



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)
- 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**

**BOARD MEETING
October 31, 2024**

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

A MEETING OF THE NEW YORK STATE TEACHERS' RETIREMENT SYSTEM BOARD was held at the System on October 31, 2024. The meeting was called to order by Board President David Keefe at 9:01 a.m. President Keefe asked Paul Farfaglia to lead the group in the Pledge of Allegiance.

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

After the Pledge of Allegiance, President Keefe welcomed Donald A. Little III to the Board. Mr. Little was appointed by the NYS Board of Regents to fill the vacancy left by Elizabeth Chetney's resignation in March 2024, until the next annual convention of active members held in November 2024.

Agenda

1. Introduction of Visitors

T. Lee introduced Greg Berck, NYS School Boards Association; Steve Greenberg of Greenberg PR; Pete Savage from NYS United Teachers (via WebEx); Robert Steyer from Pension & Investments (via WebEx); Cyril Espanol from WithIntelligence (via WebEx).

2. Correspondence

None.

3. Approval of July 31, 2024 Board Minutes and August 1, 2024 Board Retreat Minutes

Upon motion of N. Smirensky, seconded by J. Benaquisto and unanimously carried, the minutes of the July 31, 2024 Board Meeting and the August 1, 2024 Board Retreat were approved.

Committee Reports & Action Items

1. Audit Committee

A. Resolution on Plante Moran Annual Audit Report (R1)

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

RESOLVED, That the report of Plante Moran on the financial statements of the Retirement System as of June 30, 2024 and for the plan year then ended, as presented to the Retirement Board, is accepted.

B. Resolution Reappointing Susan Landauer as Audit Committee Financial Expert (R2)

N. Smirensky offered the following resolution, seconded by P. Farfaglia and unanimously carried by the Board:

WHEREAS, The term of Ms. Susan M. Landauer, as the Audit Committee Financial Expert expires on December 31, 2024; be it

RESOLVED, That the Retirement Board hereby reappoints Ms. Landauer to a three-year term as the Audit Committee Financial Expert effective January 1, 2025.

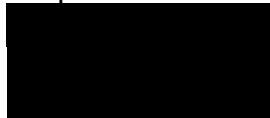
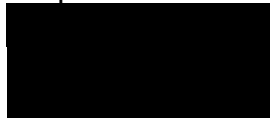
2. Disability Committee

A. Disability Rescission Resolution (R3)

P. Farfaglia offered the following resolution, seconded by J. Benaquisto and unanimously carried by the Board:

WHEREAS, After reviewing the physician’s report of the following annuitants who have retired for disability, the Medical Board believes they are improved and no longer incapacitated for the performance of all gainful employment, 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 members for disability be rescinded and they be restored to active membership on the date indicated:

<u>EmpID</u>	<u>Date Retired</u>	<u>Date Restored</u>
	02/19/2000	09/06/2024
	12/21/2010	09/06/2024
	07/12/2018	09/06/2024

3. Ethics Committee

E. Iberger, acting Chair, reported that the Committee had met

earlier in the day.

4. Executive Committee

A. Resolution on the 2025 Legislative Program (R4)

P. Harrington offered the following resolution, seconded by O. Robinson

and unanimously carried by the Board:

RESOLVED, That the 2025 Legislative Program (Appendix A, pp. 10-28), as presented to the Retirement Board by System staff, is approved and the Executive Director and Chief Investment Officer, or his designees, is authorized to seek introduction and enactment of the bill contained therein.

5. Compensation Committee

P. Harrington, Chair, reported that the Committee had met and discussed the Executive Director and Chief Investment Officer's annual performance review.

A. Resolution on Executive Compensation – EDCIO (R23)

O. Robinson offered the following resolution, seconded by J. Benaquisto

and unanimously carried by the Board:

RESOLVED, that the report of the Compensation Committee regarding a recommended action on Executive Compensation, a copy of which is attached (Appendix B, p 29), is authorized and approved.

6. Investment Committee

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-E (Appendix C, pp. 30-31) together with one motion:

O. Robinson offered the following resolutions, seconded by E. Iberger

and unanimously carried by the Board:

A. Renew Consultants

- StepStone – Private Equity/Debt Consultant (R5)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the System's contract with StepStone Group LP to serve as the System's private equity and private debt consultant and to perform such assignments as may be determined by the Executive Director and Chief Investment Officer or his designees in connection therewith, for a period of one year, commencing February 1, 2025 for all fixed services at an annual retainer not to exceed the current term's fee of \$1,485,000 (subject to an inflation price adjustment not to exceed the lesser of 3% and the change in the ECI Index) and for all optional services at fees (1) for research on market trends or on private equity or private debt partnerships not in our portfolio not to exceed \$40,000 per report; (2) for special research assignments to better define goals and objectives or monitor portfolio risk not to exceed \$40,000 per report; (3) for negotiating final investment agreements and work with the System's legal counsel and staff in drafting, reviewing and/or revising partnership agreements, subscription agreements and other required documents for an additional fee not to exceed \$15,000 per agreement; (4) for providing professional training not to exceed \$20,000 per training; (5) for attending annual meetings and providing meeting notes not to exceed \$8,000 per meeting; (6) for monitoring and reporting on legacy partnerships not to exceed \$4,500 per partnership.

- StepStone – Real Estate Consultant (R6)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with StepStone Group Real Estate LP to serve as the System's real estate consultant and to perform such assignments and optional services as may be determined by the Executive Director and Chief Investment Officer or his designee in connection therewith, for the one year period commencing February 1, 2025 at an annual retainer not to exceed \$450,000 plus the agreed upon price escalation based on the percent change in the Employment Cost Index.

- Meketa – Real Estate Consultant (R7)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with Meketa Investment Group, Inc. to serve as the System's secondary real estate consultant and to perform such assignments and optional services as may be determined by the Executive Director and Chief Investment Officer or his designee in connection therewith, for the one year period commencing February 1, 2025.

B. Renew Managers

- AQR Capital Management LLC (R8)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with AQR Capital Management, LLC to manage a portion of the System's assets as an active MSCI ACWI Ex-US international equity manager for a period of one-year, effective January 6, 2025.

- BlackRock Institutional Trust Company (R9)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with BlackRock Institutional Trust Company, N.A. to manage a portion of the System's assets as a passive ACWI ex-US international equity manager for a period of one-year, effective December 12, 2024.

- Dimensional Fund Advisors (R10)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with Dimensional Fund Advisors to manage a portion of the System's assets as an active emerging markets manager benchmarked to the MSCI Emerging Markets Index for a period of one year commencing February 19, 2025.

- Goldman Sachs Asset Management (R11)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with Goldman Sachs Asset Management, L.P. to manage a portion of the System's assets as an active global bond manager benchmarked to the Bloomberg Global Aggregate Float Adjusted ex-CNY Bond Index Hedged to USD for a period of one year, effective November 12, 2024.

- Harding Loevner Management (R12)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with Harding Loevner LP to manage a portion of the System's assets as an active global equity manager benchmarked to the MSCI ACWI index for a period of one-year, effective February 27, 2025.

- Loomis Sayles & Co. (R13)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with Loomis Sayles & Co., L.P., to manage a portion of the System's assets as an active global bond manager benchmarked to the Bloomberg Global Aggregate Float Adjusted ex-CNY Bond Index Hedged to USD for a period of one year, effective November 8, 2024.

- Marathon Asset Management Limited, As Successor in Interest to Marathon Asset Management LLP (R14)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with Marathon Asset Management Limited, as successor in interest to Marathon Asset Management, LLP, to manage a portion of the System's assets as an active EAFE international equity manager for a period of one year, effective January 24, 2025.

- Nomura Corporate Research & Asset Management (R15)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with Nomura Corporate Research and Asset Management Inc. for a period of one year, effective November 28th, 2024, to manage a portion of the System's assets as an active U.S. high yield manager in an account benchmarked to the ICE BofAML US High Yield Constrained Index (HUC0).

- State Street Global Advisors (R16)

RESOLVED, That the Executive Director and Chief Investment Officer is authorized to renew the agreement with State Street Global Advisors Trust Company (successor-in-interest by assignment from State Street Bank and Trust Company) to manage a portion of the System's assets as a passive ACWI ex US international equity manager, for a period of one year, effective February 18, 2025.

C. Reappointments to the Investment Advisory Committee

- Robert Levine (R17)

WHEREAS, The term of Mr. Robert Levine as a member of the Investment Advisory Committee expires on December 31, 2024; be it

RESOLVED, That the Retirement Board hereby reappoints Mr. Robert Levine to a three-year term as a member of the Investment Advisory Committee, effective January 1, 2025.

- June Yearwood (R18)

WHEREAS, The term of Ms. June Yearwood as a member of the Investment Advisory Committee expires on December 31, 2024; be it

RESOLVED, That the Retirement Board hereby reappoints Ms. June Yearwood to a three-year term as a member of the Investment Advisory Committee, effective January 1, 2025.

D. Reappointments to the Real Estate Advisory Committee

- Maureen Ehrenberg (R19)

WHEREAS, The term of Ms. Maureen A. Ehrenberg as a member of the Real Estate Advisory Committee expires on December 31, 2024; be it

RESOLVED, That the Retirement Board hereby reappoints Ms. Maureen A. Ehrenberg to a three-year term as a member of the Real Estate Advisory Committee, effective January 1, 2025.

- James O’Keefe (R20)

WHEREAS, The term of Mr. James W. O’Keefe as a member of the Real Estate Advisory Committee expires on December 31, 2024; be it

RESOLVED, That the Retirement Board hereby reappoints Mr. James W. O’Keefe to a three-year term as a member of the Real Estate Advisory Committee, effective January 1, 2025.

E. Resolution on Investment Policy Manual (R21)

RESOLVED, That the Investment Policy Manual, as presented to the Retirement Board reflecting significant changes through October 2024, as summarized in the grid below, is approved and accepted.

POLICY	SUMMARY OF SIGNIFICANT CHANGES 2024
Delegation of Investment Authority	<ul style="list-style-type: none"> • Added language to distinguish the processes to terminate a manager under exigent and non-exigent circumstances.
Global Bonds	<ul style="list-style-type: none"> • New Global Bonds-Internal section added as a result of Board approved internally managed emerging market debt portfolio.

2. Resolution on Internally Managed International Equity Strategy (R22)

E. Iberger offered the following resolutions, seconded by O. Robinson and unanimously carried by the Board:

WHEREAS, Staff has proposed a multi-year timeline, commencing in 2024 and ending in or about 2028, for creating an up to \$1 billion internally managed passive international public equities strategy, to be implemented in a series of steps (the “Internally Managed International Strategy”); and

WHEREAS, the Retirement Board has reviewed the proposal, and it is in the best interests of the System’s members and beneficiaries for the System to pursue and implement the Internally Managed International Strategy; and

NOW, THEREFORE, BE IT RESOLVED, That the System is hereby authorized to implement the Internally Managed International Strategy, up to an aggregate amount of \$1 billion (based on capital contributions into the strategy), in multiple stages based on countries or regions, in such amounts and at such times as may be determined by the Executive Director and Chief Investment Officer; and be it further

RESOLVED, That the Executive Director and Chief Investment Officer, or designees, is authorized to take all steps and execute all documents necessary to implement the Internally Managed International Strategy, and be it further

RESOLVED, That the Executive Director and Chief Investment Officer, or designees, shall provide periodic updates, at least annually, to the Retirement Board on the progress and status of the implementation of the Internally Managed International Strategy.

7. Risk Committee

N. Smirensky, acting Chair, reported that the Committee had met earlier in the day and heard a presentation an information security update and personnel updates in Executive Session and in open session heard reports on the annual SEC Red Flags risk assessment and the investment risk KRI dashboard.

Staff Reports

A. Old Business

None.

B. New Business

1. Litigation

Don Ampansiri discussed the Litigation report (Appendix D, p. 32)

2. Member Relations

Beth Dellea reviewed details for the upcoming Delegates Meeting to be held in Saratoga NY on November 3-4, 2024. She also reviewed the results of the 2024 Retiree Customer Service survey (Appendix E, pp. 33-40)

3. EDCIO Work Plan Update

Emily Ekland reviewed the dashboard that tracks projects under the ED/CIO work plan (Appendix F, pp. 41-43).

4. DEI Update

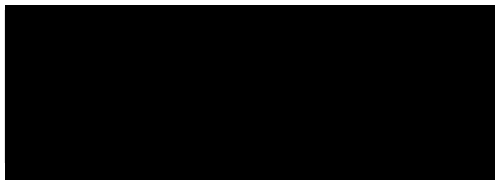
Danny Malavé and Matt Pinchinat provided department updates (Appendix G, pp. 44-47)

5. Employer Contribution Rate Presentation

Richard Young and Melody Prangley gave a presentation to the Board on the employer contribution rate (Appendix H, pp. 48-64).

There being no further business, the meeting unanimously adjourned at 10:20 a.m.

Respectfully submitted,



Thomas K. Lee

Board Meeting - January 30, 2025

RESOLUTION ON AUDIT COMMITTEE CHARTER

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

Board Meeting – January 30, 2025

**RESOLUTION APPROVING INTERNAL AUDIT PLAN FOR THE YEAR
ENDING DECEMBER 31, 2025**

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; be it

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

Board Meeting January 30, 2025

DISABILITY DENIAL RESOLUTION
TIER 4

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:



Board Meeting January 30, 2025

DISABILITY RESCISSION RESOLUTION
TIER 1

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>
██████████	11/14/1996	12/12/2024

Board Meeting January 30, 2025

DISABILITY RESCISSION RESOLUTION
TIER 3

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:

EmpID

[REDACTED]

Date Retired

04/28/2004

Date Restored

1/09/2025

Board Meeting January 30, 2025

RESOLUTION APPROVING THE BUSINESS CONTINUITY PLAN

RESOLVED, That the Business Continuity Plan, as presented to the Retirement Board reflecting changes through January 2025 is approved and accepted.

Board Meeting January 30, 2025

RESOLUTION RENEWING 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.

Board Meeting January 30, 2025

RESOLUTION ON 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.

Board Meeting January 30, 2025

RESOLUTION ON ARROWSTREET CAPITAL LP

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.

Board Meeting January 30, 2025

Resolution Renewing The Bank of New York Mellon

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.

Board Meeting January 30, 2025

RESOLUTION RENEWING BLACK ROCK FINANCIAL MANAGEMENT

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.

Board Meeting January 30, 2025

RESOLUTION RENEWING COHEN & STEERS CAPITAL MANAGEMENT

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.

Board Meeting January 30, 2025

RESOLUTION RENEWING 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.

Board Meeting January 30, 2025

RESOLUTION RENEWING PGIM, INC.

RESOLVED, That the Executive Director and Chief Investment Officer 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.

Board Meeting January 30, 2025

RESOLUTION RENEWING 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.

Board Meeting January 30, 2025

RESOLUTION RENEWING RAI TH CAPITAL PARTNERS, LLC

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.

Board Meeting January 30, 2025

Resolution Renewing RhumbLine Advisors LP

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.

Board Meeting January 30, 2025

Resolution Renewing Xponance

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.

Board Meeting January 30, 2025

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Board Meeting January 30, 2025

**RESOLUTION APPOINTING DHVANI SHAH
TO THE INVESTMENT ADVISORY COMMITTEE**

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.

Board Meeting January 30, 2025

**RESOLUTION ACCEPTING UPDATES TO NYSTRS' RESPONSIBLE STEWARDSHIP
POLICY—APPENDIX A: STOCK PROXY VOTING**

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.

Retirement Board Meeting January 30, 2025

**RESOLUTION ACCEPTING UPDATES TO NYSTRS' AML/OFAC COMPLIANCE
POLICY AND APPENDIX B: AML/OFAC COMPLIANCE CERTIFICATION**

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.



**New York State
Teachers'
Retirement
System**

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



To: T. Lee
From: C. Laven
CC: B. Dellea
Date: January 30, 2025
Re: Member & Employer Services
Materials for the January 30, 2025, Retirement Board Meeting

I have attached the summary of member loan information for the January 30, 2025, Retirement Board meeting.

If you need any further information, please let me know.

A handwritten signature in black ink that reads 'Colleen Laven'.

Colleen Laven, Manager
Member & Employer Services

New York State Teachers' Retirement System

MEMORANDUM

TO: Retirement Board

FROM: Thomas K. Lee

SUBJECT: Member Loans

DATE: January 30, 2025

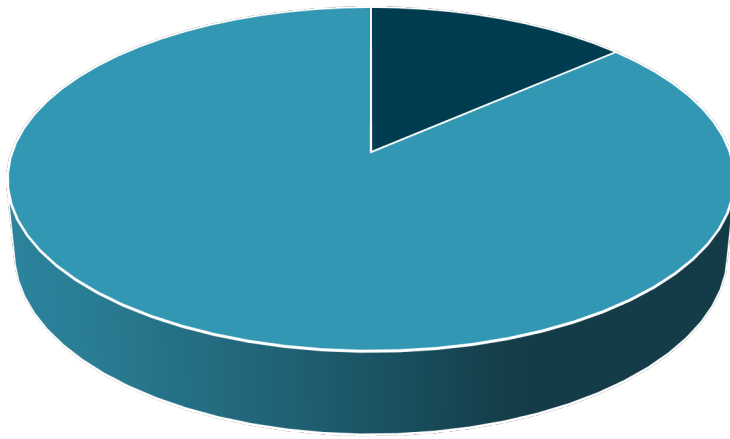
<u>Total Loans Outstanding</u>	<u>December 31, 2024</u>	<u>December 31, 2023</u>	<u>Increase(Decrease)</u>
Direct Payments	3,059	2,936	123
Payroll Deductions	<u>19,508</u>	<u>19,229</u>	<u>279</u>
Total	22,567	22,165	402
Direct Payments	\$ 38,575,807	\$ 35,835,172	\$ 2,740,635
Payroll Deductions	<u>245,078,465</u>	<u>231,281,091</u>	<u>13,797,374</u>
Total	\$283,654,272	\$267,116,263	\$16,538,009

<u>Delinquent Loans</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
One Month	84	0.4	81	0.4
Two Months	46	0.2	54	0.2
Three Months	41	0.2	24	0.1
Default to Payroll	147	0.7	129	0.6
Nonperforming Loan	<u>2,774</u>	<u>12.3</u>	<u>2,727</u>	<u>12.3</u>
Total	3,092	13.8	3,015	13.6

<u>Loans Issued Annually</u>	<u>December 31, 2024</u>	<u>December 31, 2023</u>	<u>Increase(Decrease)</u>
Direct Payments	290	253	37
Payroll Deductions	<u>10,912</u>	<u>10,795</u>	<u>117</u>
Total	11,202	11,048	154
Direct Payments	\$ 2,686,597	\$ 2,514,159	\$ 172,438
Payroll Deductions	<u>102,267,434</u>	<u>100,819,250</u>	<u>1,448,184</u>
Total	\$104,954,031	\$103,333,409	\$1,620,622

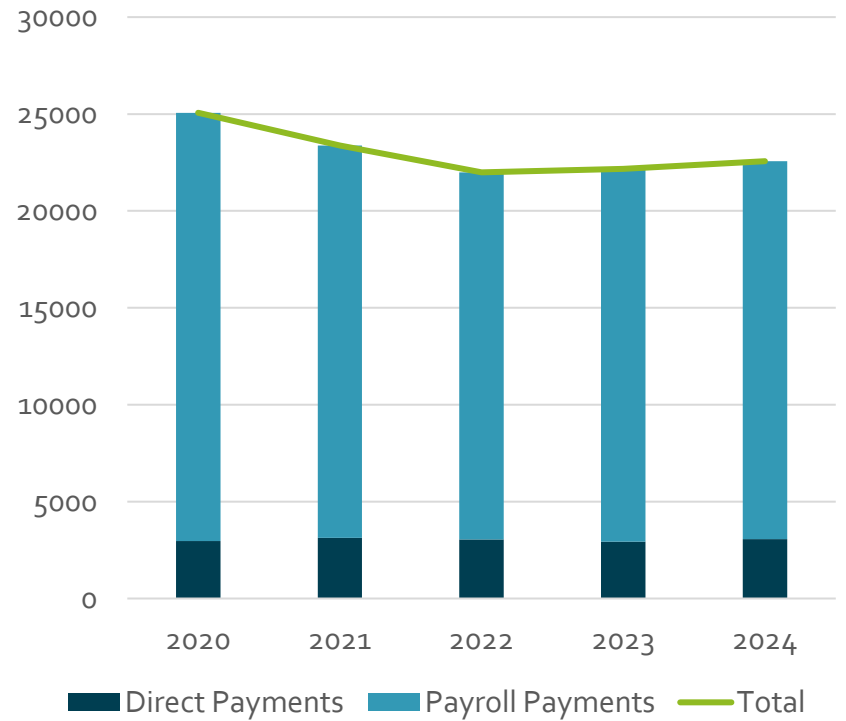
Member Loans December 31, 2024

Member Loans Outstanding as of 12/31/2024 (\$283,654,272)

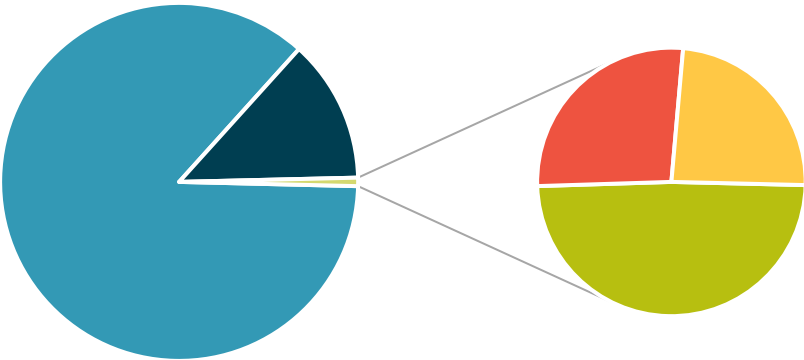


- Direct Payments (\$38,575,807)
- Payroll Deduction (\$245,078,465)

Member Loans Outstanding 2020-2024

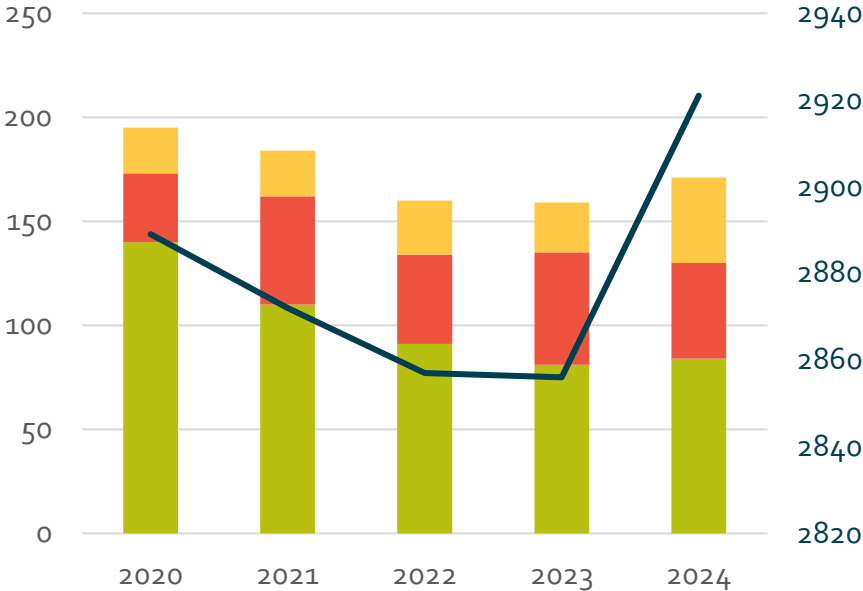


Member Loan Repayment Status as of 12/31/2024



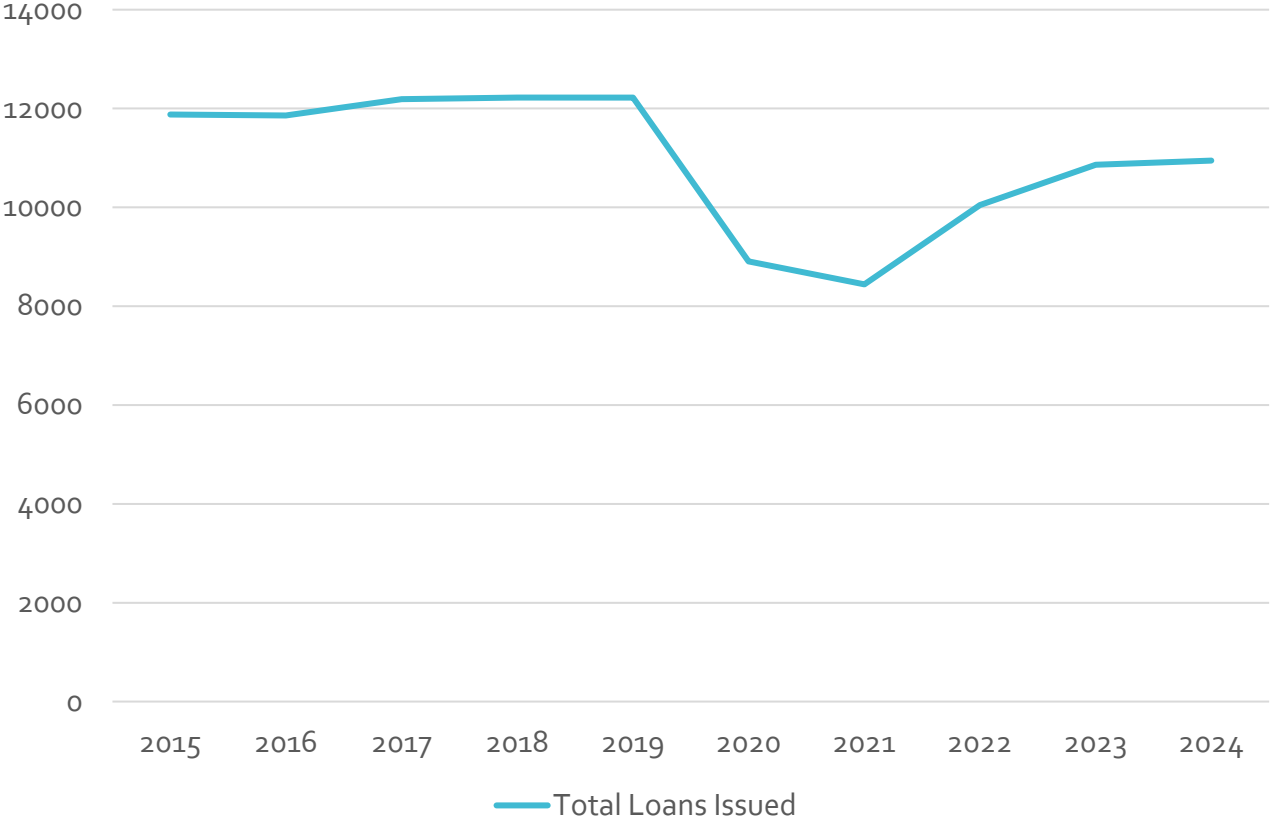
- Current (19,475)
- One Month Delinquent (84)
- Two Months Delinquent (46)
- Three Months Delinquent (41)
- Defaulted (2,921)

Delinquent Member Loans 2020-2024



- Three Months Delinquent
- Two Months Delinquent
- One Month Delinquent
- Defaulted

Total Loans Issued 2015-2024



MEMORANDUM

To: Tom Lee and the Retirement Board
From: Beth Dellea, Chief Customer Officer
Subject: Annual Unclaimed Account Memo
Date: January 30, 2025

This memo is formally documenting a change to the annual memo issued for the April Board meeting which breaks down the most recent Unclaimed Accounts report.

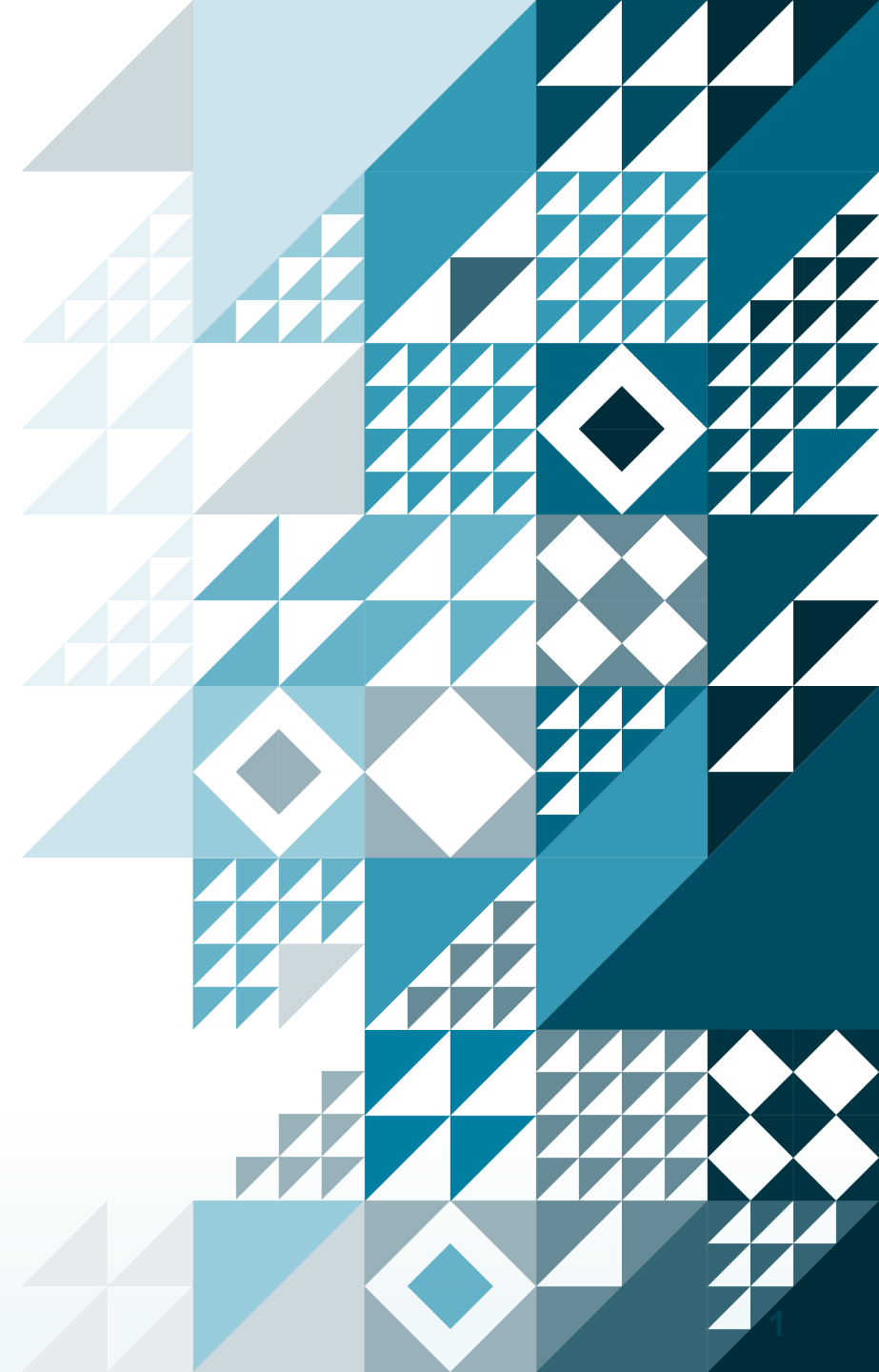
Previously the memo broke down the number of projected refunds that occurred during the 18 months between when the members' account cease and when they are officially deemed abandoned.

Since there are instances when action other than "refund" may be included in this number, we will be removing the statistic from the report, since it is not required.

The next report that will reflect this change will be provided at the April 2025 Board meeting.

Quality Assurance & Support (QAS) Update

Board presentation January 2025



Agenda



What's new in QAS



Results of QAS Service Retirement Monthly Review



Items reported to NYS Department of Financial Services (DFS)

QAS Accomplishments

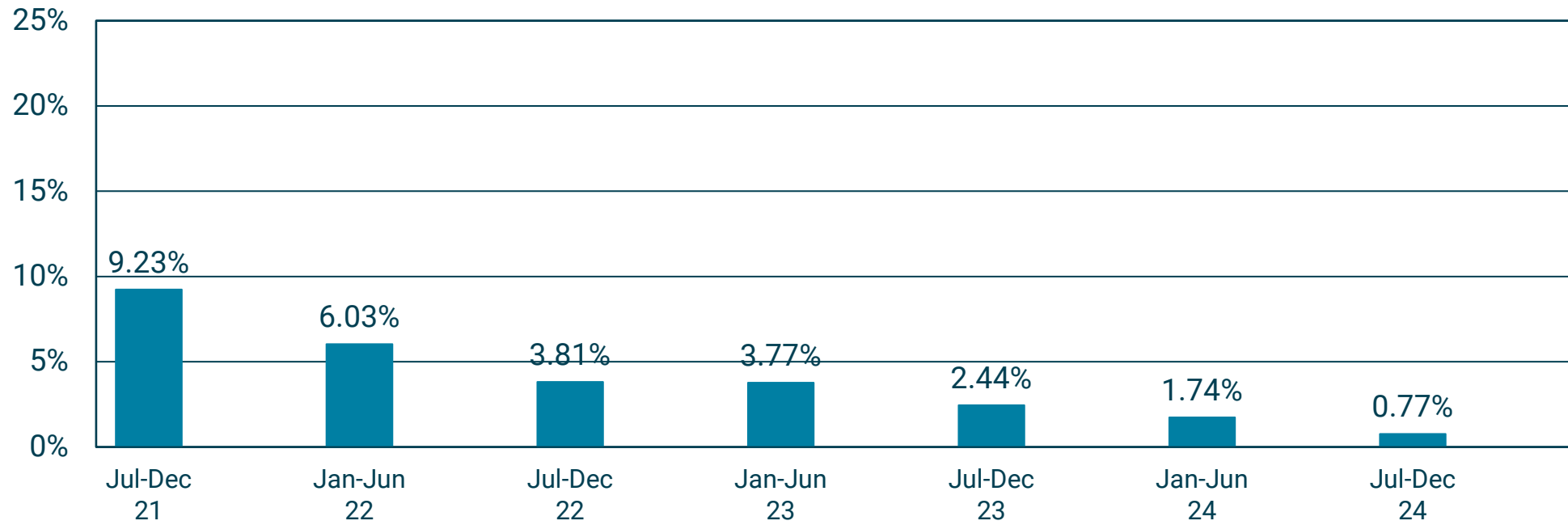
- Andy Whitney was appointed Manager of QAS.
- Established processes and procedures for the review of part-time service credit.
- Continued developing new trainings focused on service credit and file reviews.
- Completed reviews on 433 service retirement closeout files.

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*



	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

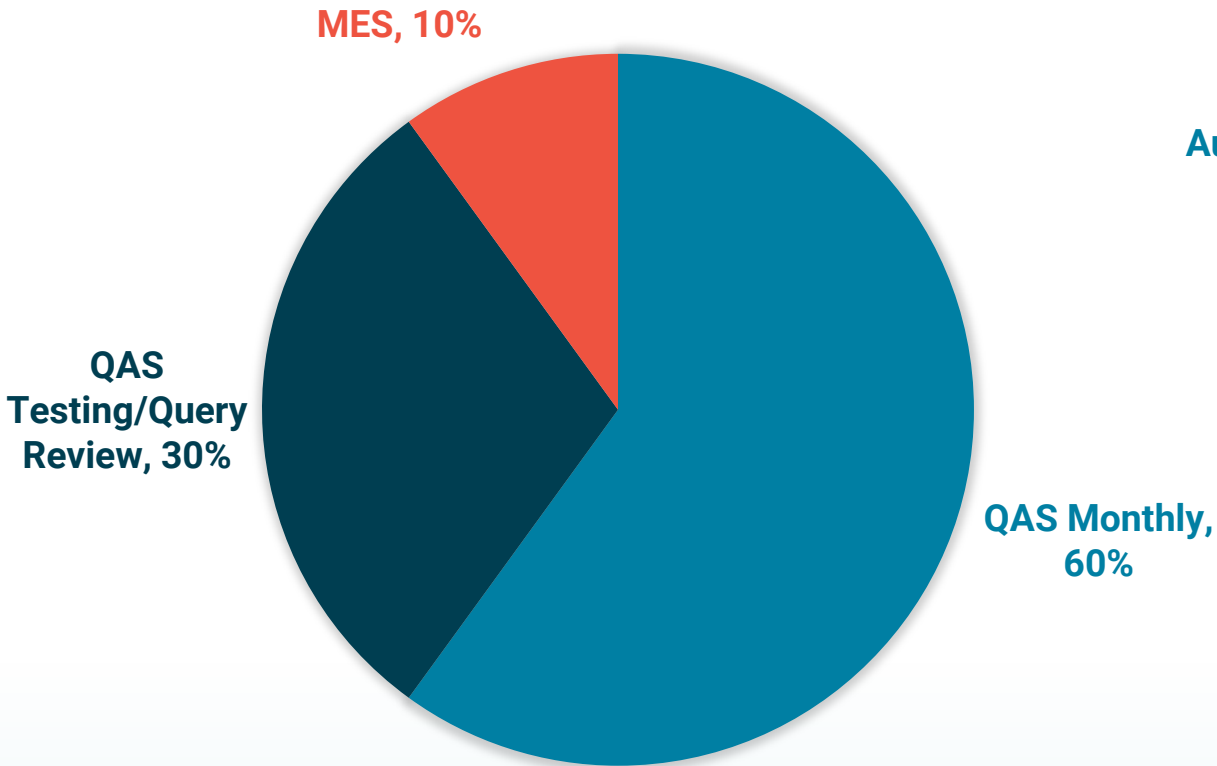
Items Reported to DFS July-December 2024

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.

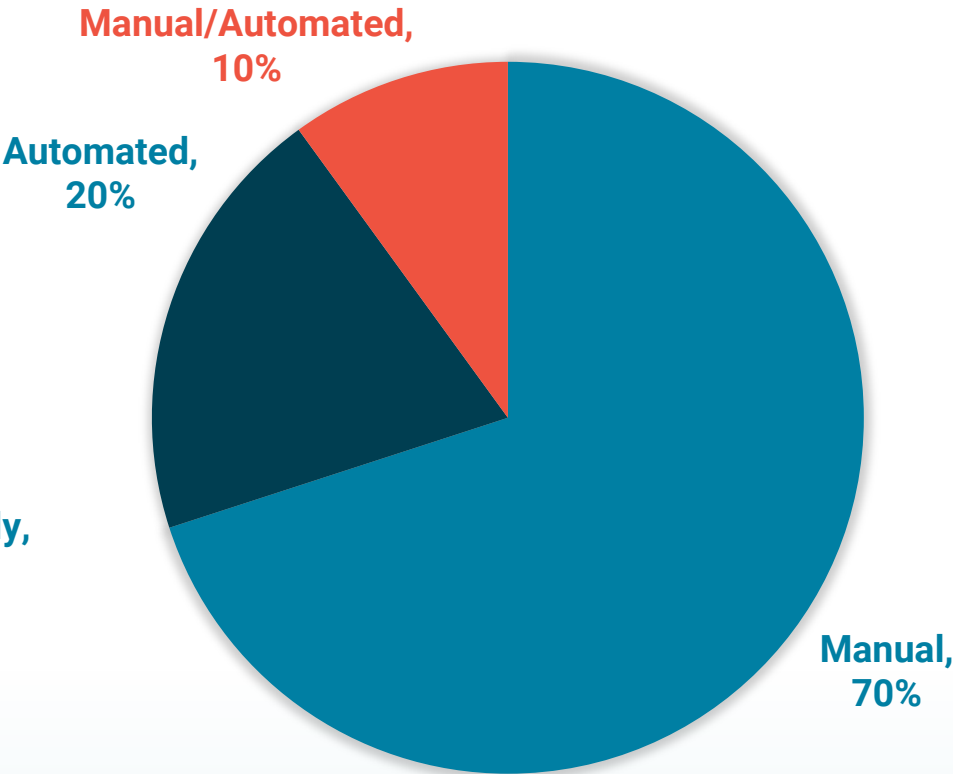
July 2024	3
August 2024	0
September 2024	0
October 2024	7
November 2024	0
December 2024	0
<hr/> Total	10

July-December 2024 DFS Items

REPORTING DEPARTMENT

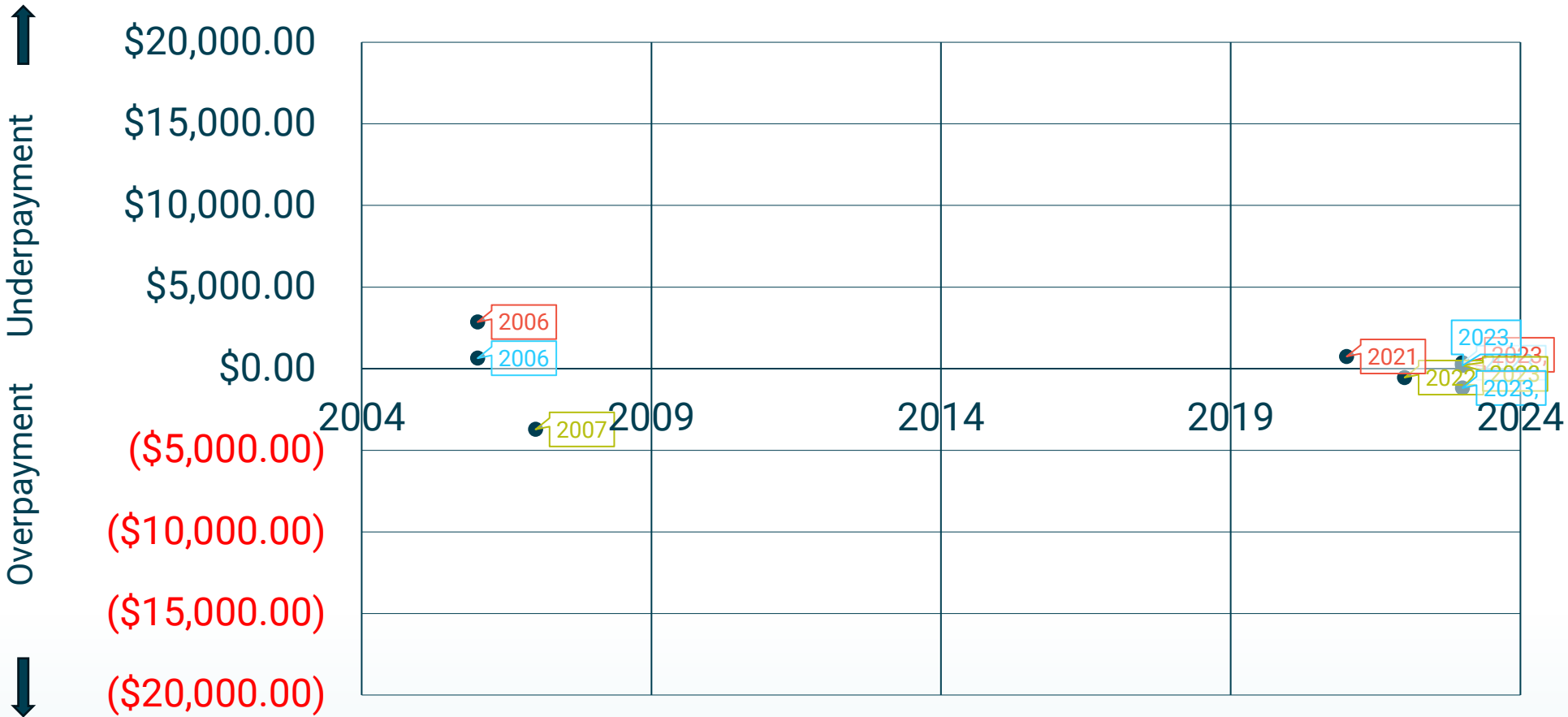


ERROR TYPE



July-December 2024 DFS Items

Amount Underpaid/Overpaid by Calendar Year of Retirement



Questions?



What is Artificial Intelligence?



- Artificial intelligence (AI) refers to the simulation of human intelligence by machines, particularly computer systems.
- AI systems can be designed to perform tasks that typically require human cognitive functions, such as recognizing speech, making decisions, translating languages, and even playing complex games.



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What is GenAI? Ex: ChatGPT



Generative AI refers to artificial intelligence techniques that learn a representation of many types of material from large existing data pools.

Generative AI can then create brand-new, completely original material such as images, video, speech, text and more.



Three Categories of AI Products

- Embedded AI (43%). These are the AI capabilities that software vendors are adding to the enterprise applications in your portfolio
- Built AI (35%). These are the centrally owned AI capabilities that your in-house software engineering and data and analytics (D&A) teams are building
- Bring your own (BYO) AI (22%). These are the packaged AI software and capabilities that departments within your organization are procuring and using



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Artificial Intelligence at NYSTRS

A review of the technology and our approach ...



Major Considerations

- AI policy developed and published
- AI is limited to approved use cases
- Evaluate business value vs. risk
- Strong vendor management is paramount –
Ensure safeguards for NYSTRS data
- Regular review and oversight



NYSTRS Data Safeguards

- Contract Reviews and approvals
- Ownership over data
- Security and privacy terms
- Vendor Acquisitions, mergers and bankruptcies
- IT assessment for technology being considered

Artificial Intelligence at NYSTRS

AI Committee

- All TRS education and training
- Decision making

AI Policy

- Outlines responsible use
- Outlines prohibited use

NYSTRS AI Policy – Responsible Use

- Users must adhere to all applicable laws, regulations and industry standards
- Users must handle personal and sensitive data in accordance with NYSTRS policies
- Users shall respect intellectual property rights
- Users must ensure the accuracy of the outputs generated prior to use

NYSTRS AI Policy – Prohibited Use

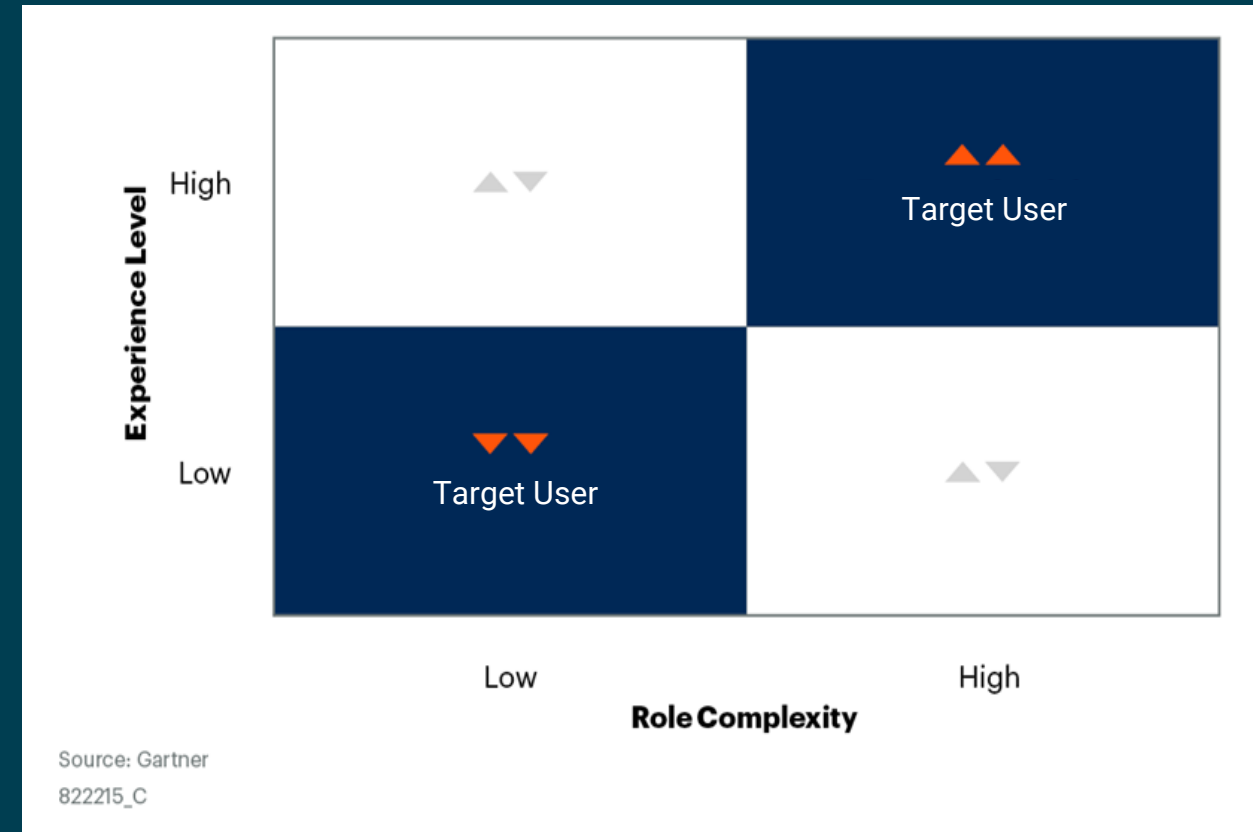
- **Unlawful activities:** Illegal, unethical or malicious activities
- **Discrimination and bias:** Systems that discriminate against individuals or groups based on characteristics
- **Misrepresentation:** Generating or disseminating false or misleading information
- **Invasion of privacy:** Use of AI to harvest personal data or surveil without consent
- **Deceptive use:** Causing someone to believe AI work is original content

NYSTRS Approach

- Steady, intentional pace
- Start small
- Outcome driven

Use Case Criteria

- Appropriate user
- Creates efficiency
- Scalable solution



Use Cases

- **Current Use**

- ServiceNow AI Search- Enables faster and more organized record searching
- Microsoft Teams Premium- Automated meeting notes, personalized highlights providing intelligent meeting recaps
- Blackrock's Aladdin –Virtual assistant providing users with fast, self-service

- **Under development**

- NYSTRS.org virtual agent proof of concept

- **Future Applications**

- MS Office 365 Copilot
- Automated IT System Testing Using AI
- Retirement applications processing
- Fraud detection and prevention

Possibilities

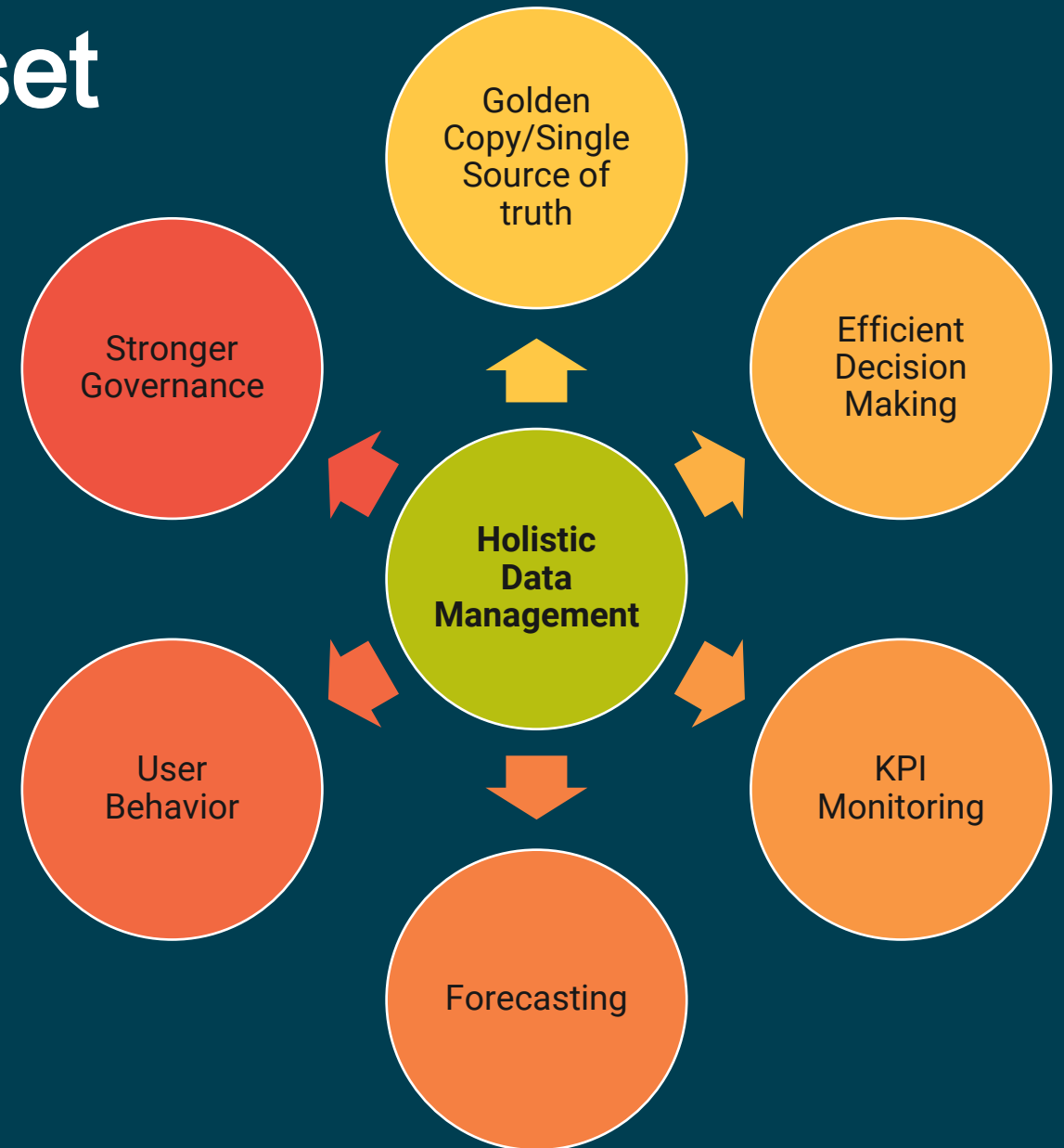
- Content creation and search functions
- Data Summarization and insights
- Process and workflow automation
- Workforce productivity
- Customer assistance
- Software development

Anticipated Challenges

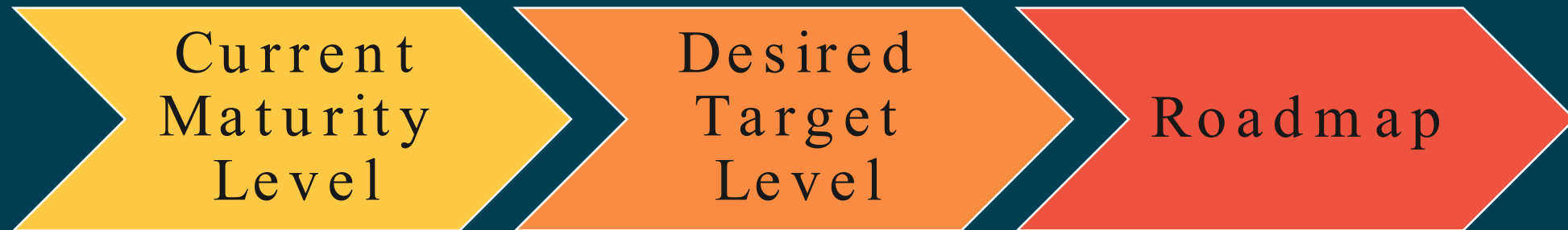
- Talent
- Change Management
- Data Management

Data is our strategic asset

Without good data and good data infrastructure you cannot have any efficient programs, let alone efficient AI.



Initiative: Data Management Maturity Assessment



Questions?



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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

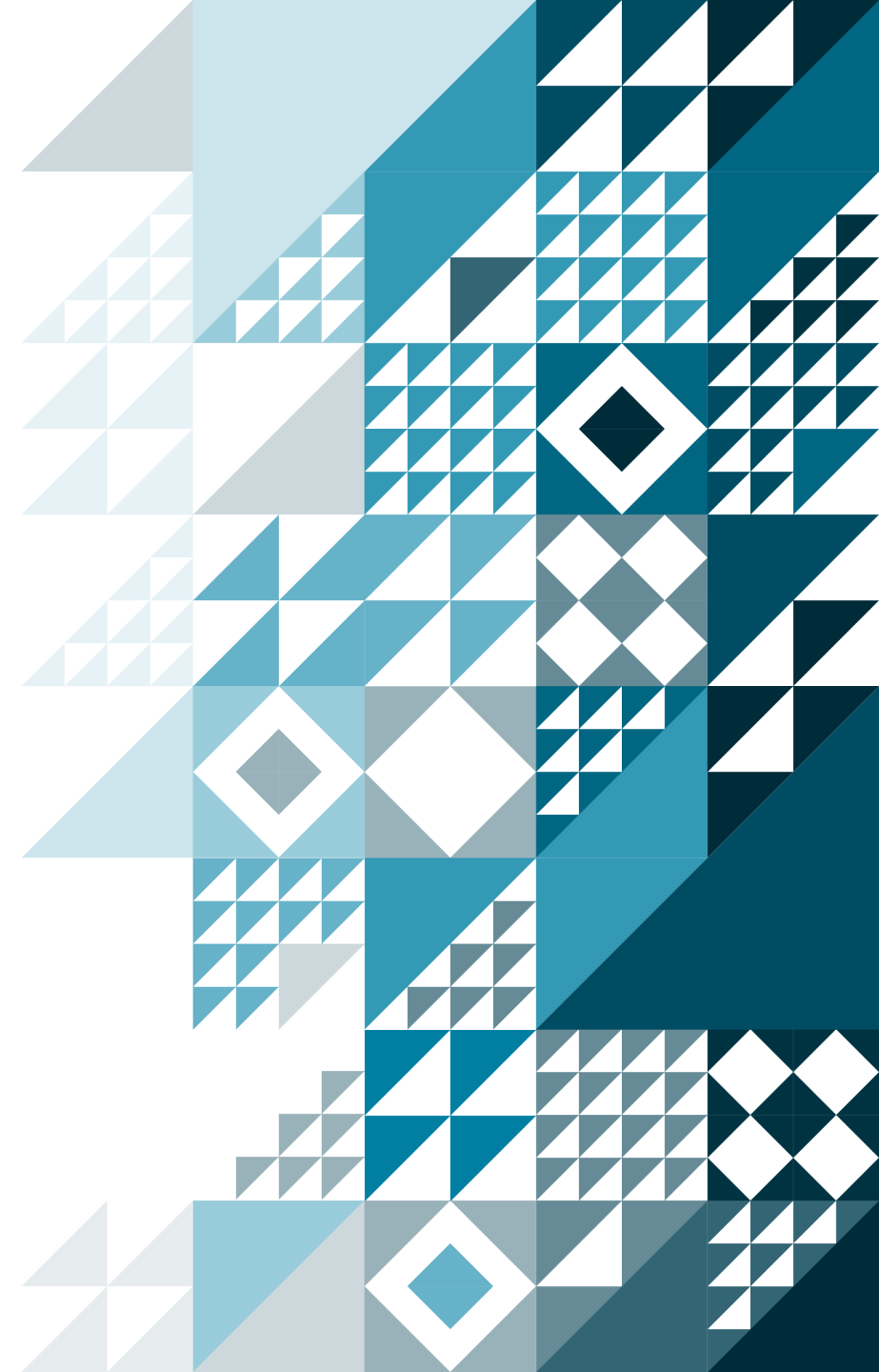
- Voluntary Workforce Education – Empowerment Series (Ongoing)
- Employee Networking Group (ENG) Collaborative Initiatives
- NYSTRS DEI Advisory Council – *NEW FY25/26*

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

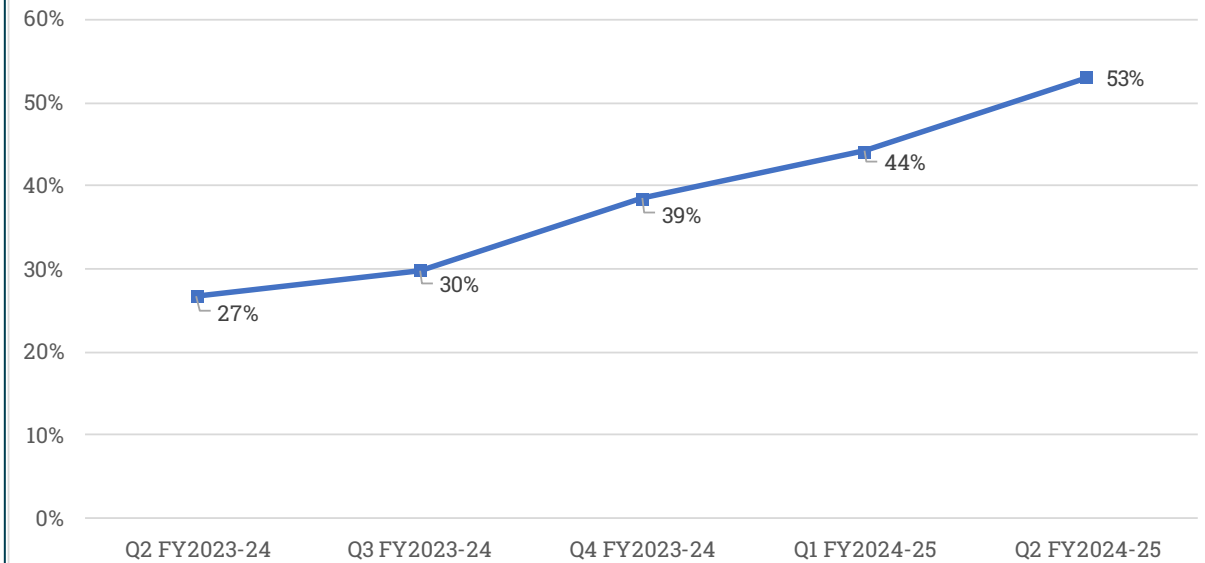
- Veterans Day Breakfast
- Exploring the Intersections of Identity & Work
- Cultural Exchange – BEN Collaboration (ENG)

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



Program Attendance by Quarter

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





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MWBE 2025

Investments & Professional Services Conference

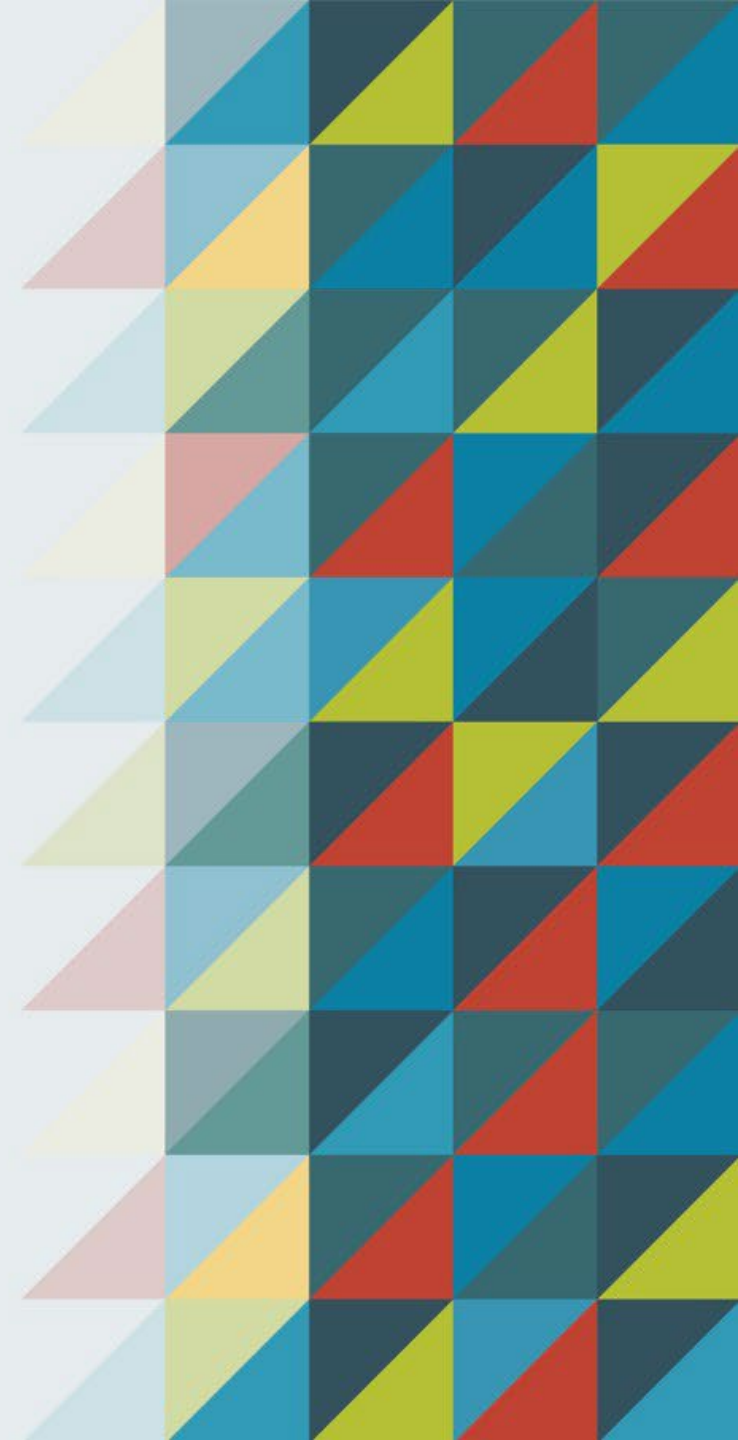
Conference Overview

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)

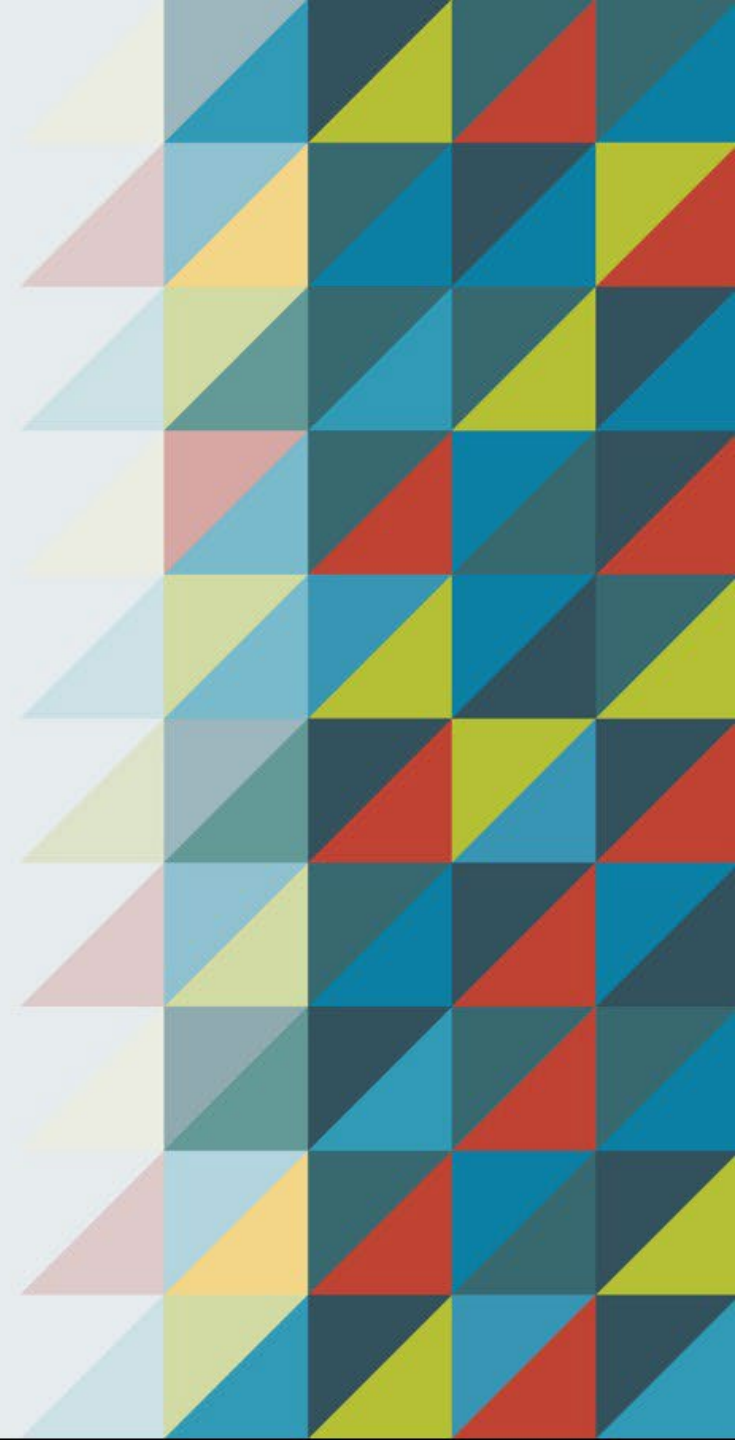
General Conference Opening/Welcome (11AM)

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

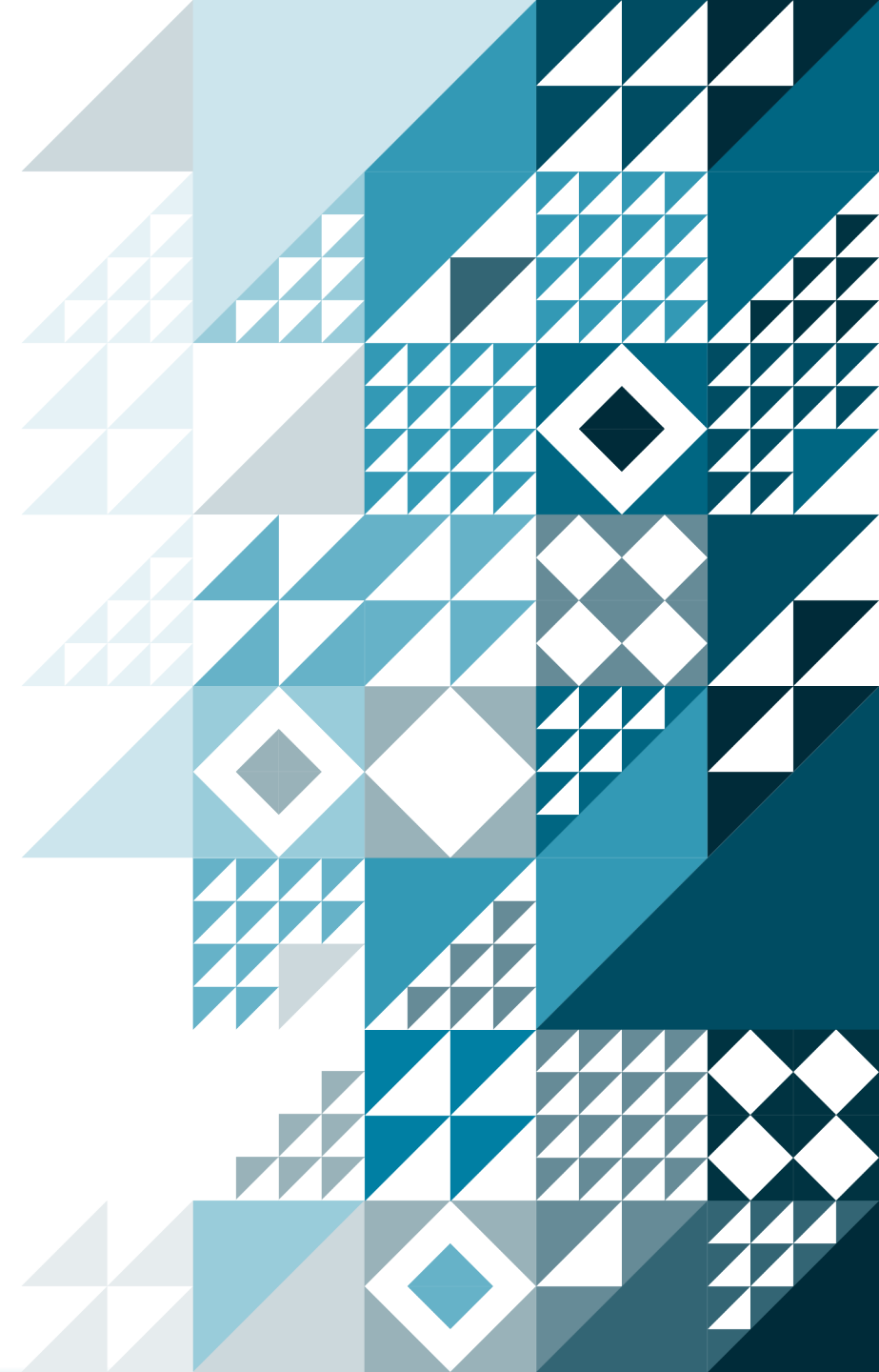
- *NEW* – Excellent Team Assessment
- Employee Mentorship Program Enhancements
- *NEW* – DEI Advisory Council
- Expanded initiative assessment

External Engagement Updates

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

DEI Division/Team

- Staffing Plan
- Summer 2025 – Internship Staffing





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Stewardship Report

January 2025

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Stewardship Report

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' 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.

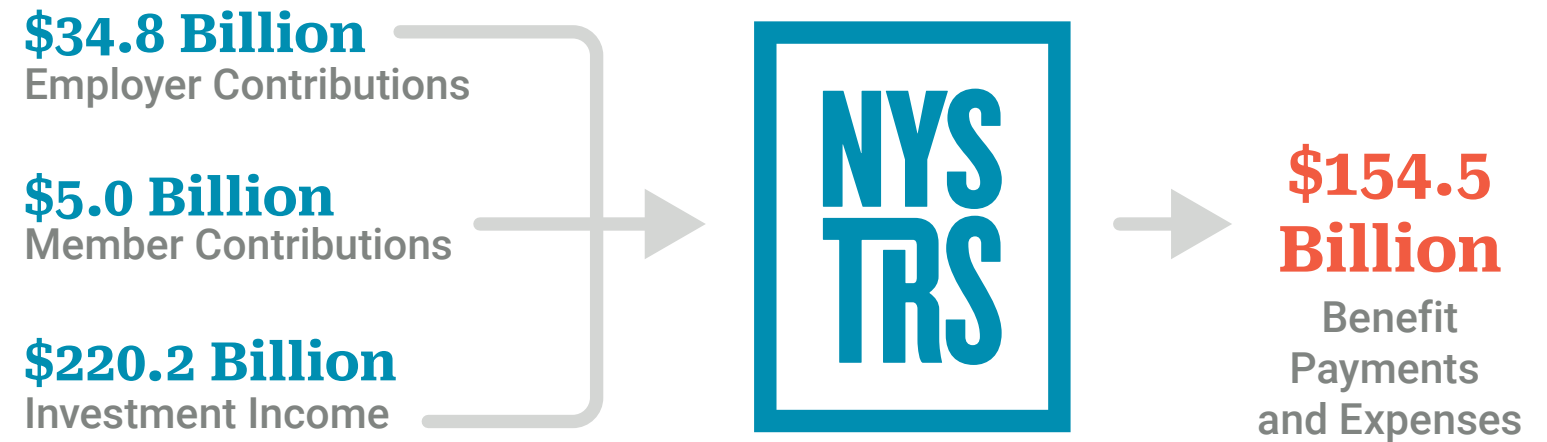
NYSTRS serves nearly 455,000 active members, retirees and beneficiaries. During the last fiscal year, the System paid \$8.4 billion in benefit payments. Over the 30-year period from July 1, 1994 to June 30, 2024, the System paid \$154.5 billion in benefit payments and expenses. During that same period,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

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).

NYSTRS: A 30-Year Snapshot

as of June 30, 2024



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

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.

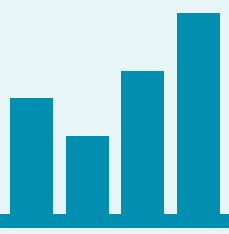
We monitor the portfolio on an annual basis to ensure compliance with the Restriction Criteria. These companies have also been prioritized for engagement and additional scrutiny regarding their proxy votes. During 2024, the System conducted independent risk assessments of these companies using five Key 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

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).

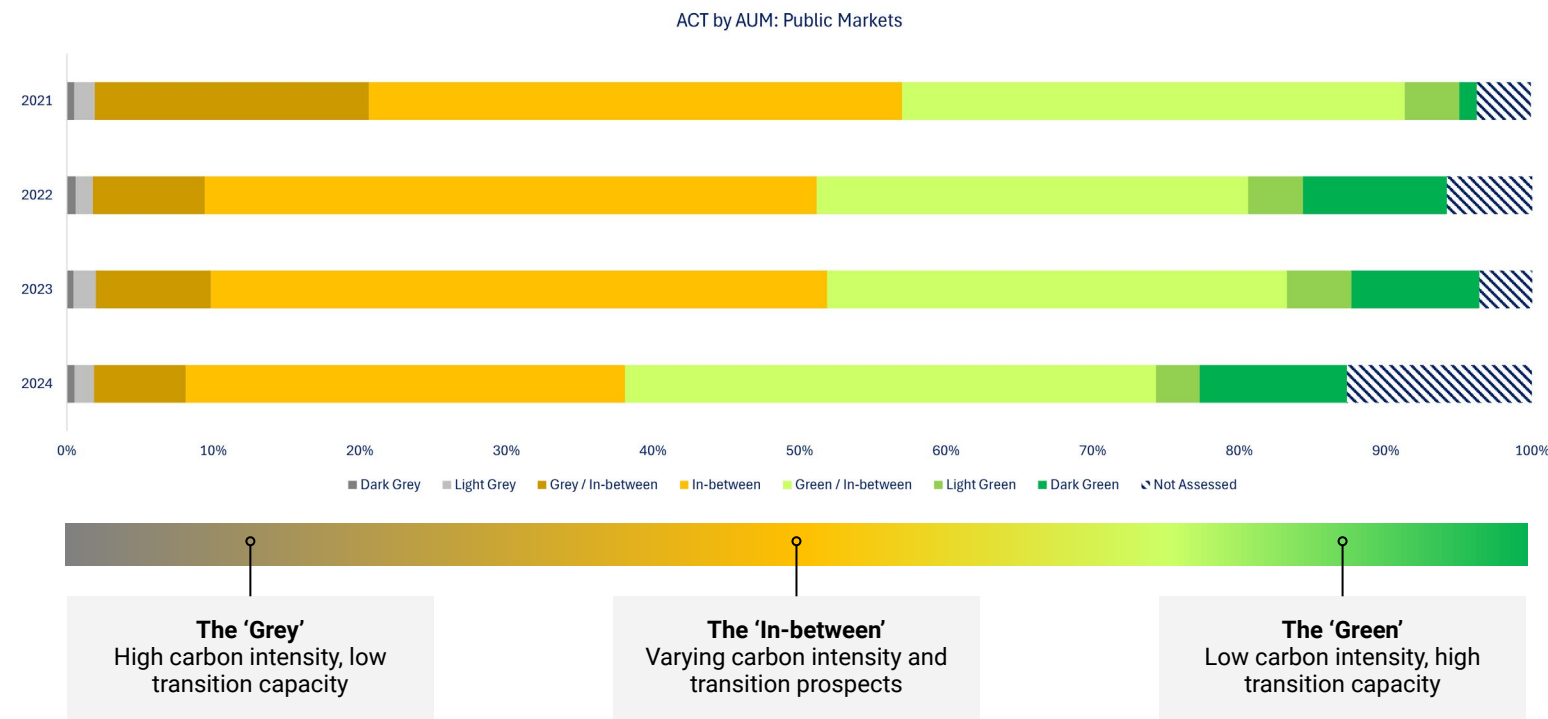
One addition to the Oil Sands companies (six companies total).

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:



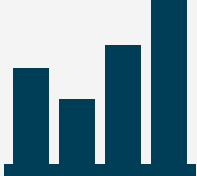
Prioritized and continued engagement (both directly and through collaborative initiatives) with the companies meeting the Restriction Criteria regarding their progress towards meeting their risk mitigation targets.



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.

Appendix: Highlighted 2024 Proxy Votes

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

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

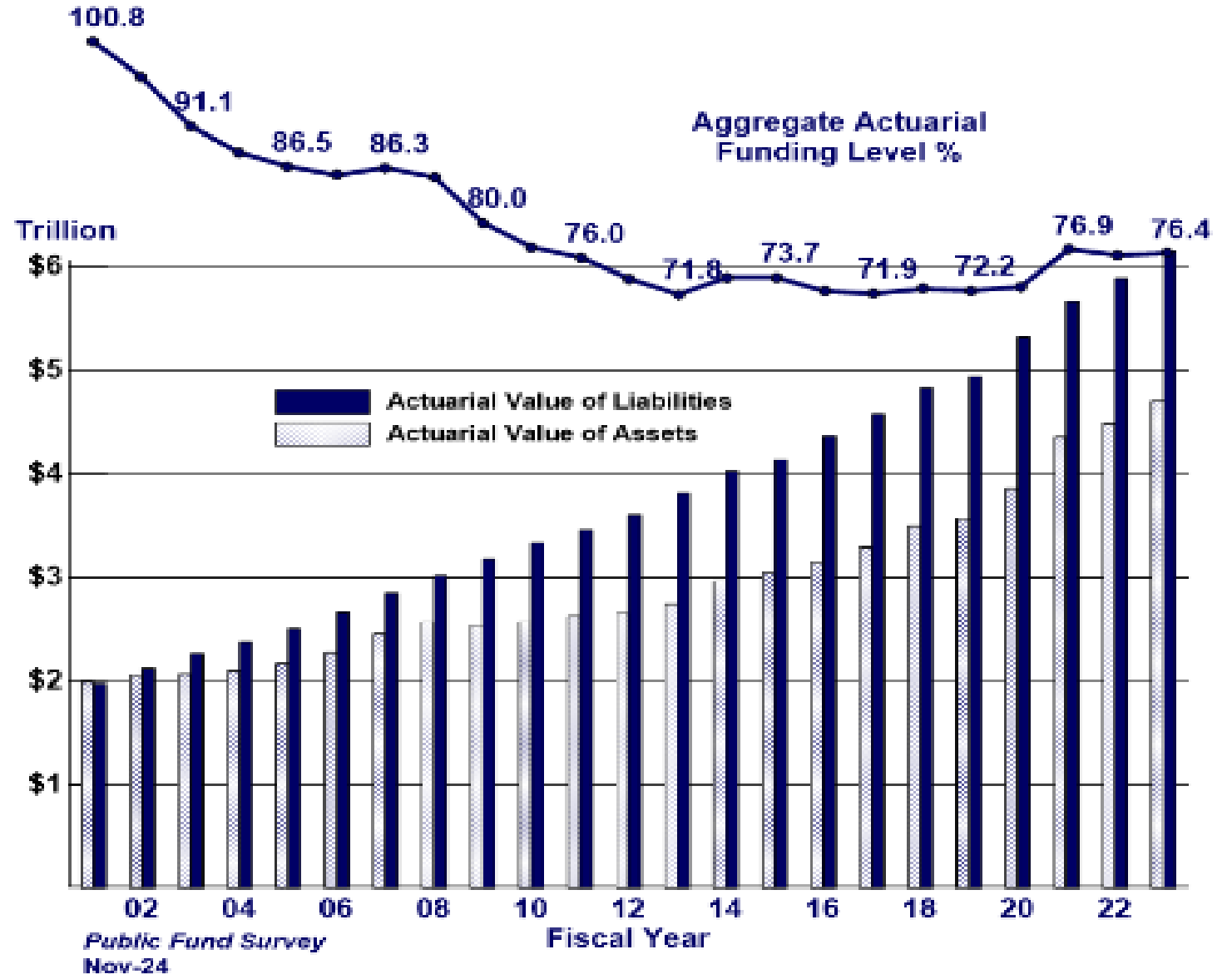
MVA = Market Value of Assets

AVA = Actuarial Value of Assets

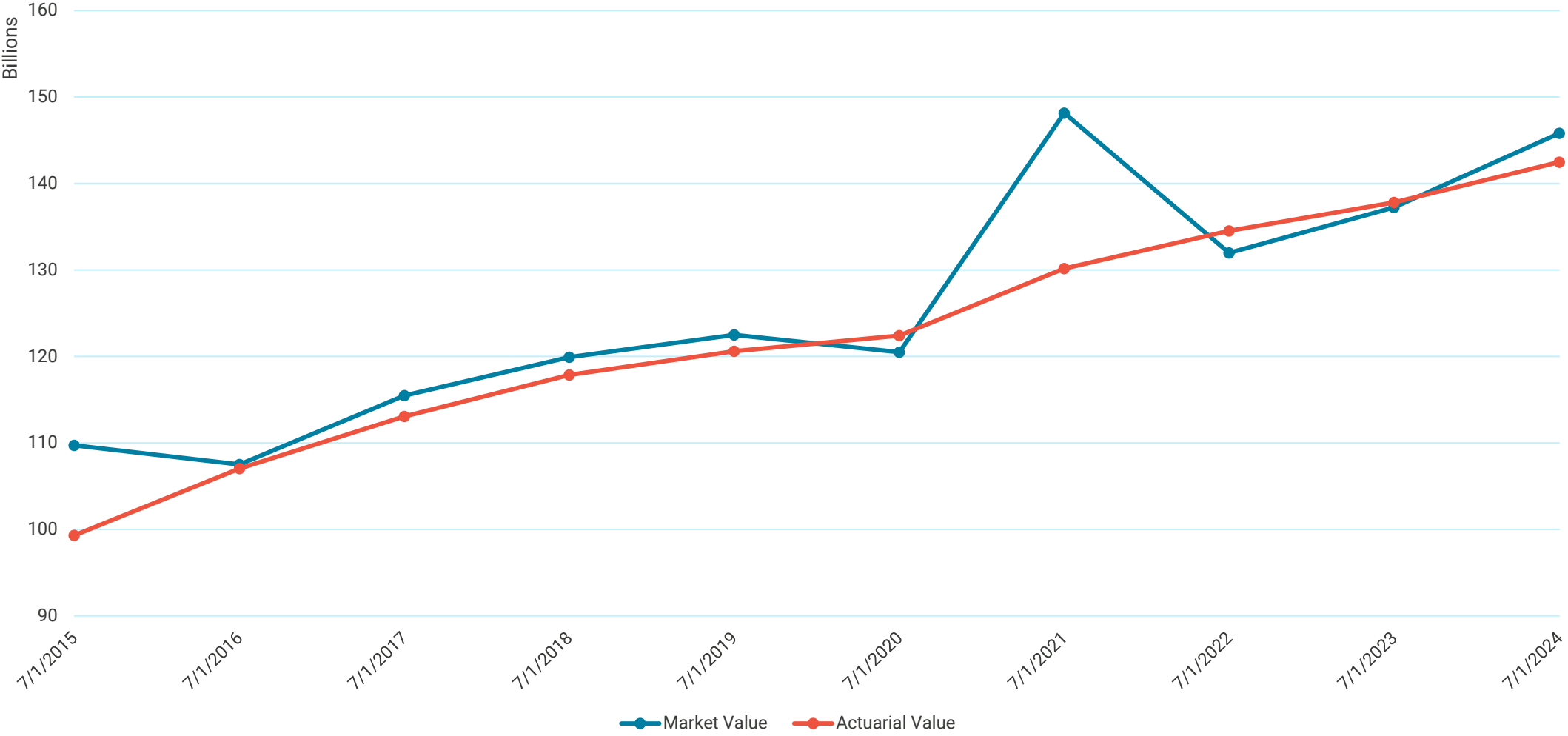
FYE	Funded Ratio Based on MVA	Funded Ratio Based on AVA
6/30/2019	101.2%	99.6%
6/30/2020	97.3%	98.9%
6/30/2021	113.0%	99.3%
6/30/2022	97.4%	99.3%
6/30/2023	98.2%	98.6%
6/30/2024	101.5%	99.1%

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

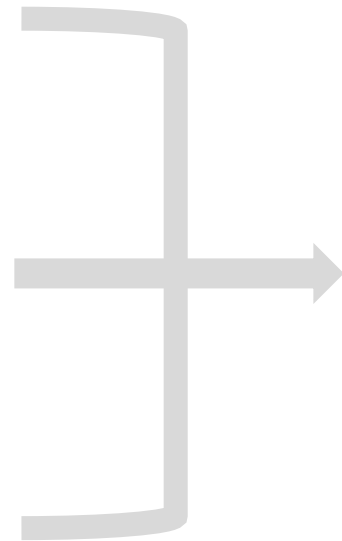
Employer
Contributions

\$5.0 Billion

Member
Contributions

\$220.2 Billion

Investment Income



\$154.5 Billion

Benefit
Payments
and Expenses

1994

Net Assets
\$40.3 Billion

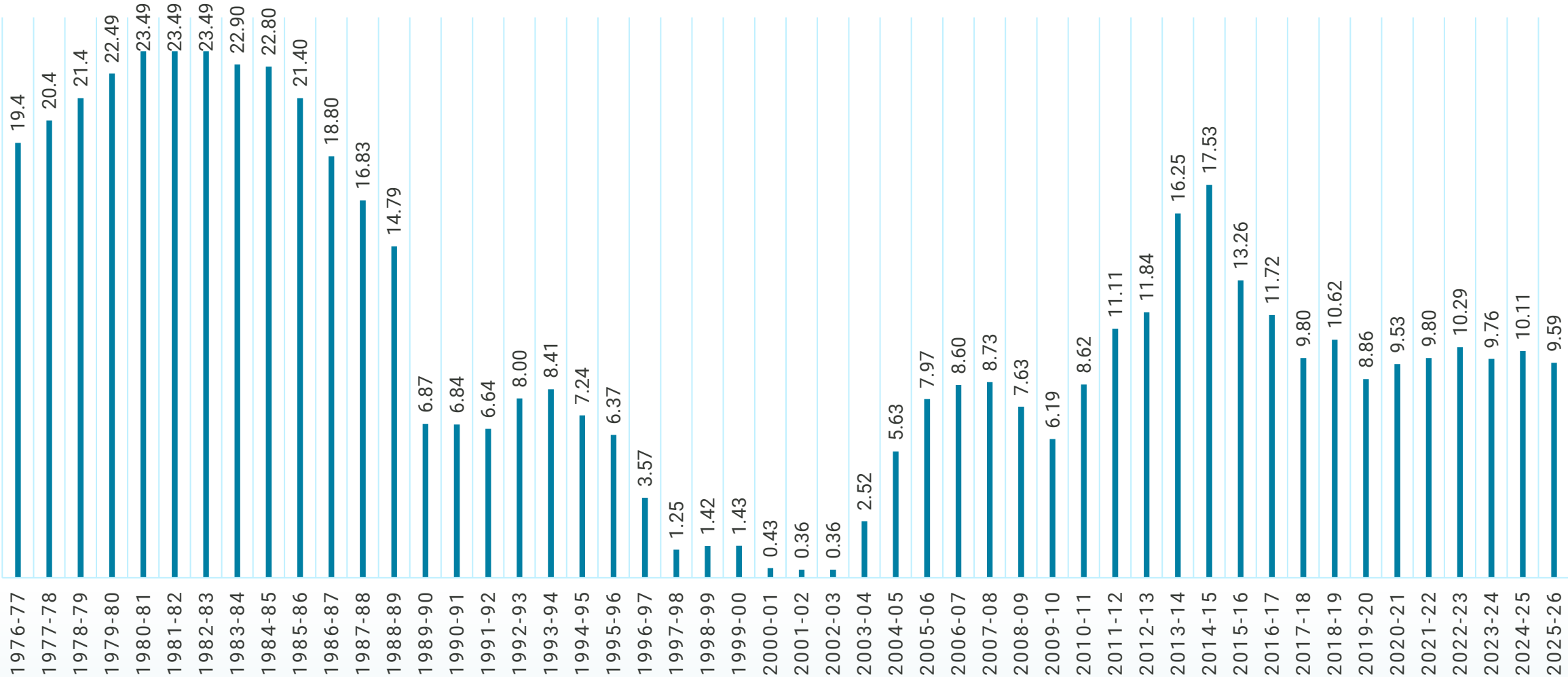


2024

Net Assets
\$145.8 Billion

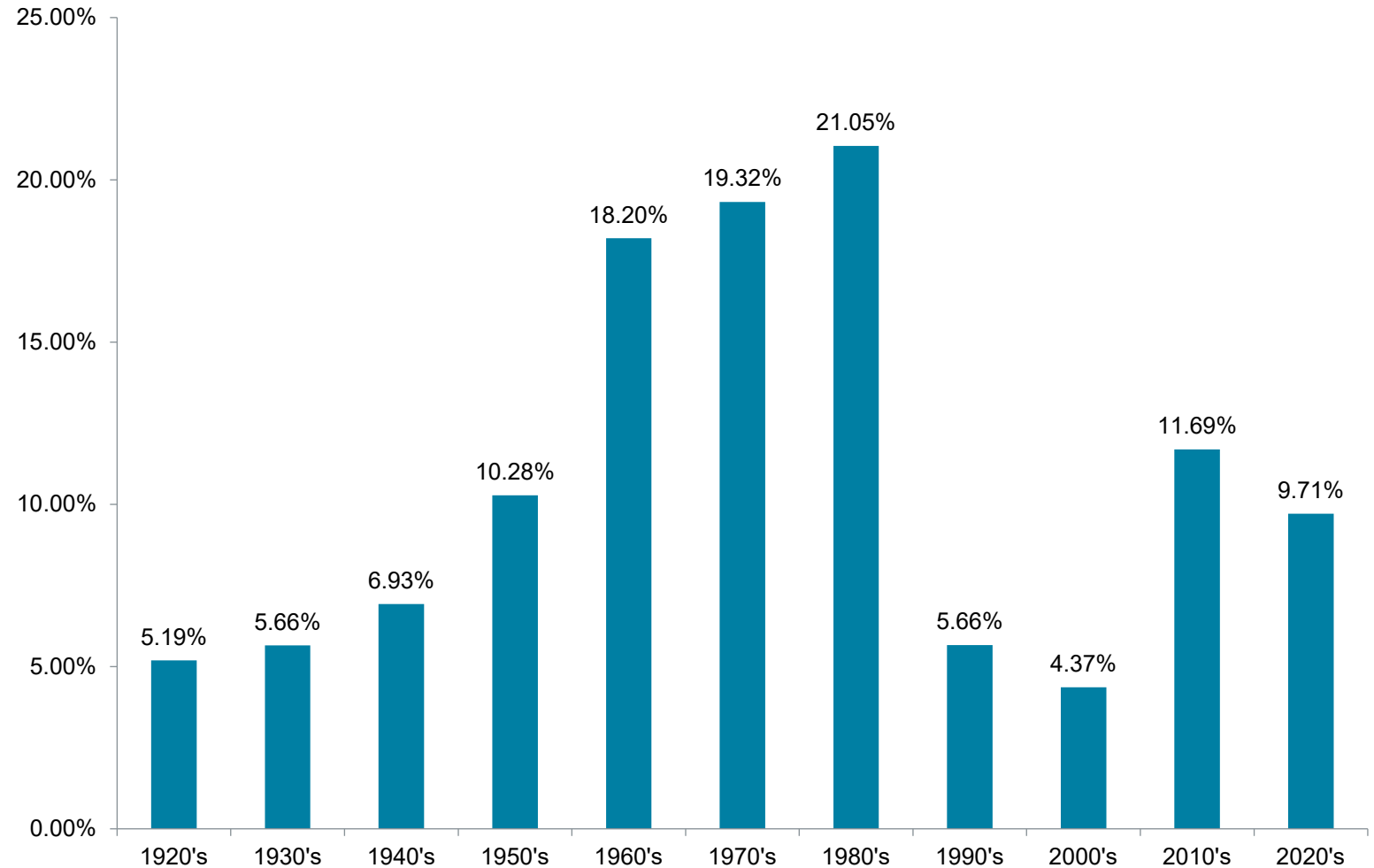
Historic 50 Years of ECRs

50-Year Average ECR = 11.14%



Average ECR's by Decade

Overall Average = 10.87%



Questions?

