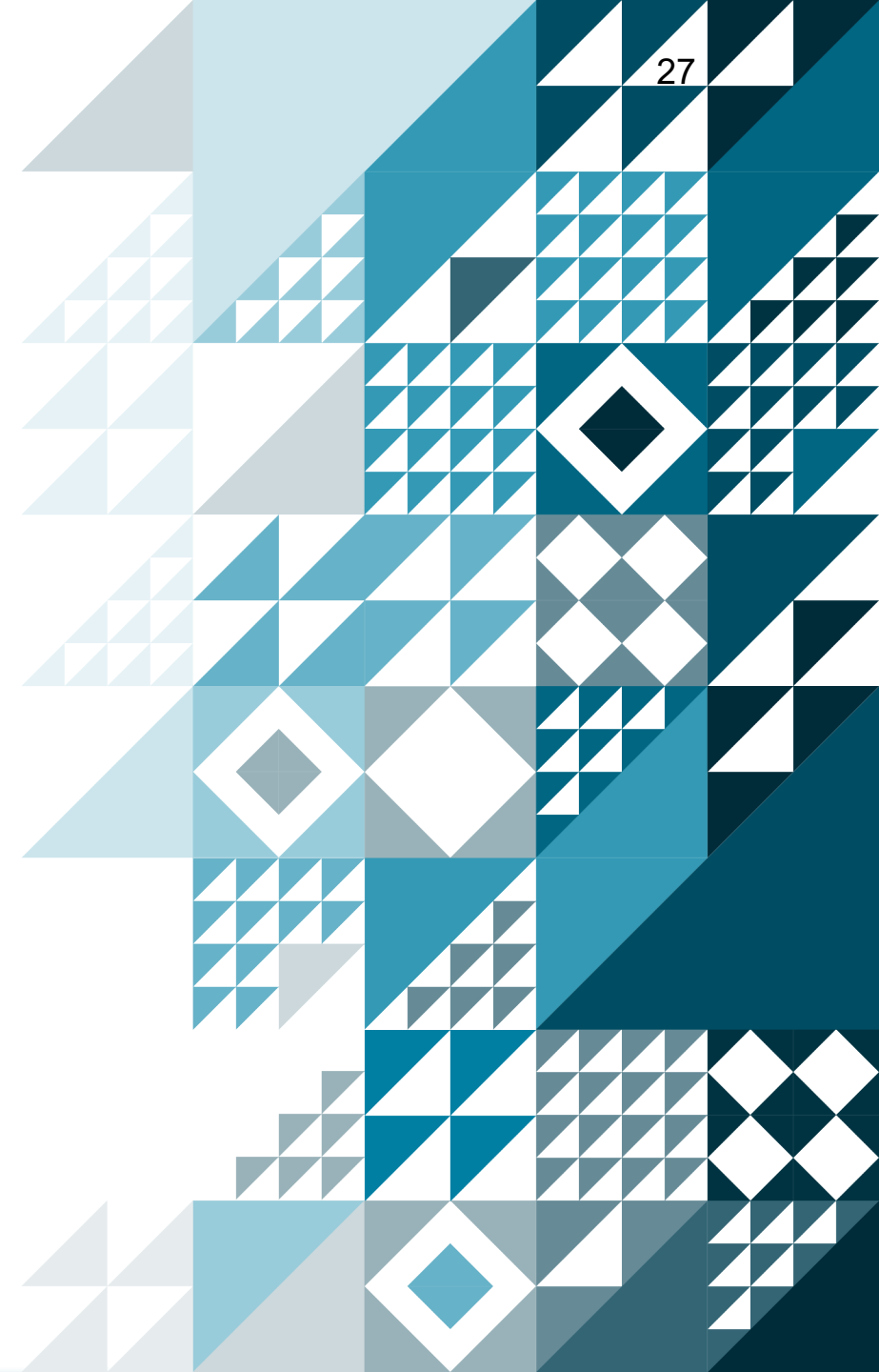
- **NEW** – Excellent Team Assessment
- Employee Mentorship Program Enhancements
- **NEW** – DEI Advisory Council
- Expanded initiative assessment

External Engagement Updates

- 2025 MWBE Investments & Professional Services Conference
- MWBE & DEI Strategy Alignment

DEI Division/Team

- Staffing Plan
- Summer 2025 – Internship Staffing





Appendix F

Stewardship Report

January 2025



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Executive Summary

As fiduciaries, NYSTRS’ Board must be responsible and thoughtful stewards of the fund and act for the exclusive benefit of NYSTRS’ members and beneficiaries. This deliberate approach is essential to help ensure the System meets the retirement benefit payroll and therefore fulfills its fiduciary obligation to provide our members with a secure retirement.

Two leading indicators of a pension plan’s strength include its funded ratio and long-term returns (net of fees). NYSTRS is 99% funded based on the actuarial valuation of assets, which compares the actuarial value of assets to accrued benefit liability. As of June 30, 2024, the System’s 10-, 20- and 30-year annualized net rates of return were 7.8%, 7.8% and 8.7%, respectively. (See graphic below.)

This history of success is due to NYSTRS’ prudent approach to asset management and analysis of risk. The System approaches this from the starting point that we are universal owners with a long-term view of the markets. To ensure we can meet our fiduciary responsibility, we identify long-term risks to our portfolio through independent measurement and assessment.

To manage these risks, the System engages with the companies in which we invest, vote our proxies, and seeks opportunities to invest in companies and areas that can help to mitigate the risks we have identified.

Throughout 2024, the System did the following:

- Continued monitoring our directly held public equity portfolio for companies deriving more than 10% of their revenue from thermal coal, given the likelihood of “stranded asset” risk;
- Performed internal risk assessments of the 24 companies meeting the Restriction Criteria from the last fiscal year and focused on engagement with these companies on identified risks;
- Updated the list of companies meeting the Restriction Criteria for the current fiscal year to prioritize for engagement and analysis in the coming year;
- Made two new fund commitments totaling \$150 million in the private equity allocation of our portfolio within the energy transition space;
- Maintained LEED certification of all of our directly owned office/life science buildings within the real estate allocation of our portfolio, and maintained Gold certification for our own headquarters in Albany.

NYSTRS Funding and Investment Progress

History of Annual Returns and Funded Status Through June 30, 2024



30-year annualized rate of return (net of fees): 8.7%

The Board’s Fiduciary Duties, Investment Beliefs and a Responsible Investment Pathway

NYSTRS’ Board has strict fiduciary duties under New York State regulations (11 NYCRR §136-1.6) and applicable law:

“The administrative heads are fiduciaries and as such shall act solely in the interests of the members and beneficiaries of the systems they administer. They shall perform their responsibilities in a manner consistent with those of a reasonably prudent person exercising care, skill and caution.”

The Board is committed to its fiduciary duties to act in the best interest of the System’s members and to prudently manage System assets using appropriate skill, care and diligence.

The Board’s unequivocal focus at all times is to ensure the System is sufficiently funded in order to fulfill its mission of providing our members with a secure pension.

To that end, the Board developed a set of Investment Beliefs to provide a consistent and transparent framework to guide the System’s investment decision-making process. The Beliefs reflect NYSTRS’ fiduciary responsibility to plan participants and beneficiaries and its commitment to the System’s mission, vision and values.

Visit the [Investments section](#) at nystrs.org to read the Investment Beliefs.

Our View on Responsible Stewardship

As fiduciaries, NYSTRS’ Board must be responsible and thoughtful stewards of the fund and act for the exclusive benefit of NYSTRS’ members and beneficiaries. This deliberate approach is essential to help ensure the System meets the retirement benefit payroll and therefore fulfills its fiduciary obligation to provide our members with a secure retirement.

NYSTRS approaches this from the starting point that we are universal owners with a long-term view of the markets. To ensure we can meet our fiduciary responsibility, we identify long-term risks to our portfolio through independent measurement and assessment.

To manage these risks, the System engages with the companies in which we invest, votes our proxies, and seeks opportunities to invest in companies and areas that can help to mitigate the risks we have identified.

What are universal owners?

Universal owners are investors with highly diversified and long-term portfolios that are representative of global capital markets.

Three Pillars of NYSTRS’ Investment Beliefs



Asset Allocation

NYSTRS is a universal owner of the global public markets, with a highly diversified, long-term portfolio. We hold the following convictions about the capital markets:

- Markets are generally efficient.
- Passive management provides broad, diversified exposure, while active management can yield benefits when the investment manager has an informational, technical or operational advantage.
- Alternative investments allow the System to expand the opportunity set beyond public markets and can be used as a return enhancer and risk diversifier.



Risk

NYSTRS’ risk management program is designed to identify, assess and address significant risks, including the ability to manage System assets relative to liabilities, meet liquidity requirements and maintain an appropriate funding level.



Stewardship

NYSTRS’ view on stewardship centers on making prudent investment choices consistent with our fiduciary duties under a disciplined risk-controlled strategy. The System’s Stewardship priorities include:

- Promoting responsible corporate governance, consistent with our Duty of Loyalty to act for the exclusive benefit of NYSTRS’ members and beneficiaries.
- Being active owners of public and private companies.
- Collaborating with other institutional investors to harness collective influence in engagement efforts.
- Actively participating with external organizations to help shape future rules and regulations related to sustainable investing.

NYSTRS: A 30-Year Snapshot

as of June 30, 2024

NYSTRS' Mission: To Provide Our Members with a Secure Pension

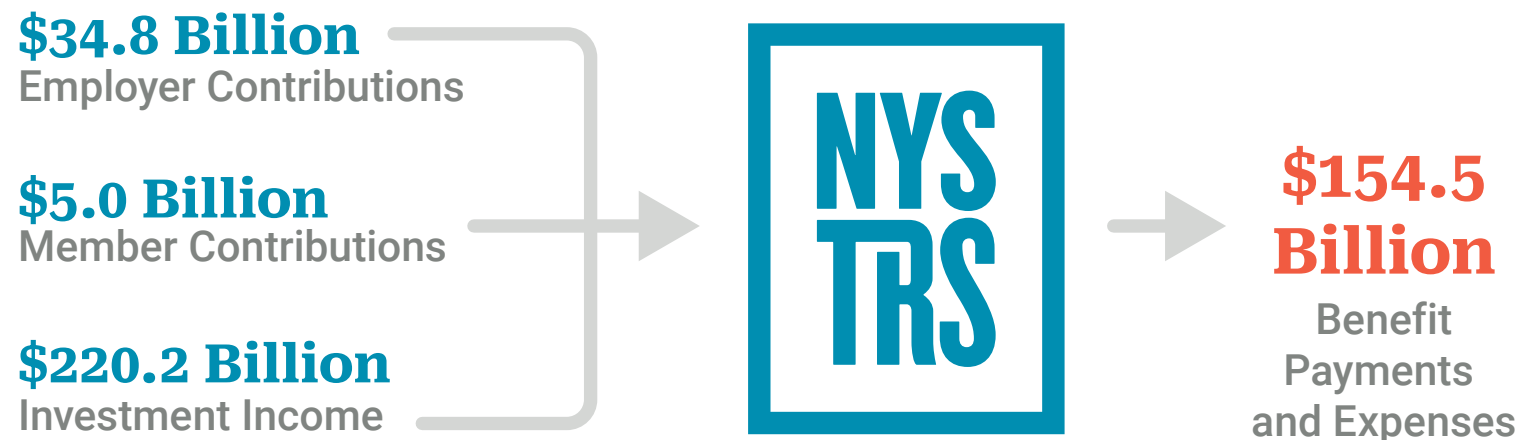
Our status as one of the best-funded public pension plans in the nation is a distinction the System holds in very high regard.

NYSTRS was established as a defined benefit plan in 1921 by an act of the state legislature. The Retirement System administers the fund from which public school teachers and administrators employed outside New York City receive retirement and ancillary benefits. Benefits provided by the Retirement System are funded from three sources: employer contributions, member contributions and income from investments.

The System has a well-diversified and prudently managed investment portfolio that provides appropriate long-term risk adjusted returns. This diversification of assets helps us earn the highest possible long-term rate of return within appropriate risk levels. NYSTRS' total fund performance results for the 30-year period ending June 30, 2024 are above the 10th percentile compared to peers, according to a survey of public fund sponsors¹.

As such, the System is nearly 100% funded based on the actuarial value of assets as of June 30, 2024.

NYSTRS serves nearly 455,000 active members, retirees and beneficiaries. During the last fiscal year, the System paid \$8.4 billion in benefit payments. Over the 30-year period from July 1, 1994 to June 30, 2024, the System paid \$154.5 billion in benefit payments and expenses. During that same period, approximately 85% of the System's income was generated from investments, far exceeding the industry average of approximately 61%².



NYSTRS Pension Dollar*



Three funding sources make up the NYSTRS pension dollar: investment income, employer contributions and member contributions.

Providing our members with a secure pension is a shared responsibility. Over the past 30 years, earnings on investments and member contributions produced the bulk of NYSTRS' income. Taxpayers contribute by way of employer contributions. The result of this shared commitment is a well-funded plan.

*30 years ending June 30, 2024

¹ Callan, NYSTRS Asset Allocation and Performance Statistics as of June 30, 2024. The "Callan Public Fund Sponsor Very Large Peer Group" consists of 62 constituent funds with average Assets Under Management (AUM) of \$43.9 billion and a median AUM of \$26.2 billion. The peer group includes Callan clients and anonymously shared data from BNY Mellon and Investment Metrics.

² National Association of State Retirement Administrators (NASRA) Public Fund Survey for FY 2023 (published in November 2024).

Responsible Stewardship and Climate Risk

NYSTRS Retirement Board's Investment Beliefs, detailed in the Board Governance Manual, provide a consistent and transparent framework to guide the System's investment decision-making processes. Stewardship is one strategic component within our Investment Beliefs.

Under this pillar, key areas include:



Risk

Make prudent investment choices under a disciplined risk-controlled strategy.



Ownership

Be active owners of the companies we invest in through efforts such as direct engagement and proxy voting.



Collaboration

Work together with other long-term institutional investors to engage with companies.



Rules & Frameworks

Participate with external investor organizations to shape future regulation and disclosure standards related to identified key long-term portfolio risks.

The Energy Transition

It is through the framework noted above that NYSTRS has approached an independent analysis of climate risk and the challenges posed by the energy transition, and further assessed how they pertain to the System's fiduciary obligation to provide retirement security to our members and beneficiaries.



Identifying the measures driving climate risk (i.e., greenhouse gasses/carbon emissions) and estimating the impact on our portfolio through scenario analysis.



Engaging actively with companies we own on their transition plans and progress towards those plans, and voting proxies in line with addressing the risks identified.



Joining organizations such as Climate Action 100+, an investor-led global coalition that engages with the top 100+ greenhouse gas emitters to take necessary action; and the Ceres Investor Network, which works with institutional investors to advance sustainable investing practices.



Working with organizations like the International Financial Reporting Standards Foundation, which brings together asset owners, asset managers and standard setters on material and important metrics for disclosure.

Why is Climate a Risk?

As part of our disciplined risk-controlled strategy, NYSTRS examines a number of risk factors that can impact the long-term financial performance of the portfolio. Climate risk is one of those risk factors, and we look at it through two lenses: physical risk and transition risk.

- Physical risk comprises both acute risks, which include events such as hurricanes, heatwaves, wildfires and flooding; and chronic risks such as sustained elevated temperatures and sea level rise. Physical risk poses a material financial risk to the real assets within our portfolio (i.e., real estate) and to various companies and industries, including agricultural, insurance and reinsurance, utilities as well as to the physical properties and infrastructure of businesses in affected areas.
- Transition risk is the risk posed by changing policies, advances in technology, market supply and demand shifts and reputational risk. These risks can pose a material impact to the long-term return potential of companies and industries.

We assess these risks, along with many other long-term risks, to determine the potential impact on the ability to generate long-term returns in our portfolio.

Mitigating Risk: An Investor’s Perspective

NYSTRS has been successful in providing retirement security to our members for over a century through an investment program designed to maintain the sustainability of retirement benefits members have earned. The System has accomplished this as universal owners – owning assets across the U.S. and global economy. Diversification of assets is key to maintaining the sustainability of retirement benefits. We achieve risk-adjusted returns through a well-diversified portfolio comprised of investments in multiple sectors and areas. Although some sectors and companies may perform better than others during certain periods of time, over the long term, diversification has proven to be among the most effective in balancing portfolio risk and return.

With respect to investor actions on the issue of climate risk in publicly traded companies, the two most common actions discussed are divestment and engagement. It is important to note that divestment does not actually address overall climate risk as one investor simply sells their holdings to another investor.

Our perspective is that the System can more effectively address identified risks by maintaining a voice as owners (i.e., shareholders) of a company. Maintaining ownership provides an opportunity to engage with portfolio companies to encourage them to develop plans to mitigate the risks we have identified.

Divestment is a last resort, considered if:

- a) companies fail to address identified risks after engaging with us over a period of time; or
- b) when engagement has not resulted in a meaningful risk mitigation plan.


The System has divested from directly held public equity securities in companies that derive more than 10% of their revenue from thermal coal (i.e., the “Divestment Criteria”). We monitor the portfolio on a regular basis to ensure compliance with the Divestment Criteria in the directly held public equity strategies.

For directly held public equity securities in the System’s internally managed portfolios and externally managed passive portfolios, NYSTRS has a restriction on further purchase of shares in companies that meet the following criteria (i.e., the “Restriction Criteria”):

- The 10 largest positions held by the System in companies that have more than 0.3 gigaton of potential CO2 emissions from thermal coal reserves;
- The 10 largest positions held by the System in companies that (i) derive more than 20% of their revenue from oil and gas, or (ii) have more than 0.1 gigaton of potential CO2 emissions from oil and gas reserves; and
- Companies that derive more than 10% of their revenue from oil sands.

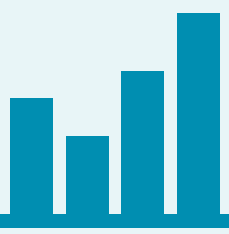
We monitor the portfolio on an annual basis to ensure compliance with the Restriction Criteria. These companies have also been prioritized for engagement and additional scrutiny regarding their proxy votes. During 2024, the System conducted independent risk assessments of these companies using five Key Performance Indicators (KPI): reduction target(s), decarbonization strategy, climate governance - executive compensation, climate governance - board oversight, and standardized disclosure.

The System’s independent assessments have three key features:




1. Transparency

They allow the companies we invest in and the public to know our Key Performance Indicators (KPIs).



2. Measurability

The KPIs are both reportable and measurable, to allow for continued monitoring, achievement of milestones by companies, and to measure the success of our engagement.



3. Actionable

The System can act on the success (or failure) of engagement, by reassessing companies that have shown progress and improvement in their KPIs on an annual basis from the Restriction Criteria or divesting from companies that have shown an unwillingness to engage or a lack of progress toward stated goals.

NYSTRS’ Climate Key Performance Indicators (KPIs)



Reduction Target(s):

To assess if short-, medium- and long-term GHG reduction targets or Net Zero by 2050 pledges have been established.



Decarbonization Strategy:

To assess if there are clearly defined action plans that align with proposed reduction targets.



Climate Governance – Executive Compensation:

To assess executive compensation alignment with stated climate goals, further supporting a firm-wide adoption of a transition plan.



Climate Governance – Board Oversight:

To assess whether a firm’s board has clear oversight of climate change and sufficient capabilities to manage climate risk and opportunities.



Standardized Disclosure:

To assess whether the firm follows best practice Task Force on Climate-related Financial Disclosures (TCFD) as it pertains to climate reporting and disclosure.

2024 Engagement

During 2024, risk assessments were conducted on all companies that met the Restriction Criteria. We held direct engagements with a number of companies on the list as well as participated in collective engagement with a number of other companies. The purpose of the engagement meetings was to present our approach to Responsible Stewardship, outline the relevant risks we identified and to present the findings of our risk analysis for each individual company. The idea behind the engagement efforts was to allow companies to respond to our assessments and to explore their plans to address the risks we identified.

Key Terms

ACT Category

Mercer's proprietary tool called Analytics for Climate Transition ("ACT") is a forward-looking multi-factor model that provides an in-depth analysis of the carbon intensity and transition capacity of the public markets portfolio across a "Grey" to "Green" continuum.

CDP (Carbon Disclosure Project) Climate Change Scores

A snapshot of environmental disclosure and environmental performance for any entity or organization that discloses through CDP.

A 'C' score indicates Awareness. It measures the comprehensiveness of an organization's evaluation of how environmental issues intersect with their business. A 'B' score indicates Management. It indicates evidence of undertaking actions associated with good environmental management. An 'A' score indicates Leadership. It is awarded for organizations that demonstrate best practices in strategies and in the actions they undertake.

SBTi Targets

Science Based Targets initiative helps companies set emission reduction targets in line with climate sciences and Paris Agreement goals. SBTi offers to validate climate targets set by companies as science-based targets for a fee.

TCFD Compliant Reporting

Taskforce on Climate-related Financial Disclosures (TCFD) reporting framework is hinged on consistent disclosure recommendations to capture climate-related risk exposure. TCFD has 11 disclosure recommendations that companies should focus on, which are further broken down into four main categories to make implementation easier; risk management, strategy, governance, and metrics and targets.

Pay Incentives Aligned with Climate Targets

A method of incentivizing sustainability commitments linking executive pay with sustainability metrics.

Scope 1 & 2 Change in Carbon Emissions Intensity from Previous Assessment

Scope 1 emissions are direct greenhouse (GHG) emissions that occur from sources that are controlled or owned by an organization (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles). Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling.

The 10 largest positions held by the System in companies that (i) derive more than 20% of their revenue from oil and gas, or (ii) have more than 0.1 gigaton of potential CO2 emissions from oil and gas reserves

10 companies met this criteria

ACT Category	
Dark Grey	0 companies
Light Grey	1 company
Grey/In-between	7 companies
In-between	3 companies
Green/In-between	0 companies

Engagement	
Collective - Grey	3 companies
Direct - Blue	3 companies
Both	4 companies

CDP Climate Change Scores	
A	2 companies
B	2 companies
C	1 company
Submitted - not scored	1 company
No response	4 companies
Declined to respond	0 companies

SBTi Targets	
	0 of 10 companies

TCFD Compliant Reporting	
	8 of 10 companies

Pay Incentives Aligned with Climate Targets	
	8 of 10 companies

Scope 1 & 2 Change in Carbon Emissions Intensity from Previous Assessment	
28% decrease on average, with a range of 3% decrease to 41% decrease	

The 10 largest positions held by the System in companies that have more than 0.3 gigaton of potential CO2 emissions from thermal coal reserves

9 companies met the criteria

ACT Category	
Dark Grey	2 companies
Light Grey	1 company
Grey/In-between	4 companies
In-between	2 companies
Green/In-between	1 companies

Engagement	
Collective - Grey	4 companies
Direct - Blue	2 companies
Both	3 companies

CDP Climate Change Scores	
A	2 companies
B	2 companies
C	0 companies
Submitted - not scored	0 companies
No response	1 company
Declined to respond	4 companies

SBTi Targets	
	1 of 9 companies

TCFD Compliant Reporting	
	9 of 9 companies

Pay Incentives Aligned with Climate Targets	
	6 of 9 companies

Scope 1 & 2 Change in Carbon Emissions Intensity from Previous Assessment	
2% decrease on average, with a range of 104% increase to 32% decrease	

Companies that derive more than 10% of their revenue from oil sands 34

5 companies met this criteria

ACT Category	
Dark Grey	4 companies
Light Grey	1 company
Grey/In-between	0 companies
In-between	0 companies
Green/In-between	0 companies

Engagement	
Collective - Grey	0 companies
Direct - Blue	0 companies
Both	5 companies

CDP Climate Change Scores	
A	0 companies
B	3 companies
C	0 companies
Submitted - not scored	0 companies
No response	2 companies
Declined to respond	0 companies

SBTi Targets	
	0 of 5 companies

TCFD Compliant Reporting	
	5 of 5 companies

Pay Incentives Aligned with Climate Targets	
	5 of 5 companies

Scope 1 & 2 Change in Carbon Emissions Intensity from Previous Assessment	
24% decrease on average, with a range of 17% increase to 57% decrease	

The assessments were conducted with greater depth this year given that it was the second year of engagement since the enactment of the Climate Action Plan. A re-assessment of the Restriction Criteria after the end of our fiscal year will result in the following changes:

One addition to and one removal from the Oil and Gas companies meeting the Restriction Criteria (10 companies total).

Five additions to and four removals from the Thermal Coal companies meeting the Restriction Criteria (10 companies total).

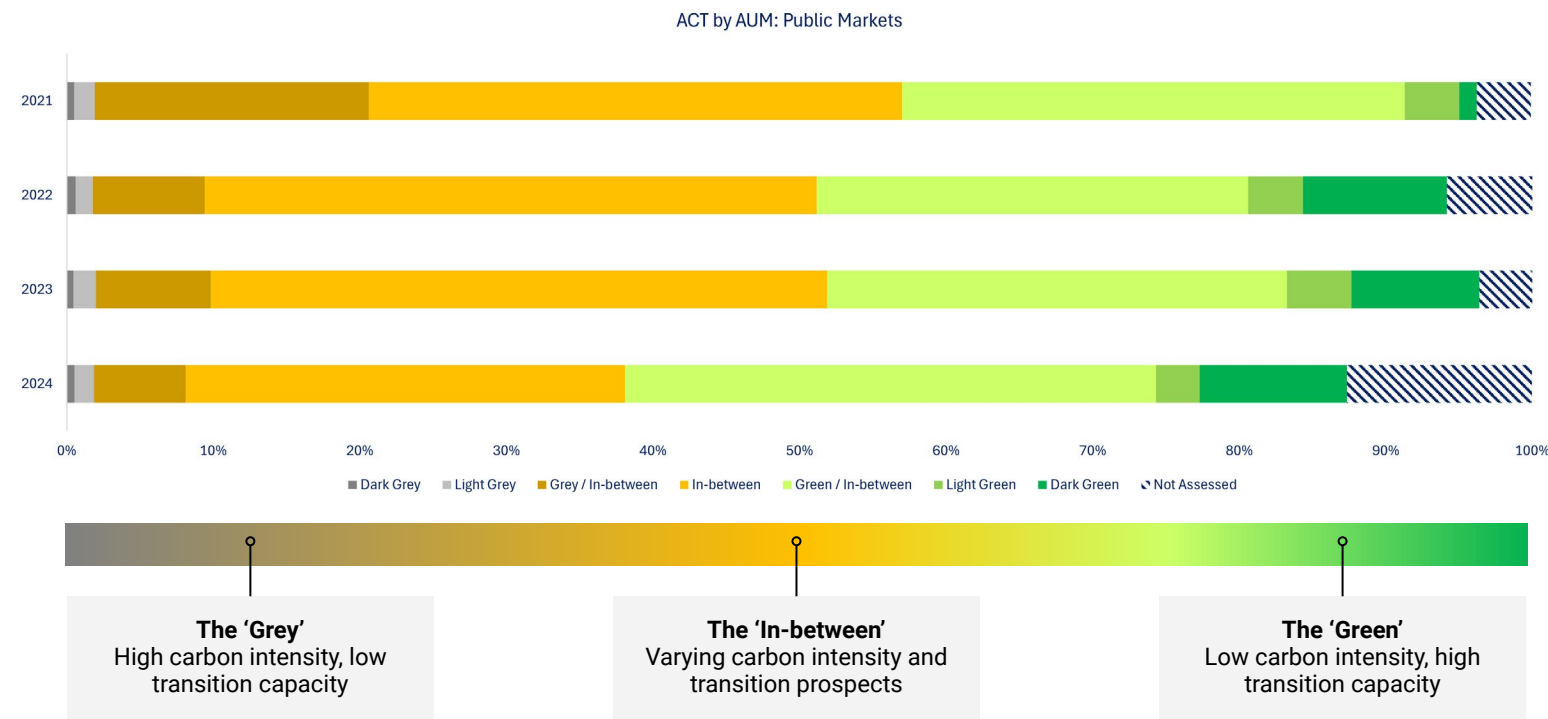
One addition to the Oil Sands companies (six companies total).

Climate Transition Via Asset Ownership of Public Markets

As universal owners of the broad market, NYSTRS participates in the evolution of the global economy that is adapting to the risks and opportunities posed by climate change. For example, NYSTRS' public equities portfolios include investments in renewable energy; wind turbines; biofuels; liquefied natural gas; lithium-ion batteries; and electric vehicles. NYSTRS' portfolios also reflect many of the industry leaders that are embracing the transition to a more sustainable future.

The integration of climate change-related risks and opportunities into our investment process is an exceedingly complex and intricate undertaking. Over the years, we have been working with Mercer to assess the climate transition capacity and carbon emissions intensity of the System's public markets portfolio using Mercer's proprietary tool called Analytics for Climate Transition ("ACT"). Mercer's ACT tool is a forward-looking multi-factor model that provides an in-depth analysis of the carbon intensity and transition capacity of the public markets portfolio across a "Grey" to "Green" continuum.

Mercer's ACT Transition Assessment of NYSTRS' Public Markets Portfolio (as of 6/30) over the Years:



The carbon emissions intensity in public markets have shown consistent declines since we began this analysis in 2021, and have decreased from 171.5 tons of greenhouse gas per million dollars of sales in 2021 to 142.7 tons in 2024 (a 16.8% reduction). Absolute emissions (as measured on the public markets equities portion of the portfolio) have also dropped during this time period from 4.5 million tons to 3.8 million tons.

Compared to the results from June 30, 2023, Mercer's analysis found a decrease in the amount of Grey to Grey/In-between assets (from 9.8% last year to 8.1% this year) and an increase in Green assets (from 44.5% to 49.3%) of NYSTRS' public markets portfolio as of June 30, 2024.

This year, there was an increase in assets classified as "Not Assessed." This was due to a change in methodology in the analysis which now excludes assets in the Fixed Income category other than corporate and sovereign bonds. The majority of the assets now classified as "Not Assessed" were previously classified as "In Between" in the 2023 analysis.

The ACT analysis examines the transition readiness of NYSTRS' entire public markets portfolio, rather than solely being focused on specific holdings in the fossil fuel industry. As universal owners, NYSTRS' portfolio will continue transitioning in line with the broader economy. NYSTRS believes that maintaining universal ownership of public markets preserves its exposure to the transition to a more sustainable economy.

Climate Scenario Analysis

The Climate Scenario Analysis was last conducted in July 2023. Further updates will be conducted as determined based on changing conditions and the availability of updated data.

Climate Disclosure Frameworks & Alliances

Access to clear, consistent and reliable climate-related disclosures from companies help asset owners such as NYSTRS evaluate climate change-related risks and opportunities in their investment portfolios and make informed investment decisions.

As noted in the Board's Stewardship Investment Belief, the System is actively participating with external organizations to help shape future rules and regulations related to sustainable investing. Visit the [Investments/Stewardship and Investment Beliefs](#) page at nystrs.org to learn more about the investor networks and sustainable investment groups with which NYSTRS partners.

One such example is the System's active participation with groups such as The International Financial Reporting Standards Foundation ("IFRS") in this developing area. NYSTRS supports the IFRS Sustainability Disclosure Standards and participates as an active member of the International Sustainability Standards Board Investor Advisory Group ("IIAG"). The IIAG comprises leading global asset owners, asset managers, and investment intermediaries who recognize the need for consistent, comparable, and reliable disclosure of financially-material, decision-useful sustainability information to investors. The IIAG serves as an advisory body to the International Sustainability Standards Board ("ISSB") by providing strategic guidance on developing IFRS Sustainability Disclosure Standards and by helping to ensure that the investor perspective is articulated

clearly and is considered in the ISSB's standard-setting process. The IIAG also helps achieve widespread adoption of IFRS Sustainability Disclosure Standards by encouraging organizations to use the Standards to communicate performance to investors on sustainability-related issues that affect enterprise value. As part of the System's engagement efforts, NYSTRS expects companies to align their financial reporting disclosure with the newly released IFRS S1 standards and to adopt IFRS S2 for their climate-related disclosures.

Per the Board's Investment Beliefs, NYSTRS will collaborate with other institutional investors to harness collective influence in engagement efforts, including initiatives such as Climate Action 100+ and Climate Engagement Canada. We utilize these initiatives to help us, in part, to identify climate related financial risk factors. We then utilize this information along with our independent risk assessments to directly engage in discussions with companies in which we invest. In addition, NYSTRS has been working with other institutional investors to engage relevant companies with The Oil & Gas Methane Partnership 2.0 (OGMP 2.0) in order to encourage companies to more accurately track and mitigate their methane emissions.

Seven of the 10 oil and gas companies that meet the Restriction Criteria have signed on to OGMP 2.0, with two joining during 2023 and two more joining during 2024.

Private Equity: Investing in the Energy Transition

As detailed previously, addressing climate risk involves both reducing existing emissions and transitioning to new sources of energy, production and manufacturing that can replace current methods. NYSTRS' private equity portfolio has exposure to a number of energy transition assets including:

- A company that designs and implements customized electric and natural gas energy efficiency programs for utilities, municipalities and government bodies.
- A company focused on energy management and generation services, offering a portable, scalable and clean power platform.
- A distributor of fibers and inorganic materials used in emission control, thermal management, filtration and batteries.
- An ecological construction company that is a leading player in the ecology and greenery sector, leveraging a vast tree plantation operation.
- A holding company specializing in environmental protection solutions, with green investments around the globe.
- A company operating in the renewable transportation fuel industry.
- A clean-energy provider that sources and supplies renewable energy to residential and commercial customers, sourcing energy from wind and solar farms.
- A consulting company that specializes in environmental consultancy services to public and private sector clients internationally, offering energy and water resource design and builds and environmental due diligence, among other services.

- A company that delivers energy management services and solutions that enable utilities and grid operators to manage peak demand while enabling public and private institutions to optimize their facilities and operations through strategic energy reduction initiatives.
- A company that provides energy infrastructure solutions, including renewable thermal systems and solar and storage solutions.
- A company that operates a network of fast chargers for electric vehicles, compatible with all fast charge capable electric vehicle models.
- A manufacturer of photovoltaic solar panels.
- A company that designs, integrates and installs solar electric power systems for homeowners.
- A company that has developed a device that captures the carbon emissions from semi-trucks.

During 2024, NYSTRS made the following two fund commitments to funds in the energy transition space:

- \$100 million to OIC Structured Equity Fund I, L.P., a private debt fund primarily focused on providing structured equity capital solutions to middle market companies operating in the energy transition, energy infrastructure, and social infrastructure sectors mainly in North America.
- \$50 million to OIC Structured Equity CI NY I, L.P., a co-investment separately managed account that will co-invest alongside OIC Structured Equity Fund I, L.P.

Real Estate: Investing in the Energy Transition

As owners of real assets, NYSTRS is able to implement changes and policies to directly invest in the energy transition, including:

- Our directly owned office/life science buildings, totaling 6.7 million square feet, are all LEED Certified. LEED Certification is sponsored by the U.S. Green Building Council and focuses on efficient energy and water usage as well as implementation of best practices in efficient operations. In addition, NYSTRS' headquarters has also achieved LEED Gold certification. Five of our seven directly owned office/life science buildings also have Fitwel certifications which focus on occupant health and wellness. Fitwel was developed by the Center for Active Design in collaboration with the U.S. General Services Commission and the U.S. Centers for Disease Control and Prevention.
- We continue to work with our advisors and consultants to measure our greenhouse gas emissions from our office properties as a baseline from which to track future improvements.
- Using software (i.e., Yardi Energy Services) to track and analyze energy use at our multi-family properties, to identify opportunities for improvement.
- We have engaged energy consultants to perform ASHRAE (The American Society of Heating, Refrigerating and Air-Conditioning Engineers) Level 2 energy audits at a sample of multi-family properties and are assessing and incorporating recommended improvements into the property business and capital plans where we can reasonably estimate a positive return on investment. In addition, we have been actively installing energy efficient appliances, low flow plumbing fixtures, LED and motion activated lighting, and recyclable carpets in our multi-family apartment properties.
- As part of the annual business plans for our apartment communities, we are reviewing the cost/benefit analysis of replacing fossil fuel/gas powered heating and cooling units as they reach the end of their useful life, with electric/air source heat pump systems in both the common areas and in the units. Three garden-style apartment communities have already converted their clubhouse and individual units to heat pumps.
- We are assessing implementing or increasing the number of EV charging stations at our directly owned properties. We are using a third-party operator at select apartment communities to implement and operate the EV chargers. We are also exploring the addition of solar panels on the clubhouse and/or car ports to provide energy for the common areas and/or EV chargers.

- We are implementing similar initiatives at our industrial properties such as replacement of HVAC units with energy efficient units, conversion to LED lighting, installing and maintaining white roofs on certain properties and including "green lease" language in all new leases requiring tenants to report energy usage. We have installed a white silicone roof coating and solar panels on one industrial property and are currently assessing additional buildings for solar panels.
- Specific to our mixed-use development property, we have installed a small solar array on the roof which powers hot water serving the residential amenity space. The residential units and retail spaces are served by heat pumps.
- In addition to implementing energy efficiency strategies at our properties, NYSTRS also invests in roughly 110,000 acres of timberland in the Southeast United States, which includes over 75,000 productive timber acres and over 18,000 acres of protected habitat. Our timber advisor, Forest Investment Associates, has a commitment to implementing sustainable forestry practices and our plantations are 20% to 30% more productive than the legacy plantations we acquired. The forest carbon cycle is a natural process through which carbon cycles from the atmosphere into forests. Harvested wood products store carbon while forests are replanted in a positive feedback loop that accumulates carbon in forests and wood products. Our timberland stored (sequestered) 8.1 million metric tons of CO2 equivalents (above-ground carbon emissions) during 2023. 100% of our timberland met the requirements for certification from the Sustainable Forestry Initiative (SFI) for sustainable forestry practices.
- The Real Estate team has reviewed 42 opportunities across infrastructure equity and credit strategies. NYSTRS continues to review investment opportunities across infrastructure strategies focused on alternative energy as well as larger diversified strategies which include a component of alternative energy investments.

Fixed Income: Economy in Transition

Across its internal and external strategies, NYSTRS' Fixed Income team continues to analyze and invest in opportunities related to the decarbonization of the global economy as follows:

- One continuing initiative is the externally managed global carbon transition credit strategy. These portfolios overlay fundamental credit analysis with a focus on investing in debt issued by climate solution providers, companies that have strategically positioned their business amidst decarbonization, or high emitting firms that need capital to implement a transition plan.
- Another key aspect of the carbon transition strategy is manager engagement with bond issuers to improve transition planning, disclosure, and use of bond proceeds for green projects.
- As part of the internal portfolio management process, the NYSTRS Fixed Income team continues its research related to decarbonization at the macroeconomic (top-down) and bond issuer (bottom-up) levels. This includes continued improvements in data availability, analysis, and visualization.

- The team has frequent meetings with asset management firms and investment bank research departments to stay abreast of new climate strategies and research methods.
- In addition, the team participates in seminars, conferences, and education on the topic of climate change and the fixed income markets.
- The Fixed Income team may invest in labeled "green", social, and sustainability-linked bonds in the internally managed portfolios when the risk-adjusted returns are viewed as attractive relative to other securities.

The Fixed Income team continues to collaborate with other investment funds and organizations on climate issues. One such example is participation in a working group that is seeking to establish frameworks for bond issuance related to methane emissions reduction.

The Year Ahead: A Look Forward

NYSTRS' thoughtful and deliberative approach to stewardship and risk mitigation will continue. The System's foremost actions are as follows:



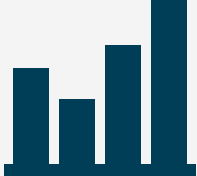
Prioritized and continued engagement (both directly and through collaborative initiatives) with the companies meeting the Restriction Criteria regarding their progress towards meeting their risk mitigation targets.



Continued collaboration and partnership with other asset owners and asset managers looking to address commonly identified risks.



Opportunities in the energy transition space that meet our investment criteria and fiduciary standards in generating long-term value and return for our portfolio.



Opportunities for measurable, relatable improvements within our directly owned real asset portfolio (i.e., installation of heat pumps, insulation, energy efficiency improvements, etc.).



The System pledges to continue working with industry groups in support of ongoing regulatory efforts to develop climate disclosure frameworks and standards that promote clear, consistent, reliable and decision-useful climate disclosures.



The Board is committed to helping develop the path to a climate-friendly future. The Board's deliberative process is ongoing and will continue to evolve given many possible factors (e.g., geopolitical, regulatory, technological innovation, etc.).



The Retirement Board and NYSTRS staff are committed to actively engage in investigating how to best integrate the risks and opportunities associated with climate change into its investment analysis and portfolio construction, including any potential portfolio adjustments or enhancements, and they are doing this in a methodical and prudent manner consistent with their fiduciary responsibilities.

Jack in the Box

Shareholder proposal: Disclose GHG emissions reductions targets (passed with 55% support)

Shareholders request the company to determine and disclose its current greenhouse gas emissions (for at least Scopes 1 and 2) as well as short-, medium- and long-term goals for reducing its emissions. Progress meeting the goals should then be disclosed annually.

NYSTRS' Vote: FOR – NYSTRS believes that companies with significant GHG emissions or other negative environmental impacts should disclose plans for transitioning to a more sustainable business model, including GHG emissions and explicit reduction targets where such emissions are material. Jack in the Box discusses some of its environmental initiatives in its 2023 Sustainability Report, including its energy efficiency and sustainable packaging efforts. However, the company does not disclose its GHG emissions and has not set any GHG emissions reduction targets. Given the company's lack of GHG emissions reporting and emissions reduction targets and the fact that it appears to lag its peers in this regard, the requested disclosure would provide shareholders with beneficial information about how the company is effectively managing climate change related risks.

Chevron

Shareholder proposal: Report on reduced plastics demand impact on financial assumptions (failed with 8% support)

Shareholders request that Chevron issue a report, at reasonable cost and omitting proprietary information, addressing whether and how a significant reduction in virgin plastic demand, as set forth in Breaking the Plastic Wave's System Change Scenario, would affect the Company's financial position and the assumptions underlying its financial statements.

NYSTRS' Vote: FOR – NYSTRS believes that significant risks and opportunities related to climate change and other environmental factors should be disclosed, as well as how the company identifies, measures and manages these risks and opportunities. These risks should include relevant physical and transition risks and opportunities. While Chevron has conducted scenario analysis to assess its areas of competitive advantage as the world's energy systems transition due to climate change, it has not done so under the Breaking the Plastic Wave's System Change Scenario, as called for in this proposal. This System Change Scenario predicts a much more significant decline in demand for plastics than used for Chevron's current scenario analysis. Given that Chevron's 50% owned subsidiary, Chevron Phillips Chemical Company, is one of the largest producers of single-use plastics in the world, undertaking this additional scenario analysis may help the company identify potential future risks to the business.

Wingstop

Shareholder proposal: Report on GHG emissions reductions targets (passed with 52% support)

Shareholders request Wingstop issue a report disclosing its current GHG emissions, as well as short-, medium- and long-term targets for measurably reducing them—and that Wingstop report annually on its progress toward those targets.

NYSTRS' Vote: FOR – NYSTRS believes that companies with significant GHG emissions or other negative environmental impacts should disclose plans for transitioning to a more sustainable business model, including GHG emissions and explicit reduction targets where such emissions are material. Currently, Wingstop does not disclose any GHG emissions data. An analysis of a group of the company's key peers reveals that disclosing at least Scope 1 and Scope 2 emissions is standard practice, and a majority of them also disclose at least some of their Scope 3 emissions. The requested disclosure would provide shareholders with beneficial information about how the company is effectively managing climate change-related risks.

Exxon

Shareholder proposal: Report on social impact from plant closure or energy transition (failed with 8% support)

Shareholders request that the Board of Directors create a report regarding the social impact on workers and communities from closure or energy transition of the Company's facilities, and alternatives that can be developed to help mitigate the social impact of such closures or energy transitions. The report should be prepared at reasonable cost, omitting proprietary information, and be available on the Company's website by the 2025 Annual Meeting of Shareholders.

NYSTRS' Vote: FOR – The System supports reasonable requests for corporate accountability related to human rights and human capital management. Exxon will have a significant role to play in the transition to a lower carbon future. The company's employees and communities in which it operates should have an understanding of how they could potentially be impacted by this transition. Although Exxon now maintains a Just Transition webpage which discloses some of the higher-level strategies the company may use to assist employees and communities in the transition to a low-carbon economy, it does not specifically address the possibility of plant closures or evolution of the company's current facilities for other uses. These more detailed requests of the proponent may better allow stakeholders to evaluate how Exxon is managing business and societal risks associated with a transition to a low carbon economy.

Canadian National Railway Company

Shareholder proposal: Management advisory vote on climate change (passed with 98% support)

The company is seeking shareholder approval for its Climate Action Plan.

NYSTRS' Vote: FOR – Canadian National Railway Company is committed to setting a target to achieve net-zero carbon emissions by 2050, in line with a 1.5° C scenario. The company also plans to review its 2030 well-below 2°C aligned targets and request to revalidate them by 2026 per SBTi guidelines. It also plans to neutralize the hard-to-abate Scope 3 residual emissions that cannot be avoided by investing in nature-based solutions, starting in 2045. Considering these commitments and plans of Canadian National Railway Company, support for the Climate Action Plan is warranted.



**New York State
Teachers'
Retirement
System**

10 Corporate Woods Drive
Albany, NY 12211-2395
800-348-7298
nystrs.org

Presentation to the Retirement Board

The Estimated Employer Contribution Rate

Appendix G

Richard A. Young, Chief Actuary
Melody Prangley, Deputy Chief Actuary

January 30, 2025



Next ECR: **June 30, 2024 Actuarial Valuation**

The *Estimated* next Employer Contribution Rate (ECR):

9.59% of pay

A decrease of approximately 5.1% over the current ECR of 10.11%

Estimated ECR Components

Normal Rate	9.11%
<i>Estimated</i> Expense Rate	0.35%
Group Life Rate	0.13%
Excess Benefit Plan Rate	0.00%
<i>Estimated June 30, 2024 ECR</i>	9.59%

Year-to-Year ECR Comparison

	6/30/2024	6/30/2023	Difference
Normal Rate	9.11%	9.63%	-0.52%
<i>Estimated</i> Expense Rate	0.35%	0.35%	0.00%
Group Life Rate	0.13%	0.13%	0.00%
Excess Benefit Rate	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
<i>Estimated</i> Total Rate (ECR)	9.59%	10.11%	-0.52%

Application Dates



- Will apply to Member Salaries from 7/1/2025 through 6/30/2026
- Will be collected in the Fall of 2026
 - September 2026 (1/3rd)
 - October 2026 (1/3rd)
 - November 2026 (1/3rd)

Employer Dollars Contributed

Collection Date	Employer Contributions	ECR
Fall 2021	\$1.6 billion	9.53%
Fall 2022	\$1.7 billion	9.80%
Fall 2023	\$1.9 billion	10.29%
Fall 2024	\$1.9 billion	9.76%
Fall 2025	\$2.0 billion*	10.11%
Fall 2026	\$1.9 billion*	9.59%

**estimated*

NYSTRS Funded Ratio

Ratio of Plan Assets to Accrued Liabilities

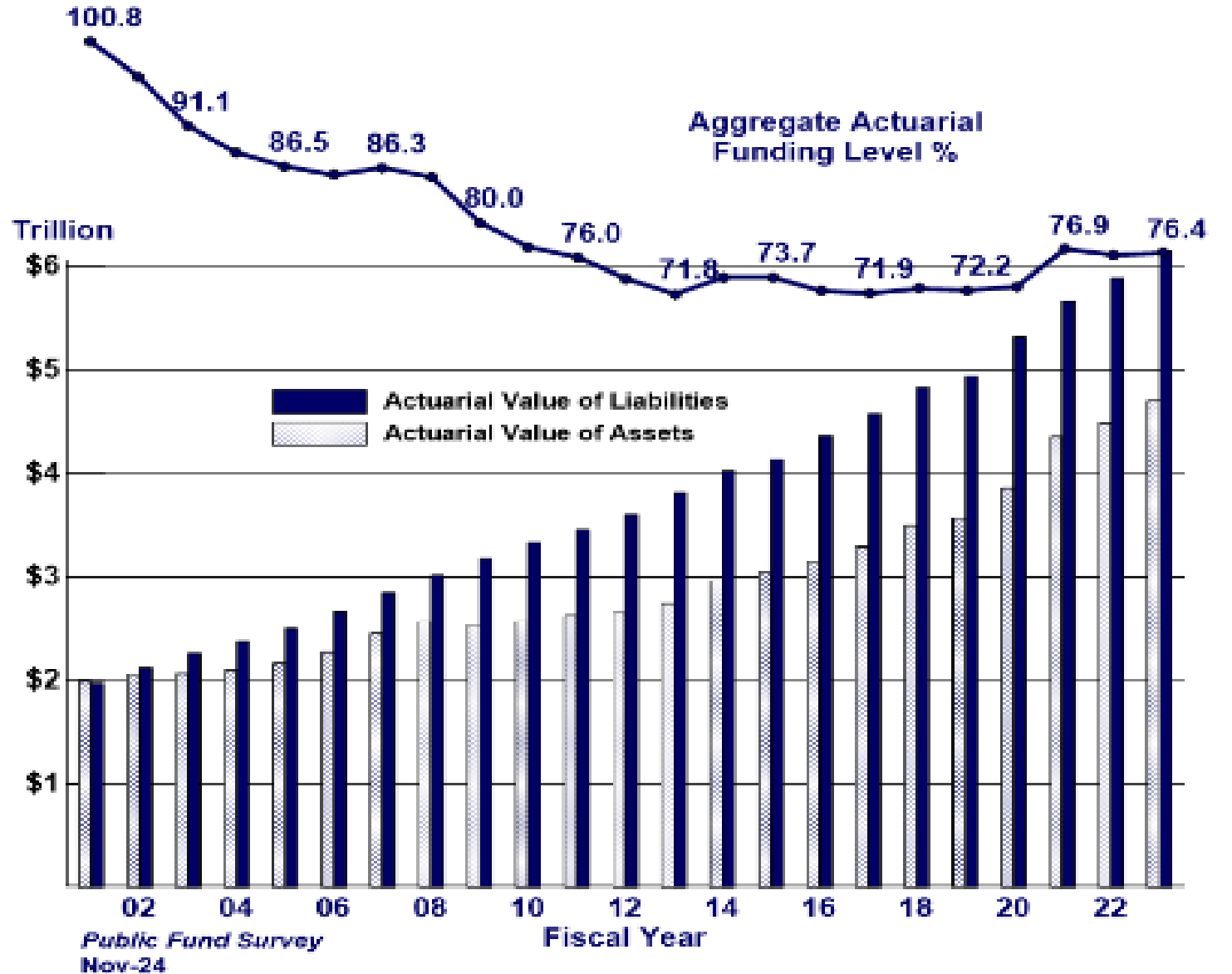
MVA = Market Value of Assets

AVA = Actuarial Value of Assets

FYE	Funded Ratio Based on MVA	Funded Ratio Based on AVA
6/30/2019	101.2%	99.6%
6/30/2020	97.3%	98.9%
6/30/2021	113.0%	99.3%
6/30/2022	97.4%	99.3%
6/30/2023	98.2%	98.6%
6/30/2024	101.5%	99.1%

Aggregate Public Plans Funded Level

NYSTRS 6/30/2023 funded ratio based on AVA was 98.6% compared to the average funded ratio of 76.4%.



Actuarial Value of Assets Development



Historic Rates of Return – Last Five Years

Fiscal Year	Rate of Return (net of fees)
2019 – 2020	3.5%
2020 – 2021	29.0%
2021 – 2022	-7.1%
2022 – 2023	9.0%
2023 – 2024	11.4%
5-year average:	8.5%

5-year geometric average: $[(1.035) \times (1.29) \times (0.929) \times (1.09) \times (1.114)]^{(1/5)} - 1 = 8.5\%$

Long-Term Annualized Rates of Return

As of June 30, 2024

Period	Rate of Return (net of fees)
1-Year	11.4%
5-Year	8.5%
10-Year	7.8%
15-Year	9.8%
20-Year	7.8%
25-Year	6.7%
30-Year	8.7%

ECR Actuarial Gain/Loss '23-'24

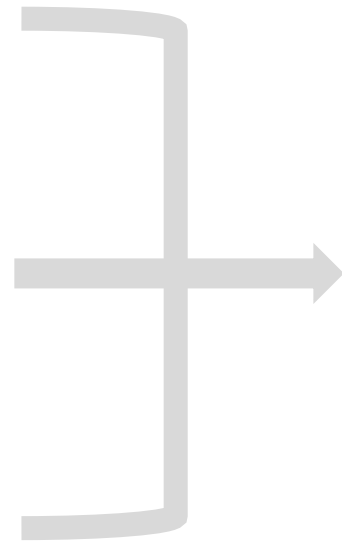
Previous Year 6/30/2023 ECR		10.11%
Factors Which Increased the ECR (Actuarial Loss)		
Salary	Salary increases higher than expected.	0.30%
Mortality	Mortality different than expected.	0.04%
Plan Change	Final Average Salary definition for Tier 6 changed to highest <u>three</u> years, instead of five.	0.12%
COLA Payments	Actual COLA of 1.8% higher than assumption of 1.3%.	0.08%
Miscellaneous	Net increase due to miscellaneous sources (e.g. data updates, tier reinstatements, return to active service, net transfers in/out, finalized contribution).	<u>0.39%</u>
Total Increase in ECR		0.93%
Factors Which Decreased the ECR (Actuarial Gain)		
Net Investment Gain	Investment return greater than expected return of 6.95%.	-1.31%
Withdrawal and Retirement	Experience different than expected.	-0.03%
New Entrants	Tier 6 normal rate lower than current normal rate.	<u>-0.11%</u>
Total Decrease in ECR		-1.45%
Overall Net Decrease in the ECR (Actuarial Gain)		-0.52%
Estimated 6/30/2024 ECR		9.59%

30-Year Inflow/Outflow Summary 1994-2024

\$34.8 Billion
Employer
Contributions

\$5.0 Billion
Member
Contributions

\$220.2 Billion
Investment Income



\$154.5 Billion
Benefit
Payments
and Expenses

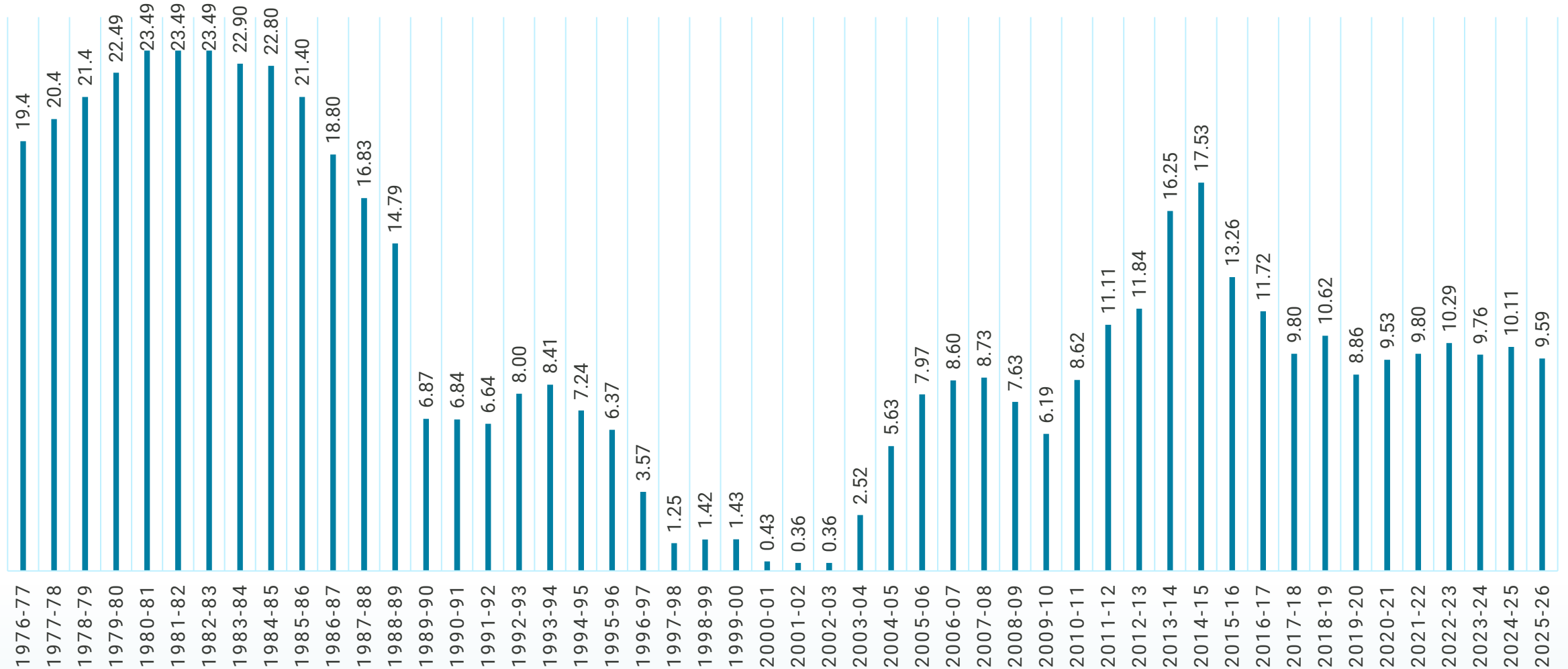
1994
Net Assets
\$40.3 Billion



2024
Net Assets
\$145.8 Billion

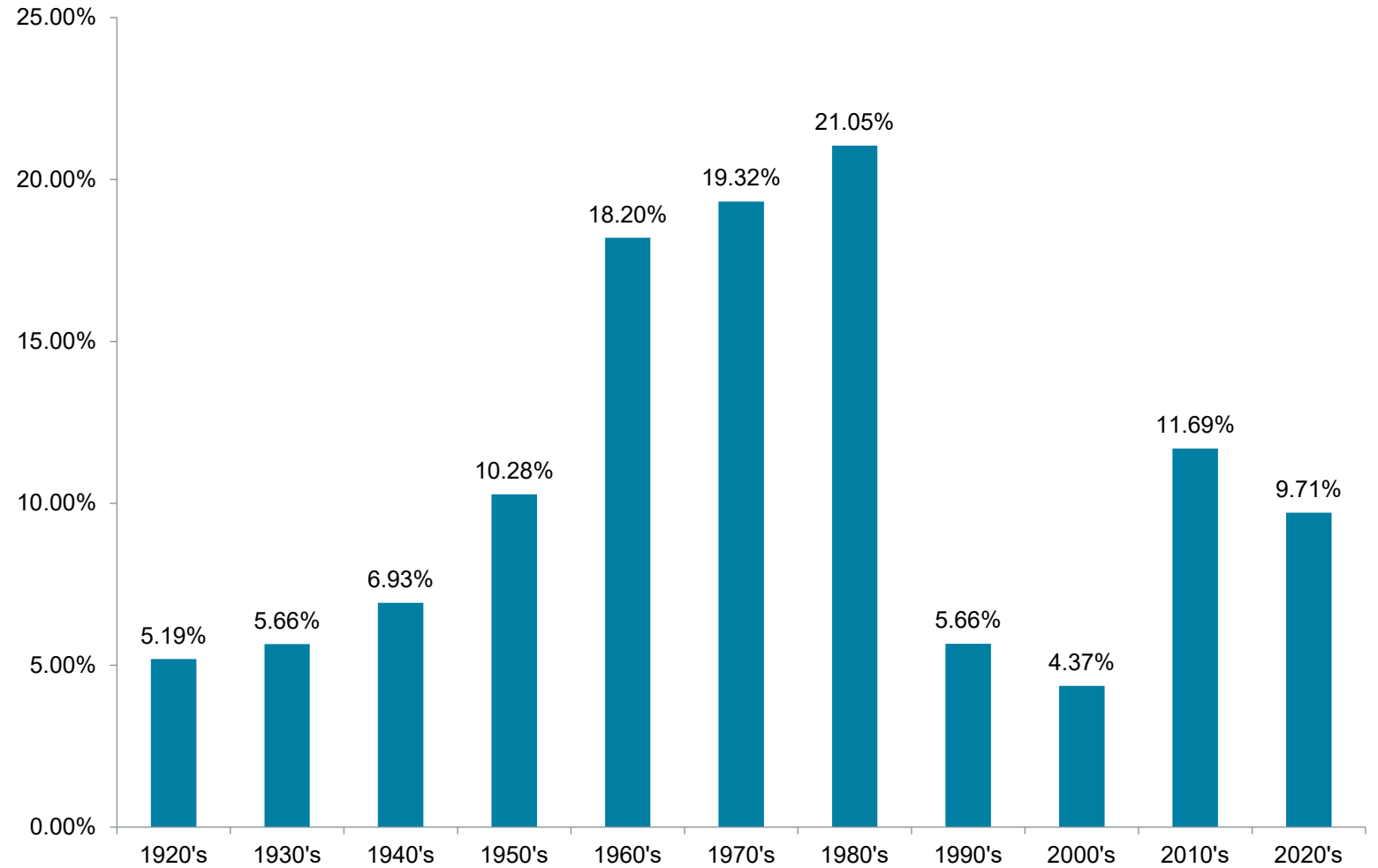
Historic 50 Years of ECRs

50-Year Average ECR = 11.14%



Average ECR's by Decade

Overall Average = 10.87%



Questions?

