NORTH Dakota | Teachers' Fund For Retirement
Be Legendary. RETIREMENT & INVESTMENT

ND TFFR Board Meeting
Thursday, March 21, 2024, 1:00 p.m.
Virtual Only

Click here to join the meeting

AGENDA

I. **CALL TO ORDER AND ACCEPTANCE OF AGENDA** ***(Board Action)***
   A. Pledge of Allegiance
   B. Conflict of Interest Disclosure
   C. Introduction of New Staff
   D. Executive Summary

II. **ACCEPTANCE OF MINUTES (January 25, 2024)** ***(Board Action)***

III. **EDUCATION (30 Minutes)** ***(Information)***

   A. Fiduciary Duties & Ethics – A.A.G. DePountis

IV. **GOVERNANCE (90 minutes)**

   A. RIO Strategic Plan – Ms. Murtha *(Board Action)*
   B. 2025 Legislative Session Planning – Ms. Murtha *(Board Action)*
   C. GPR Committee Update – Mr. Mickelson, Mr. Roberts *(Information)*
   D. Pioneer Project Update – Mr. Roberts *(Information)*
   E. Administrative Rules Update – Ms. Murtha *(Information)*
   F. Performance Surveys – Ms. Seiler *(Information)*
   G. Audit Committee Update – Treasurer Beadle, Ms. Seiler *(Information)*

(Break)

V. **REPORTS (60 minutes)** ***(Board Action)***
   A. Quarterly Investment Report (12/31) – Mr. Posch
   B. Annual Retirement Trends Report – Mr. Roberts
   C. Executive Limitations/Staff Relations – Ms. Murtha

VI. **CONSENT AGENDA – DISABILITY APPLICATIONS[1]** ***(Board Action)***

VII. **OTHER BUSINESS**

   A. Board Reading Materials – Material References Included
   B. Next Meetings:
      1. TFFR Board Meeting - Thursday, April 25, 2024, at 1:00 p.m.

VIII. **ADJOURNMENT**

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[1] Possible Executive Session to discuss confidential member information under N.D.C.C. 15-39.1-30.

Any individual requiring an auxiliary aid or service, please contact the Retirement and Investment Office (701) 328-9885 at least three (3) days prior to the scheduled meeting.

EXECUTIVE SUMMARY

TFFR Regular Meeting
March 21, 2024 – 1:00pm CT

I. **Agenda:** The **March Board Meeting will be held in the Board Room at the WSI Building to accommodate in person attendance, however, a link will also be provided so that Board members and other attendees may join via video conference.**
- Attendees are invited to join the Board President in the Pledge of Allegiance.
- Introduction of new staff members.
- Conflict of Interest Disclosure: For best practice board members are asked to review the agenda and note any potential conflicts of interest for an item in advance of or at the start of the meeting. Conflicts can be documented using the following form: Conflict of Interest Disclosure Form 8_17_2022 .pdf (nd.gov)

II. **Minutes (Board Action):** The January 25, 2024, Board meeting minutes are included for review and approval.

III. **Board Education – Fiduciary Duties and Ethics (Information):** Assistant Attorney General Dean DePountis will provide board education on board member fiduciary duties and ethics.

IV. **A. RIO Strategic Plan (Board Action):** Ms. Murtha will present the RIO's updated strategic plan for board acceptance.

B. 2025 Legislation Planning (Board Action) : Ms. Murtha will provide the Board with an update on the current status of the changes required by the RMD age change discussed at the November and January TFFR Board meetings.

C. GPR Committee Update (Information): The Committee Chair and Mr. Roberts will provide the Board with an update on current committee activities.

D. Pioneer Project Update (Information): Mr. Roberts will provide the Board with an update on the current status of the Pioneer project.

E. Administrative Rules (Information): Ms. Murtha will provide the board an update on the administrative rules promulgation process.

F. Performance Surveys (Information): Ms. Seiler will provide the Board with an overview of the process for the annual performance surveys for the Executive Director and the Deputy Executive Director – Chief Retirement Officer.

G. GPR Committee Update (Information): The Committee Chair and Ms. Seiler will provide the Board with an update on current committee activities.

V. **Reports (Board Action):** Staff will provide a reports on quarterly investment performance, annual retirement trends, and executive limitations/staff relations.

Adjournment.

NORTH DAKOTA TEACHERS' FUND FOR RETIREMENT
MINUTES OF THE
JANUARY 25, 2024, BOARD MEETING

BOARD MEMBERS PRESENT:	Dr. Rob Lech, President Mike Burton, Vice President Kirsten Baesler, State Supt. DPI Thomas Beadle, State Treasurer Scott Evanoff, Trustee Cody Mickelson, Trustee Jordan Willgohs, Trustee
STAFF PRESENT:	Mensah Anyide-Ocloo, Membership Spec. Jayme Heick, Retirement Spec. Rachel Kmetz, Accounting Manager Missy Kopp, Exec. Assistant Denise Leingang-Sargeant, Retirement Spec. Sarah Mudder, Communications/Outreach Dir. Jan Murtha, Exec. Director Chad Roberts, DED/CRO Sara Seiler, Supvr. of Internal Audit Ryan Skor, CFO/COO Rachelle Smith, Retirement Admin. Dottie Thorsen, Internal Auditor Denise Weeks, Retirement Program Mgr.
OTHERS PRESENT:	Dean DePountis, Atty. General's Office Krysti Kiesel, GRS Dana Woolfrey, GRS Members of the Public

CALL TO ORDER:

Dr. Lech, President of the Teachers' Fund for Retirement (TFFR) Board of Trustees, called the meeting to order at 1:00 p.m. on Thursday, January 25, 2024. The meeting was held in the WSI Board Room, 1600 E Century Avenue, Bismarck.

THE FOLLOWING MEMBERS WERE PRESENT REPRESENTING A QUORUM: MR. BURTON, MR. EVANOFF, DR. LECH, MR. MICKELSON, AND MR. WILLGOHS.

ACCEPTANCE OF AGENDA:

The Board considered the agenda for the January 25, 2024, meeting.

IT WAS MOVED BY MR. MICKELSON AND SECONDED BY MR. WILLGOHS AND CARRIED BY A VOICE VOTE TO APPROVE THE AGENDA AS DISTRIBUTED.

AYES: MR. BURTON, MR. MICKELSON, MR. WILLGOHS, MR. EVANOFF, AND PRES. LECH
NAYS: NONE
ABSENT: SUPT. BAESLER AND TREASURER BEADLE

MOTION CARRIED

<u>ACCEPTANCE OF MINUTES</u>:

The Board considered the minutes for the November 16, 2023, TFFR Board meeting.

IT WAS MOVED BY MR. BURTON AND SECONDED BY MR. EVANOFF AND CARRIED BY A VOICE VOTE TO ACCEPT THE NOVEMBER 16, 2023, MINUTES AS DISTRIBUTED.

AYES: MR. MICKELSON, MR. EVANOFF, TREASURER BEADLE, MR. BURTON, MR. WILLGOHS, AND PRES. LECH
NAYS: NONE
ABSENT: SUPT. BAESLER
MOTION CARRIED

<u>EDUCATION</u>:

<u>Open Meetings & Records</u>:

Mr. DePountis, Assistant Attorney General, presented education on open meeting and records law. The presentation included an overview of what is subject to open records laws, the definition of a record, public business, and protected records. Mr. DePountis defined what constitutes a meeting and quorum. An overview of open meeting exceptions, common violations, and executive session requirements was provided. Board discussion followed.

<u>GOVERNANCE</u>:

<u>2023 GASB Report</u>:

Ms. Dana Woolfrey and Ms. Krysti Kiesel, GRS, reviewed the GASB 67 and 68 Report for the Fiscal Year (FY) ending June 30, 2023. GASB established accounting and financial reporting standards for US state and local governments. GASB 67 and 68 address accounting and financial reporting for pension plans and focus on the employer's pension obligation. Ms. Keisel reviewed the comparison of net pension liability results from 2022 and 2023, pension expense, and cost sharing. Board discussion followed.

IT WAS MOVED BY MR. WILLGOHS AND SECONDED BY TREASURER BEADLE AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE 2023 GASB REPORT.

AYES: TREASURER BEADLE, MR. WILLGOHS, MR. EVANOFF, MR. BURTON, MR. MICKELSON, AND PRES. LECH
NAYS: NONE
ABSENT: SUPT. BAESLER
MOTION CARRIED

<u>Administrative Rules Update</u>:

Ms. Murtha provided an update on the administrative rules process. The proposed rules were reviewed by the Attorney General's Office. They found the rules to be in substantial compliance and requested some minor changes. Ms. Murtha reviewed the requested changes. Board discussion followed.

IT WAS MOVED BY MR. WILLGOHS AND SECONDED BY TREASURER BEADLE AND CARRIED BY A ROLL CALL VOTE TO APPROVE THE REQUESTED CORRECTIONS AND FINAL ADOPTION OF RULES TO SUBMIT TO LEGISLATIVE COUNSEL.

AYES; MR. WILLGOHS, MR. BURTON, MR. MICKELSON, MR. EVANOFF, TREASURER BEADLE, AND PRES. LECH
NAYS: NONE
ABSENT: SUPT. BAESLER
MOTION CARRIED

Required Minimum Distribution (RMD) Implementation:

Ms. Murtha provided an update on the RMD implementation. The Board approved and the Employee Benefits Programs Committee authorized an interim change in ND Century Code related to RMD to maintain compliance with federal law. Ms. Murtha outlined the communication methods RIO has used to update members on the change. Board discussion followed.

Pioneer Project Update:

Mr. Roberts provided an update on the Pioneer Project. A summary was provided of tasks that have been completed, are in progress, or have not been started. User acceptance testing has started and is going well. Data migration slowed down in November and December but has resumed and is expected to finish on schedule. The project remains under budget and is expected to go live in October 2024. The vendor informed RIO that they are subject to a lawsuit. Mr. Roberts will continue to monitor this issue and discuss it with the vendor. The Board will be updated if necessary. Board discussion followed.

Benefit Compliance Review:

IT WAS MOVED BY MR. MICKELSON AND SECONDED BY MR. BURTON AND CARRIED BY A ROLL CALL VOTE TO ENTER INTO EXECUTIVE SESSION PURSUANT TO NDCC 15-39.1-30, NDCC 44-04-19.1(2), AND 44-04-19.2 TO DISCUSS CONFIDENTIAL MEMBER INFORMATION AND ATTORNEY CONSULTATION.

AYES: MR. EVANOFF, MR. MICKELSON, MR. WILLGOHS, TREASURER BEADLE, MR. BURTON, AND PRES. LECH
NAYS: NONE
ABSENT: SUPT. BAESLER
MOTION CARRIED

The executive session started at 1:58 p.m. and ended at 2:19 p.m. The session was attended by Board Members, staff, and Mr. DePountis.

The Board recessed at 2:20 p.m. and reconvened at 2:32 p.m.

REPORTS:

Annual TFFR Ends Report:

Mr. Roberts provided the FY 2023 Annual Ends Report. The report summarizes and provides metrics for performance to demonstrate the program is adhering to policies and expectation of the TFFR Board and the SIB. The report provides statistics on membership and contributions, member services, account claims, and trust fund monitoring. Board discussion followed.

Quarterly TFFR Ends Report:

Mr. Roberts provided the Quarterly TFFR Ends report for the quarter ended December 31, 2023. The report highlights exceptions to the normal operating conditions of the TFFR program. Staff and the PAS vendor completed pilot 4 of the pension system design phase. Staff provided presentations at the annual conferences of the ND Council of Educational Leaders and the ND School Board Association. Educational presentations have been offered to business partners and members. The actuarial valuation was completed. Mr. Roberts and Ms. Murtha attended the National Council on Teacher Retirement annual conference. Board discussion followed.

Quarterly Outreach Report:

Ms. Mudder provided the TFFR Outreach report which reviewed outreach activities completed and upcoming. The report provided a breakdown of attendance at events offered by RIO, participation in Board education, and open/engagement rates for RIO publications. The report provided a list of upcoming events, publications, and staff presentations. Board discussion followed.

Executive Limitations/Staff Relations Report:

Ms. Murtha reviewed RIO's strategic planning process. The next new board member onboarding session is scheduled for January 29, 2024. Ms. Murtha provided an update on staffing and ongoing projects and initiatives. Ms. Murtha was appointed to committees for the National Association of Public Pension Attorneys (NAPPA) and the National Council on Teacher Retirement (NCTR). She will attend the winter meetings for NAPPA, NCTR, NASRA, and NIRS in February. Board discussion followed.

IT WAS MOVED BY MR. WILLGOHS AND SECONDED BY MR. MICKELSON AND CARRIED BY A VOICE VOTE TO ACCEPT THE ANNUAL & QUARTERLY TFFR ENDS, QUARTERLY OUTREACH, AND THE EXECUTIVE LIMITATIONS/STAFF RELATIONS REPORTS.

AYES: MR. BURTON, MR WILLGOHS, MR EVANOFF, TREASURER BEADLE, MR. MICKELSON, SUPT. BAESLER, AND PRES. LECH
NAYS: NONE
MOTION CARRIED

ADJOURNMENT:

With no further business to come before the Board, Pres. Lech adjourned the meeting at 3:26 p.m.

Prepared by,

Missy Kopp, Assistant to the Board

Fiduciary Responsibility & Ethics

Dean DePountis

March 2024

Terminology

- **Trust**
  - A legal entity created by a grantor for the benefit of designated beneficiaries.
- **Grantor, aka settlor, funder, trustor, or sponsor**
  - Creates and establishes the terms of the trust.
- **Beneficiaries**
  - Those who benefit from the trust.
- **Trustees**
  - Those who oversee asset management and benefit distributions in accordance with the plan documents.
  - Trustees are fiduciaries.
- **Plan documents**
  - Memorialize the intent of grantor.

Trust, sponsor, and beneficiaries

“There is hereby created the teachers’ fund for retirement…”
N.D.C.C. 15-39.1-01

“The primary objective of the teachers' fund for retirement is to provide income security to retired teachers.”
N.D.A.C. 82-01-01-01(1)(a)

“Teacher means: …”
N.D.C.C. 15-39.1-04

The retirement plan is the trust, North Dakota is the sponsor, and teachers are the beneficiaries.

Trustee

“The authority to set policy for the fund rests in a board of trustees composed as follows: …”
N.D.C.C. 15-39.1-05.1

The board “[h]as the powers and privileges of a corporation”…and…“[s]hall establish investment policy for the trust…”
N.D.C.C. 15-39.1-05.2

“The board may adopt such rules as may be necessary to fulfill the responsibilities of the board.”
N.D.C.C. 15-39.1-07

The Board is the trustee.

Plan Documents

- North Dakota Century Code Chapter 15-39-1;
- North Dakota Administrative Code Title 82;
- TFFR Board Program Manual;
- Internal Revenue Code section 401(a) – Applicable to governmental plans.

What is a fiduciary?

"Someone who is required to act for the benefit of another person on all matters within the scope of their relationship; one who owes to another the duties of good faith, loyalty, due care, and disclosure…"

"Someone who must exercise a high standard of care in managing another's money or property…"

Black's Law Dictionary (11th ed. 2019)

Who is a fiduciary?

- Agents, executors and administrators, trustees, guardians, and officers of corporations are fiduciaries;
- Accountants, attorneys, and bankers are fiduciaries;
- TFFR Board members are fiduciaries.
- Fiduciaries are charged with fiduciary duty.

Fiduciary Duty

- Fiduciary responsibility has been called the most important duty imposed by law.
- Fiduciary law has a long history: recognized in Roman law, British common law, American common law, and developed by courts over hundreds of years.
- ERISA (1974), a federal law, clarified trust law as it applied to private sector pension funds.
- Although ERISA does not apply to public pension funds, it provides best practices that inform public pension fund fiduciary behavior.

Fiduciary Responsibilities

- Duty of Loyalty
- Duty of Prudence
- Duty to Follow the Law and Plan Docs

Duty of Loyalty

"Many forms of conduct permissible in a workaday world for those acting at arm's length, are forbidden to those bound by fiduciary ties. A trustee is held to something stricter than the morals of the marketplace. Not honesty alone, but the punctilio [i.e., a careful observance] of an honor the most sensitive, is then the standard of behavior. As to this there has developed a tradition that is unbending and inveterate. Uncompromising rigidity has been the attitude of courts of equity when petitioned to undermine the rule of undivided loyalty by the 'disintegrating erosion' of particular exceptions. Only thus has the level of conduct for fiduciaries been kept at a level higher than that trodden by the crowd."

Justice Benjamin N. Cardozo, United States Supreme Court

Duty of Loyalty

A fiduciary shall discharge his duties with respect to the plan **<u>solely</u>** in the interest of members and beneficiaries and for the **<u>exclusive purpose</u>** of providing benefits and defraying reasonable expenses of administering the plan.

"As a qualified employee pension plan, all assets of the fund are held in trust for the exclusive benefit of members and their beneficiaries. Fund assets may not be diverted or used for any purpose other than to provide pension benefits and other incidental benefits allowed by law."

N.D.A.C. 82-01-01-01(1)(c)(2)

Duty of Loyalty

Realize Duty of Loyalty by implementing good governance, which includes transparency, accountability, and managing conflicts of interest.

- Open meetings and communication
- Awareness and restraint

Conflicts of Interest

- The standards concerning conflicts of interest originate from the common law duty of loyalty.
- Dealing with conflicts:
  - **Avoid** conflicts of interest;
  - **Disclose** unavoidable conflicts of interest;
  - **Mitigate** conflicts of interest;
  - Adopt and follow a Code of Ethics that defines standards of conduct (Board Program manual)

Conflicts of Interest

- North Dakota Ethics Commission
  - Article XIV of the North Dakota Constitution
  - Chapter 54-66 of the North Dakota Century Code
  - Title 115 of the North Dakota Administrative Code

Conflicts of Interest

- Regular conflict of interest: typical Board matters
  - Gift from one of the parties
  - Significant financial interest in one of the parties or the outcome
  - Relationship in private capacity

- Quasi-judicial bias: quasi judicial matters (will this lead to an OAH hearing?)
  - Gift from one of the parties
  - Significant financial interest in one of the parties or the outcome
  - Relationship in private capacity
  - Campaign Monetary or In-kind Support: for any campaign, not just statewide

Conflicts of Interest

1. Review the agenda: are there topics that trigger a conflict of interest?
2. At the meeting: declare the conflict before any discussion and prior to any action on the topic. Must provide sufficient information to put public on notice of the "material facts."
3. Board member determines recusal; or
4. Board member may request remaining board members (neutral reviewer) determine recusal. If board member follows neutral reviewer determination, board member has safe harbor.

Conflicts of Interest

What happens if a board member with a known conflict fails to disclose the conflict?

- A board member may mention another board member's conflict of interest.
- Follow procedure in N.D.C.C. § 44-04-22.
- The board votes on whether the conflicted board member can vote.

Duty of Prudence

- Requires that fiduciaries discharge their duties with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.
- Requires conscientious processes in all decision-making by:
  - Understanding the facts
  - Investigating the options
  - Seeking expert advice and questioning those experts if their advice is not clear
- The law requires process more than outcome and prudence rather than perfection.

Duty to Follow the Law and Plan Docs

- Fiduciaries have a duty to administer the plan in a fair and impartial manner.
- In doing so, they must consider:
  - Plan provisions
  - Statutes, rules, and ordinances
  - Federal laws
  - Legal opinions
  - Common law concepts

Fiduciary Liability

- Fiduciary liability means personal liability for losses
  - Restoration of profits
  - Additional civil penalties and\or injunctions
  - Potential criminal penalties for willful violations
- Co-Fiduciary Liability
  - Knowledge of another fiduciary's breach coupled with inaction is a breach of fiduciary duty
  - Courts have held that fiduciaries have a duty to speak up and try to prevent or remedy the breach

Mitigating Fiduciary Risk

- ✓Establish, follow, and document prudent processes
- ✓Maintain good governance structure
  - – Thorough decision-making processes
  - – Rigorous risk identification and management
  - – Clearly defined and understood roles and responsibilities
- ✓Perform on-going oversight
- ✓Establish appropriate reporting and disclosure
- ✓Periodically review procedures and processes; revise as needed
- ✓Offer orientation and continuing education
- ✓Obtain independent expert advice – law, actuarial, benefits, investments, audits

Summary

- Fulfill Duty of Loyalty
- Effect Duty of Prudence
- Follow Plan Documents
- Act in good faith in the best interest of plan participants and beneficiaries
- When in doubt, seek the advice of experts
- Maintain independence and objectivity by avoiding conflicts of interest

Thank you!

STRATEGY REVIEW

Retirement & Investment Office

Jan Murtha, J.D., M.P.A.P. – Executive Director

March 2024

NORTH Dakota
Be Legendary.

AGENCY VISION STATEMENT

To be recognized as a trusted and innovative provider of investment and pension services.

AGENCY PRIORITIES

***Outreach** – Implementing a communication strategy with our stakeholders and the public that supports education and transparency.*

***Organizational Culture** – Recognizing that talent management, a growth mindset, and a remote enabled workforce supports agency success.*

***Technology** - Leveraging technology enabled processes and infrastructure to enhance organizational efficiency and support quality fiscal and risk management practices.*

BIG HAIRY AUDACIOUS GOALS (BHAG)

LOOKING AHEAD 5 TO 10 YEARS

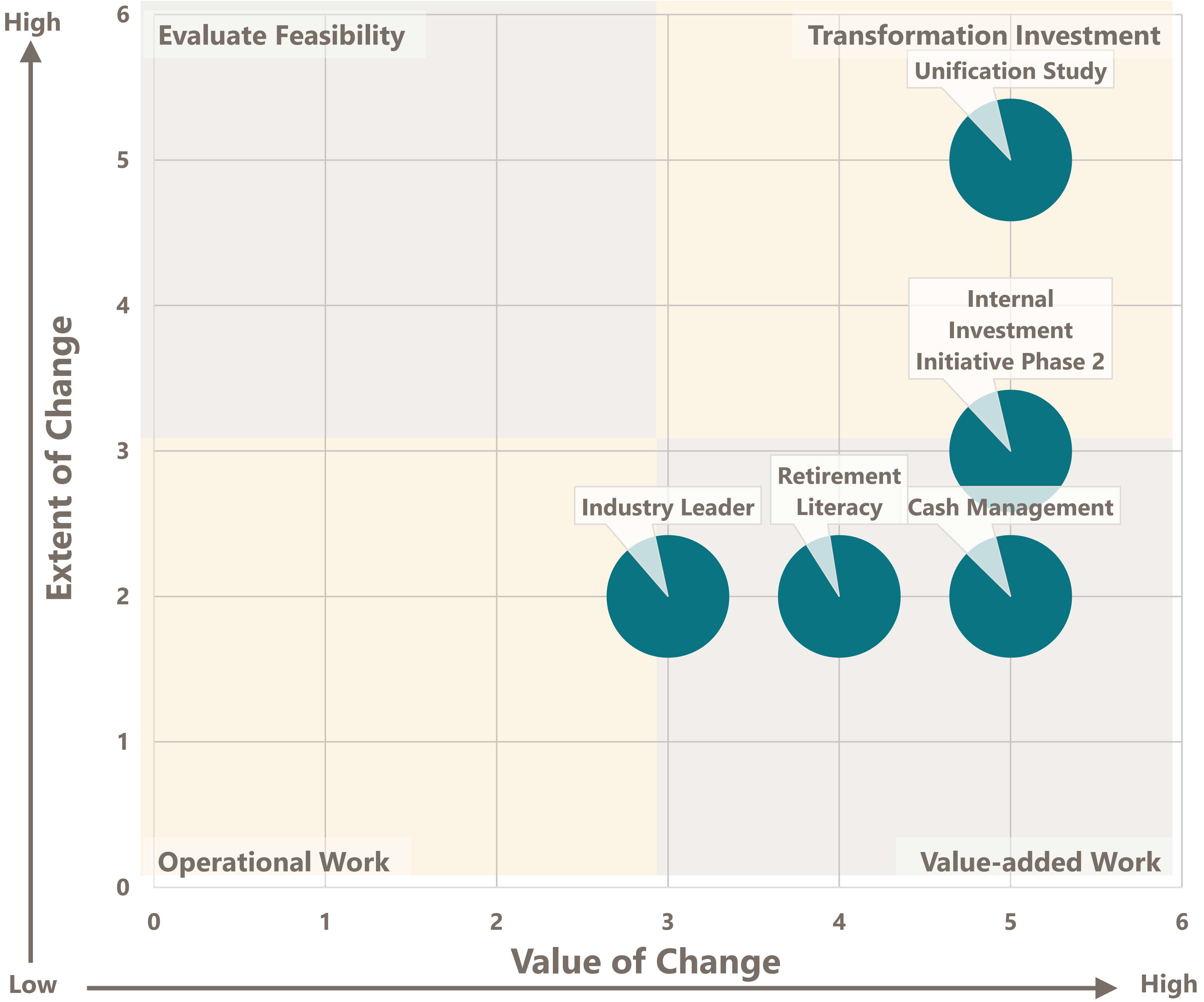
BHAG Goals (Draft)
ND Cash Management Practices – Leveraging opportunities across agencies.
Internal Investment Initiative Expansion – Building on the business case to optimize benefits of scale.
Benefits Administration Optimization – Leveraging opportunities across agencies through unification.
Financial/Retirement Literacy Initiative – Educating for teacher retention and recruitment success.
Industry Leader Initiative – Innovation in operations to excel in education, technology, and talent pool.

2025-27
STRATEGIC GOALS

Strategic Goals	Problem Being Solved
ND Cash Management Practices – Implementing Cash Management Study Recommendations.	Unnecessary expense, failure to leverage benefits of scale, governance to support growth.
Internal Direct Investment Initiative 2.0 – Building on the business case to optimize benefits of scale.	Exposure management and active management of assets beyond simple indexing, bringing up to 30% of assets managed internally with additional savings to client funds. Expanded Compliance and Internal Audit functions. Fiscal large IT project to improve efficiency.
Benefits Administration Optimization – Interim Legislative Study during the 2025-2027 session.	RIO and PERS collaboration and possible unification to realize benefits of mission alignment, specialization, and outreach.
Financial/Retirement Literacy Initiative – Educating for teacher recruitment and retention success.	Lack of understanding of industry not just benefit. Economic health of citizens in state. Educating students interested in education and supporting retention and recruitment of new teachers.
Industry Leader Initiative – Innovation in operations to excel in education, technology, and talent pool.	Improving external communication, leveraging IT resources including AI, increase industry participation relating to public policy, promote and support growth mindset org. culture.

2025-2027

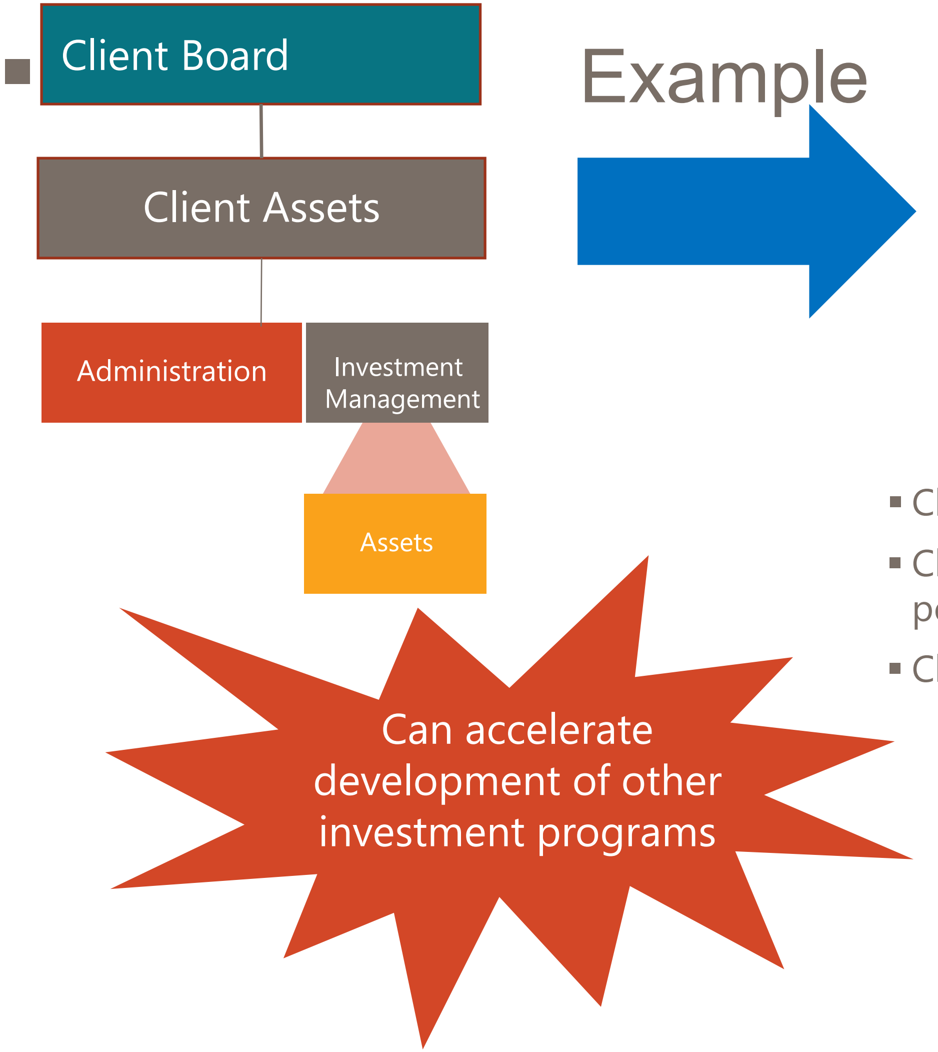
PRIORITIZATION **MATRIX**

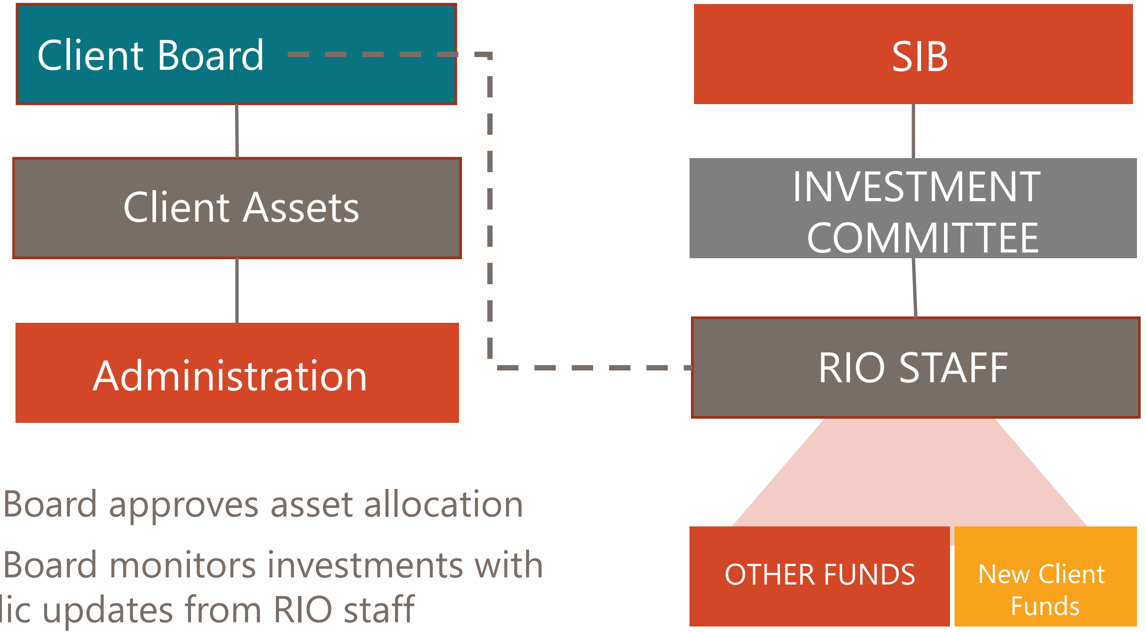


CASH MANAGEMENT

- Study may include recommendations to pool funds.

CASH MANAGEMENT STUDY MAY INCLUDE INVESTMENT RELATED RECOMMENDATIONS



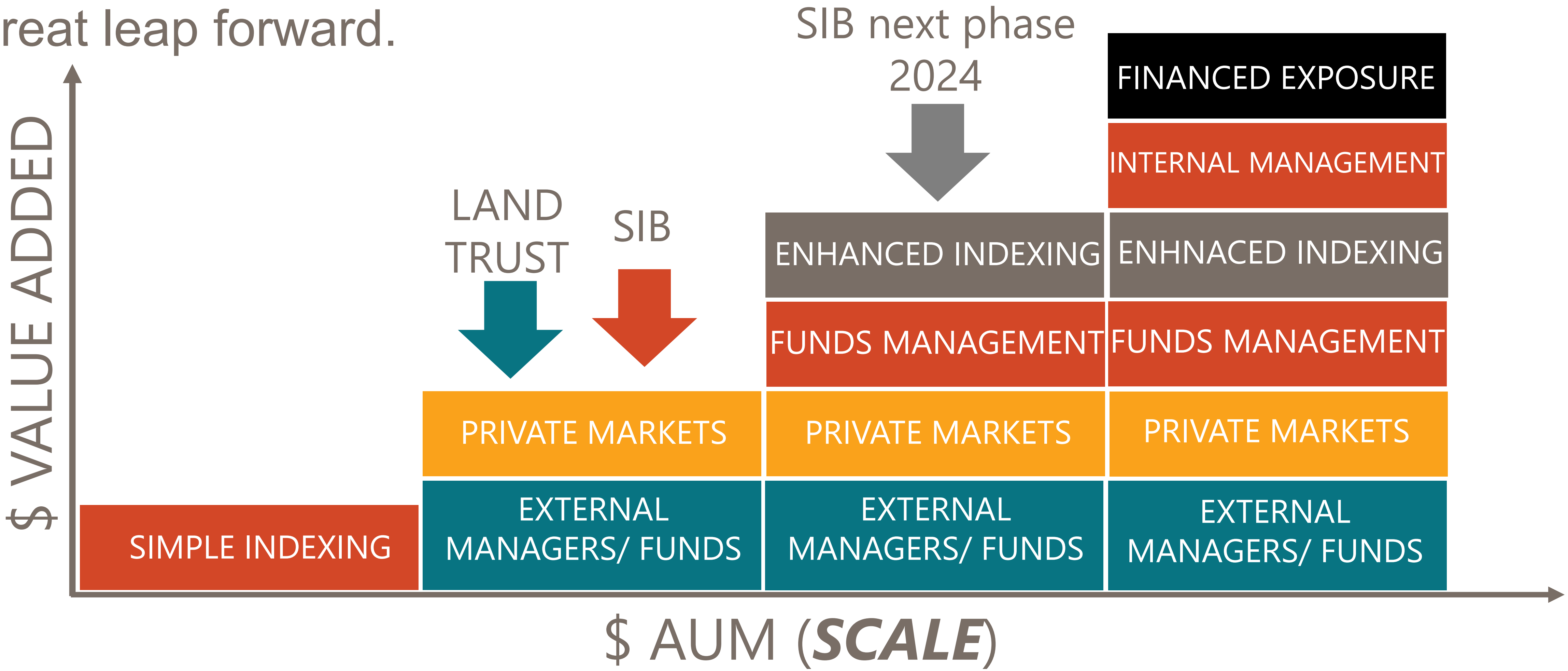


- Client Board approves asset allocation
- Client Board monitors investments with periodic updates from RIO staff
- Client Board becomes client of SIB

- RIO manages some assets
- RIO actions determined by Client Board as client and SIB with its committee governance structure
- Client assets benefit from the scale and focus of the RIO investment governance, operations, and investment management.

COLLABORATION LEADS TO INNOVATION

A great leap forward.



EXAMPLE: MANAGEMENT OF SIIF ASSETS[1]

ILLUSTRATION

CASH OUTFLOW
TIMING BASED PORTFOLIO

5.6%[1]

25%
SHORT TERM
@3.25%[2]

25%
INTERMEDIATE
@5.2%[2]

50%
PERPETUALLY
INVESTED
@7.0%[2]

Versus

SHORT DURATION
PORTFOLIO

100%
SHORT TERM

@3.25%

A 2.35% Benefit!
($23.5 Million/Year on
$1 Billion)[1]

1. Based on cash flow timing assumption illustration, actual timing yet to be determined. *Cost savings of implementation captured in combination business case*
2. Cash overlay, intermediate credit and cash return based on consultant assumptions

WHY UNIFY? BENEFITS OF CONSOLIDATION

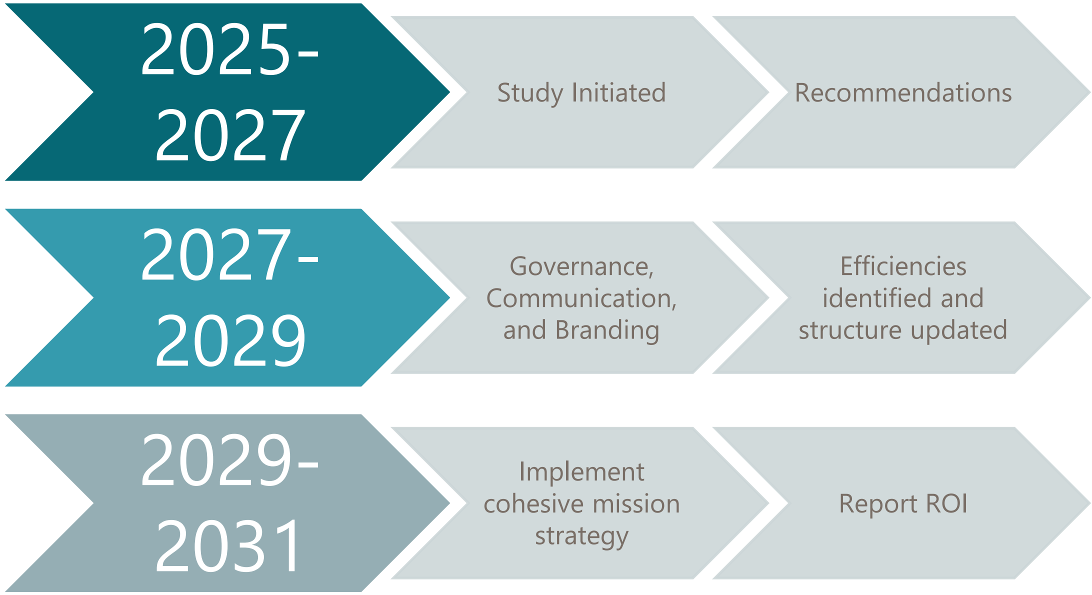
- Current structure fails to leverage benefits of scale, promotes unnecessary competition for workforce, distorts stakeholder feedback, and duplicates services.
- SB2030 (1989) created RIO. The original bill proposed supporting SIB, TFFR and PERS through RIO.
- Through specialization, succession planning, and a cohesive mission strategy we can deliver better services to members, the funds, and the state.

RIO AND PERS: WHAT WE SHARE

- **Mission**
  - Agencies provide benefits administration and education to public employees.
- **Workforce**
  - Agencies compete for employees with the same skillsets to perform similar roles and send employees to the same or similar trainings.
- **Operations**
  - In addition to having a similar internal operation structure, we retain the same or similar vendor services.
  - Both retain Sagitec as a software vendor, GRS for actuarial services, and the state auditor retains the same external auditor for both agencies.
  - Both belong to same or similar national associations.

PLANNING FOR SUCCESS

- 2025-2027 Interim Study to examine benefits of Unification.
- If Unification recommended, recognize multi-biennium roll-out needed to manage change.



2027-29
STRATEGIC GOALS

Strategic Goals	Problem Being Solved
Internal Investment Initiative Phase 3	Potential to bring up to 50% of assets managed internally for additional cost savings to funds.
RIO- PERS Unification Phase 1	Governance, Communication and Branding addressed. Operational efficiencies identified and organization structure updated.
Retirement Education Programing – Plan Changes	Focus groups and surveys conducted to determine impact of retirement literacy campaign and elicit stakeholder input regarding preferred plan changes.
Industry Leader Initiative	Consistent publications and seminar host, expanded internship program to promote agency recruitment.

2029-31
STRATEGIC GOALS

Strategic Goals	Problem Being Solved
Expanded Investment Program Strategy	Increasing portfolio management capabilities for the benefit of client funds and expanding client fund services.
RIO – PERS Unification Phase 2	Implementation of shared mission strategy and metrics for Return on Investment.
Industry Leader Initiative	Expanded ND participation in national public policy trends; cultivate institutional investment industry in state.

2025-27
ACTION PLAN

Strategic Goal: ND Cash Management Practices

Action Items:

1. Participate in Cash Management study led by OMB and RVK.
2. Based on results of study, merge SIIF and Budget Stabilization Funds and other as required. Enable a unitization of the funds.
3. Transition the funds to be managed with new internal direct investment capability.
4. Enable overlays of the new cash as required and as beneficial.
5. Overlay working cash in all investment portfolios.

Resources Needed:

1. EXISTING in '24 + NEW: Two new investment positions to support treasury management function.
2. EXISTING: Completion of the order management/portfolio management system with treasury function enabled.
3. NEW: Additional data sets used for financed exposures and new internal direct investment strategies.

Challenges:

1. Hiring the talent to manage the advanced overlays and internal direct strategies – requires a total rewards package including incentive compensation.
2. Gaining the resources and budget in the 2025 legislative session.
3. Developing the capabilities of a remote and hybrid investment organization (most large investment organizations have this capability)
4. Opportunity to merge all of RIO and Land assets to streamline operations, reduce cost and gain scale.

Success Measures:

1. Merging and unitization of cash funds.
2. Successful internal direct management cash funds with demonstrated returns and returns per risk after cost.
3. Successful overlay of all operating cash across all investment portfolios including Land.

2025-27
ACTION PLAN

Strategic Goal: Internal Direct Investment Initiative 2.0

Action Items:

1. Develop framework for financed exposures to enable porting of active portfolios, overloading of active sub-asset classes, and managing systematic risks.
2. Develop a liquidity management framework to enable the cost management of financed exposures and risk management.
3. Develop risk and performance tools, staff and trading capabilities for financed exposures.
4. Develop risk and performance tools, staff and capability for first internal direct management strategies.

Resources Needed:

1. EXISTING in 24-25: Advanced data warehouse and exchange for analysis of exposure cost, risk management and for security level data used for internal direct management strategies.
2. NEW: Five additional analysts – two fixed income, two equity and one liquidity management analyst in addition to existing five analysts hired in 2024. Additional fiscal, compliance and internal audit positions. Fiscal large IT project to increase functionality.
3. EXISTING+NEW: Additional data sets used for financed exposures and new internal direct investment strategies.

Challenges:

1. Hiring the talent to manage the advanced overlays and internal direct strategies – requires a total rewards package including incentive compensation.
2. Gaining the resources and budget in the 2025 legislative session.
3. Developing the capabilities of a remote and hybrid investment organization (most large investment organizations have this capability)

Success Measures:

1. Completion of data warehouse, data content management and ongoing quantitative development framework centered on new data and IT related tools.
2. Successful implementation of an advanced portfolio rebalancing framework that incorporates exposure management with overlays as demonstrated by better returns and return per risk measurements.
3. Successful overloading of best active investment managers by off-setting systematic exposures demonstrated by better returns and return per risk measurements.
4. Additional 15% of investments managed internally (for a total of 30%) and reduction of additional $16 million in fees/year for a total of $32 million in savings per year with internal direct initative.

2027-29 FIRST BIENNIUM ACTION PLAN

IF RECOMMENDED BY STUDY - ACTION PLAN FOR RIO/PERS UNIFICATION OR COLLABORATION

Strategic Goal: RIO to support 3 Boards – SIB as governing board with PERS and TFFR as policy boards.

Action Items:

1. Legislation Change to allow Unification.
2. Board Governance Change to allow Unification.
3. Development and amendment to governance documents.
4. Development and implementation of a Change Management plan.
5. Communication of Change to internal and external parties.

Challenges:

1. Internal Change Management – Communicating the benefits of change
2. Communicating changes to stakeholders.
3. Governance alignment with Boards.
4. Branding.
5. Additional mandated program changes during period of unification.

Resources Needed:

1. NEW: Budgeting for change management.
2. EXISTING: Enhanced support for fiscal operations to coordinate reporting.
3. NEW: Additional support for branding/communication.
4. EXISTING: Interim contingency funds.

Success Measures:

1. Completion of necessary updates to governance structure by 2026.
2. Identifying opportunities to specialize positions.
3. Identifying opportunities to provide back-up.
4. Identifying operational efficiencies and support succession planning.
5. Prepared to propose operational changes for 2027-2029 biennium.

2025-27
ACTION PLAN FOR FINANCIAL/RETIREMENT LITERACY INITIATIVE

Strategic Goal: Increasing education to plan for program enhancements.

Action Items:

1. Collaborate with Governor's Financial Literacy Initiative Group on audience, strategy, and content.
2. Collaborate with NDPERS on audience, strategy, and content.
3. Collaborate with Teacher's Recruitment and Retention Task force on audience, strategy, and content.
4. Develop content and implement education campaign.
5. Develop success metrics and survey content.

Challenges:

1. Coordinating and developing a cohesive campaign across multiple groups.
2. Communicating complex content to different audiences.
3. Additional mandated program changes during period of education campaign.

Resources Needed:

1. NEW: Additional operation budget for materials and consultant for survey administration.
2. NEW: Additional appropriated dollars for education programing/presentations.

Success Measures:

1. Participation rate in excess of 10% of population in survey.
2. Participant understanding of successful retirement factors. (Need to establish a base line.)

2025-27
ACTION PLAN

Strategic Goal: Industry Leader Initiative

Action Items:

1. In addition to existing intern program - develop an ad hoc intern program for investments including budget for intern hire and for subsequent full-time hire. Ex: South Dakota
2. Program to include 2-3 summer graduate interns; 1-2 of whom will transition to year-round part-time internship with RIO Investment team for potential employment at RIO at end of internship.
3. Setup a "Student Investment Fund" for training on investments in the first year of graduate program at one or more university in North Dakota in conjunction with RIO Investment team. Or collaborate with existing funds ex: NDSU "Bison Fund".
4. Leverage AI use across programs. See Strategy Question #6.
5. Program outreach to include regular publications and seminar host.
6. Leverage wellness training to support engagement.

Resources Needed:

1. NEW: Budget for "Student Investment Fund" at ND universities
2. NEW: Budget for 2-3 interns per year and budget to hire one intern as a full-time role with the investment team.

Challenges:

1. Setting up "Student Investment Fund" at one or more North Dakota universities in conjunction with RIO Investment Team
2. Hiring the talent from local universities that will have the capability to be a full-time investment analyst in the program.
3. Gaining the resources and budget in the 2025 legislative session.
4. Address concerns of employee "burn-out" with wellness training.

Success Measures:

1. Implement AI use to different degrees in both programs.
2. Setup of "Student Investment Fund"
3. Completion of intern training content and plan.
4. Host annual seminar and create and publish investment program education content annually.

STRATEGY DISCUSSION QUESTIONS 2025-27

How will your agency's strategic goals support Governor Burgum's Five Strategic Initiatives?

All five of RIO's proposed strategic initiatives illustrate what can be accomplished through reinventing government by leveraging the benefits of technology, unification services, and communication to reduce costs and provide better services to the state and the members and clients we serve.

How would your strategy change with unlimited resources?

All of RIO's proposed strategic initiatives are business case driven with an expectation of realizing a return on investment within the next five to ten years. Unlimited resources would allow for enhancements beyond those that can be identified through a strictly business case analysis to support stakeholder education of program operations, public relations and development of agency organizational culture.

STRATEGY DISCUSSION QUESTIONS 2025-27

What should your agency stop doing? (Red Tape Reduction Ideas)

The agency has declined to leverage a procurement exception for certain investment related services due to stakeholder feedback regarding transparency of process. While providing increased transparency this has slowed the pace of some program initiatives. Reconsideration of some procurement processes is needed.

What other agencies will your agency collaborate with to achieve your strategic goals?

Other agencies that RIO has and will continue to collaborate with are: AGO, BND, DFI, NDIT, OMB (fiscal, HRMS, and training), PERS (if unified), Securities, State Treasurer, and WSI (landlord).

STRATEGY DISCUSSION QUESTIONS 2025-27

What processes in your agency could be automated?

During the 2022 strategic plan development process RIO identified leveraging technology enabled processes as an agency priority and as such all processes are continually reviewed for technology enabled enhancements. Through two large IT projects for the retirement and investment programs respectively, RIO will realize the automation and transformation of both programs in 2024. RIO will seek an additional large IT project for fiscal and audit services in the 2025-2027 biennium. In addition, RIO routinely works with NDIT and OMB to adopt and implement the latest modules available for agency use.

How can artificial intelligence (AI) be utilized by your agency?

AI will be leveraged for investment data quality management including investment risk analysis. AI options will be explored for retirement program concierge services. RIO will seek the assistance of NDIT to explore AI options for information summaries, open records responses, and development of education materials.

2025 LEGISLATIVE INITIATIVES

- Procurement – Clarification of procurement exemption for internal investment program infrastructure needs.
- Unification Study – An interim legislative study to evaluate the feasibility and benefits of RIO and PERS unification.
- TFFR must submit a bill to obtain RMD change approved by Employee Benefits Programs committee. Due 4-1-24.

CONCLUSION

“If you want to succeed you should strike out on new paths, rather than travel the worn paths of accepted success.” - John D. Rockefeller*

*Courtesy of www.brainyquote.com

2025-2027 RETIREMENT AND INVESTMENT WORKFORCE PLAN

Retirement and Investment Mission: Provide the Best Possible Customer Service to our Clients and Members

Internal and External Trends Impacting our Workforce Needs:

- Citizen perspectives due to lack of consensus with Legacy Fund utilization
- Interest of qualified applicants for evolving investment program needs.
- Teacher Retention & Recruitment.

Top Workforce Initiatives		Timeline
Talent	Successfully and expeditiously recruit new talent for investment, retirement, and internal divisions	2024-2025
	Stand-up agency LinkedIn page to highlight the work of the agency and contributions and impact of team members	2025
	Build on Crucial Conversations learning to enhance interactions with internal/external stakeholders	Implemented
Leadership	Manager participation in targeted Boss to Coach sessions and utilization of 5 coaching conversations in team member interactions/engagement in alignment with agency mission and strategy	Implemented
Organizational	Technology enhancements to allow seamless transactions with enhanced efficiencies	In-progress
	Reorganization of divisions to optimize existing staff and business processes and build a better structure for future growth	Implemented

*Proposed FTE count excludes seasonal intern positions.

Authorized FTE	Full-Time	Temporary	Contractor
2023-2025 Biennium	34	2	0
2025-2027 Biennium *(Proposed)*	37	0	0
2025-2027 Initiative Contingent	45	0	0

Prioritized Workforce Competencies:

- Communicate Effectively and Build Collaborative Relationships
- Cultivate Innovation and Strategic Mindset
- Action-Oriented, Resourceful, Flexible and Adaptable

Success Measures	Current State 2024	End State 2024
Successful acquisition of new talent	In-progress	7 positions filled
Sustain team member engagement	4.55 mean	Exceeded prior goal of 4.25 - maintain
Increase customer service/success scores	3.33 out of 4.00	3.50 out of 4.00
Implementation of technology enhancements and systems	In-progress	In-progress
Investment performance	TBD by Board	TBD by Board

Talent Acquisition Priorities/Key Positions To Fill	Approx Timing to Fill
New Investment Position – Budget Authority 7/1/24	Summer 2024
New Investment Position – Budget Authority 7/1/24	Summer 2024
New Investment Position – Budget Authority 7/1/24	Summer 2024
New Investment Position – Budget Authority 7/1/24	Summer 2024
New Investment Position – Budget Authority 7/1/24	Summer 2024
New Fiscal Position – Budget Authority 7/1/24	Summer 2024
New Fiscal Position – Budget Authority 7/1/24	Summer 2024

2025 Legislative Session Planning

TFFR Board

Meeting of March 22, 2024

Presented by Jan Murtha, JD, MPAP – Executive Director

Background What Changed? SECURE ACT 2.0

New RMD Rule

Beginning in 2023, the SECURE 2.0 Act raised the age that you must begin taking RMDs to age 73. If you reach age 72 in 2023, the required beginning date for your first RMD is April 1, 2025, for 2024.*

*https://www.irs.gov/retirement-plans/retirement-plans-faqs-regarding-required-minimum-distributions#

Definition of "RMD"

- Required minimum distributions (RMDs) are the minimum amounts you must withdraw from your retirement accounts each year. You generally must start taking withdrawals from your traditional IRA, SEP IRA, SIMPLE IRA, and retirement plan accounts when you reach age 72 (73 if you reach age 72 after Dec. 31, 2022).*

Applicable State Law- EBPC Jurisdiction

NDCC 15-39.1-34(1)

- The board shall administer the plan in compliance with section 415, section 401(a)(9), section 401(a)(17), and section 401(a)(31) of the Internal Revenue Code, as amended, and regulations adopted pursuant to those provisions as they apply to governmental plans.

NDCC 15-39.1-35

- If the board determines that any section of this chapter does not comply with applicable federal statutes or rules, the board shall adopt appropriate terminology with respect to that section as will comply with those federal statutes or rules, subject to the approval of the employee benefits programs committee. Any plan modifications made by the board pursuant to this section are effective until the effective date of any measure enacted by the legislative assembly providing the necessary amendments to this chapter to ensure compliance with the federal statutes or rules.

*The Employee Benefits Program Committee approved the request for an interim change at its meeting on November 16, 2023, however, a bill must be submitted in the upcoming legislative session to ratify the change in state law.

TFFR Proposed Language

- *15-39.1-10. Eligibility for normal retirement benefits.*

- *4.* ~~For a member who attains age seventy and one-half before January 1, 2020, the member's required beginning date is no later than April first of the calendar year following the year the member attains age seventy and one-half or April first of the calendar year following the year the member terminates covered employment, whichever is later. For a member who attains age seventy and one-half after December 31, 2019, the member's required beginning date is no later than April first of the calendar year following the year the member attains age seventy-two or April first of the calendar year following the year the member terminates covered employment, whichever is later.~~ Payments must be made over a period of time which does not exceed the life expectancy of the member or the joint life expectancy of the member and the beneficiary. Payment of minimum distributions must be made in accordance with section 401(a)(9) of the Internal Revenue Code, as amended, and the regulations issued under that section, as applicable to governmental plans.

* Proposed legislation impacting benefit programs of the state must be submitted to the EBPC by April 1 of the year preceding the next session.

Motion Request

Motion to approve proposed legislation for submission to the Employee Benefits Programs Committee.

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MEMORANDUM

TO: TFFR
FROM: Chad Roberts, DED/CRO
DATE: March 13, 2024
RE: TFFR GPR Committee update

The TFFR GPR Committee met on February 8, 2024. At the meeting ED Murtha reviewed the agency strategy planning sessions. In addition, the committee reviewed suggested edits and modifications to sections of the TFFR policy manual. Of those changes, most changes were minor or clarifying. The Board will receive a full appraisal of all recommended changes to the policy manual at the June 2024 board retreat.

Additional information can be found at:
https://www.rio.nd.gov/sites/www/files/documents/PDFs/TFFR%20GPR/Board/Materials/tffrgprmat02082024.pdf

Board Action Requested: Information only

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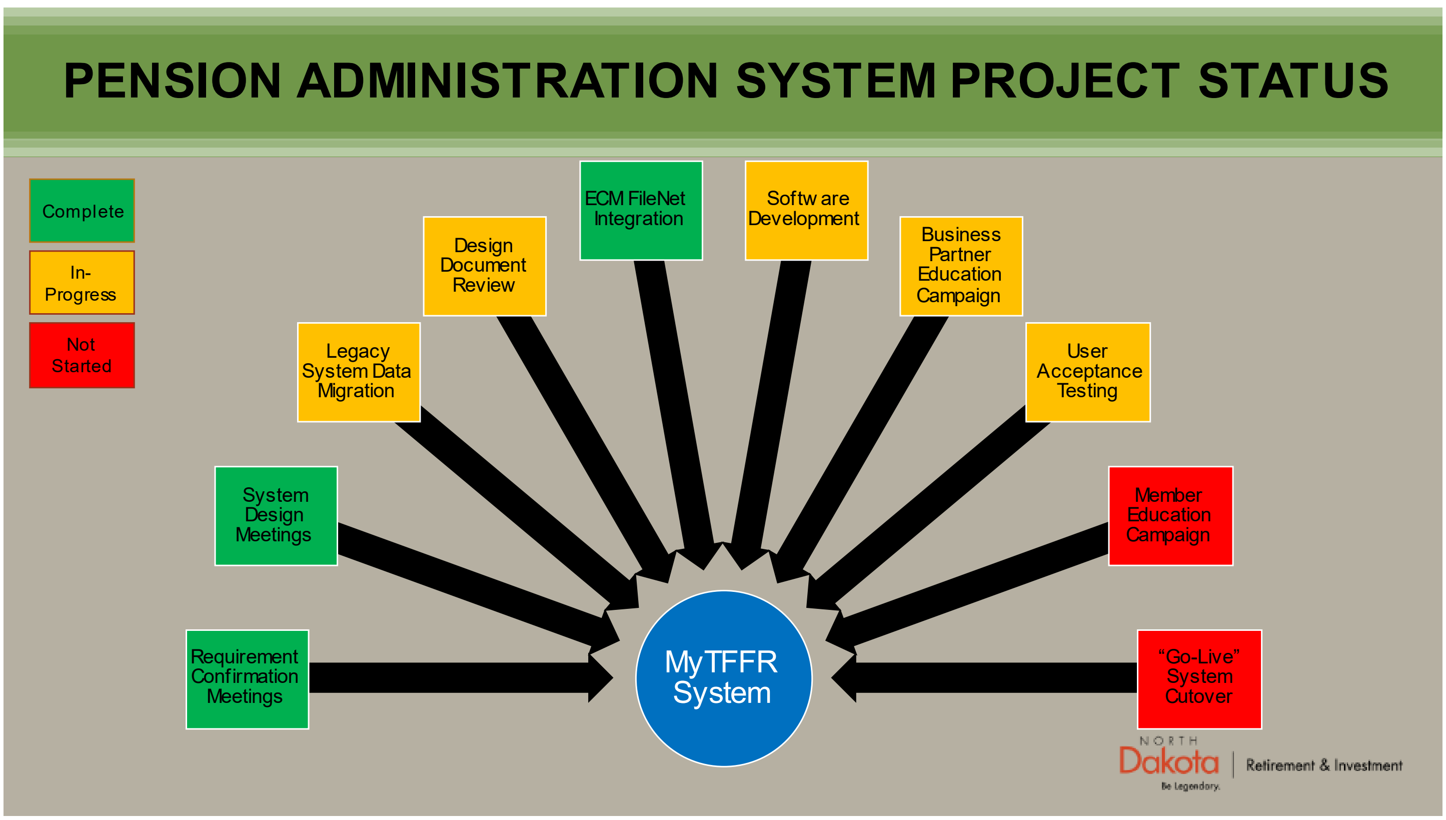
MEMORANDUM

TO: TFFR
FROM: Chad R. Roberts, DED/CRO
DATE: March 13, 2024
RE: March 2024 pension administration system project update

Project Status



The first segment of user acceptance testing was completed in early March. The vendor is currently working on a few lingering problem incident reports (PIRs) encountered during the testing. Overall, the testing segment was very successful. There were two issues identified that the vendor missed during the design elaboration phase. Neither issue is significant as it relates to the project schedule or "go live", however the vendor and NDRIO are discussing how these corrections will be made and how the cost will be absorbed. As of now, the two corrections have not resulted in an increase to project cost for NDRIO. The second segment of testing is tentatively scheduled to begin during the first week of April. This segment will require additional labor hours from NDRIO compared to the first segment of testing.

Data migration and testing is proceeding quickly. While some time was lost in late 2023 and early 2024 due to issues related to weather events and infrastructure on the vendor side, those delas have been made up for and the migration is expected to finish on time. Currently the vendor is refreshing the data in the test environment on a regular basis with current data from the CPAS system so that testing can be more accurate. That data which has been migrated has been found to be accurate and complete by NDRIO staff during testing.

The FileNet document migration to allow the new system to both utilize FileNet going forward and to retrieve existing documents from FileNet is now complete. As part of the next segment of testing, NDRIO staff will also test the access to and usability of these migrated documents in the new system. This phase of the project finished on schedule.

Budget Status

The project remains slightly under budget by approximately $60,000 due to the savings found through the elimination of the SharePoint licensing listed in the contract by using the existing State SharePoint licensing.

Unanticipated Issues

The vendor is working to provide a plan to address the design and implementation of uniform pay codes into the new pension administration system. Uniformity in pay code reporting from business partners will provide further assurance that all contributions are being captured by the TFFR system from business partners. The pay code feature was addressed during design meeting in November and December of 2022, however the vendor failed to capture the features in their designs. Any cost or delay caused by this omission by the vendor has yet to be established.

Board Action Requested: Information only

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MEMORANDUM

TO: **TFFR Board**
FROM: **Jan Murtha, Executive Director**
DATE: **March 15, 2024**
RE: **Administrative Rules**

Staff presented on behalf of the TFFR Board before the Administrative Rules Committee on March 5, 2024. There were no exceptions to the proposed rules as presented and the rules will be published on and effective by April 1, 2024.

Board Action Requested: Information only

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MEMORANDUM

TO: **TFFR Board**
FROM: **Sara Seiler, Supervisor of Internal Audit**
DATE: **March 7, 2024**
RE: **Performance Surveys**

The State Investment Board Executive Review and Compensation Committee (ERCC) facilitates performance surveys of the Executive Director and Deputy Executive Director/Chief Retirement Officer (DED/CRO) on an annual basis. This is an opportunity for the TFFR Board to participate in surveys about the Executive Director and DED/CRO's performance over the past fiscal year.

The ERCC will review the results as part of the Executive Director's annual performance review. The Executive Director will use the survey results for the DED/CRO yearly performance review.

The TFFR Board members will receive the survey on Thursday, March 21, 2024, and it will close on Monday, April 1, 2024.

BOARD ACTION REQUESTED: Information Only.

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2024 Performance Surveys - TFFR

Performance Survey

As a member of the Teachers' Fund for Retirement (TFFR) Board, you are asked to participate in giving feedback on the Executive Director Janilyn Murtha and the Deputy Executive Director/Chief Retirement Officer Chad Roberts. There are 10 multiple-choice questions and 1 open-ended for the Executive Director and by 8 multiple-choice and 1 open-ended question for the Deputy Executive Director/Chief Retirement Officer.

The Executive Review and Compensation Committee, a committee of the State Investment Board, will review the results.

If you have questions, please contact the Supervisor of Internal Audit, Sara Seiler, at 701-328-9896 or sseiler@nd.gov.

Survey responses are due by midnight on **Monday, April 1, 2024.**

Thank you in advance for your participation.

* 1. Full name of TFFR Board member completing the survey:

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2024 Performance Surveys - TFFR

Executive Director Performance Survey

As a member of the TFFR Board, you are asked to evaluate the Executive Director's performance for the past year.

2. Prior to the meeting, the Executive Director ensures Board members are provided with an agenda that includes supporting information, identifies any items that need action, and includes staff recommendations when appropriate.

◯ Exceeded expectations

◯ Met expectations

◯ Below expectations

3. The Executive Director is responsive to requests from the TFFR Board, adapts to the TFFR's direction on policy, and works with the board as a team member.

◯ Exceeded expectations

◯ Met expectations

◯ Below expectations

4. The Executive Director keeps the TFFR Board aware of current issues and, when appropriate, provides information between board meetings.

◯ Exceeded expectations

◯ Met expectations

◯ Below expectations

5. The Executive Director provides timely and accurate problem identification to the TFFR Board as well as solutions and options for consideration.

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

6. Based on my observations at board meetings and other interactions, I believe the Executive Director provides leadership to RIO staff.

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

7. The Executive Director successfully engages with stakeholders (i.e., clients, legislators, constituents, etc.) to promote the SIB and TFFR Board, RIO agency, and its programs.

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

8. The Executive Director develops legislative proposals in concert with the TFFR Board and represents the board in communications and presentations to the legislature.

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

9. The Executive Director has developed a rapport with legislators to ensure the credible recognition of the positions of the TFFR Board.

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

10. The Executive Director provides visionary and strategic leadership to the TFFR Board.

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

11. The Executive Director exhibits a positive and results-oriented style with a predisposition to building consensus and goal achievement through collaboration with by exhibiting courtesy and respect in all interactions.

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

* 12. Overall, how satisfied are you with the job being done by the Executive Director?

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2024 Performance Surveys - TFFR

Deputy Executive Director/Chief Retirement Officer Performance Survey

As a member of the TFFR Board you are asked to evaluate the Deputy Executive Director/Chief Retirement Officer's (DED/CRO) performance for the past year.

13. The DED/CRO understands the TFFR operations, board goals, strategic direction, and effectively and efficiently administers the retirement program.

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

14. The DED/CRO adds value to the TFFR pension program and operations suggesting and managing that improve efficiency (i.e., technological advancements, industry best practices, etc.).

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

15. The DED/CRO properly manages and informs the board of the progress and issues related to the Pioneer Project.

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

16. The DED/CRO understands and adheres to TFFR governance.

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

17. The DED/CRO upholds ethical standards in their decision-making and administrative practices.

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

18. The DED/CRO effectively communicates with and educates stakeholders about the retirement program.

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

19. The DED/CRO works to ensure educators have a clear understanding of their pension benefit, any program or contribution rate changes.

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

20. The DED/CRO stays informed of developments in pension management, regulations and industry trends and provides the board with information that aids in their growth and development as trustees.

- ◯ Exceeded expectations
- ◯ Met expectations
- ◯ Below expectations

* 21. Overall, how satisfied are you with the job being done by the DED/CRO?

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MEMORANDUM

TO: TFFR Board
FROM: Sara Seiler, Supervisor of Internal Audit
DATE: February 29, 2024
RE: Audit Committee

The Audit Committee met on February 15, 2024. The Audit Committee reviewed and approved the second quarter audit activities and update on current audit activities. An updated version of the charter was presented and approved that will be going to the Governance Review and Policy Committee for their review. Informational updates on the internal audit modernization project and Pioneer Project were given.

The Audit Committee reviewed and approved the Executive Limitations Audit. The Executive Limitations Audit reviews the Executive Director's level of compliance with the State Investment Board governance manual Executive Limitations A-1 thru A-11 on an annual basis. Internal Audit is sufficiently satisfied that the Executive Director was in compliance with the SIB Governance Manual Executive Limitation Policies A-1 through A-11 during calendar year 2023.

The following link has the committee materials that were presented for your reference:

https://www.rio.nd.gov/sites/www/files/documents/PDFs/SIB%20Audit/Board/Materials/sibauditmat20240215.pdf

BOARD ACTION REQUESTED: Information Only.

INVESTMENT PERFORMANCE REVIEW

March 21, 2024

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THE MARKET

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PERFORMANCE – BENCHMARK INDICES

Summary of Returns
January 31, 2024

Benchmark Indices (% change, annualized)	YTD	1 Yr	5 Yr	10 Yr	10 Yr Volatility
Russell 1000	1.4%	20.2%	14.0%	12.3%	17.9%
Russell 2000	-3.9%	2.4%	6.8%	7.0%	22.6%
S&P 500	1.7%	20.8%	14.3%	12.6%	17.7%
MSCI ACWI IMI Net	0.2%	13.5%	9.8%	8.2%	14.3%
MSCI World ex US	0.4%	9.5%	7.1%	4.8%	14.3%
MSCI Emerging Markets	-4.6%	-2.9%	1.0%	2.9%	15.7%
Bloomberg Aggregate	-0.3%	2.1%	0.8%	1.6%	4.6%
Bloomberg Gov/Credit	-0.2%	2.4%	1.1%	1.8%	4.9%
Bloomberg US High Yield	0.0%	9.3%	4.4%	4.5%	5.2%
NCREIF Property Index (12/31/2023)	-7.9%	-7.9%	4.3%	6.8%	4.0%

Source: Bloomberg

PERFORMANCE – BENCHMARK INDICES

Summary of Returns March 14, 2024					
Benchmark Indices (% change, annualized)	**YTD**	**1 Yr**	**5 Yr**	**10 Yr**	**10 Yr Volatility**
Russell 1000	7.9%	33.1%	14.5%	12.6%	17.9%
Russell 2000	0.5%	16.1%	7.0%	7.0%	22.6%
S&P 500	8.3%	33.4%	14.8%	12.9%	17.7%
MSCI ACWI IMI Net	5.9%	25.6%	10.3%	8.5%	14.3%
MSCI World ex US	4.6%	18.3%	7.3%	5.0%	14.3%
MSCI Emerging Markets	2.7%	13.9%	2.5%	3.6%	15.7%
Bloomberg Aggregate	-1.6%	2.2%	0.5%	1.4%	4.6%
Bloomberg Gov/Credit	-1.6%	2.4%	0.8%	1.6%	4.9%
Bloomberg US High Yield	0.9%	12.3%	4.2%	4.4%	5.2%
NCREIF Property Index (12/31/2023)	-7.9%	-7.9%	4.3%	6.8%	4.0%

Source: Bloomberg

HAS INFLATION PEAKED?[1]

+9.1%

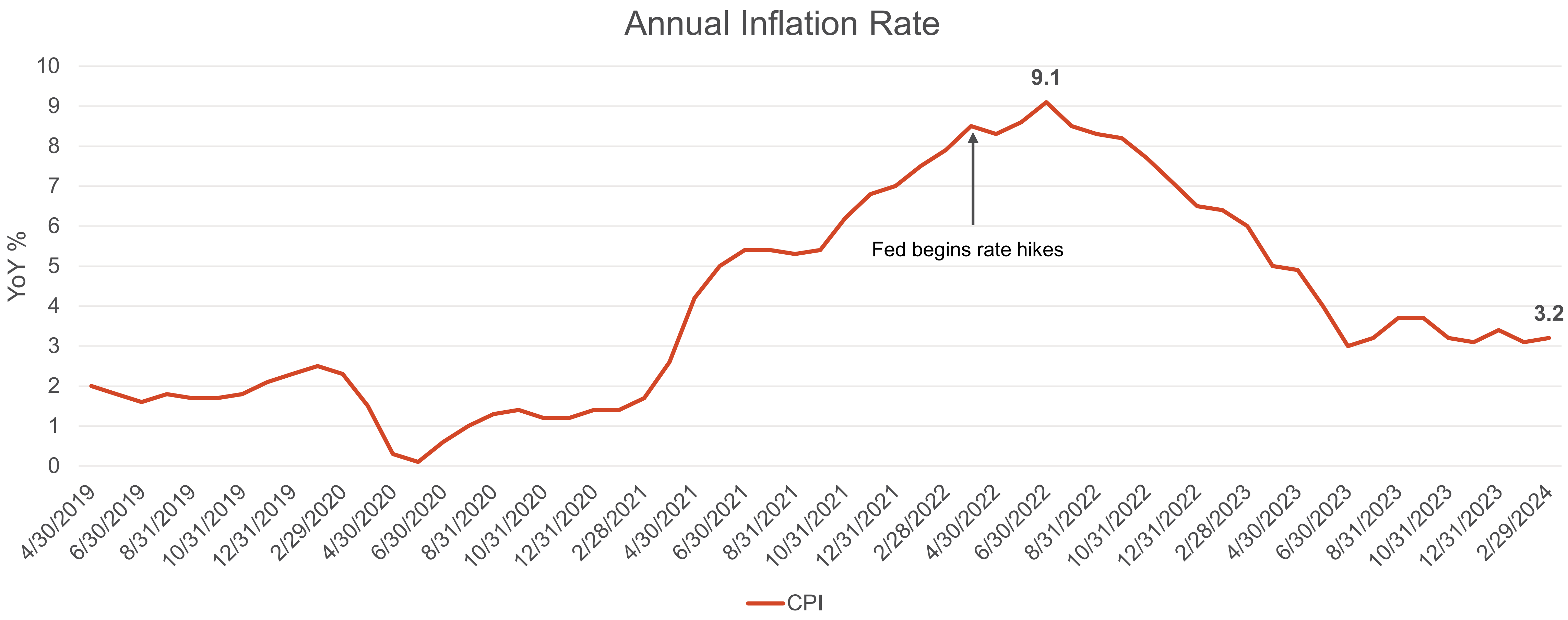
ANNUAL INFLATION RATE
(June 2021 thru June 2022)

+3.2%

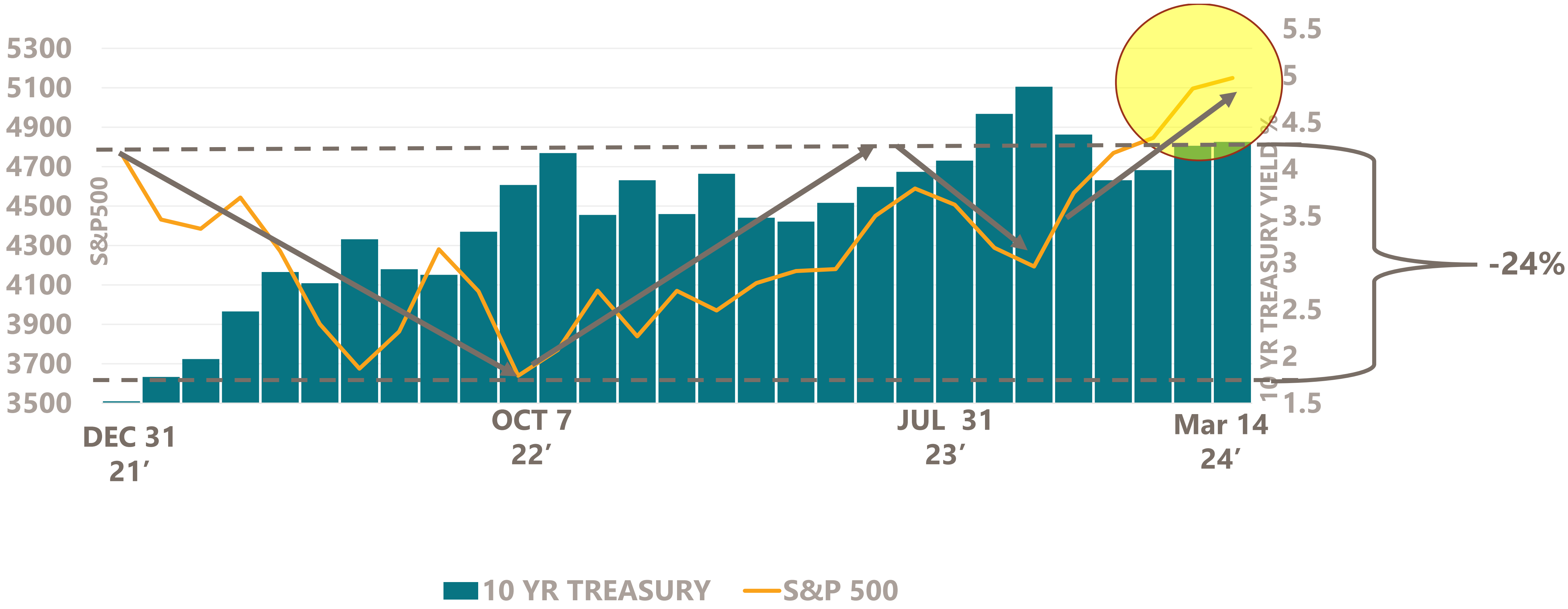
ANNUAL INFLATION RATE
(February 2023 thru February 2024)
3.8% Ex Food & Energy

1. Bureau of Labor Statistics

INFLATION PAST 5 YEARS

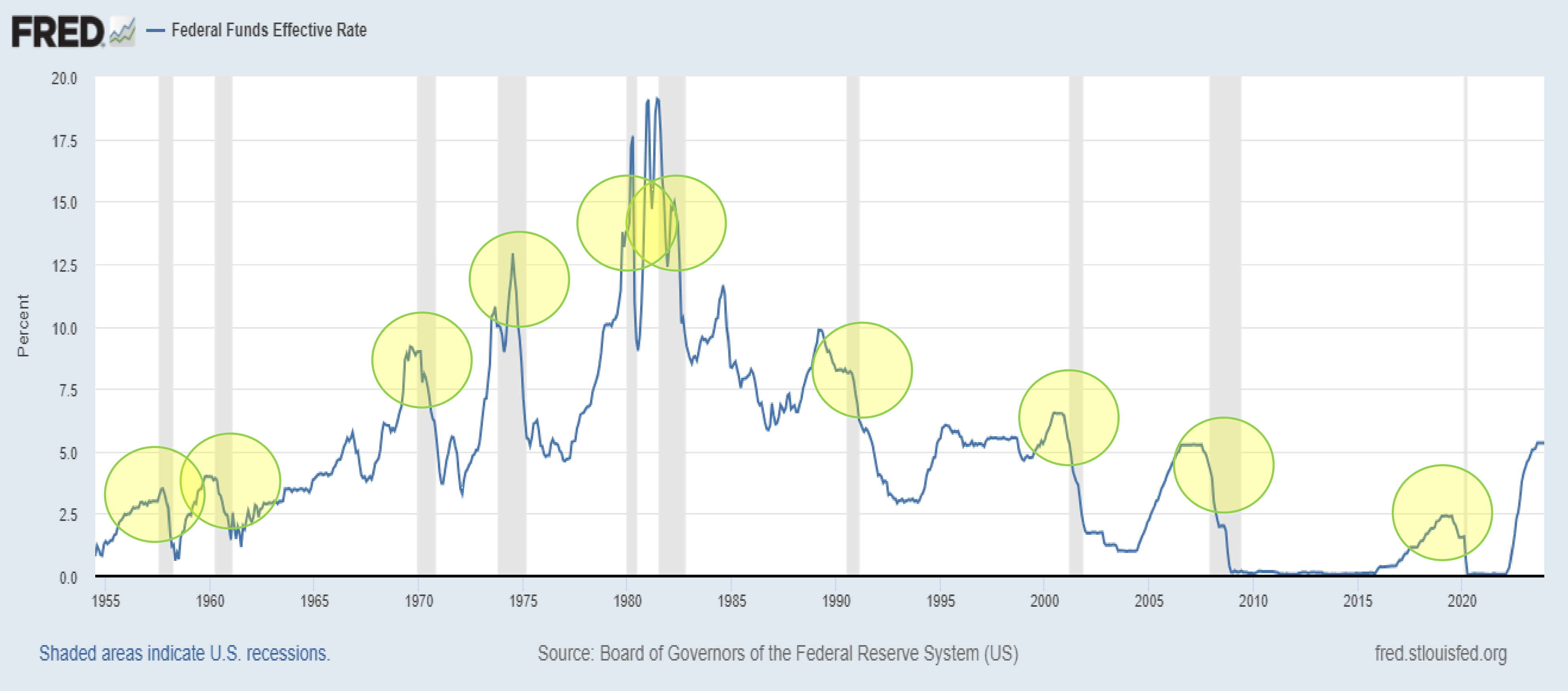


THE S&P500 HAS TRACKED INFLATION EXPECTATIONS[1]



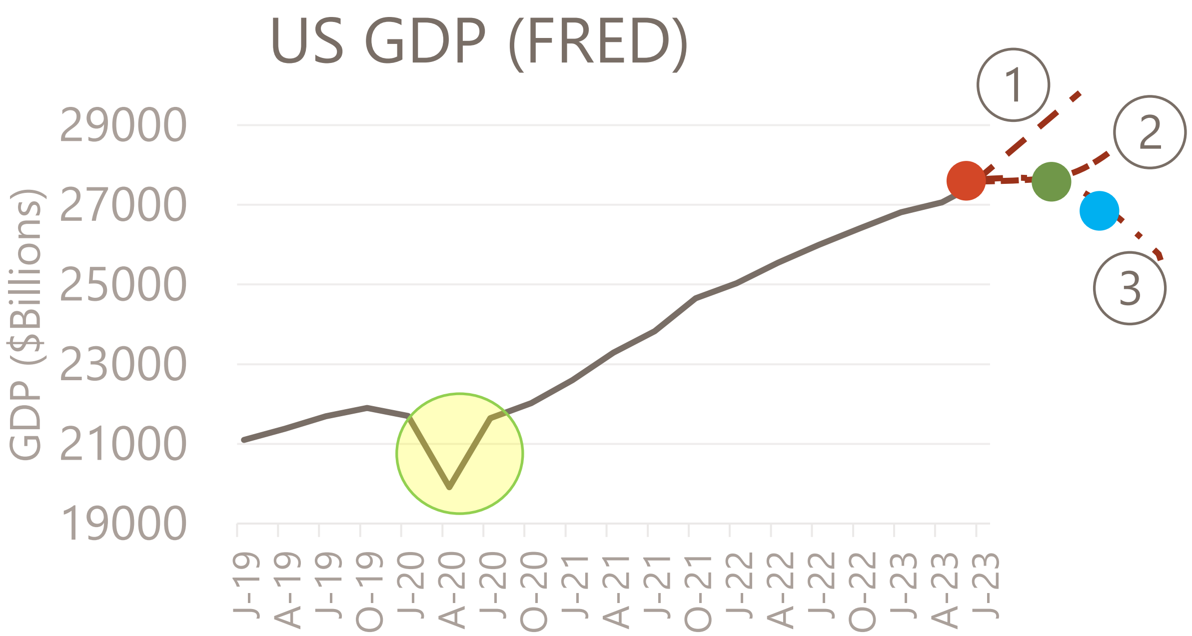
1. FRED

RECESSIONS AS FED LOWERS RATES



1. Fred Fed Fuds Effective Rate

THE GOLDILOCKS NARRATIVE



1 Fed Lowers Early – Too Hot
- GDP growth to fast
- Tight labor and fast growth cause inflation
- Moderate equity growth, interest rates rise

2 Fed lowers Just Right - Goldilocks
- Reach growth capacity and control inflation
- Moderate equity markets, normal fixed income markets, low defaults

3 Fed lowers too Late- Too Cold
- Growth collapses into a recession
- Equity markets perform poorly, fixed income performs poorly as defaults spike
- Lower rates eventually potentially spur stagflation

COMPETING NARRATIVES

LOW GROWTH / HIGH INFLATION

(Hard Landing)

- High Levels of Debt – Higher Interest Rates
- Tight Labor Market/Labor Force Growth
- Consumer Savings Are Running Out
- Higher Energy Prices From Policy
- **Political Risk**
- Student Loan Payments Restart Reducing Retail Spending

HIGHER GROWTH / HIGH INFLATION

(No Landing)

- Continued Government Spending
- Tight Labor Market/Labor Force Growth
- Inflation Psychology
- Higher Energy Prices From Policy
- Millennials in Peak Spending Years
- Housing Shortage/Higher Prices
- Real Consumer Income Growth

LOW GROWTH / LOW INFLATION

(Soft Landing)

- Housing Inflation Abates
- Lower Interest Rates
- Lower Growth/Lower Energy Prices
- Student Loan Payments Restart Reducing Retail Spending
- Reduced Government Spending
- Political Risk Diminish

HIGHER GROWTH / LOW INFLATION

(Goldilocks)

- Low Unemployment Buoys Economy
- Lower Interest Rates
- Millennials in Peak Spending Years
- Reduced Government Spending
- Global Political Risks Are Resolved/ Peace Dividend
- Productivity Boom From AI

GOOD NEWS [1]

BLOOMBERG AGG YIELD[1]: 4.9%

BEST GUESS FOR FUTURE BOND RETURN!

1. Fixed income benchmark; yields are the best estimate of future bond returns.

PERFORMANCE

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INVESTMENT MANAGEMENT BENEFITS

TFFR TEN YEAR AVERAGE RETURN[1]

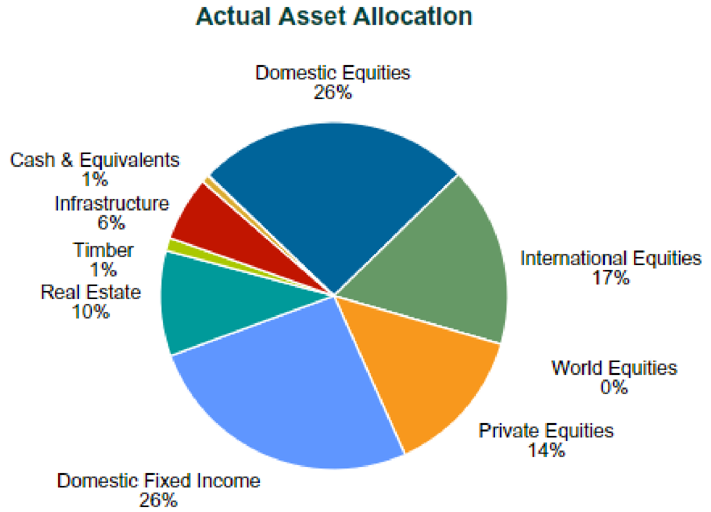
7.1% > **6.6%** > **5.4%**

FUND RETURN | **POLICY RETURN** | **60% EQUITIES/40% FIXED INCOME RETURN[3]**

1.7%/$550 MILLION Benefit[2]

1. Thru December 2023; North Dakota Investment Performance Summary
2. Starting with $3.0 Billion of assets
3. 60% MSCI ACW IMI/40% Bloomberg Aggregate – 10 years

ASSET ALLOCATION[1]



Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equities	809,357	25.5%	27.6%	(2.1%)	(67,512)
International Equities	532,698	16.8%	17.4%	(0.6%)	(17,830)
World Equities	246	0.0%	0.0%	0.0%	246
Private Equities	438,844	13.8%	10.0%	3.8%	121,644
Domestic Fixed Income	827,945	26.1%	26.0%	0.1%	3,226
Real Estate	312,271	9.8%	9.0%	0.8%	26,791
Timber	37,070	1.2%	1.2%	0.0%	48
Infrastructure	191,634	6.0%	7.8%	(1.8%)	(56,824)
Cash & Equivalents	21,930	0.7%	1.0%	(0.3%)	(9,790)
Total	3,171,995	100.0%	100.0%		

1. December 2023 values – Callan

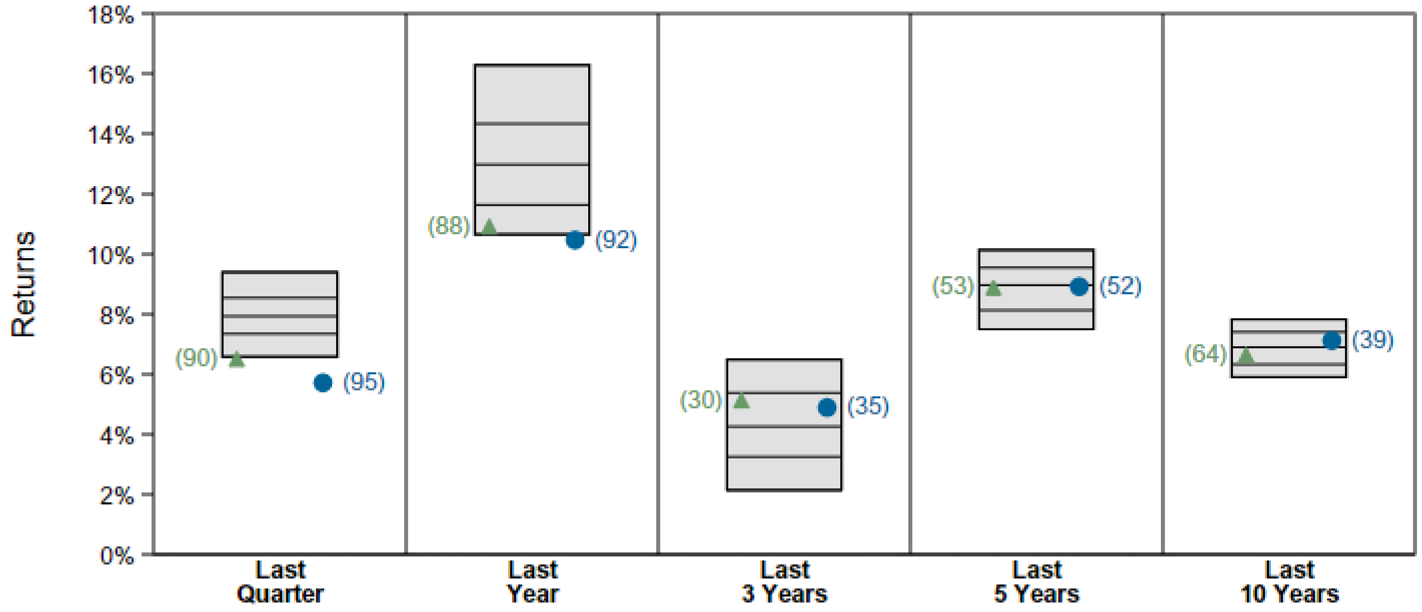
TFFR PERFORMANCE

AS OF DECEMBER 31, 2023 TFFR $3.2 Billion	Jan. 2024	1 Year	3 year	5 Year[1]	Risk (5 Year)
Total Fund Return - Net	-0.1%	10.5%	4.9%	8.9%	9.7%
Policy Benchmark Return	-0.2%	9.9%	4.3%	8.3%	10.0%
Total Relative Return[1]	0.1%	0.6%	0.6%	0.6%	

1. 1-year, 3-year, 5-year as of December 31, 2023

TFFR PERFORMANCE

Callan Public Fund Sponsor Database

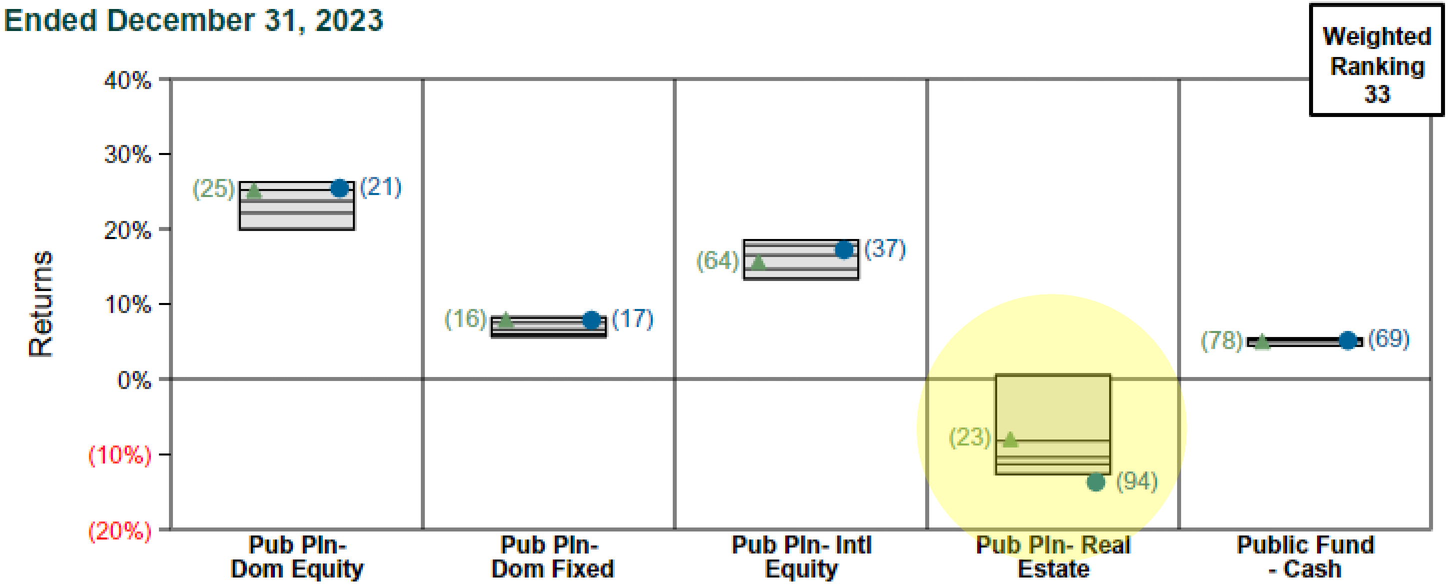


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	9.40	16.28	6.49	10.14	7.83
25th Percentile	8.55	14.33	5.38	9.55	7.41
Median	7.93	12.99	4.26	8.97	6.90
75th Percentile	7.35	11.64	3.25	8.13	6.33
90th Percentile	6.58	10.66	2.14	7.50	5.91
Total Fund ●	5.72	10.47	4.89	8.92	7.12
Policy Target ▲	6.51	10.92	5.13	8.89	6.65

1. December 2023 values – Callan

ASSET CLASS PERFORMANCE

Total Asset Class Performance
One Year Ended December 31, 2023



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	26.26	8.20	18.53	0.52	5.42
25th Percentile	25.19	7.52	17.82	(8.19)	5.28
Median	23.72	6.60	16.51	(10.36)	5.18
75th Percentile	22.14	6.02	14.64	(11.29)	5.09
90th Percentile	19.95	5.65	13.35	(12.62)	4.43
Asset Class Composite ●	25.44	7.85	17.21	(13.69)	5.13
Composite Benchmark ▲	25.18	7.92	15.62	(7.94)	5.01

1. December 2023 values – Callan

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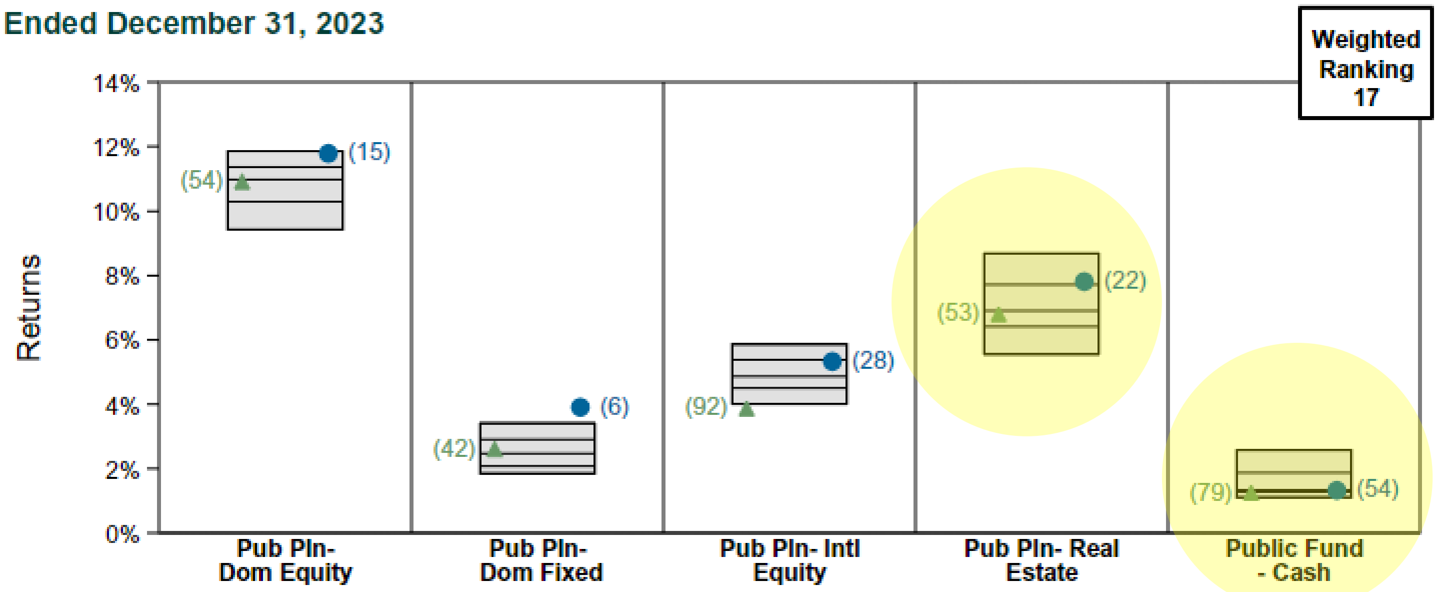
ASSET CLASS PERFORMANCE

Total Asset Class Performance
Ten Years Ended December 31, 2023



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	11.85	3.41	5.87	8.69	2.58
25th Percentile	11.36	2.91	5.38	7.72	1.87
Median	10.98	2.47	4.87	6.91	1.33
75th Percentile	10.30	2.08	4.50	6.42	1.27
90th Percentile	9.43	1.85	4.01	5.55	1.10
Asset Class Composite ●	11.78	3.91	5.33	7.81	1.32
Composite Benchmark ▲	10.92	2.61	3.87	6.80	1.25

1. December 2023 values – Callan

FY2023 RETIREMENT TRENDS REPORT

Chad Roberts, MAc
Deputy Executive Director/Chief Retirement Officer
March 2024

NORTH Dakota Be Legendary.

Teachers' Fund For Retirement
RETIREMENT & INVESTMENT

AGENDA

- Retirement Considerations
- Classification of members
- Current membership
- Trend Analysis
- Summation

RETIREMENT: NOW OR LATER?

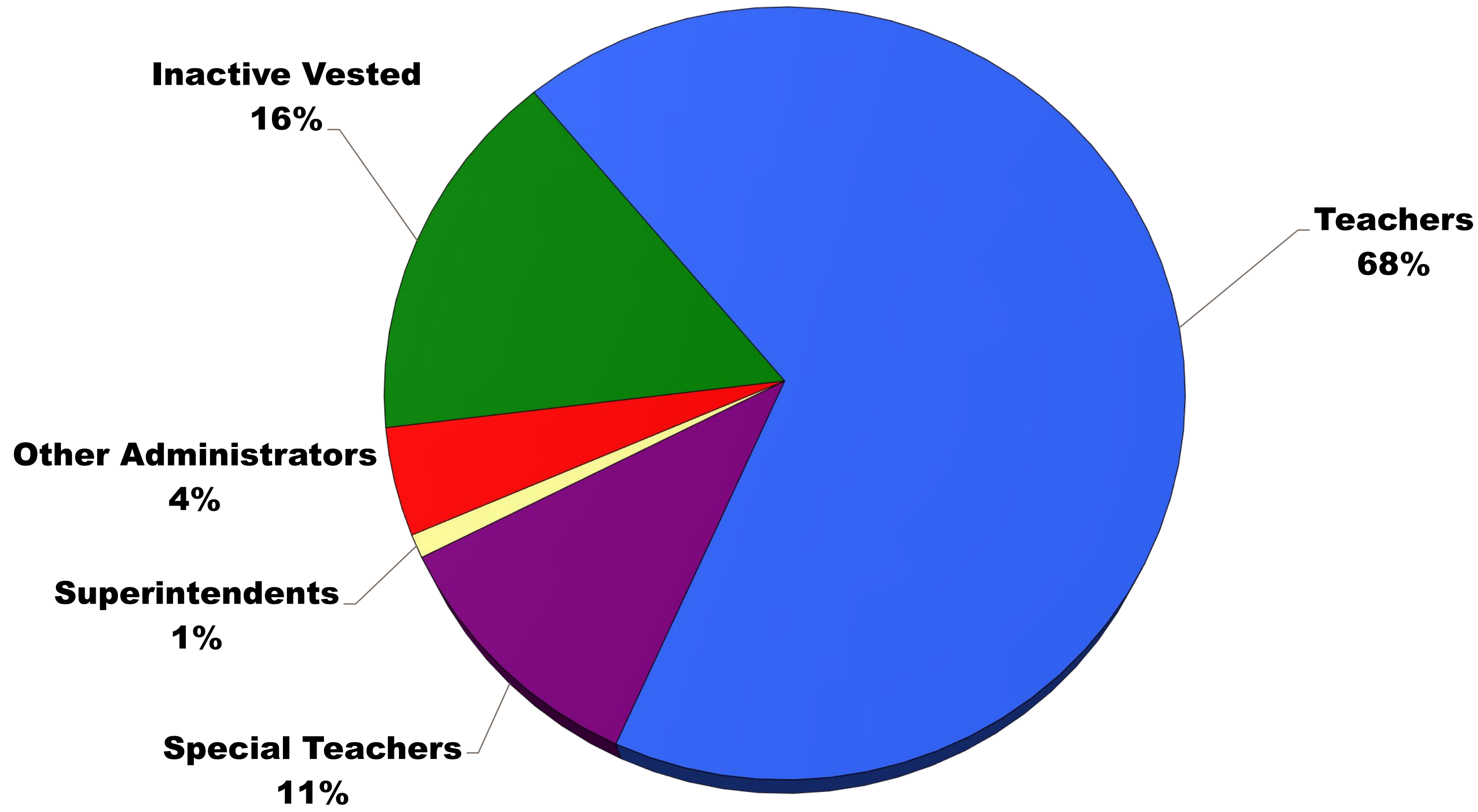
- Financial considerations:
  - Salary vs. Retirement benefits
  - Health insurance benefits – rising cost of medical care
  - Second career opportunities
  - Economic factors such as inflation and other investments performance
- Non-financial considerations:
  - Health of teacher (and spouse)
  - Family matters (spouse, children, parents)
  - Personal reasons (job satisfaction vs. job stress)
  - Legislative and regulatory factors affecting teaching

TFFR MEMBER CATEGORIES

- Teachers
- Special Teachers
  - Special Ed Teachers
  - Guidance & School Counselors
  - Speech Language Pathologists
  - Social Workers
  - School Psychologists
  - Library Media Specialists
  - Technology Coordinators
- Superintendents
- Other Administrators
  - Assistant Superintendent
  - Assistant Director
  - Principal
  - Assistant Principal
  - County Superintendent
  - Other administrative positions

TFFR member categories are based on DPI title codes and presented according to teacher and administrator categories defined in NDCC 15.1-02.13.6.

CURRENT MEMBERSHIP BY CLASSIFICATION



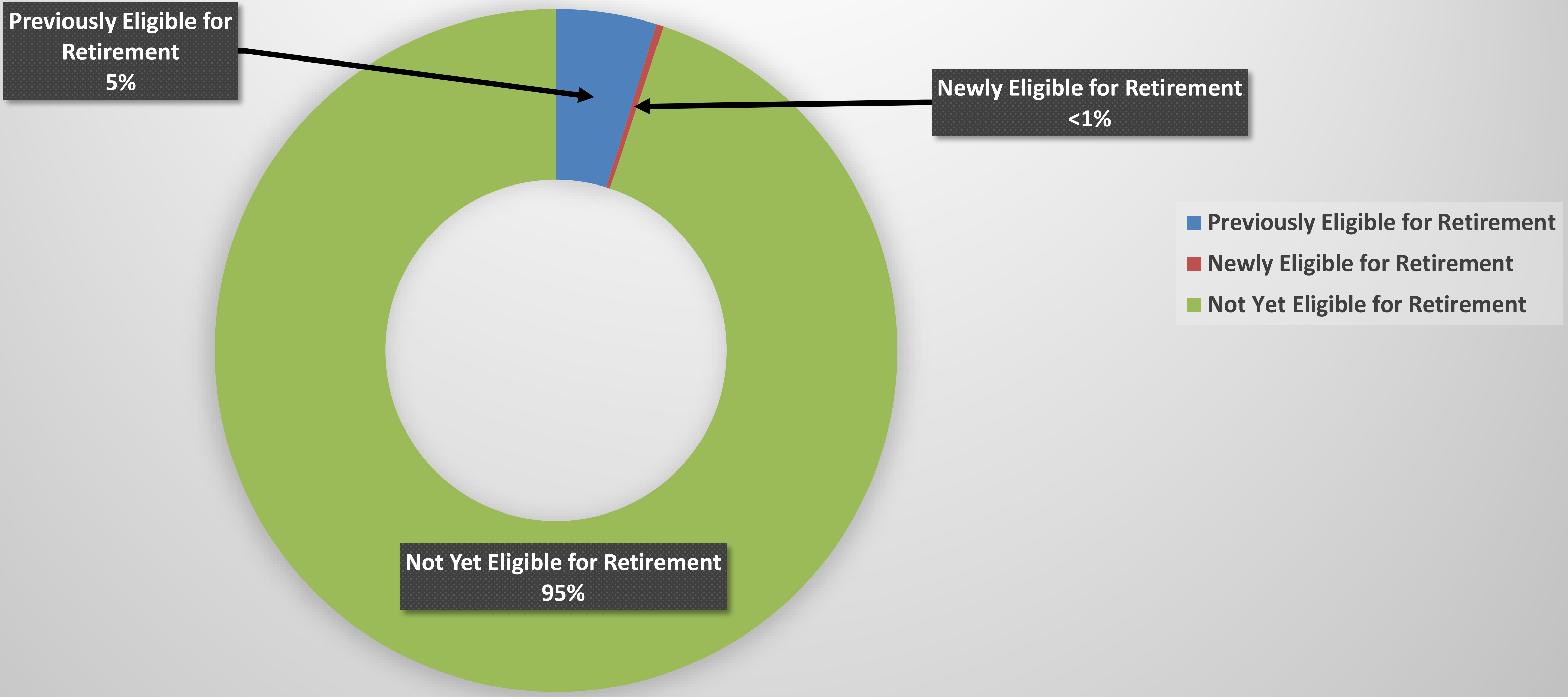
TFFR TIER MEMBERSHIP

TFFR Members	Tier 1G	YoY Change	Tier 1NG	YoY Change	Tier 2	YoY Change	Total
Teachers	**421**	**-47%**	**2,131**	**-7%**	**7,072**	**+9%**	**9,624**
Special Teachers	**66**	**-45%**	**390**	**+3%**	**1,087**	**+9%**	**1,543**
Superintendents	**13**	**-58%**	**62**	**+16%**	**65**	**+14%**	**140**
Other Administrators	**40**	**-48%**	**287**	**+12%**	**314**	**+22%**	**641**
Inactive Vested	**153**	**-37%**	**1,104**	**+77%**	**986**	**+58%**	**2,283**
Total	**693**	**-45%**	**3,974**	**-1%**	**9,524**	**+13%**	**14,191**

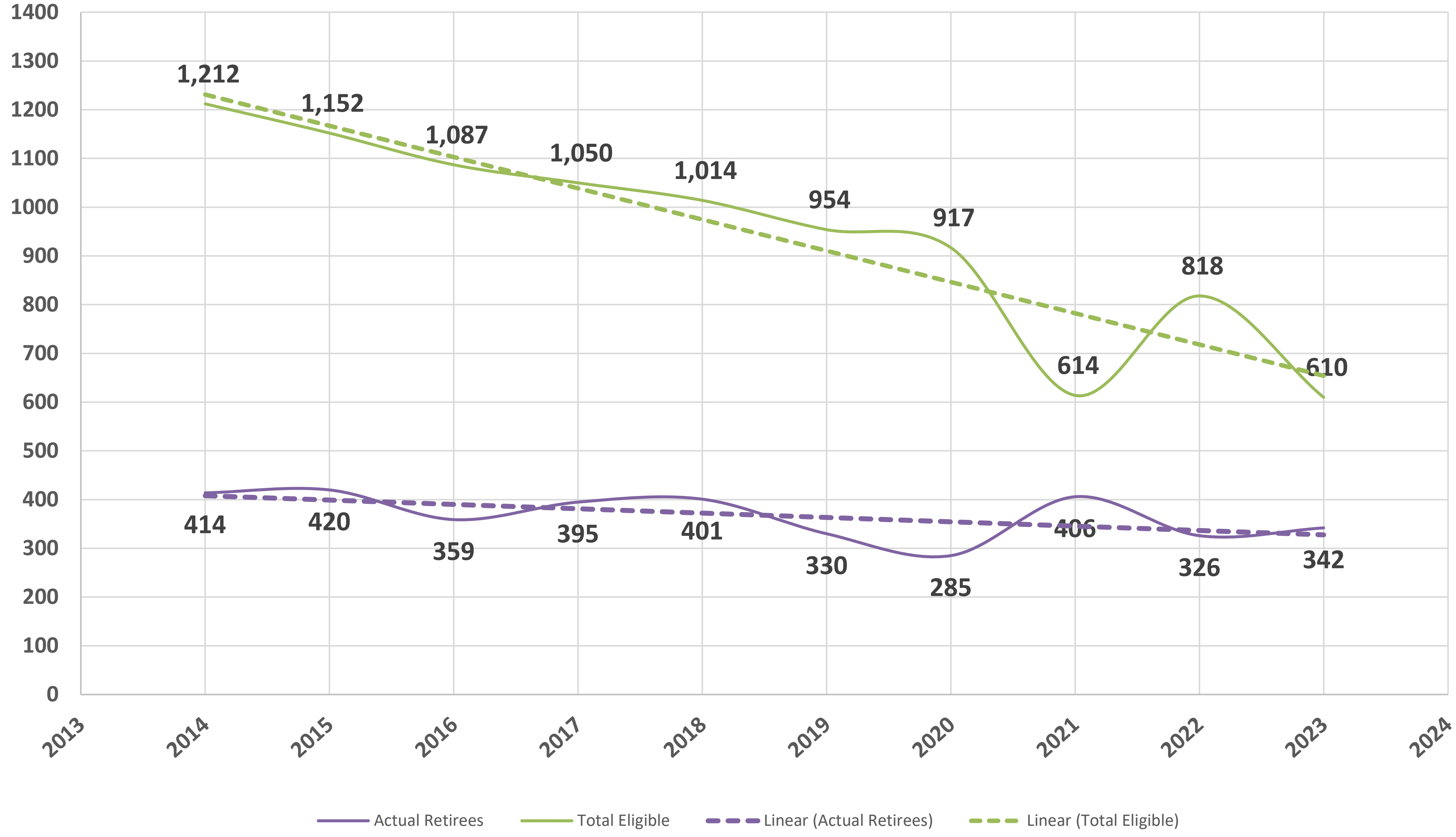
- Significant reduction in Tier 1G membership
- Surge in Tier 1NG inactive vested
- Surge in Tier 2 inactive vested

MEMBERSHIP BY TIER 2015-2024

Current Active TFFR Membership Eligible for Retirement



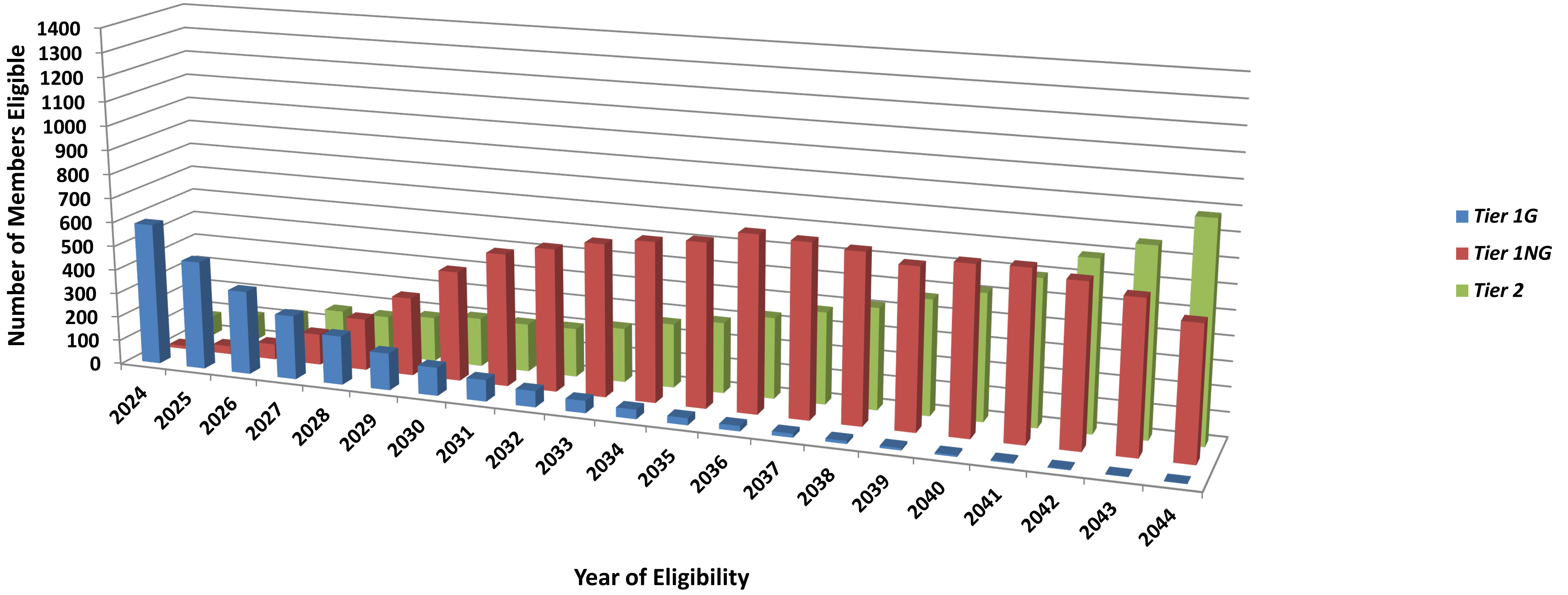
ACTUAL RETIREES AND TOTAL ELIGIBLE 10 YEAR HISTORY



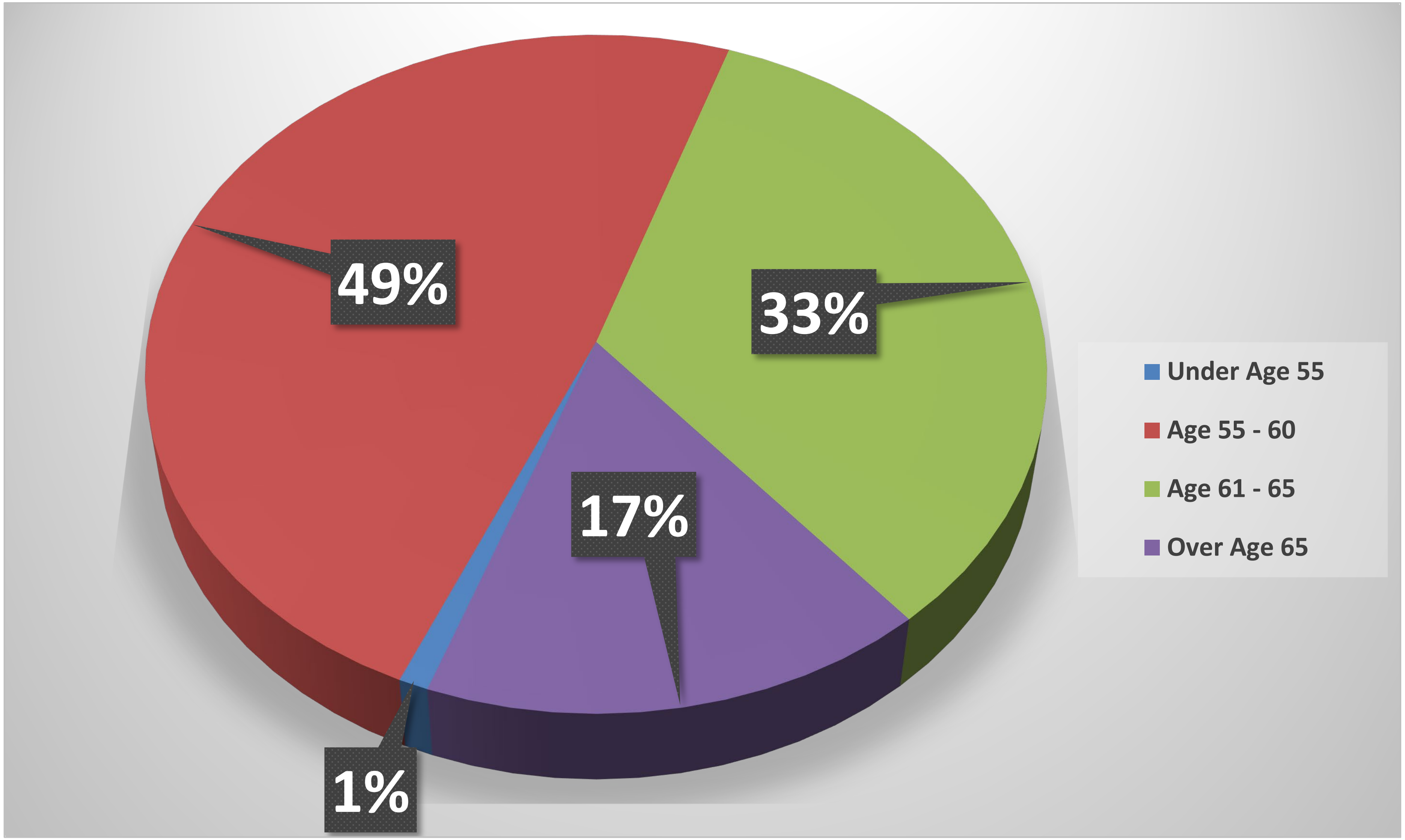
10 Year History 2014-2023

- On average, 942 teachers have been eligible to retire each year over the last 10 years.
- On average, 367 teachers actually retired each year, or total of almost 3,678 for 10-year period.
- Approximately 39% of eligible members actually retired over the past 10 years.

RETIREMENT ELIGIBILITY BY TIER
20-YEAR PROJECTION

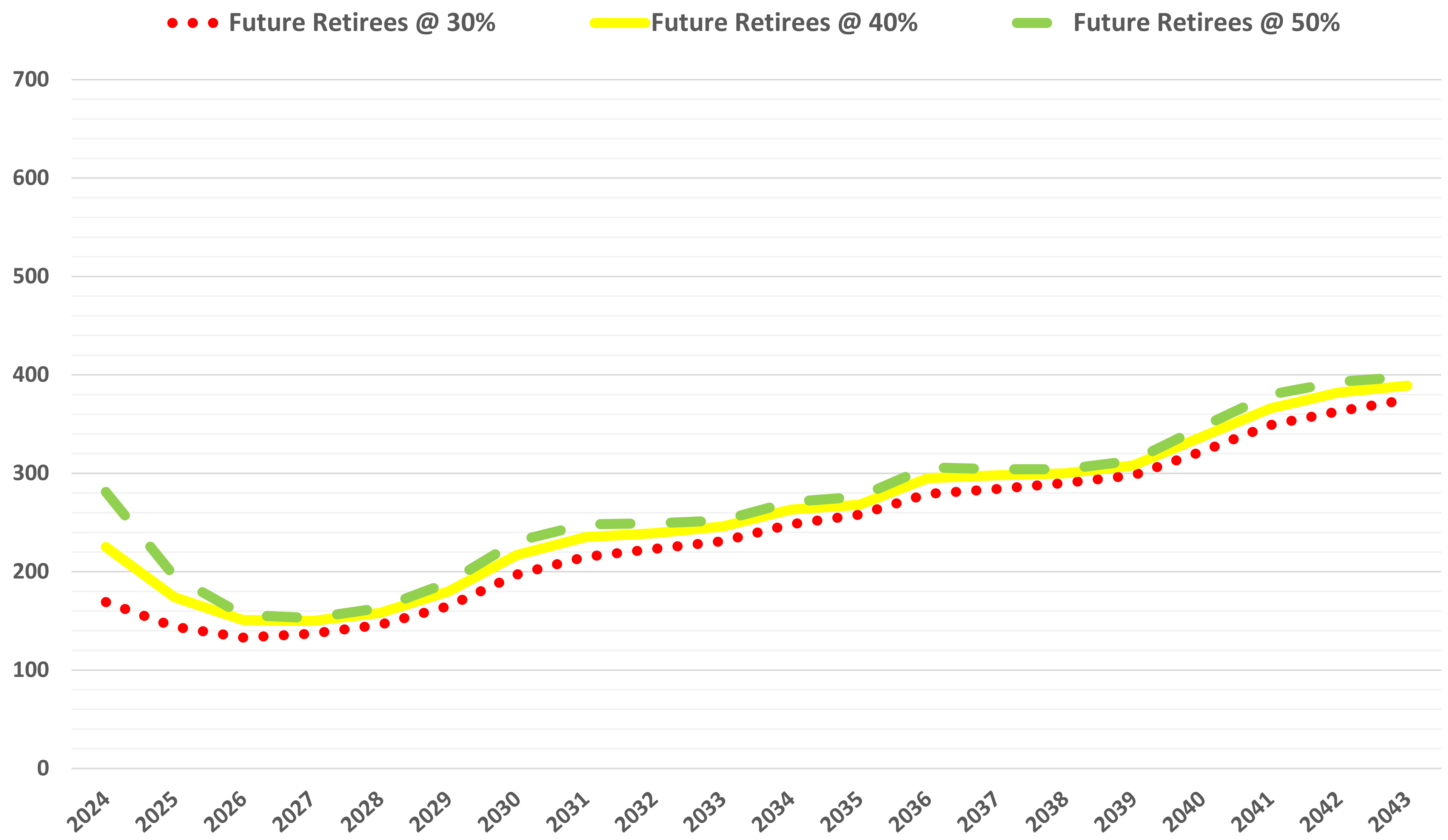


2024 RETIREMENT ELIGIBILITY BY AGE

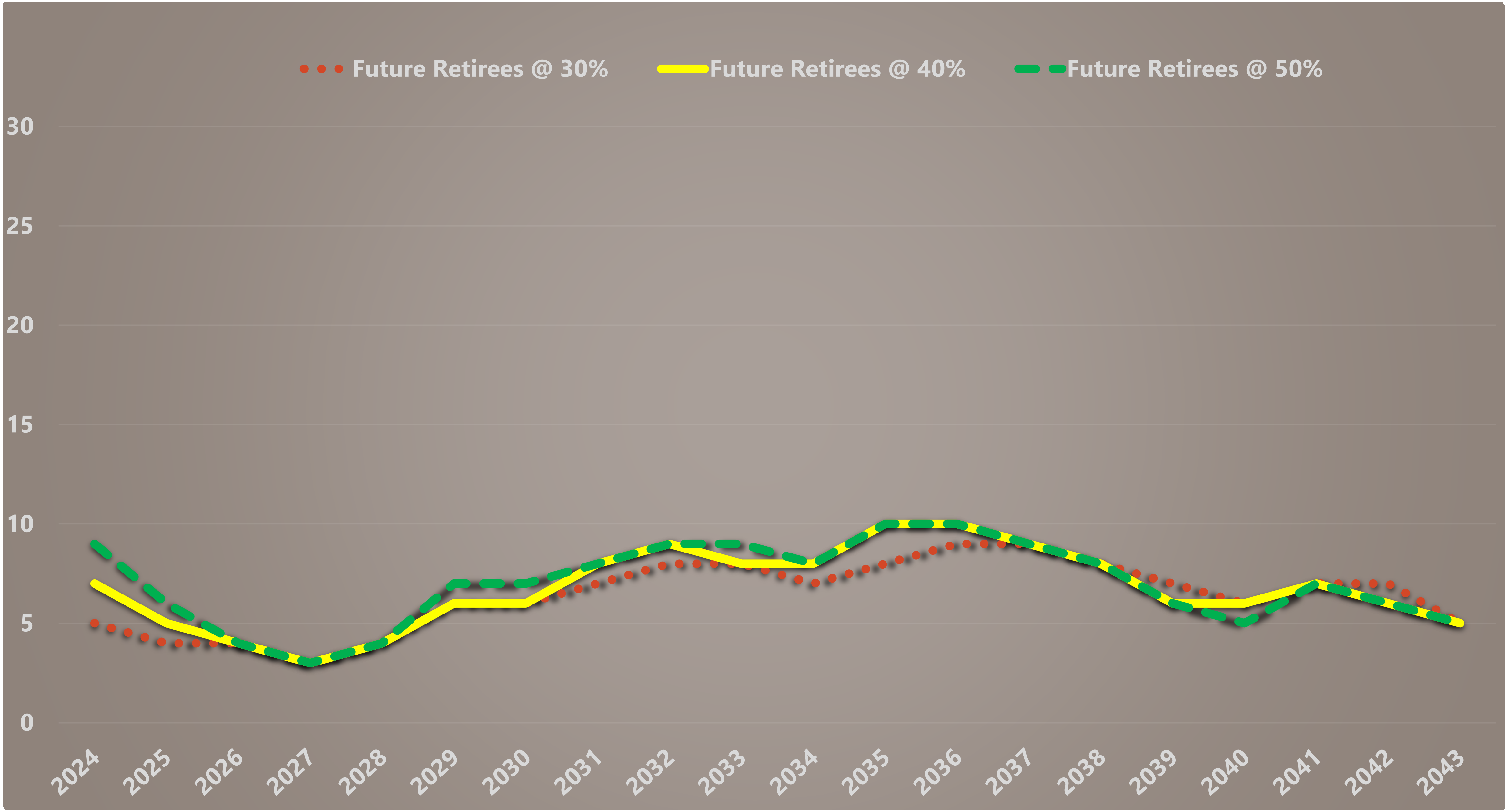


- In 2024 there are 610 total members eligible for retirement
  - ⬇ from 821 in 2023
- The youngest member eligible is 53
- The most senior member eligible is 84

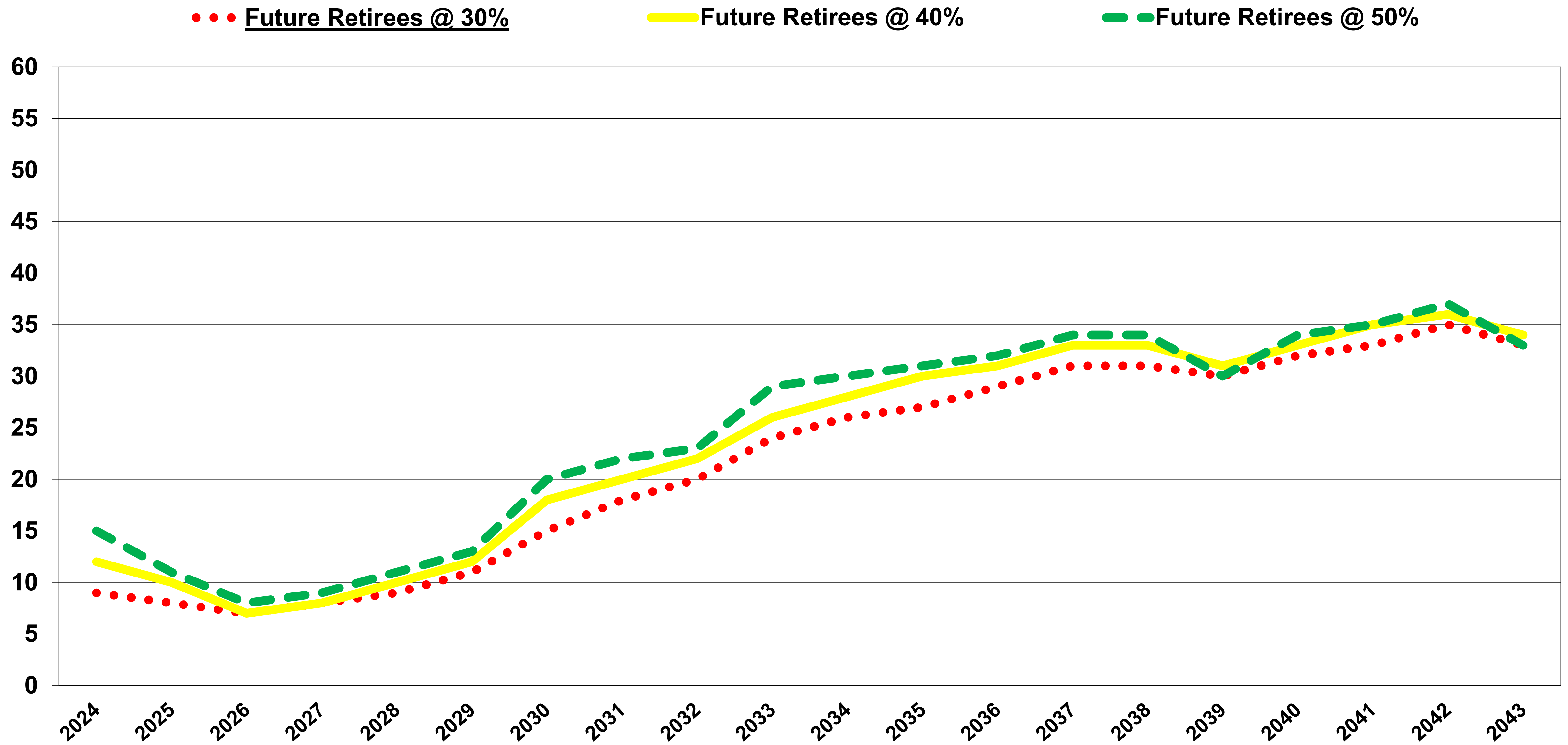
PROJECTED RETIREES – TEACHERS



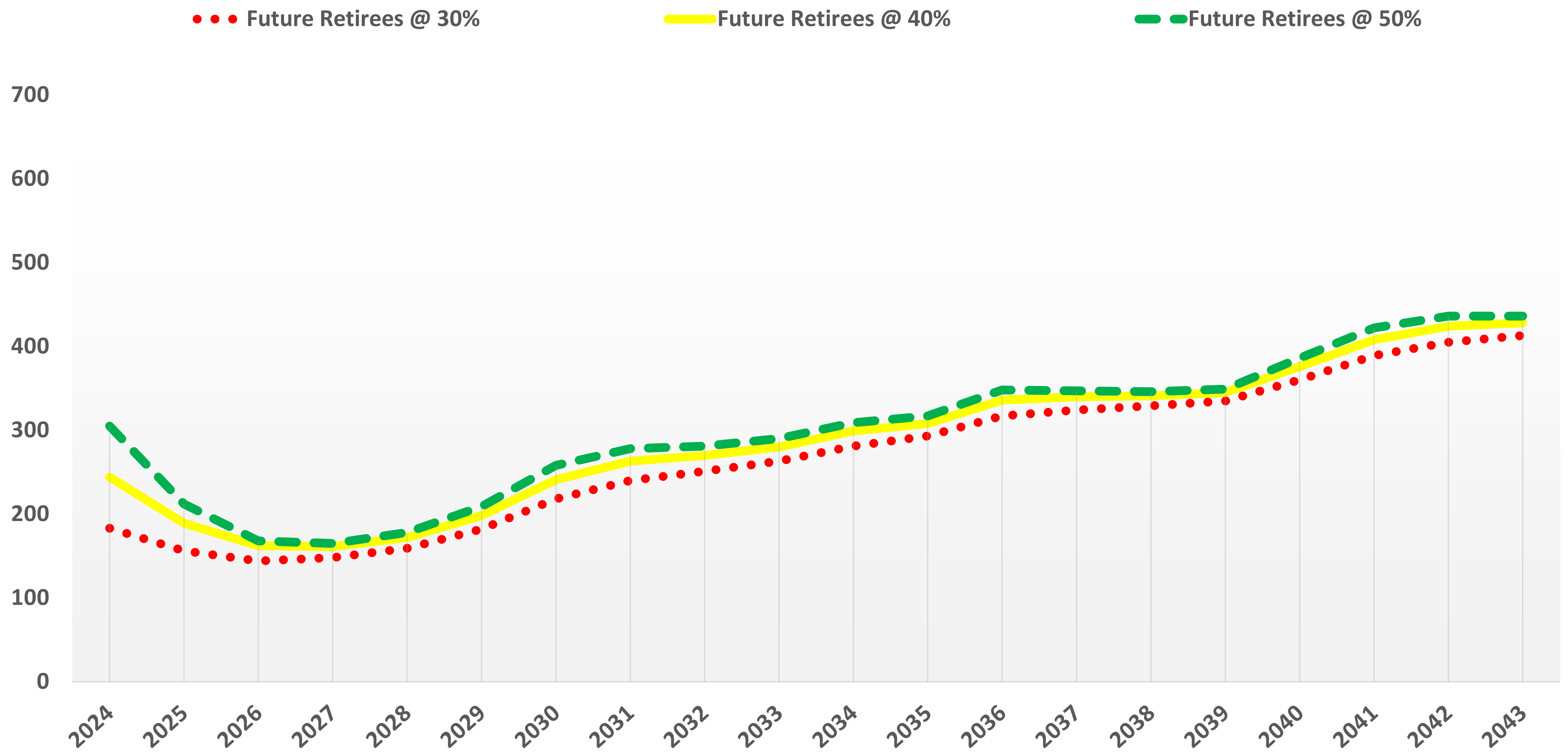
PROJECTED RETIREES - SUPERINTENDENTS



PROJECTED RETIREES – OTHER ADMINS



PROJECTED RETIREES – ALL ACTIVE



TAKEAWAYS

- Tier 1 Grandfathered members are down significantly
- Newly eligible for retirement is very minimal
- 95% of members are ineligible for retirement
- Total number of members eligible for retirement is 50% of what it was ten years ago
- Total retirements should continue to decline through 2028
- Nearly 50% of TFFR retirement eligible membership is now SSI eligible

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MEMORANDUM

TO: **SIB**
FROM: **Jan Murtha, Executive Director**
DATE: **March 15, 2024**
RE: **Executive Limitations**

A verbal update will be provided at the meeting on staff relations and strategic planning. Including updates on the following topics:

I. Strategic Planning

RIO presented it's updated strategic plan to the Governor's Office in March. The presentation will be shared with both the TFFR Board and SIB for acceptance at the March meetings.

II. New Board & Committee Member Update

The next two new board member onboarding meetings are scheduled for Wednesday, April 3, 2024, at 10amCT, and Thursday, April 25, 2024, at 10amCT, respectively. The April 3, 2024, meeting is virtual only and a Teams link will be provided; the topic of this training is Governance Manual Part 3, Jan Murtha Executive Director presenting. The April 25, 2025, meeting will be in person with a virtual option; the topic of this training is Risk Strategy, Nitin Vaidya, Chief Risk Officer presenting.

III. Retirements/Resignations/FTE's/Temporary Assistance:

Position Title*	Status
All current positions filled.	

*New FTEs related to the Internal Investment program are expected to be posted in Spring of 2024.

IV. Current Project Activities/Initiatives:

- **BND Study:** RIO is participating in the investment working group for the BND led study related to examining the impact of ESG related factors on state policy and industries. The working group is working together to present recommendations at the next steering committee meeting this April.
- **Cash Management Study:** RIO is participating in the OMB led cash management study. RVK has been contracted as the consultant to perform the study. RIO has participated in the kick-off and initial information gathering meetings related to the study.
- **TFFR Pioneer Project** – The TFFR Pioneer Project continues with implementation consistent with the project plan. Currently the project is in the user acceptance testing phase. The amount of time spent on the project by various staff members continues to vary from 5 to 25 hours or more per week. The project is currently on time and on budget with an expected launch date by end of 2024.

- **Investment Program Software Solutions:** NDIT has determined that the investment software solution to provide the necessary infrastructure for internal investment management qualifies as a large IT project. RIO staff is still working with NDIT and State Procurement through the procurement process. The procurement process is pending.
- **Northern Trust Initiative** – In an effort to enhance the infrastructure for the investment program the Investment and Fiscal teams continue to coordinate with Northern Trust for additional functionality/capabilities. This effort should be finalized coincident with the full implementation of the new investment program infrastructure.
- **Internal Audit Co-Sourcing:** Contract negotiations with Weaver for co-sourcing of additional internal audit functions in addition to those functions already being performed by current Internal Audit staff have been finalized and a kick-off to the collaboration has occurred. The ED, CFO/COO, and Supervisor of Internal Audit will meet with Weaver at least bi-monthly if not more frequently to coordinate consultant co-sourcing activities.
- **Compensation Study:** Mercer completed its presentation of the proposed incentive compensation plan at the February SIB meeting. Mercer will be presenting the compensation study results at the March SIB meeting.
- **Other Agency Collaborations:** Members of RIO's fiscal team were invited and are participating on compensation related committees/groups for both Trust Lands and HRMS.

Board Action Requested: Board acceptance.

Confidential information will be sent to Board members via secure link.

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MEMORANDUM

TO: TFFR
FROM: Chad R. Roberts, DED/CRO
DATE: March 13, 2024
RE: Board reading materials for March 2024 TFFR Board of Trustees

Attached are three suggested readings concerning pensions, retirements, and factors impacting retirement funds and the retirements of retirees.

The first suggested reading is a survey by NCPERS. The study examined trends in the fiscal, operational, and business practices of public pension funds. The survey was published in December of 2023.

The second suggested reading is an article published in December 2023 by JPMorgan Asset Management offering insight into how the public sector can utilize defined contribution plans to enhance retirement readiness of employees.

The third suggested reading is the summary of a survey conducted by the Institute of Education Sciences examining teacher attrition and mobility for the 2021-2022 school year. The study was released in December 2023. The attached material is a press release summarizing high points from that study. The full study can be accessed at the following link if interested in reading the full data and results.
https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2024039

Board Action Requested: Information only

NCPERS 2024 Public Retirement Systems Study:

Trends in Fiscal, Operational, and Business Practices

National Conference on Public Employee Retirement Systems

The Voice for Public Pensions

Table of Contents

This study reviews funds' current fiscal condition and the steps they are taking to ensure fiscal and operational integrity.

Overview

From September to December 2023, the National Conference on Public Employee Retirement Systems (NCPERS) conducted its Annual Public Retirement Systems Study to explore the retirement practices of the public sector. Now in its 13th year, NCPERS has partnered with Cobalt Community Research to collect and analyze the most current data available on funds' fiscal condition and steps they are taking to ensure fiscal and operational integrity.

NCPERS 2024 Public Retirement Systems Study includes responses from 157 state and local government pension funds with more than 13.8 million active and retired members and assets exceeding $2.3 trillion. About 52 percent are local funds while 48 percent are statewide funds.

The full results of the study are exclusively available to NCPERS members via an interactive dashboard, where they can filter data by total number of participants, type of employee/beneficiary, and more for peer-to-peer benchmarking. To access the dashboard and previous editions of this report, please visit https://www.ncpers.org/public-retirement-systems-study

Questions? Please contact Lizzy Lees, Director of Communications, at lizzy@ncpers.org.

"NCPERS has conducted this study annually for the past 13 years because public pensions are long-term investors who operate in complex environments, so it's crucial to regularly benchmark fiscal and operational performance." - Hank Kim, Executive Director, NCPERS

About NCPERS

NCPERS is the largest trade association for public pensions, representing approximately 500 plans, plan sponsors, and other stakeholders throughout the United States and Canada. Organized as a 501(c)(3) non-profit, the membership is a unique network of trustees, administrators, public officials, and investment professionals who collectively oversee approximately $4 trillion in retirement funds managed on behalf of seven million retirees and nearly 15 million active public servants — including firefighters, law enforcement officers, teachers, and other public servants.

Founded in 1941, NCPERS is the principal trade association working to promote and protect pensions by focusing on advocacy, research, and education for the benefit of public-sector pension stakeholders.

About Cobalt Community Research

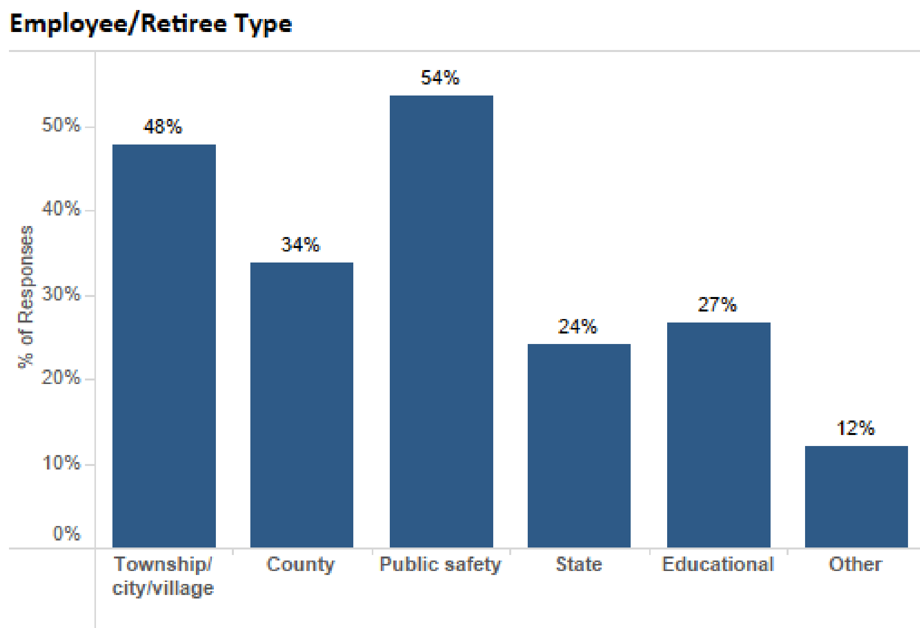
Cobalt Community Research is a national 501(c)(3) nonprofit, nonpartisan coalition that helps local governments, schools, and membership organizations affordably engage their communities through high-quality data, benchmarking, geofencing, and community engagement. Cobalt is headquartered in Charlotte, Michigan.

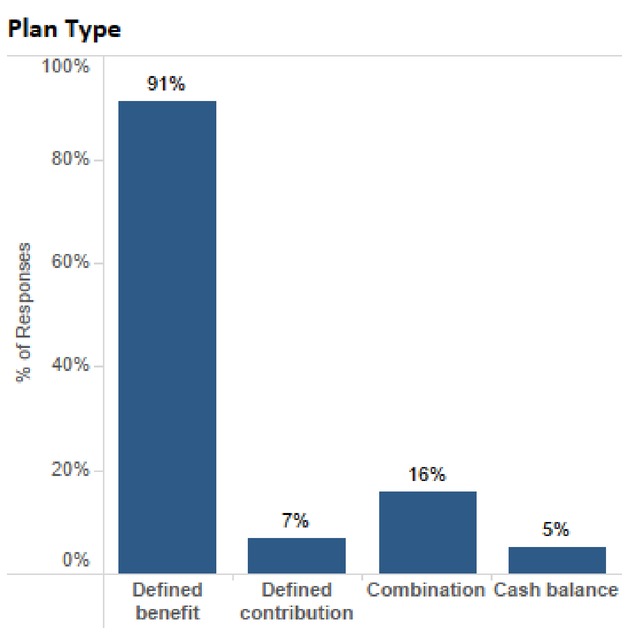
Who Responded?

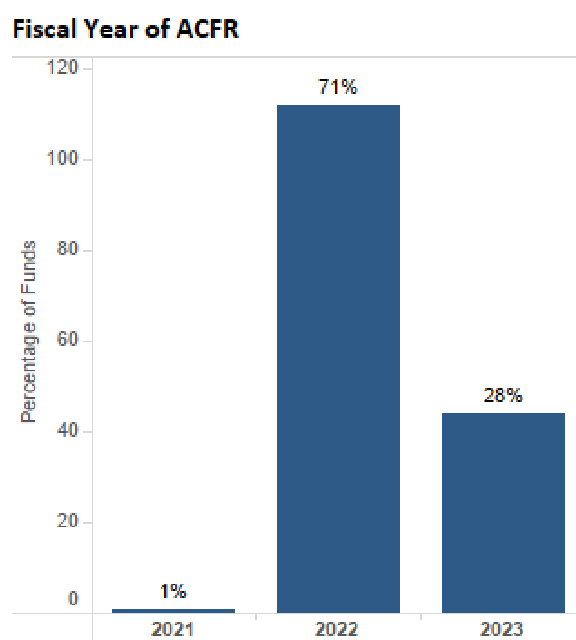
Overall, 157 public retirement funds participated in the NCPERS 2024 Public Retirement Systems Study. Of these survey respondents, 115 also participated in the previous year's study.

About 48 percent of all responding funds serve township, city, and village employees and beneficiaries, down from 52 percent in the prior year. About 54 percent of the responding funds serve public safety employees (i.e. firefighters or law enforcement officers) up from 45 percent in the prior year. The graph below shows the distribution of employee types served by the funds. The bottom graphs show response by type of plan provided and response by the year of the ACFR/CAFR used. Totals on plan type may exceed 100 percent because of multiple responses.

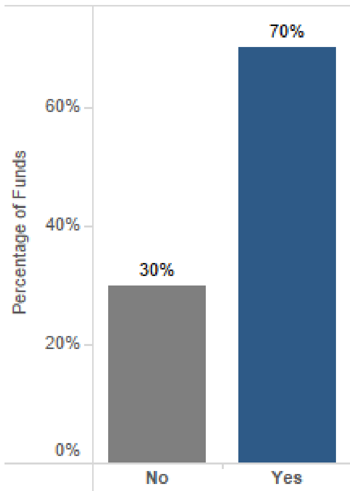
The overall distribution of the groups served by responding funds is similar to prior years; however, public safety funds were a larger proportion of the responses compared with last year.







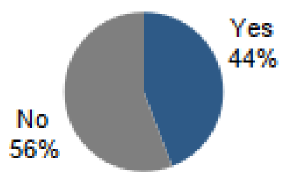
Members' Social Security Eligibility



About 70 percent of responding funds have members who are eligible for Social Security, and 30 percent have members who are not eligible. In this report, breakdowns are presented for funds whose members are or are not eligible for Social Security.

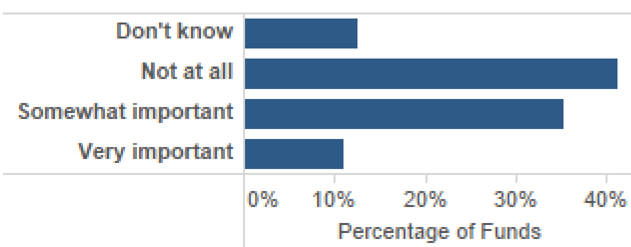
Funds whose members are not eligible for Social Security tend to offer higher levels of benefits to make up for the loss of income typically supplemented by Social Security.

Inclusion of Overtime in Benefit Calculation



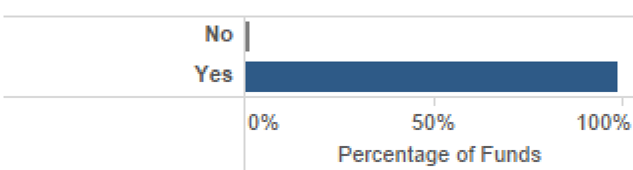
Inclusion of overtime in the calculation of a retirement benefit has been an area of interest to public funds. Fifty-six percent of respondent funds exclude overtime in the benefit calculation, which is 7 percentage points more than last year.

How important are ESG (environmental, social, and governance) factors in your fund's investment decisions?



Funds were asked about the role of environmental, social, and governance (ESG) factors in their investment decisions. About 46 percent of respondents said they are somewhat or very important in their investment decisions, down from 54 percent last year.

Eligible for Medicare



New this year, funds were asked if members were eligible for Medicare. About 99 percent said yes.

Key Takeaways

1. Reporting funds saw, on average, one-year returns of around -1.9 percent. The five-year, 10-year, and 20-year averages were lower than last year, but the 10-year and 20-year averages were above the assumed rate of return. Those funds that also participated in last year's study show similar patterns, although this cohort saw, on average, one-year returns around -1.2 percent.

2. The average funded level is 75.4 percent, down from 77.8 percent last year. Funds reporting both years saw funded levels decrease to 75.3 from 77.0 percent.

3. The average investment assumed rate of return for responding funds is 6.91 percent, compared with 6.86 percent the year prior. Plans that responded both years saw similar assumptions.

4. The average investment-smoothing period for respondents increased from 5.2 to 5.7 years, and it rose from 5.2 to 5.6 among funds that responded to both survey years. For funds with Social Security-eligible members, the smoothing period was 5.9 years. Funds with members who are not Social Security eligible have an average smoothing period of 5.0 years.

5. The overall average expense for all respondents to administer the funds and to pay investment management fees is 56 basis points (100 basis points equals 1 percentage point). This is below the 64 basis points in the prior year. Investment expenses were lower than in the prior year. According to the *2023 Investment Company Fact Book*, the average expense of hybrid funds is 59 basis points.

6. The aggregated average cost-of-living adjustments (COLAs) offered to members was 2.2 percent, which is slightly higher than 2.0 percent last year. Many responding funds did not offer a COLA in the most recent fiscal year. Funds with members who are not eligible for Social Security tend to offer higher COLAs (2.7 percent) than those with members who are eligible for Social Security (1.9 percent). Funds with populations smaller than 10,000 participants have an average COLA that is 0.25 percent higher than larger funds.

7. Amortization continues to tighten. For responding funds, amortization averages 20.4 years, down from 20.8 years. Funds that also participated in the survey the year before saw a reduction in the period of time by about 0.4 years. Overall, the percentage of closed/fixed funds increased from 70 percent to 75 percent.

8. Surveyed funds were asked, "How satisfied are you with your readiness to address retirement trends and issues over the next two years?" Respondents provided an overall "confidence" rating of 8.0 on a 10-point scale (very satisfied = 10). This is slightly higher than 7.8 last year. Funds responding in both 2022 and 2023 were slightly more confident in their ability to adapt to and address issues in the volatile environment surrounding public pensions. Overall, their average confidence increased to 8.2 from 7.9.

9. Funds were asked about the role of environmental, social, and governance (ESG) factors in their investment decisions. About 46 percent of respondents said they are somewhat or very important in their investment decisions, down from 54 percent last year.

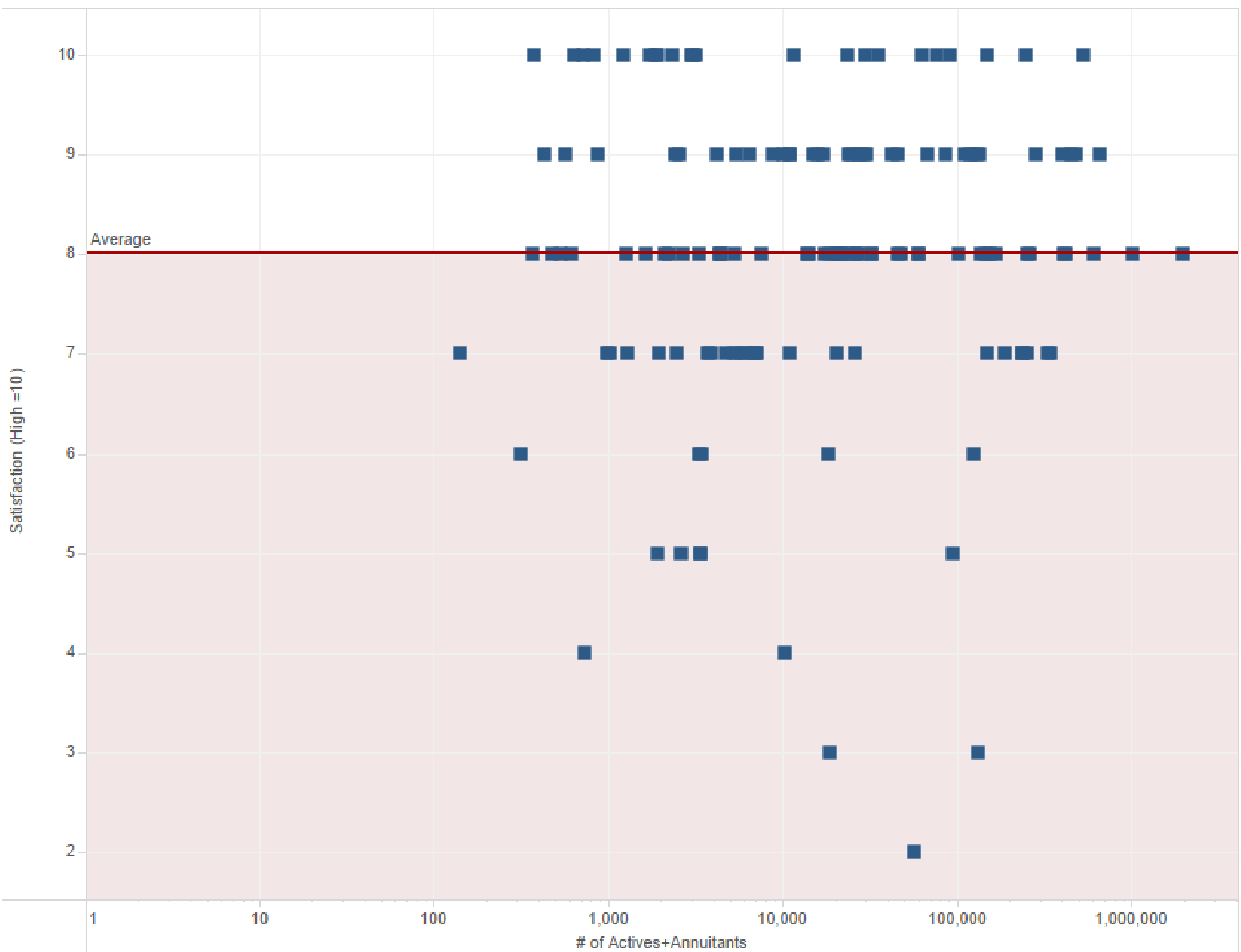
Fund Confidence

Surveyed funds were asked, “How satisfied are you with your readiness to address retirement trends and issues over the next two years?” Respondents provided an overall “confidence” rating of 8.0 on a 10-point scale (very satisfied = 10). This is slightly higher than 7.8 last year.

Funds responding both years were slightly more confident in their ability to adapt to and address issues in the volatile environment surrounding public pensions. Overall, average confidence increased to from 8.2 from 7.9.

Funds with members eligible and members ineligible for Social Security responded with a rating of 7.9 and 8.2, respectively.

Fund Confidence



Expenses

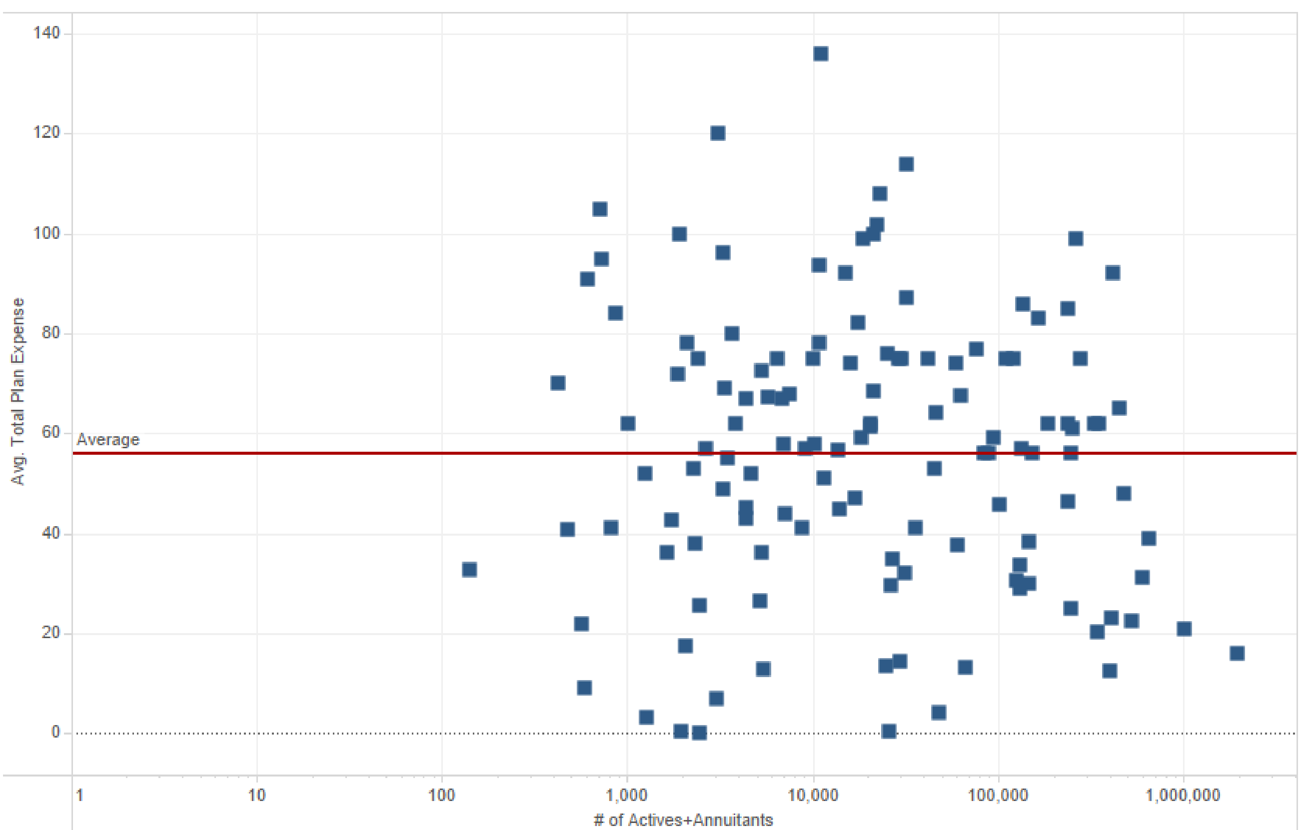
The average total expense for all respondents to administer their funds and to pay investment management fees is 56 basis points (100 basis points equals 1 percentage point). This is below the 64 basis points in the prior year. According to the *2023 Investment Company Fact Book*, the average expense of hybrid funds is 59 basis points.

Investment manager expenses were significantly lower than in the prior year, decreasing from an average of 49 basis points to 39 basis points. Administrative expenses remained steady year over year.

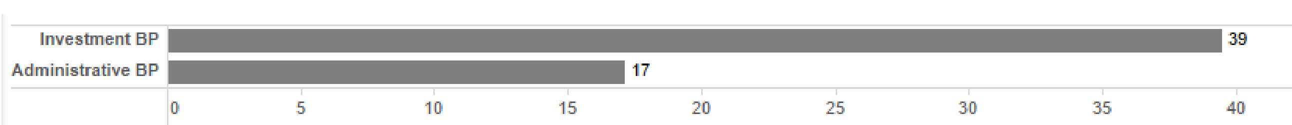
The top graph on this page shows the distribution of total expenses (in basis points) on the vertical axis and the size of the fund (by total participants) on the horizontal. The red line represents the average expense.

The bottom graph shows the average administrative and investment expenses. Note: The averages in the bottom graph do not total the average expenses in the top graph because not all funds reported both investment and administrative numbers.

Total Expenses by Size of Fund

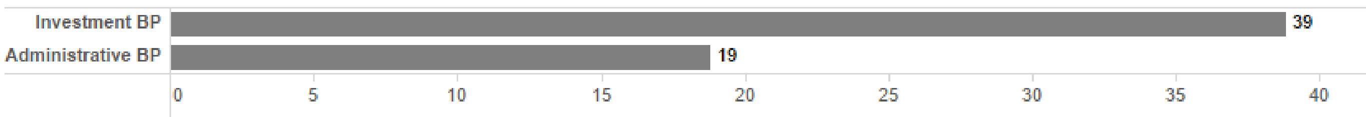


Average Fund Expenses (Basis Points)

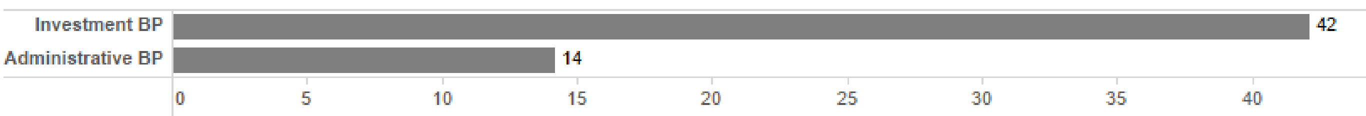


The below graphs show average expenses broken out by funds whose members are and are not eligible for Social Security. Total expenses are 58 and 56, respectively. Note: The averages below do not total the average expenses because not all funds reported both investment and administrative numbers.

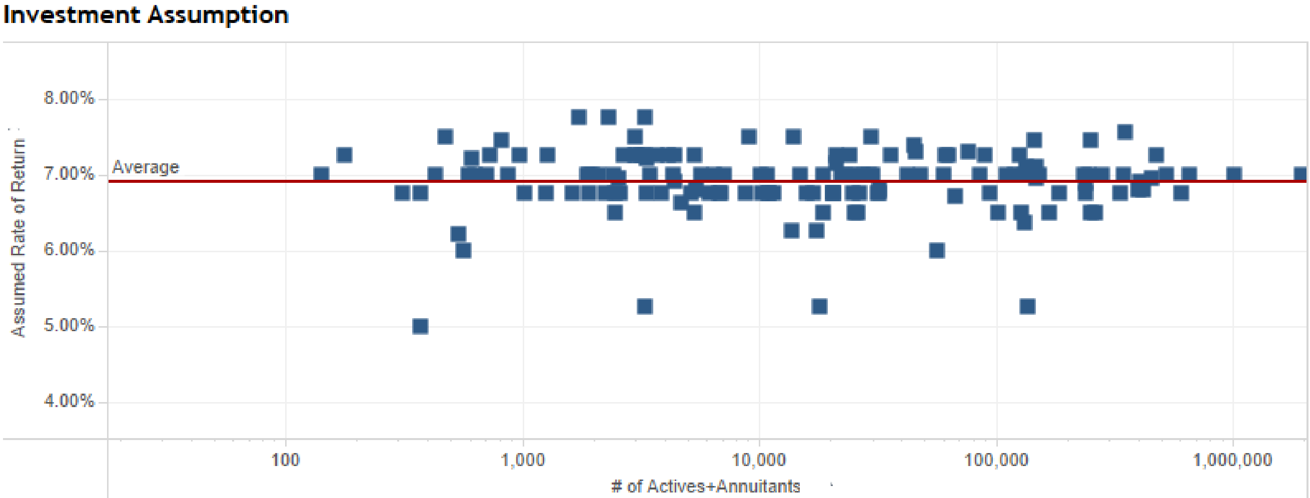
Average Fund Expenses: Social Security Eligible (Basis Points)



Average Fund Expenses: Not Social Security Eligible (Basis Points)



Actuarial Assumptions

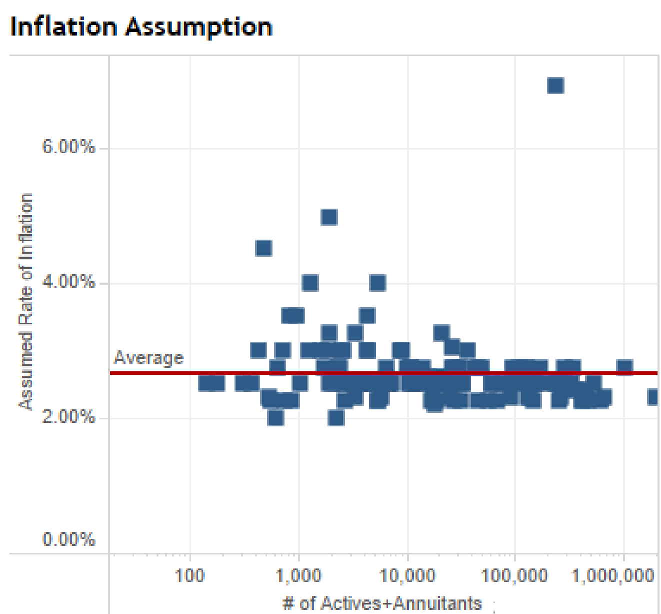


Retirement funds employ a long-term planning horizon to ensure that liabilities are fully funded at the time they are due to be paid. To set contribution rates and measure progress toward meeting their financial obligations, funds make actuarial assumptions to estimate the likely investment and demographic trends over that time horizon.

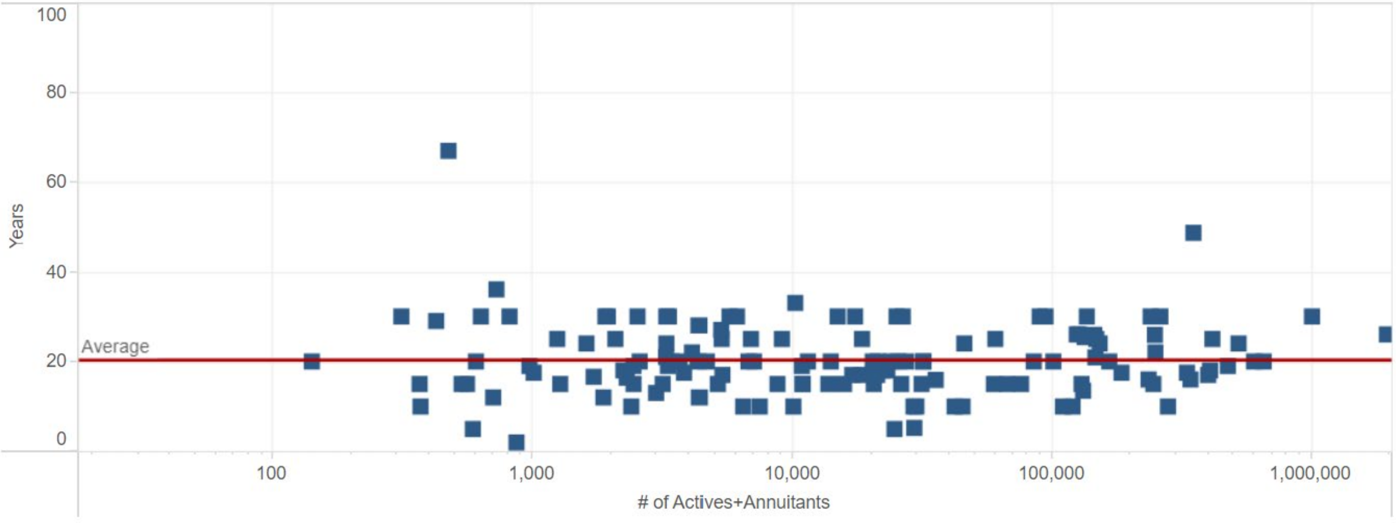
Such assumptions have powerful effects on the funded level of a plan and on required contributions to pay for future benefits. Overly optimistic assumptions (high market returns, lower-than-expected retirement rates) tend to increase a plan's funded level and reduce the contribution rates an employer is obligated to pay today. Conversely, overly pessimistic assumptions reduce the funded level and increase short-term contribution rates.

The average investment assumed rate of return for responding funds is 6.91 percent, compared with 6.86 percent the year prior. Plans that responded both years saw similar assumptions.

The aggregated assumed rate of inflation is 2.7 percent, rising from 2.6 percent in the prior year.



Amortization Period



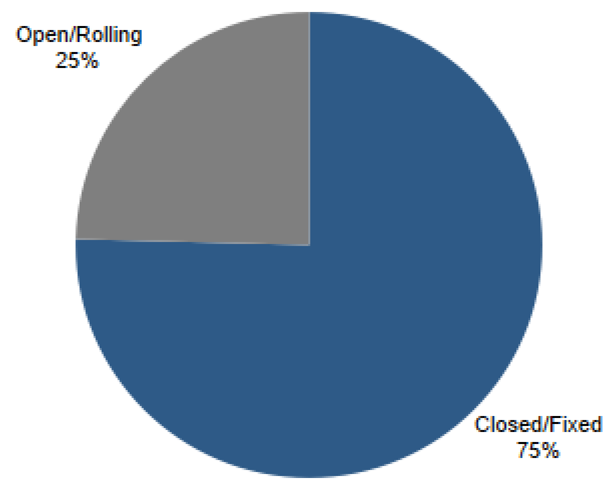
Pension funds are designed to fund liabilities over a period of time, or amortization period, which ensures long-term stability and makes annual budgeting easier through more predictable contribution levels.

For responding funds, that period of time averages 20.4 years, down from 20.8 years. Funds that also participated in the survey the year before saw a reduction in their average amortization period by about 0.4 years.

Groups can tighten their amortization period by adjusting the period in years or using a fixed (or closed) method that pays all liabilities in a fixed time frame.

Open (or rolling) amortization periods are used to determine the actuarially required payment, but they are recalculated each year, for example, 30 years is used in determining the payment each year. Overall, the percentage of closed/fixed funds increased from 70 percent to 75 percent.

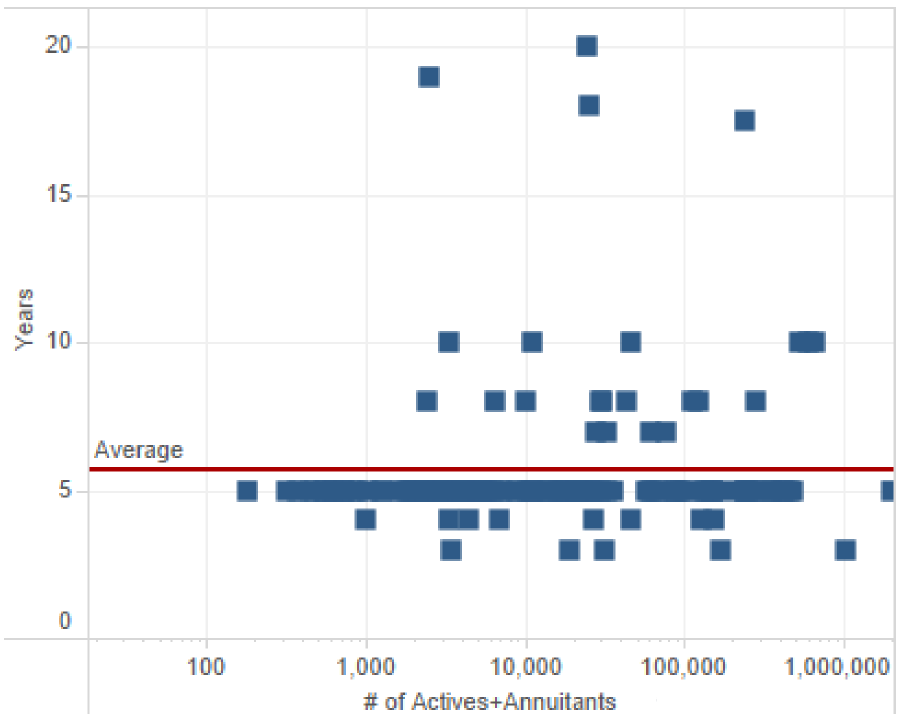
Type of Amortization Period



The investment-smoothing period is a key factor in calculating the assets currently held by the fund and the contribution levels required to continue moving toward full funding over the amortization period. By smoothing investments, funds dampen sharp changes in short-term investment returns. This helps stabilize contribution levels over time without undermining the long-term integrity of the funding mechanism.

The average investment-smoothing period for respondents increased from 5.2 to 5.7 years compared to the year prior. The distribution of responding funds on the graph below shows that the majority have smoothing periods of five years or shorter. For funds with Social Security-eligible members, the smoothing period was 5.9 years. Funds with members who are not Social Security eligible have an average smoothing period of 5.0 years.

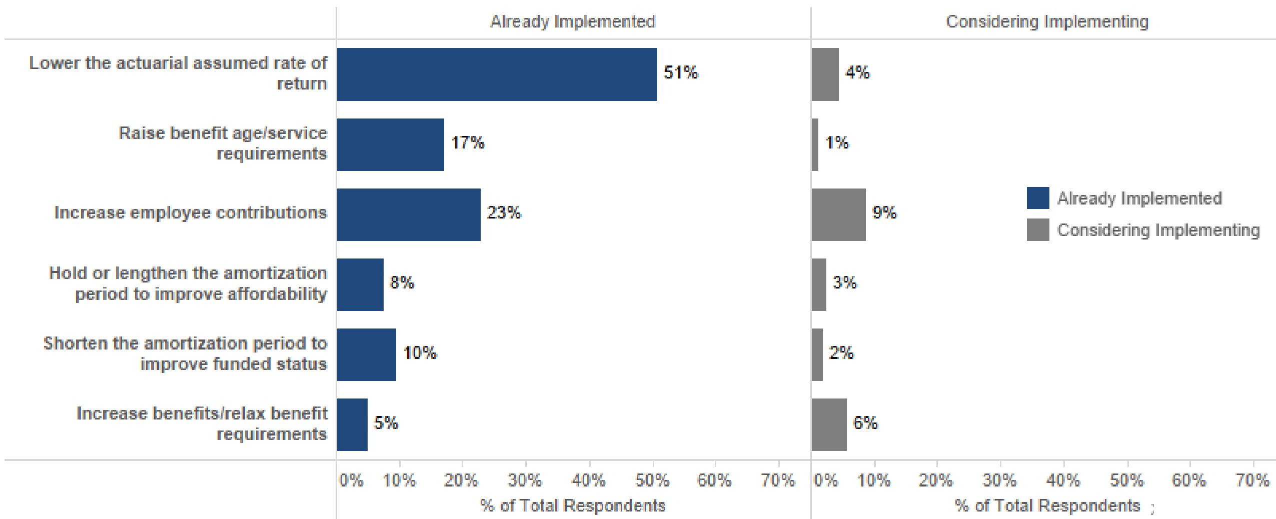
Investment Smoothing



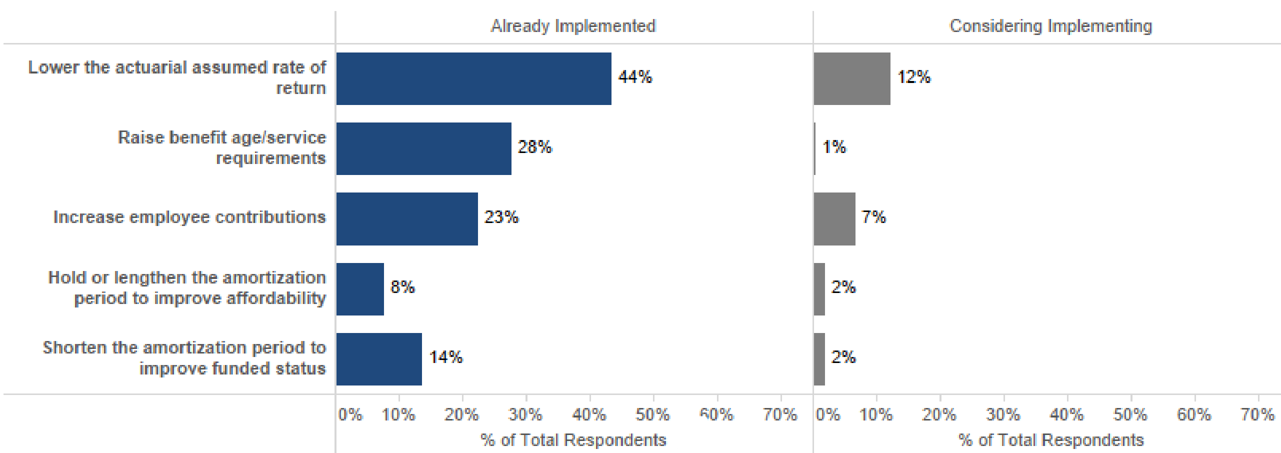
Trends in Plan Changes

As changes emerge in the political, economic, and demographic landscape, funds adapt their design and assumptions to respond and to remain sustainable. Surveyed funds were asked about the retirement plan changes that have been implemented in the past three years or are being considered by the plan or plan sponsors. The charts below look at the year-over-year plan changes based on data collected over the past two years.

2023 Retirement Plan Changes

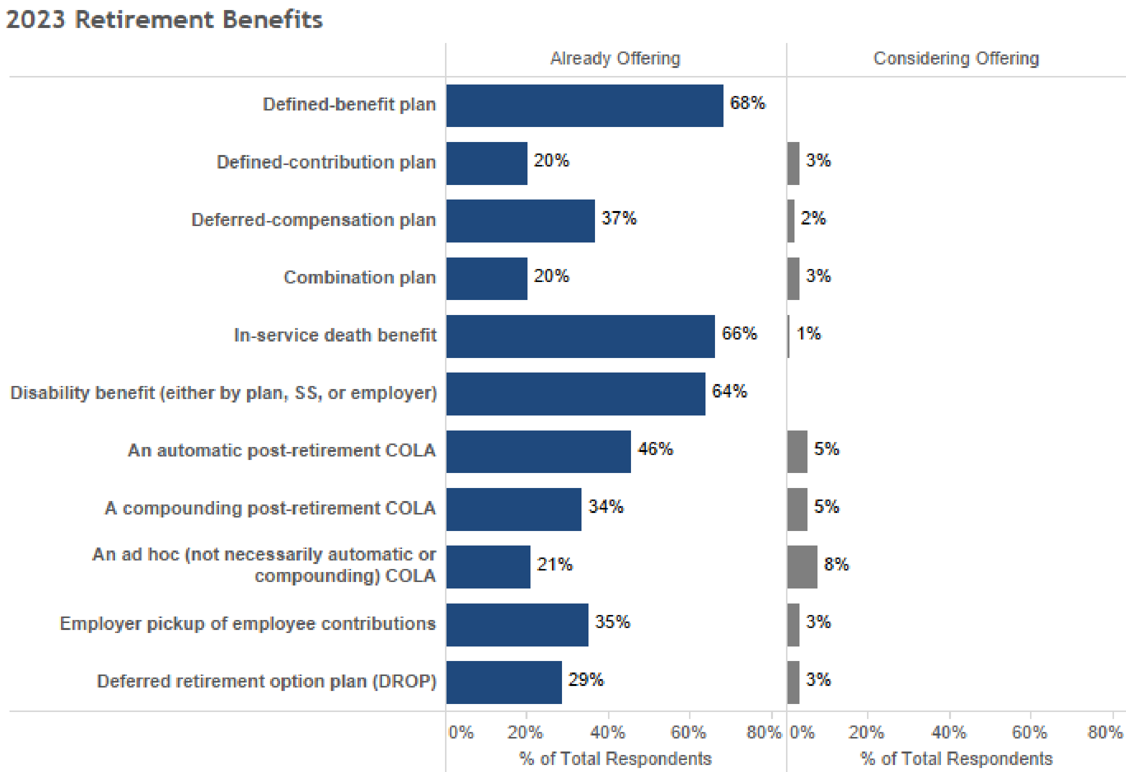


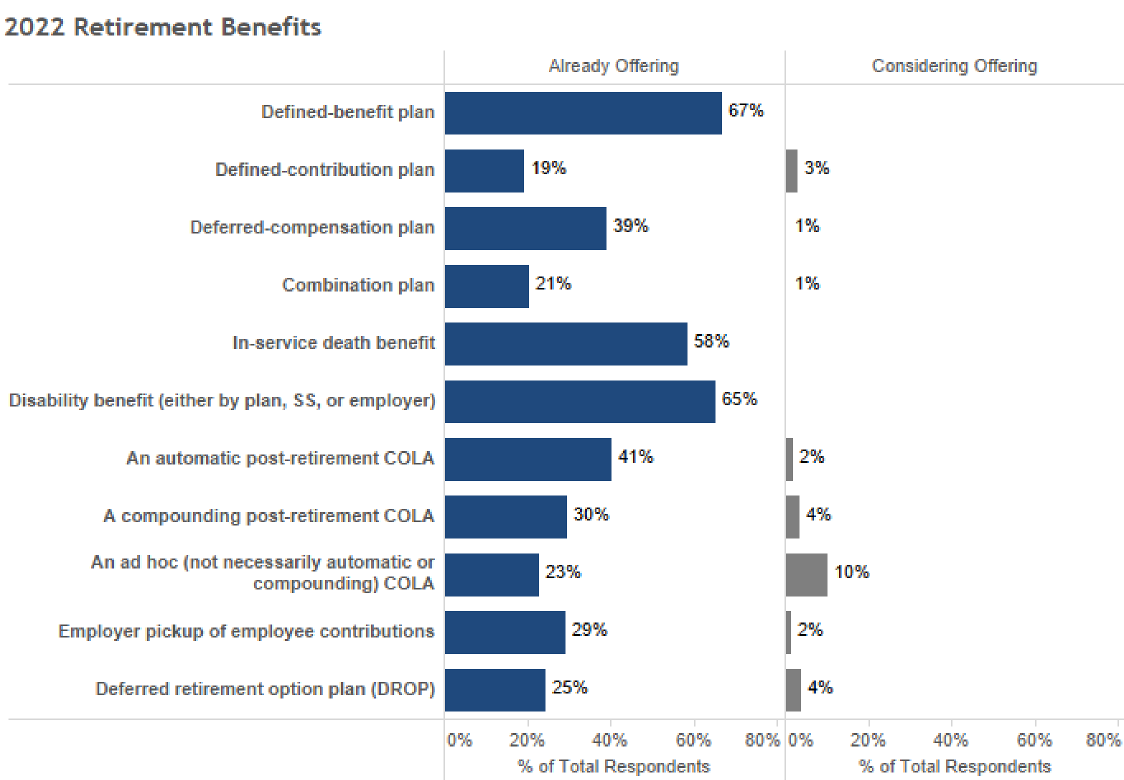
2022 Retirement Plan Changes



Trends in Retirement Benefits

More responding plans are offering in-service death benefits, an automatic post-retirement cost of living adjustment (COLA), a compounding post-retirement COLA, employer pick-up of employee contributions, and deferred retirement option plans (DROP). There is growing interest in consideration of various COLA changes. The charts below compare year-over-year data.



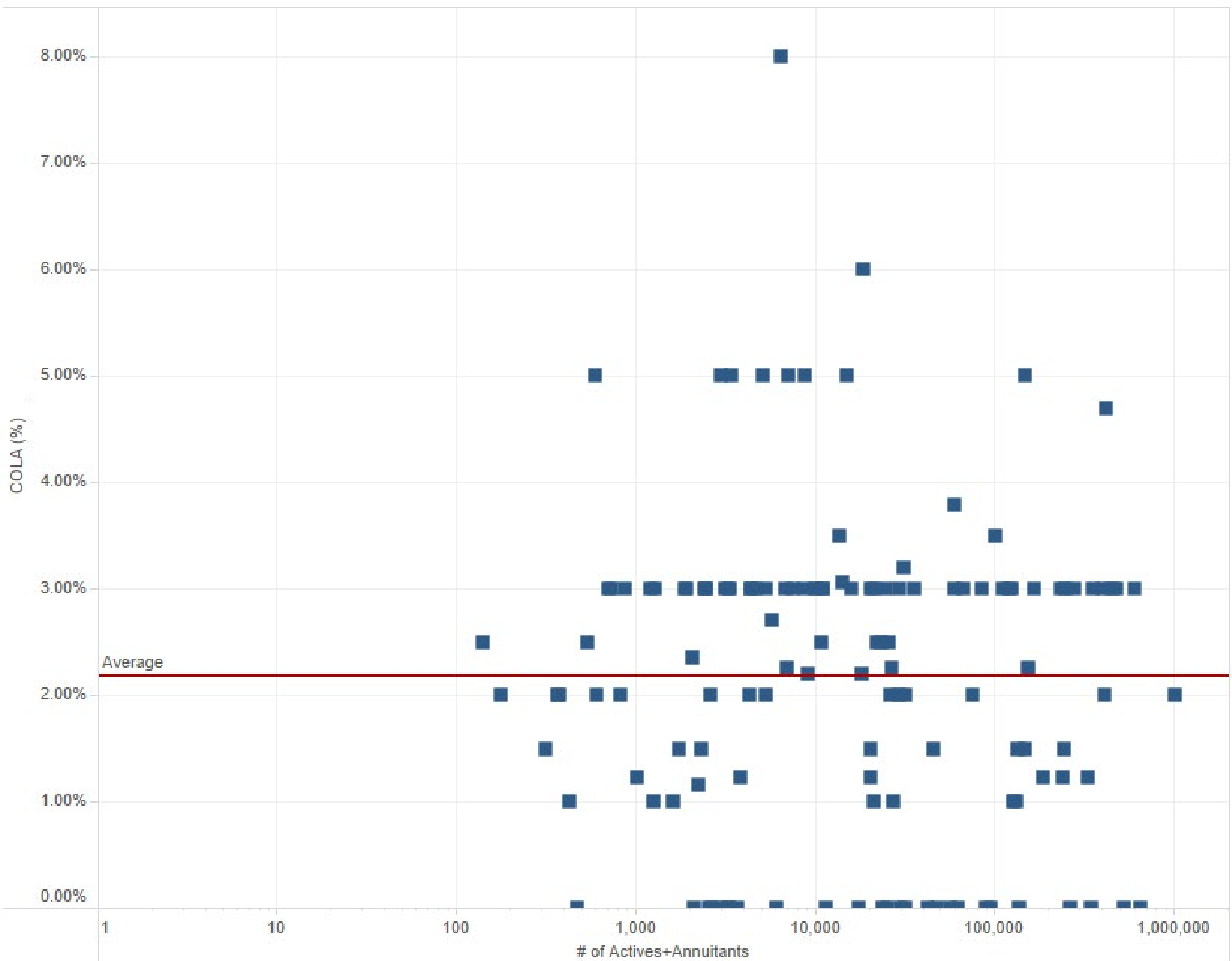


Cost-of-Living Adjustments

The chart below shows the distribution of funds offering various percentages of cost-of-living adjustments (COLAs). The aggregated average COLA offered to members was 2.2 percent, which is slightly higher than 2.0 percent last year. Many responding funds did not offer a COLA in the most recent fiscal year.

Funds with members who are not eligible for Social Security tend to offer higher COLAs (2.7 percent) than those with members who are eligible for Social Security (1.9 percent). Funds with populations smaller than 10,000 participants have an average COLA that is 0.25 percent higher than larger funds

Overall Cost-of-Living Adjustment Offerings

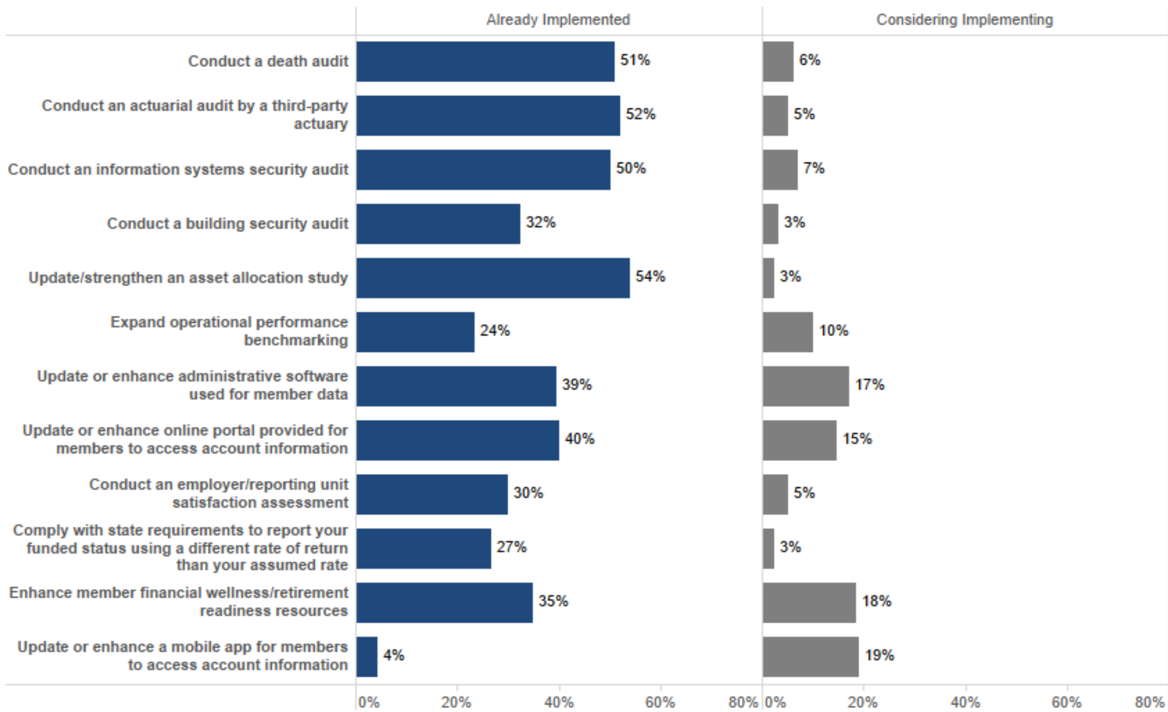


Trends in Business Practices

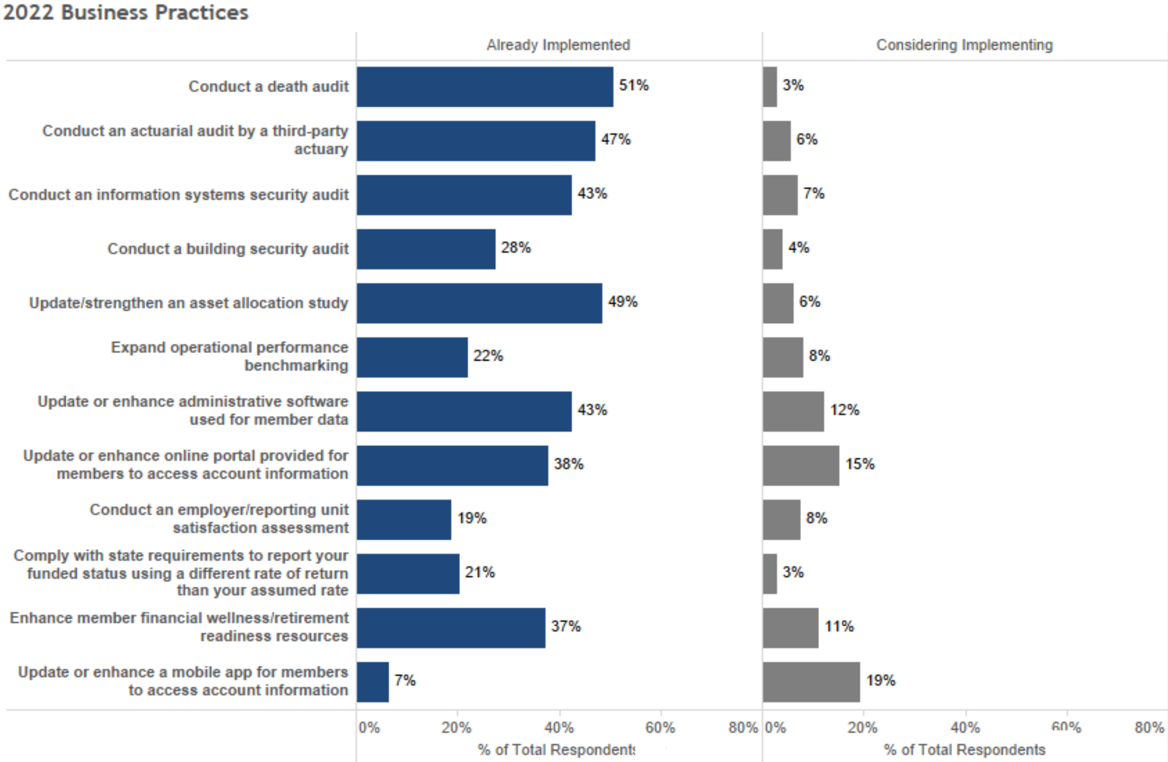
Funds were asked about the business practices they have implemented in the last three years or are currently being considered by the plan or plan sponsors. The charts below look at the year-over-year plan changes based on data collected over the past two years.

Funds saw a small increase in the implementation of actuarial audits, information systems audits, building security audits, asset allocation studies, employer/reporting unit satisfaction assessments, and complying with new state reporting requirements. The data also suggests greater consideration of enhanced administrative hardware and enhancing member financial wellness/retirement readiness.

2023 Business Practices

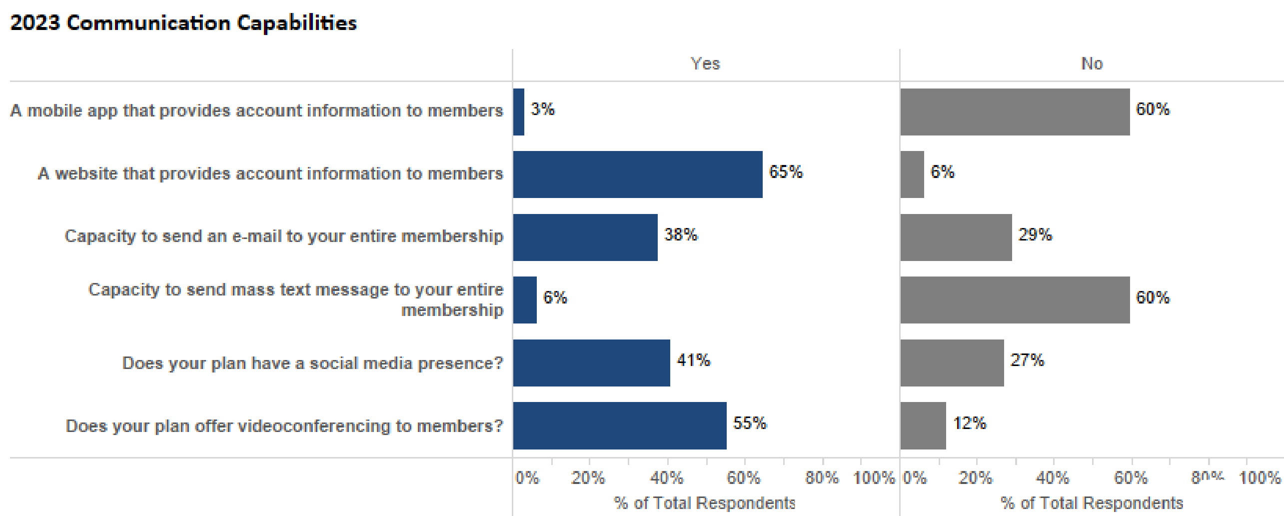


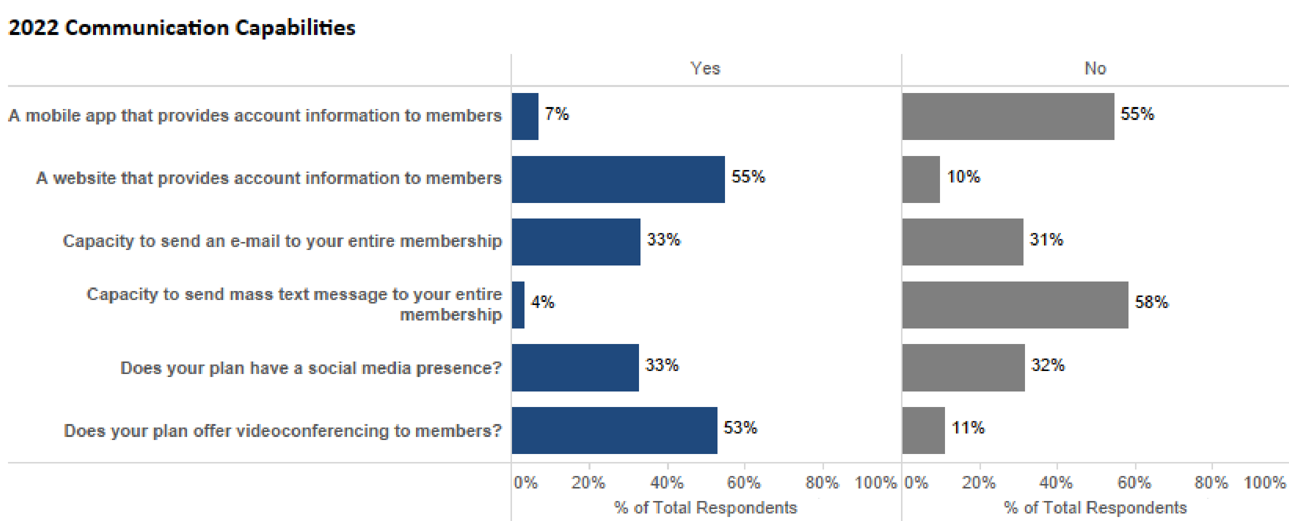
2022 Business Practices



Trends in Communication Capabilities

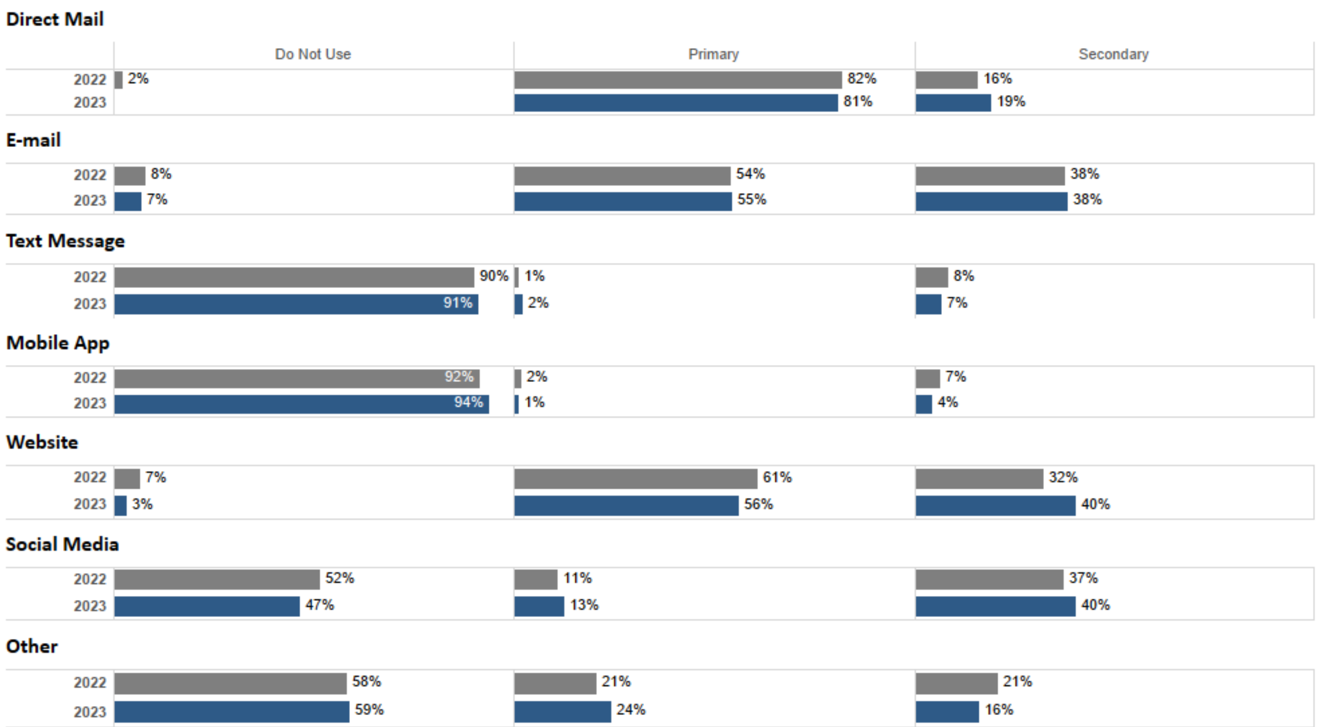
Looking at communication capabilities, there was a year-over-year increase in pension funds that have a social media presence, as well as funds with websites that provide account information to members and have the ability to send an e-mail to their entire membership.





Outbound Communication

The primary communication modes used by respondents to communicate with members include direct mail, e-mail, and the website. Secondary modes include e-mail, social media, website.

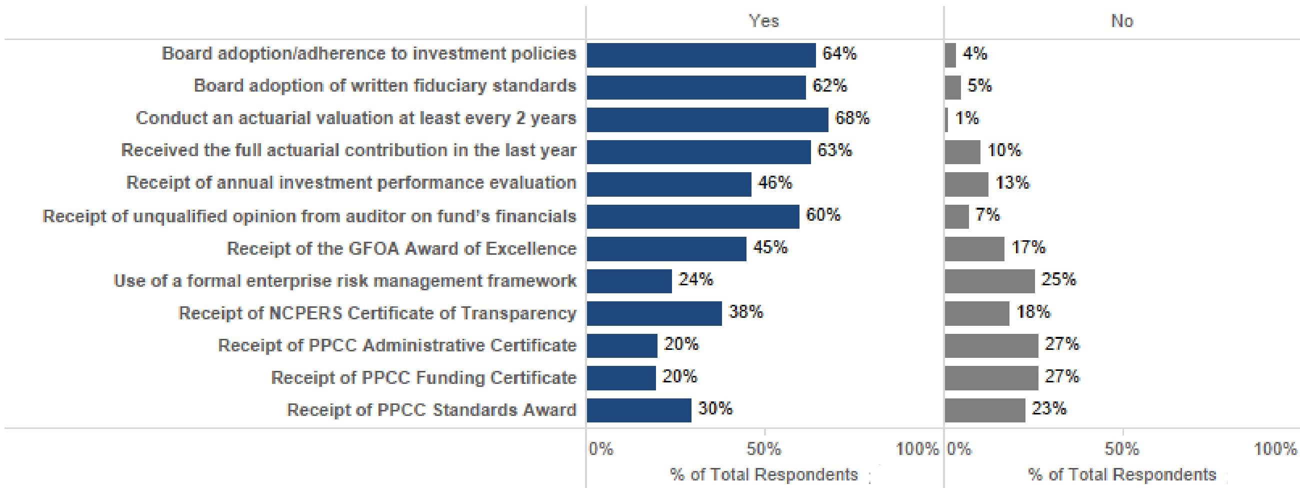


Other communications
Biannual Newsletter to membership
Direct phone calls
Group Educational On-line Programs
In-person (retirement meetings, NEO, REO, and open enrollment)
Messaging within secure website
Member portal for self-service
Newsletter
Newsletters
Paycheck flyers-primary/newsletters-secondary
Phone
Phone Calls
Posters in the office building
Personal phone calls to reminder members of account issues.
Quarterly Newsletter
Self-Service Internal Messaging Center
Telepathy (limited use)
Telephone

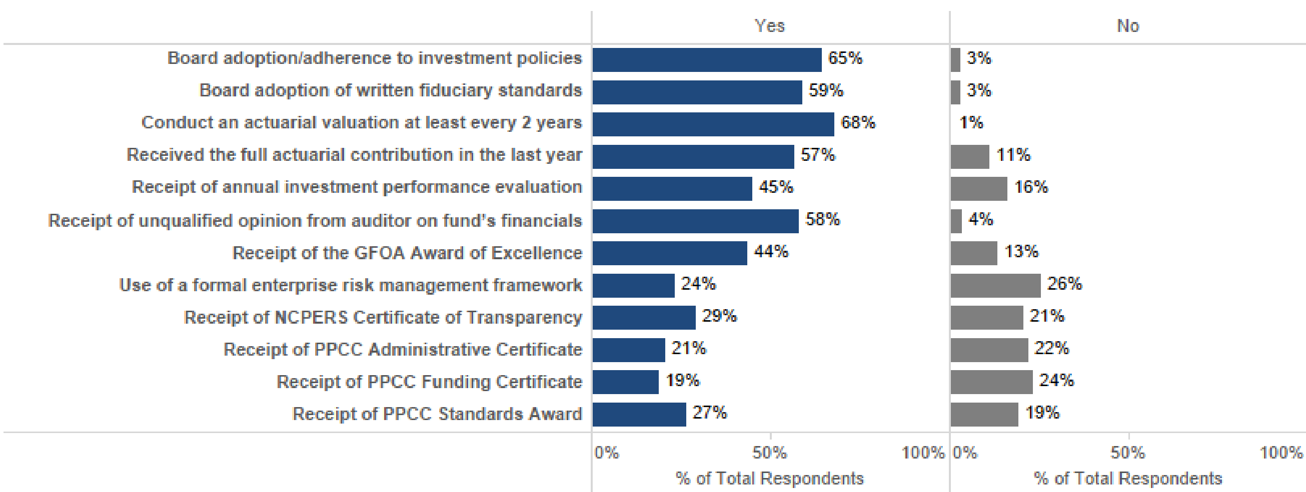
Trends in Oversight Practices

Overall, responding funds showed similar oversight practices compared to prior year. Approximately two-thirds conduct an actuarial valuation at least every two years and have boards that have adopted investment policies and/or written fiduciary standards. Sixty-three percent of funds reported receiving the full actuarial contribution in the last year, up from 57 percent.

2023 Oversight Practices



2022 Oversight Practices



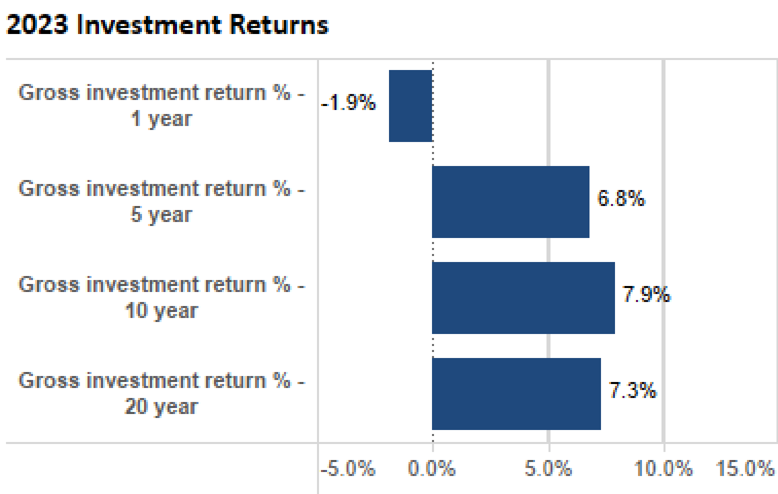
Note: GFOA = Government Finance Officers Association; PPCC = Public Pension Coordinating Council.

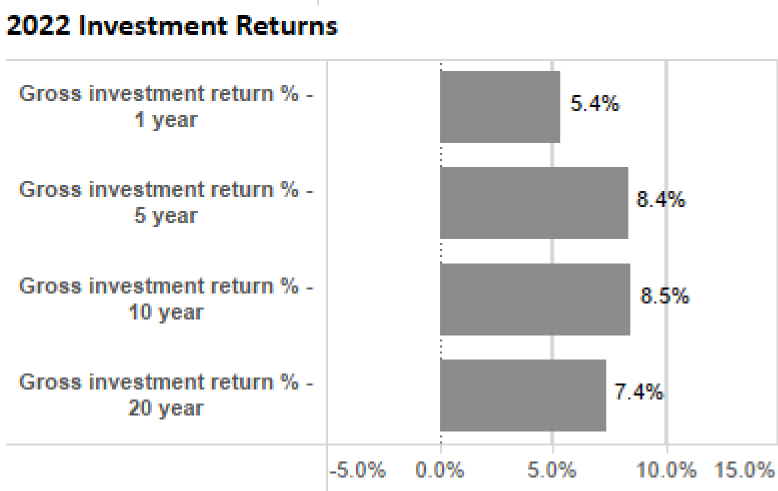
Investment Returns

Reporting funds saw, on average, one-year returns of around -1.9 percent. The five-year, 10-year, and 20-year averages were lower than last year, but the 10-year and 20-year averages were above the assumed rate of return. Those funds that also participated in last year's study show similar patterns, although this cohort saw, on average, one-year returns around -1.2 percent.

It is important to note that not all responding funds have the same fiscal year-end date. The varied timing of responding funds' fiscal year-ends accounts for a significant share of the difference in investment experience between funds. Funds that have a December fiscal year-end date saw one-year returns of -9.9 percent, and those that have a June fiscal year-end date saw one-year returns of 3.5 percent.

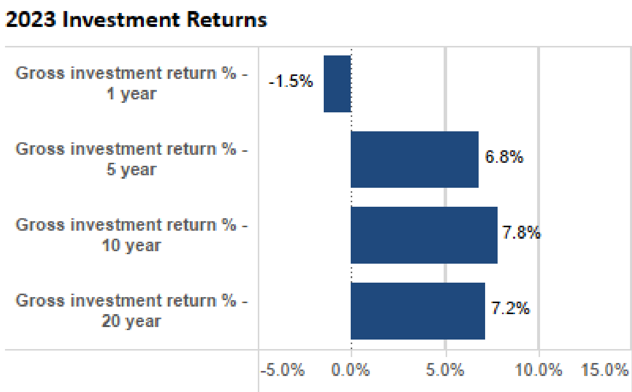
The charts below compare investment returns based on data collected over the last two years.



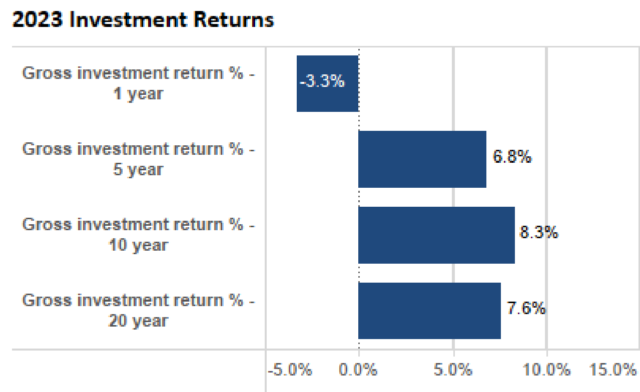


Funds with members who are Social Security eligible reported higher one-year returns than funds with members who are not Social Security eligible.

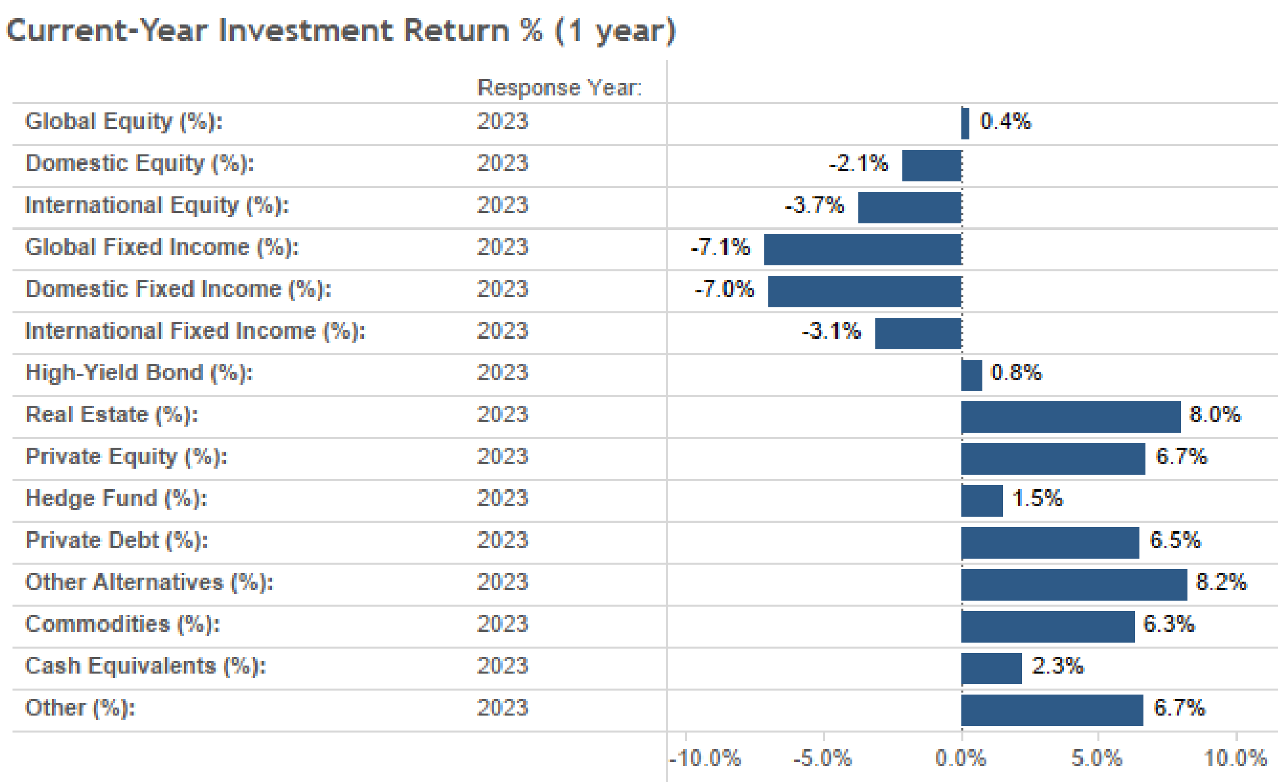
Social Security Eligible



Not Social Security Eligible



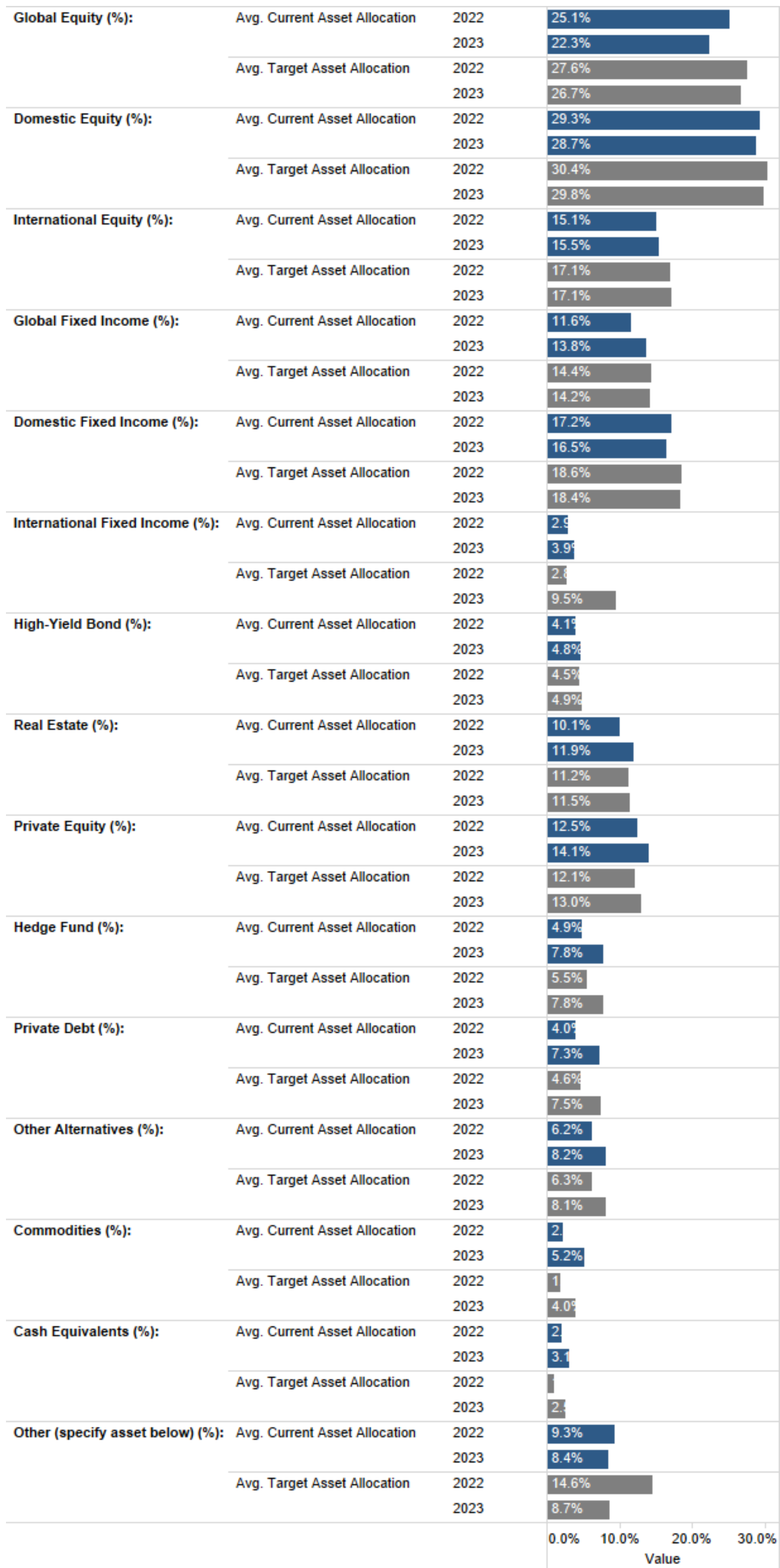
The graph below shows the one-year investment returns based on the various asset classes in which responding funds are invested. Real estate and private equity saw the largest returns.



Investment Asset Allocation

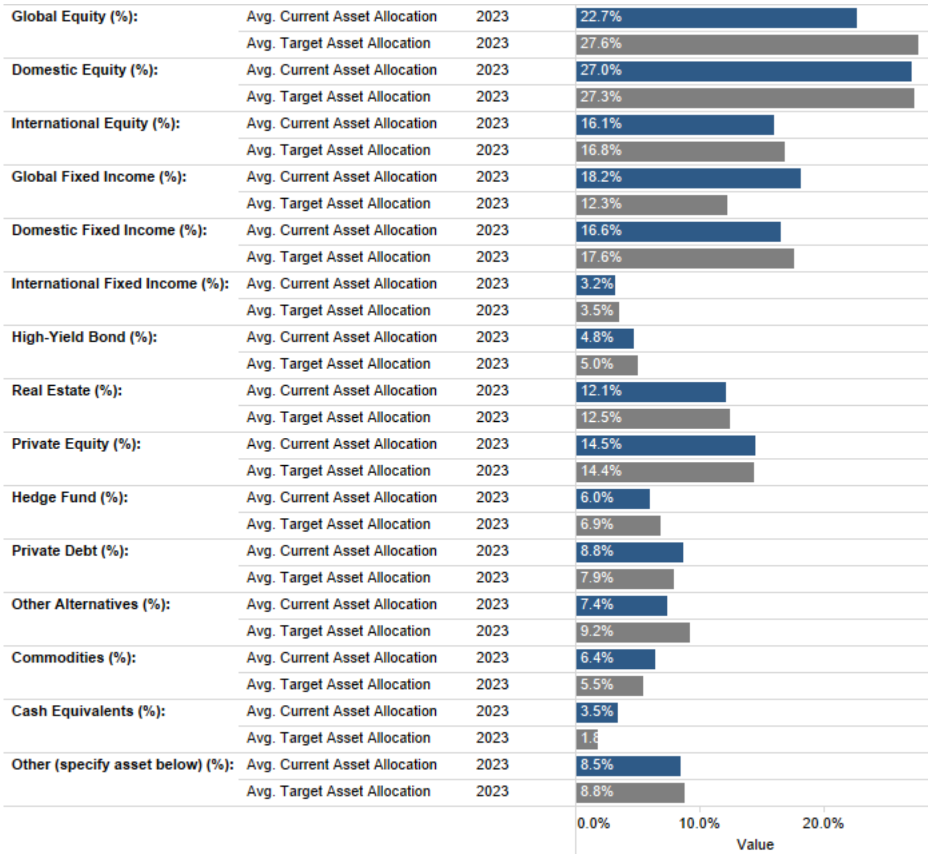
Responding funds had similar allocations to asset classes as they did in the prior year.

Note: Average allocations in each asset class do not total to 100 percent because of how individual allocations were reported.

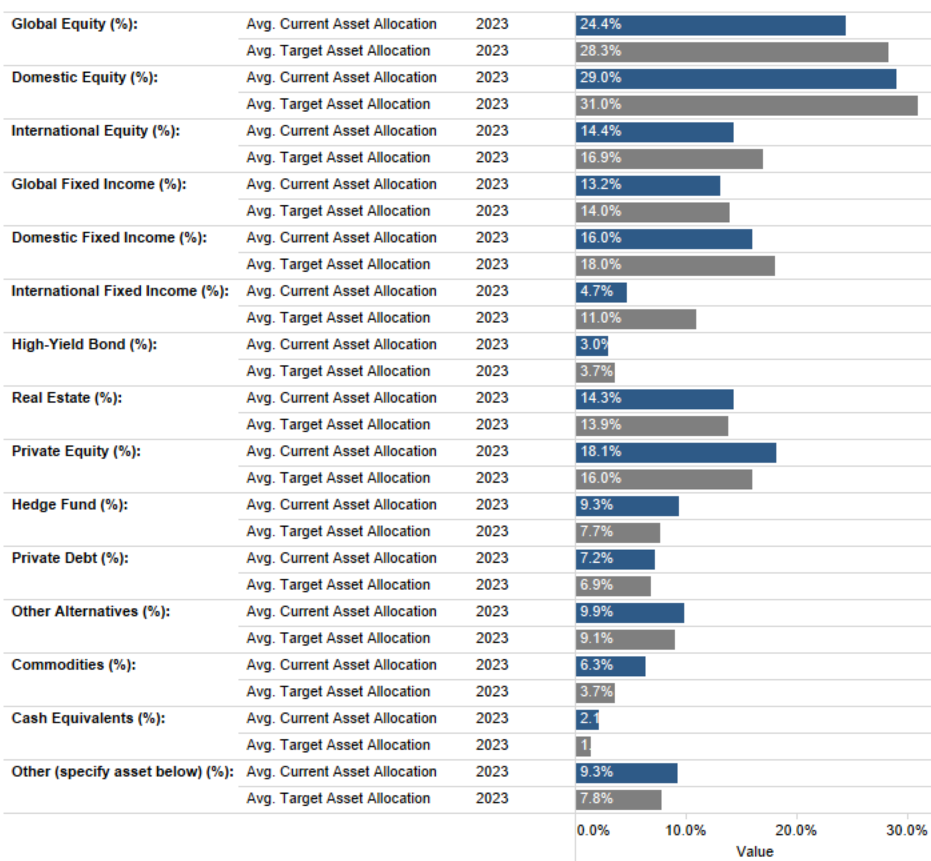


Below are two graphs that show the asset allocations for those funds that reported higher-than-average one-year and 10-year investment returns, respectively.

Above Average One-Year Return



Above Average 10-Year Return

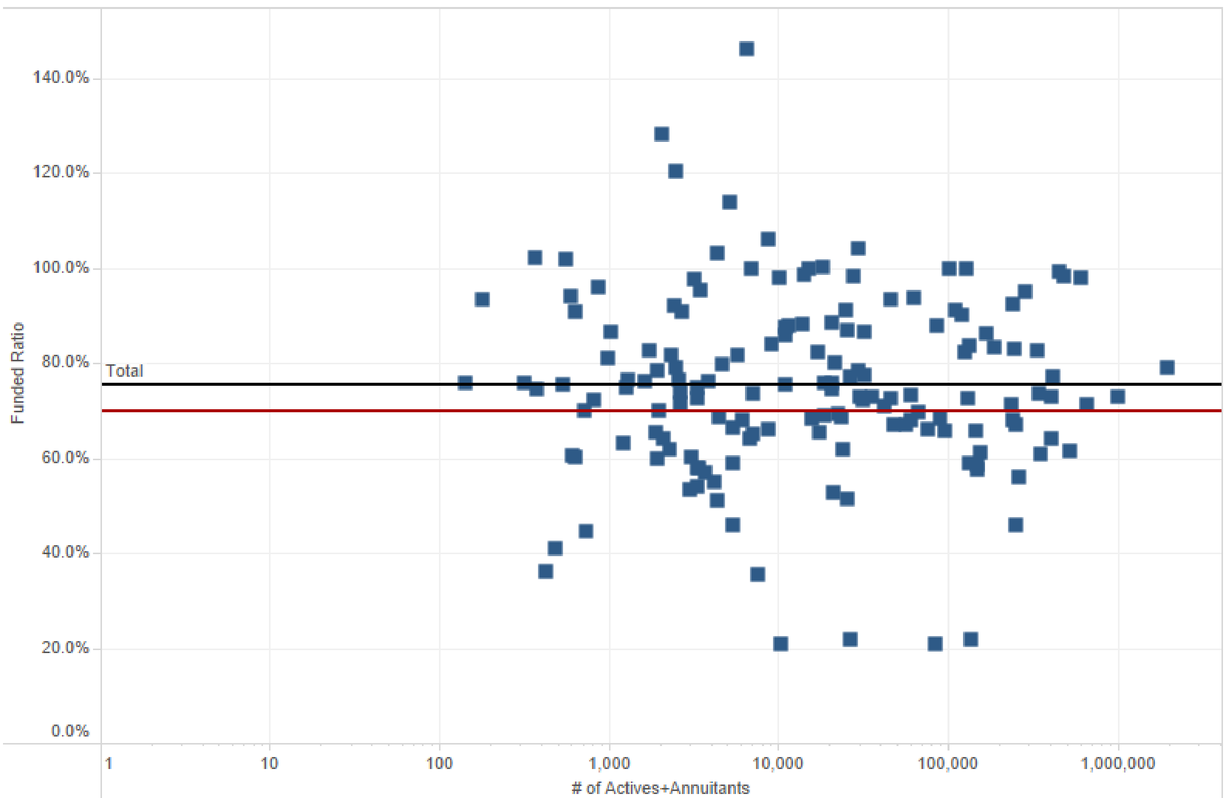


Funding Levels

The average funded level for responding funds is 75.4 percent, down from 77.8 percent last year. Funds reporting both years saw funded levels decrease to 75.3 from 77.0 percent.

The graph below shows the distribution of funded levels and fund size. The vertical axis shows the level of funding, and the horizontal axis shows the size of the fund by total active and retired participants. The black center line denotes the average of 75.4 percent, and the red center line denotes the 70 percent funding target that Fitch Ratings considers to be adequate.

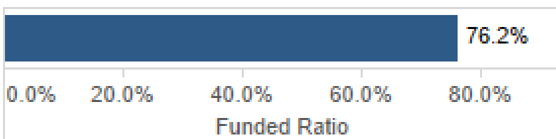
Funded Level Distribution



Many funds include members who are not eligible to receive Social Security at the time of retirement. Such funds often have higher benefit levels to offset the loss of this source of retirement income. Those funds that include such members report an average funded level of 72.8 percent, which is above the 71.3 percent reported in the most recent study. Similarly, funds with members who are eligible for Social Security saw funding levels fall from 80.0 percent to 76.2 percent year-over-year.

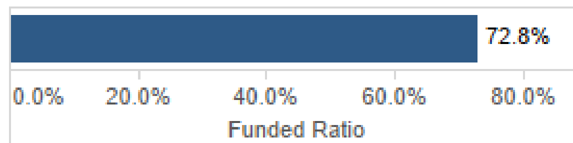
Social Security Eligible

Funded Levels



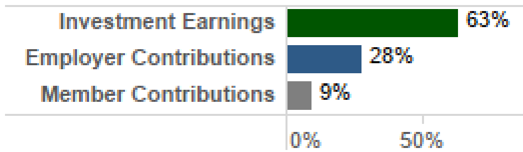
Not Social Security Eligible

Funded Levels

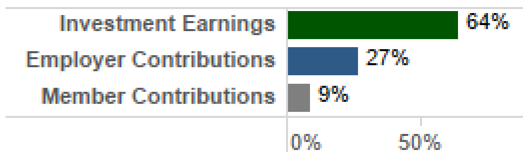


Sources of Funding

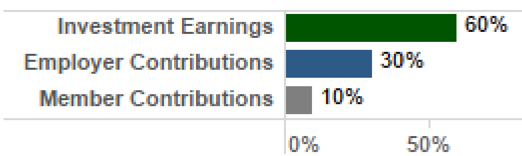
All Responses



Social Security Eligible



Not Social Security Eligible



Income used to fund pension programs generally comes from three sources: member contributions, employer contributions, and investment returns. The chart to the left shows the proportion of funding provided by each of these sources based on reported data.

Investment returns are by far the most significant source of revenue (63 percent). Employer contributions rose by 4 percentage points compared with last year, and member contributions remained the same.

The graphs to the left also show revenue sources for funds whose members are and are not eligible for Social Security.

Funds whose members are eligible for Social Security show income sourced from employer contributions rose by 6 percentage points and member contributions rose by 1 percentage point. Funds whose members are not eligible for Social Security showed a decrease in income sourced by employer contributions by 1 percentage point, while member contributions remained the same.

Contribution Rates as a Percentage of Payroll – All Respondents

Percentage of Payroll

	2022	2023
Member Contributions	9%	9%
Employer Contributions	24%	28%
All Contributions	32%	37%

Contribution Rates – Respondents in Both Years

Percentage of Payroll

	2022	2023
Member Contributions	8%	9%
Employer Contributions	25%	26%
All Contributions	33%	35%

The tables to the left show contribution rates as a percentage of payroll. The top table shows contribution rates for all survey responses, while the bottom table shows responses for those who participated in the past two years. Contribution rates were higher for the current year.

Reducing Liability

Respondents were asked to share strategies they have put in place to reduce accrued actuarial liabilities beyond traditional amortization. Below is a word cloud showing the words that appear most often in respondents' comments. Larger words appear more often. The themes relating to these words are listed to the left, and the verbatim comments are provided below.

Investment and Risk Management Example:

- Utilize risk mitigation and investment strategies.

Contribution and Funding Approaches Examples:

- Increase employer and member contributions.
- Advocate for legislative support, additional funding, and employer prepayment/buydown programs.

Policy and Legislative Measures Examples:

- Adopt new retirement tiers and benefits.
- Implement funding policies and legislative changes.

Strategies for unfunded accrued actuarial liability
Adopted new retirement tier & reduced benefits/Increased Contributions
Amortization Payment Floor where the UAL payment by plan sponsor cannot be less than the amount paid in the benchmark year. This was implemented as the plan sponsor UAL payment was scheduled to decrease significantly years prior to the plan reaching 100% funding, as such, the Floor accelerates reaching 100% funding.
Ask for increased funding in the form of additional County contributions, leaving plan participants rate unchanged.
Board is looking at ways to prepay on unfunded liability working with the legislature.
Closed amortization
Continue to follow investment strategies and best practices for public employee pension plans.
Contribution rates have increased steadily to help alleviate the unfunded liability.
Current 20-year amortization to be revisited prior the 15 years remaining.
Current laws provide for a portion of state surplus funds to be applied to UAL
Employer units are invited to make extra payments toward their unfunded liability.
Every five years, ERS's actuary performs an experience study to assess the appropriateness of the current set of actuarial assumptions and methods. The most recent study was performed in 2022 and was put into effect with the 1/1/2023 valuation. The experience study made several changes to the demographic assumptions and amortization schedules to better reflect the plan's experience and also to better address future changes to the UAAL arising from actual experience that is different than assumed.
Expected future returns that are somewhat higher than the actuarial discount rate. 2. Implementation of a Contribution Prepayment Program which may increase employers' ability to pay in the future.
For retirees that return to work, employers pay the equivalency of the member contributions to the plan and those contributions go directly against the UAL. $60m in 2022

Verbatim Comments, continued

Full ARC/ADEC funding plus extra contributions by the state.
Having the employer agree to not reduce employer contributions until we reach full funding
Implemented a new funding policy
Implemented a new tier of benefits for new members after January 1, 2022. TRS 4 is a hybrid benefit with the ability for the system to adjust provisions to manage future liabilities.
In 2017 the board adopted a dedicated gains policy that capitalizes on years of high investment return to reduce the AROR without increasing the UAAL.
In 2018 our largest plan sponsor issued a POB
Increased diversification of investments, increased member and employer contributions
Increased employee and employer contribution rates; expanded employees subject to contribution requirements; minor adjustments to benefits
increased member contributions
increased member contributions
Increasing employer contribution rate
Requires the exhaustion of the largest portion of the UAL by 2028.
We offer a variety of plan design and funding strategies to address UAL. Please see attached.
N/A close to fully funded
No new legislation since House Bill 8 (2021)
None
Not applicable; funded on the aggregate method.
Ongoing asset allocation monitoring and adjustments
Our funding policy is to continue to make contributions to our plan not less than our ADEC for that Plan Year. Our plans are to not decrease this until we are 120% funded.
Pension Liability Surtax
Plan sponsors and members pay additional contributions to reduce UAAL
Full actuarially determined contribution (ADC) funding in the Commonwealth's annual fiscal year budget. To date, the plan has received the full ADC for the past eight fiscal years (FY2017-18 - FY2023-24).
Educating employers about pension finances, particularly debt and the related costs added through unfunded accrued liability contributions. Offer employers use of and training for an employer-specific actuarial modeling tool that can project future costs based on real or hypothetical changes assumption or experiences.
Recommendation to the employer to institute UAAL buydown program or policy, effectively to make contributions greater than actuarially required.
Reduce amortization period and increase contribution rates.
Reduce benefits, increase contributions on both employee and employer, re-structure investments, increase education for trustees
Review assumptions every year and ensure ADC is paid on an annual basis.
State is making full contributions.
The Board voted to increase the minimum employer contribution rated from 16.97% of pay to 28.75% of pay for FY25, 30.25% for FY26, and 32% of pay thereafter. The minimum contribution rate will expire once the System reaches a funded ratio of 80%.
A joint commitment set forth in statute to achieve full funding by 2046.
The city makes an additional fixed contribution to eliminate the unfunded liability in 2 years.
The city made a one-time contribution of five million dollars to the plan
State legislature has approved additional employer contributions totaling $1.125 billion in 2022. In the past the Legislature has approved the sale of pension funding bonds to increase the assets in the Trust Fund. The funding plan has received bond proceeds totaling $440 million in 2004, $1.0 billion in 2015, and $500 million in 2021.

Verbatim Comments, continued

The costs will go down over time as will the rates. The primary sponsor eliminated employees and its last open tiers. (Benefit Reductions)
Our Board of Trustees has adopted a pension policy that requires a request of state funds when the UAAL grows. We continue to implement Legislative mandated contribution increases that were authorized in 2019 and are anticipated to lower the UAAL. We have also worked to educate stakeholders on the UAAL and how additional liabilities are detrimental to the health of the fund. In 2023 and with additional state funding, we were able to provide one-time stipends for beneficiaries over 75 of $7,500 and, if over 70, $2,400. In November, the public will vote to authorize state funding of a 2/4/6% cost of living adjustment for certain beneficiaries. Even with these much-needed benefits, the Trust Fund remains statutorily sound.
This falls under the purview of the state's general assembly.
We employ various strategies which allows for the accumulation of assets for future benefits payments, in a systemic and strategic manner. These strategies are reviewed and approved by the Office of the Actuary and the Board of Trustees, as well as a bi-annual audit oversight.
Two of our employers have and/or are making supplemental contributions to accelerate the paydown of the UAAL.
Utilize our investment risk mitigation strategy 2) Increase employer contributions
We are planning to address more specifically after our five-year actuarial review study.
We carved our UAAL out of the ADEC calculation and placed it on a separate 30-year amortization payment plan.
We continually assess and optimize our investment strategy to enhance returns. By carefully managing our investment portfolio, we aim to generate additional income to offset the unfunded liability.
We explore opportunities to contribute more than the minimum required contribution to the pension fund. This approach allows us to make additional payments to reduce the unfunded liability over time. We continually assess and optimize our investment strategy to enhance returns. By carefully managing our investment portfolio, we aim to generate additional income to offset the unfunded liability. Through diligent risk assessment, we identify potential risks that could impact the unfunded liability. We analyze and implement cost-containment measures to ensure the efficient use of resources. This includes reviewing administrative expenses and exploring opportunities for operational efficiencies. We engage in clear and transparent communication with Trustees to foster understanding of the unfunded liability and the strategies in place. Additionally, educational initiatives are undertaken to promote awareness and informed decision-making.
We have applied a contribution stabilization reserve fund to help manage contribution rate volatility and to speed up funding relative to traditional means.
We have recently adjusted our plan provisions to phase out the COLA floor from the existing 2.5% guaranteed minimum to zero. For years in which inflation (as measured by the CPI-W) increases by 2% or less, the funds COLA will track inflation directly. For those years in which inflation increases by 2% or more, the COLA will be 60% of the annual increase in the CPI up to 6% plus 75% of the annual increase in the CPI above 6%. We are also attempting to entice members to voluntarily work beyond the plans existing average retirement age and service by instituting a DROP plan to be offered to members not upon first eligibility, but after reaching specified age and service requirements We are currently, contemplating a wider set of reforms to be included in a new Tier. and capped at a 7.5%
We have tried to incorporate legislation to reduce the liability as well as mandate the enrollment rule so that the plan is not viewed as optional.
Work with Plan Sponsor to achieve funding goals
Yes. Shortened amortization period for annual changes in the UAAL to 20 years. Retained contribution rates at higher of current requirement or prior levels. Solicited and received periodic contribution infusions more than the ADC.

Innovations and Best Practices

In the study, respondents were asked to share a success story regarding best practices or innovations that other plans might like to learn about. Below is a word cloud showing the words that appear most often in respondents' comments. Larger words appear more often. The themes relating to these words are listed to the left, and the verbatim comments are provided below.

Innovation and Technology Integration Examples:
- Adoption of AI-enabled knowledge base and analysis tools.
- Implementation of an Artificial Intelligence Use Policy.
- Transition to a new Pension Administration System and mobile app.

Diversity, Equity & Inclusion (DEI) Focus Examples:
- Commitment to DEI through training programs and inclusive practices.
- Efforts to enhance diversity in institutional investing.
- Integration of DEI principles into workplace culture.

Operational Efficiency and Member-Centric Initiatives Examples:
- Streamlining operations with online tools, cybersecurity training, and responsive web design.
- Member engagement through social events, surveys, and phased communication strategies.
- Cost-saving measures, including Medicare transition and a new pharmacy benefits manager.

Success stories
All stakeholders developed a new tier together.
An initiative to implement a robust AI-enabled knowledge base with chat functionality capable of retaining and providing valuable department-wide information such as benefits related topics as part of an internal training program
We administer a three-part hybrid system that includes traditional DB, CB and voluntary DC plans.
Diversity, Equity & Inclusion in the Workplace: the fund continues to expand its efforts toward development of a more diverse and inclusive organization with the implementation of an annual Diversity, Equity and Inclusion (DEI) training program. This program is designed to provide a foundational understanding of DEI in our mission and culture, and to engage in cross-disciplinary discussions of tangible DEI innovation in the workplace. The all-employee training is supplemented by voluntary training offerings throughout the year. The system continues to champion broader, more diverse representation in institutional investing by creating career pathways through numerous internship programs and working with industry partners such as Girls Who Invest, Pension Real Estate Association, and SEO Alternative Investments.
During 2023, the Fund started utilizing our custodian's (Northern Trust) "Benefit Payment Participation Web Passport" will allows members to securely view payment history/check images, request duplicate tax forms, adjust tax withholdings, change addresses and maintain direct deposit information. The implementation involved was surprisingly simple.
GP waterfall calculation analysis/confirmation software for alts portfolio

Verbatim Comments, continued

Highly considering a private real assets co-investment program alongside our highest conviction GPs.
To increase membership to reduce our liability, we promulgated the enrollment statute that an eligible officer must be enrolled first before they can opt out of retirement. Some of our municipalities can opt out.
Investment: The system has deliberately constructed a more risk-focused, diversified, and globally oriented portfolio compared to peers, and has embraced the use of alternatives and innovative separate account structures within its diversifying strategies portfolio to hedge against significant equity market disruptions. The portfolio results for fiscal year 2022 serve as a testament to this strategy, as results marked in the top 1% compared to peers, and significantly preserved member capital in times of market stress.
It is our intention to start investing in Private Equity. At the present time we are laying groundwork to start this and for implementation within our plan.
NA
One-time lump sum.
Online dashboard with key stats about the systems
Our plan has started to host an "Affidavit Social" twice per year to encourage members to return their proof of life affidavits. The affidavits are required by local ordinance, and every year a large group of members always miss the deadline and have their pension payments suspended until we receive their affidavits. The new socials provide an opportunity for retired members to have their affidavits notarized, meet and greet with the Plan Administrators, and their retired friends they may not have seen in years. The socials have proven to be a monumental success, have improved affidavit return rates, and other plans around the state have taken notice and are implementing similar events.
Pension Reform: The Governor and General Assembly have focused on reducing plan costs and liabilities with a multipronged approach that included: • Implementing plan design changes (Plan for all employees and the Hybrid Retirement Plan nonpublic safety employees) that have lowered future benefit costs • The Hybrid Retirement Plan is the dominant plan for all new hires except public safety employees. • The Hybrid plan has a defined benefit and a defined contribution component: o Reduces future benefit costs o Introduces risk-sharing between employer and employee o Lowers defined benefit risk to employers by approximately one-third Funding: • Providing infusion of significant contribution amounts in excess of the ADC which are intended to pay down the UAAL • Setting contribution rates for FY 2023 and FY 2024 at the FY 2022 level or the new actuarially determined rate, whichever was higher. Financial Wellness: • In its quest to help members plan for tomorrow, today, we launched an innovative online program in 2017 to provide financial wellness education for its members, as well as free educational resources for citizens. The System continues to promote this education opportunity and enhance the materials that are available. • Recognizing that many members would like to improve their knowledge but do not have access to personal finance education, we seized an opportunity to integrate financial wellness content on the public website and with the retirement planning tools within the agency’s secure online member portal. We partnered with its service provider, iGrad, creator of Enrich financial literacy content, to develop Financial Wellness. Users find tools, tips and time-savers that help them with debt and credit management, personal budgeting, spending habits, saving for goals, student loan repayment, incorporating money mindfulness techniques and career-development strategies. Advancements in Technology and Security: • Successfully disburses more than 250,000 payments monthly to retirees and beneficiaries under the new system that was implemented in May 2019 with approximately 98% done electronically. • Enhancements to member portal security Online Self-service Member Portal Enhancements: • Enhancements now enable members to complete their retirement applications online. The online system provides the user with regular feedback and embedded education to enhance the user experience. During the fiscal year, 37%, or 4,121, of retirement applications were submitted online. • Enhanced the online Self-service portal to allow members and retirees to update and manage beneficiaries, change bank account information for direct deposits, and update Health Insurance Credit information.
We continue to implement a new strategic plan that captures our commitment to fulfilling our fiduciary duty while delivering tremendous customer service to our members. • The fund established a new member communication practice of defaulting new members into paperless online delivery for messages, resulting in 93% of those new members retaining paperless delivery, which in turn saves on printing and postage costs. • We contine to enhance its online member self-service tools by allowing members to track the processing status of their estimates, refunds and retirement applications. • We have enhanced its benefits review process to check the accuracy of members' retirement accounts at certain career milestones to ensure they have the correct information to make informed decisions, which in turn can allow the fund to expediate retirement applications. • We plan to implement the system's first SOC 1/Type 2 Review and Audit of operations and controls.

Verbatim Comments, continued

Education efforts (described above) resulted in employers across the state paying down more than $5 billion of unfunded pension liabilities over a period of slightly more than three years. Additionally, the Board of Trustees adopted a more conservative 15-year amortization period and more conservative actuarial assumptions for assumed rate of return and assumed payroll growth.
Regional Offices. The Plan opened its first regional office in November 2022. In less than a year, the office has served nearly 5,000 participants and provides a vital regional resource for employers as well. If data suggests the office is valuable to members, the Plan will consider establishing an additional regional office with related activities commencing during the 2024-25 biennium. The region was selected as the pilot following extensive research and assessment of member needs. Customer Service Improvement Initiative - from there, we significantly improved customer service in fiscal year 2023 through procedure changes, system changes, process improvements, and enhanced staffing. Benefit Services was able to meet or exceed nearly all of its targeted performance metrics for the year. This included reducing call center hold times from 23 minutes to under a minute and a half and providing nearly 30,000 counseling office visits at both its headquarters and first regional office. In addition, Benefit Services significantly reduced response times to members requesting benefit calculations and benefit information to beneficiaries regarding member deaths. The Plan also executed all of its planned activities in alignment with the Member and Employer Outreach Plan to include a measurable increase in outreach and engagement on all communication channels. Addressing Long-term Space Needs - New Headquarters - We successfully moved into the first of its two new regional headquarters buildings in fiscal year 2023, including moving staff housed in a downtown leased space. After almost 50 years in its currently owned home, we obtained a new headquarters consisting of a newly completed building along with a second building currently under construction in the Mueller development. When fully complete, the two-building campus will house the entire region-based agency. The buildings are designed to serve members of the next generation and will be fully occupied by 2025. The fund also was able to sell its current campus location for $108 million. Classification Plan - The Board of Trustees authorized a transition from the State Classification Plan to a new specific classification structure. This marked the beginning of the official implementation of a Classification and Compensation Plan, which is tailored to meet the agency's particular business needs, tied to market data for talent, and provides an efficient and flexible framework to recruit and retain staff effectively. Currently, the voluntary turnover rate is 48.3% lower than the state turnover rate. Following the authority provided during the 2019 legislative session, we also have continued a three-year fellowship program for recent undergraduate and graduate school graduates to create talent pipelines. Artificial Intelligence – To help ensure we are making the most of new artificial intelligence tools to enhance and streamline its work while mitigating risks associated with the quickly evolving technology, we created a new Artificial Intelligence (AI) Use Policy. The policy outlines a formal AI request and review process with a cross-functional review team comprised of representatives from Information Technology, Information Security, Legal & Compliance, Records Information Management, and Communications. The aim of the policy is to ensure ethical engagement and responsibility with AI in a consistent, secure, and managed process. ActiveCare – Legislation passed in 2021 created the opportunity for districts to leave ActiveCare and choose a different health plan for the 2022-23 school year. The Plan implemented regional rates for ActiveCare to ensure that employers across the state receive rates that reflect the cost of health care in their area and are competitive relative to comparable options in the market. The State Legislature also invested $588.5 million in ActiveCare to help educators have affordable health coverage. This amounts to an annual average savings of $1,100 per employee over the biennium. Even without this funding, we offer a competitively priced option compared to other health plans, with ActiveCare's total costs 18% lower on average. Because of the value ActiveCare provides, 99 percent of school districts chose to remain in ActiveCare in 2023. New Pharmacy Benefits Manager for Health Plans—This new best-in-class contract with Express Scripts will generate significant savings to help sustain health care benefits our participants and employers value. The Plan rolled out a robust communication and engagement campaign to prepare members for the transition to ActiveCare on Sept. 1, 2023, and Care on Jan. 1, 2024.
Resisting the pressure to increase benefits in good times.
Responsive web design so website is fully functional on any kind of device. Most plans have already done this.
Staff have undergone a yearlong cybersecurity training through a grant program offered by the Executive Office of Technology Services and Security. With this emphasis on end user training, the retirement system continues to make cybersecurity an organizational priority. Adopting and implementing strong security protocols and standards is the commitment we make to ensure our members' information, and the System's data, is secure. We also continue to offer hybrid counseling and training for members and employers.
The actual implementation of a Contribution Prepayment Program (CPP) which will increase employers the ability to pay all future required contributions, particularly in times of fiscal crises. The CPP will also allow excess employer funds to earn a long-term rate of return not typically accessible to employer's excess cash balances. Refer to https://www.azasrs.gov/content/contribution-prepayment-program
The jury is still out, but our use of a DROP feature as a voluntary option to increase the average retirement age and service of our retirement plan seems to be a relatively unique approach.
The Plan verifies payments to inactive members annually. The Plan also publishes an annual summary at-a-glance page with Plan highlights.
The hybrid plan may be interesting to other systems. The health insurance team has implemented pharmacogenomics, which is personalized medicine, that has kept the costs down in the health insurance trust but has also resulted in members having better health outcomes.
Transitioned Medicare-eligible population to Medicare Exchange
Transparency is something that most of us would say we are doing. I would say that some fall short of this. For example, not all plans benchmark investment performance relative to peers. Performance relative to policy and an actuarial bogey is important but stakeholders have a hard time understanding your real outcomes if peers are not included as well.
We are in the process of drafting an RFP to implement a new Pension Administration System. In addition, we launched a mobile app last year as an additional communication tool. Lastly, we are piloting a retirement centralization effort to transition retirement responsibilities from the HR representative to the Pension Office.
We have learned that one of the best ways to improve the member experience is to listen to the member. The Plan implemented a phased communication strategy which provided deeper insight into the member experience. In using member surveys at various points of member contact, this allowed the Plan to capture comments in the areas that were problematic to the member. In doing so, we utilized this feedback to improve the member experience throughout the overall lifecycle of the membership.

Appendix A: Other Investments

Respondents were asked to specify what "other" asset classes they invested in. Below is a word cloud showing the words that appear most often in respondents' comments. Larger words appear more often. The themes relating to these words are listed to the left, and the verbatim comments are provided below.

- **Infrastructure**
- **Real Assets/Real Estate**
- **Credit Strategies**
- **Multi Asset**

If you entered an "Other" asset class above, please specify
4 Capital Efficiency; 5.9 Midstream
absolute return
Alternative Credit
Alternative Credit
Bank Loans
Capital Efficiency 4.0%, Midstream 5.9%
Cash includes overlay. "Other" is Risk Diversifying sub-portfolio, a mix of mortgage-backed and multi-asset strategies.
Credit Strategies, Multi-Asset Public Strategies, Exposure Management Portfolio
Credit Strategies/ Multi-Asset Public Strategies/Exposure Management Portfolio
Credit Strategies/Multi-asset public strategies/Exposure Management Portfolio
Crisis risk offset
Developed markets 6%.... Emerging Markets 9%....US Tips 10%...REIT 4%...
Emerging Equity
Global Listed Infrastructure
Hybrid
Infrastructure
Infrastructure
Innovation Portfolio
Innovation portfolio

Verbatim Comments, continued

Legacy closing strategies
Low Volatility Hedge
Midstream Energy
Midstream Energy
N/A
Natural Resources
Natural Resources and Infrastructure, multi-asset.
Opportunistic (Current); Global Infrastructure, US Treasury Intermediate/Long Govt Bonds and TIPS (Target); US Treasury Intermediate/Long Govt Bonds and TIPS (Investment Return %)
Opportunistic Credit
Other Alternative: Private Real Assets; Other: Public Real Assets
Other Alternatives is Private Real Estate & Infrastructure / Other is Risk Parity
Other consists of REITS and TIPS
OTHER IS INFRASTRUCTURE; DOMESTIC FIXED INCOME INCLUDES ALL SUB CLASSES OF FIXED INCOME; "OTHER ALTS" IS MULTI ASSET CLASS SOLUTIONS
Other Returns: Agriculture: 3.98%; Timberland: 11.94%; Infrastructure: 11.76%
OTHER-INFRASTRUCTURE
Private Debt
Public Diversified Real Assets
PUBLIC EQUITY 40%. PRIVATE EQUITY 10%, FIX RATE BONDS 20%. FLOATING RATE DEBT 15%, CORE PRIVATE EQUITY REAL ESTAE 10%. VALUE ADD PRIVATE EQUITY REAL ESTATE 5%
Public Equity, Fixed Income, Credit Strategies, Multi-Asset Public Strategies, Private Investment Partnerships and Exposure Management Portfolio
Public Infrastructure
Real Assets (includes Real Estate, Timber, Agriculture, and Infrastructure)
Real Assets = 9.2%, Liquid Real Return = 2.4%, and Absolute Return = 2.5%
Real Estate Debt -- Actual: 5.6%, Target: 6%
Return Seeking Fixed Income allocation 5.1/5.0 return 8.8; Opportunity Fund allocation 6.0/6.0 return -1.5
Risk Mitigating Strategies: 10.3%, 10%, 8.9%; Inflation Sensitive: 5.4%, 6%, 17.5%; Innovative Strategies: 1.1%, 0%, 13%; Strategic Overlay: 0.2%, 0%, x%
Risk-Based asset allocation, as of 06/30/2022 (Current/Target/Return): Broad Growth 68.1%/65.0%/0.9%, Diversifying Strategies 29.6%/35.0%/11.4%, Other 2.3%/0%/-11.4%
Stable Value, Real Return, Risk Parity, Asset Allocation Leverage
Strategic Assets
The 1-year net return is preliminary FY2023; final returns will be released in December 2023. The "other alternatives" categories in the first two lists represent public and private infrastructure. The "other" categories in the first two lists represent explicit leverage.
Timberland
Timberland
Timberland is 2%, Additional Categories comprised of distressed debt and opportunistic credit is 8.3% Timberland's 1 year return was 5.31. Additional Categories 1 year return was 4.28.
TIPS, Global Inflation Linked Bonds, Infrastructure, Timber
We are part of the State of MA-PRIT Fund
We have a cash overlay program and an opportunistic allocation to a hedge fund manager where we invest in overflow funds that take real estate debt off the banks' books. Our Real Estate allocation is actually real assets and it includes farmland and infrastructure. Our fixed income allocation includes bank loans and mortgage debt instruments.

Appendix B: Study Instrument

NCPERS PUBLIC RETIREMENT SYSTEMS STUDY

Please share your feedback so we can continue to provide the most up-to-date data addressing retirement issues for public pension plans across the nation. Your most recent Annual Comprehensive Financial Report will help answer most questions.

If you administer more than one plan, copy this survey for each and note the name of the fund. If you are a multiple employer plan, use aggregate numbers from your ACFR and respond to questions in the generally applicable way for most of your plans.

Please enter your ID number from the cover email: ______

Plan name: ______

What type of plan is this? (**Mark all that apply.**)

☐ *Defined Benefit Plan (Traditional Pension Plan)*

☐ *Defined Contribution Plan (Mandatory Retirement Account)*

☐ *Combination Plan (Blends Defined Benefit & Defined Contribution)*

☐ *Cash Balance Plan*

Plan Statistics

1. Fund statistics from most recently completed fiscal year (if applicable). Please do not use commas, dollar signs or percentage marks in the field - it is numeric only.

Total number of members (actives + deferred + retirees + beneficiaries): ______

Total number of staff who administer the fund (full-time equivalent): ______

Fiscal year of your CAFR referenced for this survey (MM/DD/YYYY): ______

Market value of plan assets ($ in thousands from actuarial valuation): ______

Total pension assets (a) ($ in thousands from actuarial valuation): ______

Total pension liability (b) ($ in thousands from actuarial valuation): ______

Current funded ratio (a divided by b) (%): ______

Cost of Living Adjustment (COLA) offered by plan in last fiscal year (%): ______

Did your plan receive the full (100%) actuarially determined contribution in the last fiscal year? ☐ *Yes* ☐ *No*

Member contributions as percent of payroll (%): ______

Employer contributions as percent of payroll (%): ______

Investment manager expenses (basis points): ______

Administrative expenses (basis points): ______

Investment assumption/discount rate (%): ______

Inflation assumption (%): ______

Investment smoothing period (years): ______

Amortization period (years): ______

Type of amortization period: ☐ *Open/Rolling* ☐ *Closed/Fixed*

Investment return % (1 year): ______

Investment return % (5 year): ______

Investment return % (10 year): ______

Investment return % (20 year): ______

Are these investment returns Net or Gross? ☐ *Net* ☐ *Gross*

Current and Target Asset Allocation / Investment Return

2. For each of the asset classes below, please specify your *CURRENT* and *TARGET* asset allocation and your *1 YEAR INVESTMENT RETURN* (%) for each asset class. Please note: percentages for asset allocation should equal 100%. If your target assets are a range, please use middle of the range.

***CURRENT* asset allocation:**		***TARGET* asset allocation:**		***Investment return % (1 yr):***	
Global Equity (%):	☐	Global Equity (%):	☐	Global Equity (%):	☐
Domestic Equity (%):	☐	Domestic Equity (%):	☐	Domestic Equity (%):	☐
International Equity (%):	☐	International Equity (%):	☐	International Equity (%):	☐
Global Fixed Income (%):	☐	Global Fixed Income (%):	☐	Global Fixed Income (%):	☐
Domestic Fixed Income (%):	☐	Domestic Fixed Income (%):	☐	Domestic Fixed Income (%):	☐
International Fixed Income (%):	☐	International Fixed Income (%):	☐	International Fixed Income (%):	☐
High Yield Bond (%):	☐	High Yield Bond (%):	☐	High Yield Bond (%):	☐
Real Estate (%):	☐	Real Estate (%):	☐	Real Estate (%):	☐
Private Equity (%):	☐	Private Equity (%):	☐	Private Equity (%):	☐
Hedge Fund (%):	☐	Hedge Fund (%):	☐	Hedge Fund (%):	☐
Private Debt (%):	☐	Private Debt (%):	☐	Private Debt (%):	☐
Other Alternatives (%):	☐	Other Alternatives (%):	☐	Other Alternatives (%):	☐
Commodities (%):	☐	Commodities (%):	☐	Commodities (%):	☐
Cash Equivalents (%):	☐	Cash Equivalents (%):	☐	Cash Equivalents (%):	☐
Other (specify asset below) (%):	☐	Other (specify asset below) (%):	☐	Other (specify asset below) (%):	☐

Are these investment returns Net or Gross? ☐ *Net* ☐ *Gross*

If you entered an "Other" asset class above, please specify the other class(es) in which your fund is currently invested:

☐

3. Which *retirement benefits* below does your plan offer or is considering offering? Please skip individual items below if not applicable.

	Already Offering	*Considering Offering*
Defined Benefit Plan (traditional pension plan in which the benefit is defined by a formula based on service and average wages)	☐	☐
Defined Contribution Plan (retirement account such as a 403(b) or 401(k) in which an employer's contribution is specified and employee participation is generally mandatory)	☐	☐
Deferred Compensation Plan (tax-deferred retirement savings account such as a 457 in which employee participation is voluntary)	☐	☐
Combination Plan (blends Defined Benefit and Defined Contribution elements)	☐	☐
In-service death benefit	☐	☐
Disability benefit provided either within the plan, by Social Security or by employer	☐	☐
An automatic post-retirement adjustment of payments (e.g. COLA)	☐	☐
A compounding post-retirement adjustment of payments (e.g. COLA)	☐	☐
An ad hoc (not necessarily automatic or compounding) post-retirement adjustment of payments (e.g. COLA)	☐	☐
Employer pick up of employee contributions	☐	☐
Deferred Retirement Option Plan (DROP - in all forms)	☐	☐

4. Which *retirement plan changes* below have been implemented in the last 3 years or are being considered by the plan or plan sponsors? Please skip individual changes below if not applicable.

	Already Implemented	*Considering Implementing*
Lower the actuarial assumed rate of return	☐	☐
Raise benefit age/service requirements	☐	☐
Increase employee contributions	☐	☐
Hold or lengthen the amortization period to improve affordability	☐	☐
Shorten the amortization period to improve funded status	☐	☐
Increase benefits/relax benefit requirements	☐	☐

5. Which *business practices* below have been implemented in the last 3 years or are being considered by the plan or plan sponsors? Please skip individual items below if not conducted.

	Already Implemented	*Considering Implementing*
Conduct a death audit	☐	☐
Conduct an actuarial audit by a third party actuary (includes replication of valuation and opinion on actuarial assumptions)	☐	☐
Conduct an information systems security audit	☐	☐
Conduct a building security audit	☐	☐
Update/strengthen an asset allocation study	☐	☐
Expand operational performance benchmarking	☐	☐
Update or enhance administrative software used for member data	☐	☐
Update or enhance online portal provided for members to access account information	☐	☐
Update or enhance a mobile app for members to access account information	☐	☐
Conduct an employer/reporting unit satisfaction assessment	☐	☐
Comply with new State statutory or regulatory requirements to report your funded status based on a rate of return different from your assumed rate of return	☐	☐
Enhance member financial wellness/retirement readiness resources	☐	☐

6. Which of the following *communication methods* does your plan or plan sponsor have?

	Yes	*No*
A website that provides account information to members	☐	☐
A mobile app that provides account information to members	☐	☐
Capacity to send a mass text message to your entire membership	☐	☐
Capacity to send an e-mail to your entire membership	☐	☐
Does your plan have a social media presence?	☐	☐
Does your plan offer video conferencing to members (Zoom, Teams, WebEx, etc.)?	☐	☐

7. Please indicate how important each of the following are for outbound communication with your members

	Primary Way to Communicate	*Secondary Way to Communicate*	*Do Not Use*
Direct mail	☐	☐	☐
E-mail	☐	☐	☐
Text message	☐	☐	☐
Mobile app	☐	☐	☐
Website	☐	☐	☐
Social media	☐	☐	☐
Other (note below)	☐	☐	☐

8. Which *oversight practices* below have been implemented? Please skip individual practices below if not conducted.

	Yes	No
Receipt of the GFOA Award of Excellence for the most recent award cycle	☐	☐
Receipt of NCPERS Certificate of Transparency	☐	☐
Receipt of PPCC Standards Award	☐	☐
Receipt of PPCC Administrative Certificate	☐	☐
Receipt of PPCC Funding Certificate	☐	☐
Receipt of an unqualified opinion from the auditor on the fund's financial statements, internal controls, and compliance with applicable laws and regulations	☐	☐
Conduct an actuarial valuation at least every 2 years	☐	☐
Board adoption and adherence to written investment policies	☐	☐
Board adoption of written fiduciary standards	☐	☐
Receipt of annual investment performance evaluation from an outside independent investment review entity	☐	☐
Use of a formal enterprise risk management framework	☐	☐

9. How important, if at all, are ESG (environmental, social, and governance) factors in your fund's investment decisions?

☐ *Very important* ☐ *Somewhat important* ☐ *Not at all* ☐ *Don't know*

10. How satisfied are you with your plan's readiness to address retirement trends and issues over the next 2 years?

Very Dissatisfied= 1	2	3	4	5	6	7	8	9	Very Satisfied= 10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

11. If you have an unfunded accrued actuarial liability, what strategies have you put in place to reduce it beyond traditional amortization?

12. Think about best practices. Please share a success story or plan innovation you are considering that other plans may like to learn about:

13. Which categories best describe your innovation or best practice story above? (**Please mark all that apply.**)

☐ *Retirement benefit* ☐ *Business practice* ☐ *Oversight practice*
☐ *Plan change* ☐ *Communication/ engagement practice* ☐ *Investment*

Questions about your fund (your responses will be confidential)

14. What type of employees/beneficiaries does your fund serve? (**Please mark all that apply.**)

☐ *Local (township/city/village)* ☐ *Public safety* ☐ *Educational*
☐ *County* ☐ *State* ☐ *Other*

15. Are your members eligible for Social Security coverage? ☐ *Yes* ☐ *No*

16. Are your members eligible for Medicare coverage? ☐ *Yes* ☐ *No*

17. Do you include overtime in the calculation of the retirement benefit? ☐ *Yes* ☐ *No* ☐ *N/A*

18. Does your plan allow Board Members the ability to participate via teleconference or webconference (Zoom, Teams, Webex) and vote? ☐ *Yes* ☐ *No*

19. Which role(s) best describe your relationship to the fund? (**Please mark all that apply.**) ☐ *Staff* ☐ *Plan consultant* ☐ *Board member/ trustee* ☐ *Other*

20. May we contact you if we have additional questions? ☐ *Yes* ☐ *No*

Your Name Your Email

21. If the contact for next year will be different, who should we contact? ☐ *Same as above* ☐ *Different person (note below)*

Name Email

This concludes the study. Thank you for your time and cooperation.

For more information:

National Conference on
Public Employee Retirement Systems (NCPERS)
1201 New York Avenue, NW
Suite 850
Washington, DC 20005
Tel: 202-601-2445
Info@ncpers.org

J.P.Morgan
ASSET MANAGEMENT

Retirement Insights

Leveraging defined contribution plans in the public sector

Published: 12/15/2023

Learn more about how public sector defined benefit plans have scaled back their benefits and how defined contribution plans may help with retirement readiness.

Key takeaways

- Since the global financial crisis, a large number of public sector defined benefit (DB) plans have scaled back retirement benefits, particularly for new hires.
- Despite these reductions, many employees are spending all or almost all of their income, leaving little room to save to help bridge these potential retirement income shortfalls from reduced pensions.
- This is further evidenced by the generally low numbers of employees making adequate contributions to supplemental defined contribution (DC) plans.
- Employers can help place employees on a more secure retirement path by evaluating retirement outcomes at the individual level, not just by their plan funded ratio; taking a more holistic view of DB and DC benefits; and engaging with participants through financial education.

An evolving landscape of the benefit reduction among public sector defined benefit plans

While defined contribution (DC) plans have become by far the most widely utilized type of employer-sponsored benefit plan within the private sector, retiremen benefits in the public sector continue to be typically associated with defined benefit (DB) plans. However, given the broad trend toward reduced DB benefits th has occurred over the past decade, public sector employers may want to reconsider the role supplemental DC plans can play to help employees reach safer levels of retirement funding.

DB plans are a critical piece of the retirement puzzle in the public sector, but the reality is that this landscape has been evolving. Employers and employees ne to adjust with it. A crucial step in this process is to take a more holistic view of how DB and DC plans can work together to help increase the odds that employe are well positioned to achieve retirement success. This starts by evaluating retirement outcomes at the individual level, not just by the funded ratio of pension plan assets, which is often what the industry tracks.

Research overview

J.P. Morgan Asset Management has a well-established history of researching the spending and saving behaviors of corporate DC participants and quantifying how these behaviors interact with plan investments to strengthen retirement outcomes. This paper extends these research efforts into the public sector to he understand the broader impact of DB benefit reductions on retirement readiness and to develop practical solutions for any shortfalls that may exist. The resulting groundbreaking research[1] builds on our continued collaboration with the Employee Benefit Research Institute (EBRI), which has delivered two published papers focused on the private sector. It marks a joint effort between J.P. Morgan Asset Management and the Public Retirement Research Lab (PRRL which was founded by EBRI and the National Association of Government Defined Contribution Administrators (NAGDCA) in 2020. The PRRL's mission is to builc the most comprehensive database on public sector DC plans to help demystify how these programs are being used to help enhance people's retirement outcomes.

In this study, we examine two core questions:

1. *How do people with DB benefits spend and save?*
2. *Do people with reduced DB benefits modify their spending and saving behaviors?*

Our findings highlight three key factors challenging public sector employee retirement security, as well as three strategies to help address potential retiremer income shortfalls.

Research methodology

Public DC data is incredibly difficult to aggregate and analyze. A single government can have multiple types of DC plans—for example, 457(b), 403(b), 401(a) an 401(k) plans—and may employ multiple recordkeepers. PRRL's data covers 2.3 million public sector DC participants, representing $113 billion in assets across nearly 200 plans in 2019. The saving characteristics of this population were mapped to actual spending behaviors using data on households who use Chase a their primary banking institution.[2]

The overlap between these two data sets after applying rigorous filters resulted in a robust sample set of approximately 37,000 households. We segmented these households into two groups:

- *Primary-DB employees,* who worked for an employer that offered primarily DB-focused retirement benefits
- *Primary-non-DB employees,* who worked for an employer that was not primarily DB-focused, either by emphasizing DC plans or by taking a hybrid DB/DC approach

Additionally, primary-DB employees were segmented by tenure to analyze the impact of pension reforms:

- *Lower tenure employees* were hired after the implementation of the latest tier of DB benefits created from pension reform by their respective employer
- *Higher tenure employees* were hired before the latest reform took place.

Factor 1: Pension benefits have been notably reduced for many public sector defined benefit plan

Since the 2008 global financial crisis, the number of states and local municipalities that have implemented DB reforms has climbed significantly. In fact, 18 an 27 states, respectively, enacted major pension reforms in just 2010 and 2011.[3] Benefit adjustments have occurred across vesting age, final average salary period, cost of living adjustments, benefit multiplier and employee contribution.

Typically, though certainly not always, these reductions have focused primarily on new hires. Many states consider future accruals of pension benefits for current workers to be contractual obligations that cannot be reduced. It is also simply more difficult politically to scale back already-promised benefits. While t reduction amounts differ depending on the state, according to an estimate by the National Association of State Retirement Administrators (NASRA),[4] the average decrease in DB benefits for newly hired workers was 7.5% relative to those hired before the pension reforms, with cutbacks as high as 20% in some cases.

The implementation of these types of reforms is an indication of the commitment many public sector employers have made to maintain viable DB programs. However, it also has resulted in a new retirement reality for many newer employees—one where future pension benefits may be notably scaled back.

Factor 2: Employee spending behaviors do not reflect pension benefit reductions

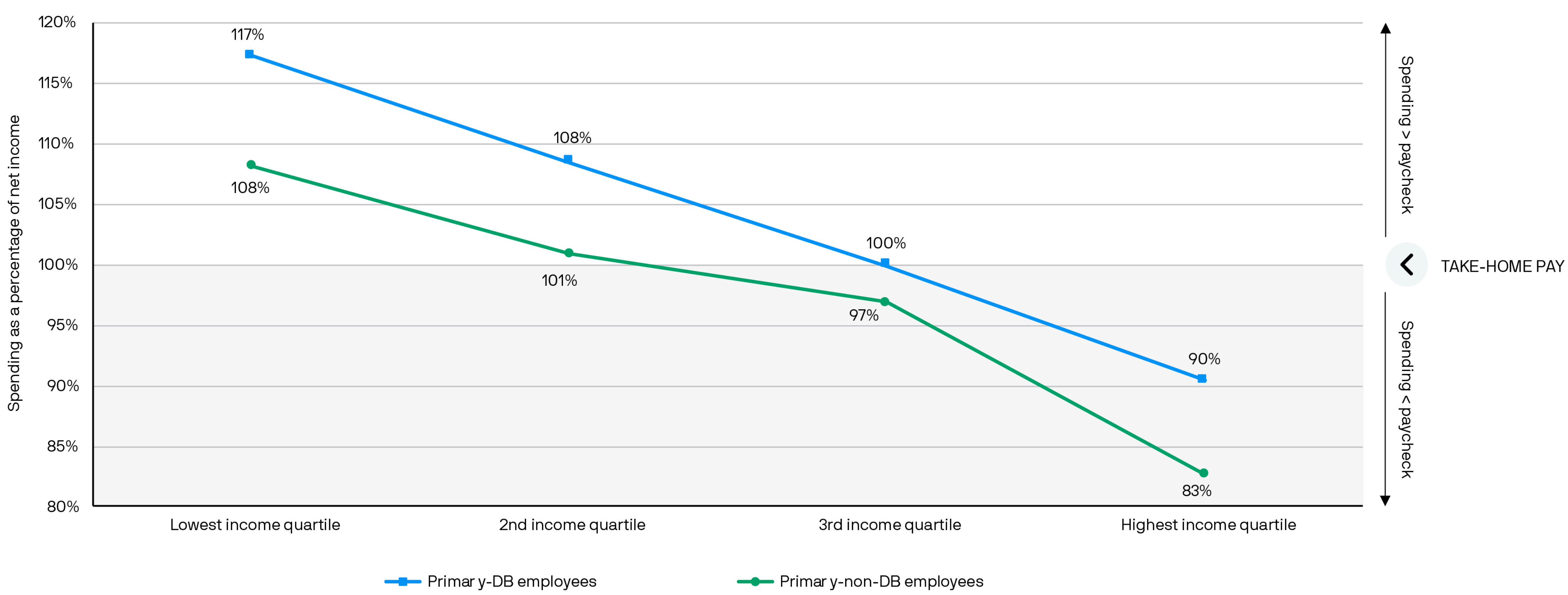
Unfortunately, our research suggests that many employees in our research population are spending at levels that do not allow for any real savings outside of their DB plan. **Exhibit 1** shows median spending-to-net-income ratios by income quartile,[5] segmented by primary-DB employees and primary-non-DB employees (see **Research methodology** for definitions of these segments). Except for the highest income households, people are spending all or more of their take-home pay at the median level.

Of note, primary-DB employees tend to spend at higher levels, with a range of 90% to 117% vs. a range of 83% to 108% for primary-non-DB employees. Perhaps they think their retirement saving is already taken care of by their employers and feel more comfortable spending to maximize their current lifestyle.

Related research suggests that these high levels of spending may continue into retirement as well. People with dedicated sources of income, such as pensior tend to spend more than people who rely more on asset-based wealth, such as 401(k) balances, even when they have similar means in terms of their total retirement wealth.[6] This suggests greater confidence and comfort spending when individuals believe that they will receive reliable periodic income streams, v people who must actively draw down their assets to support their expenses.

Many employees are spending all or more of their income, with primary-DB employees spending more

EXHIBIT 1: MEDIAN SPENDING-TO-NET-INCOME RATIOS BY INCOME QUARTILE

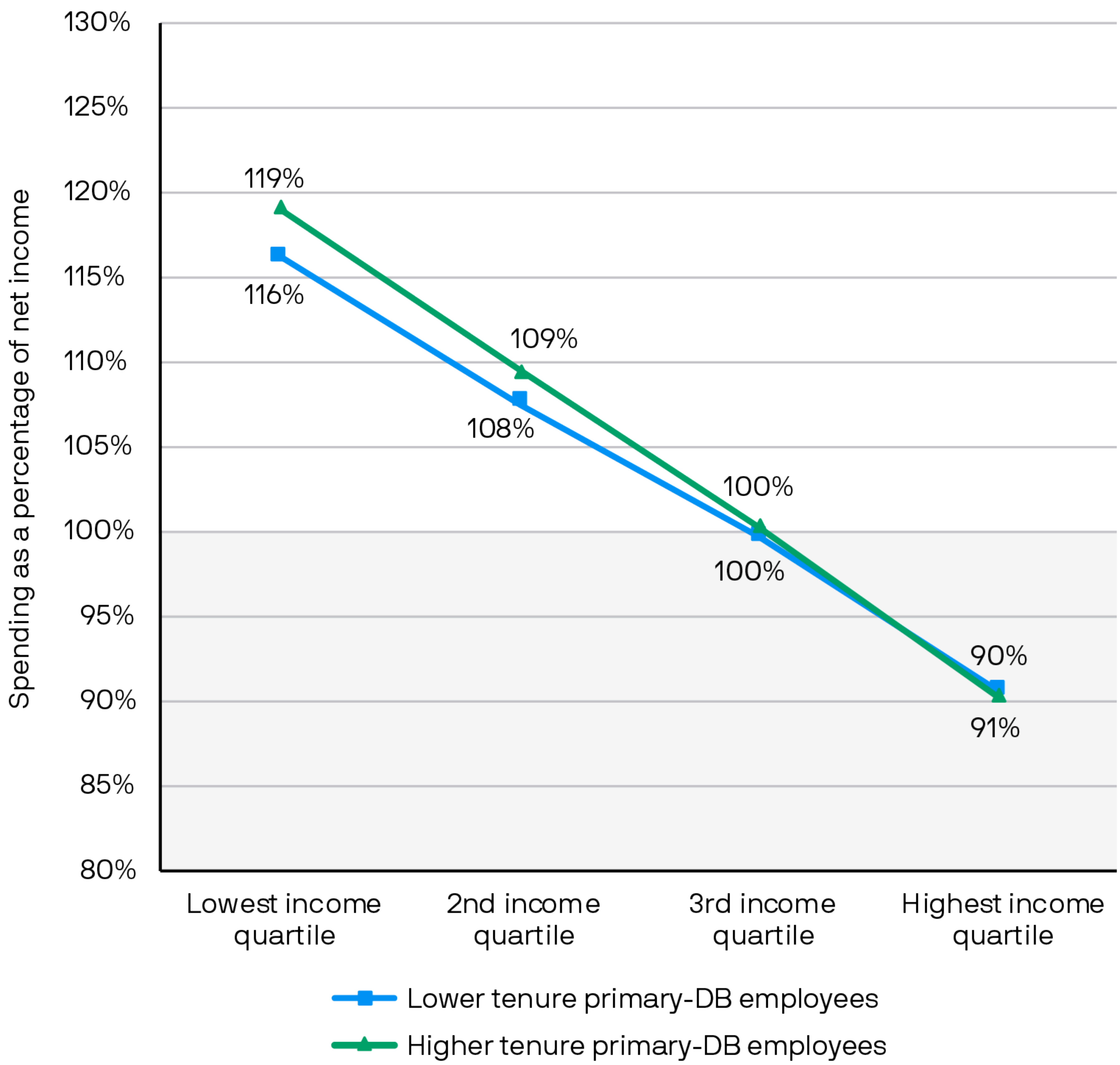


Source: "Spending and saving behavior of public-sector defined contribution plan participants," Public Retirement Research Lab and J.P. Morgan Asset Management.

We also examined spending patterns by employee tenure of the primary-DB employees (see **Exhibit 2** for income and **Exhibit 3** for age; refer to **Research methodology** for segment definitions). Surprisingly, lower tenure and higher tenure employees spend at similar levels, even though lower tenure employees ar likely to receive reduced, and in some cases significantly lower, pension benefits. This may indicate that lower tenured employees may not be aware of how much of their income their pensions will replace in retirement or even whether their specific DB benefits are adequate for achieving retirement success. That may be why they are comfortable spending at these higher levels.

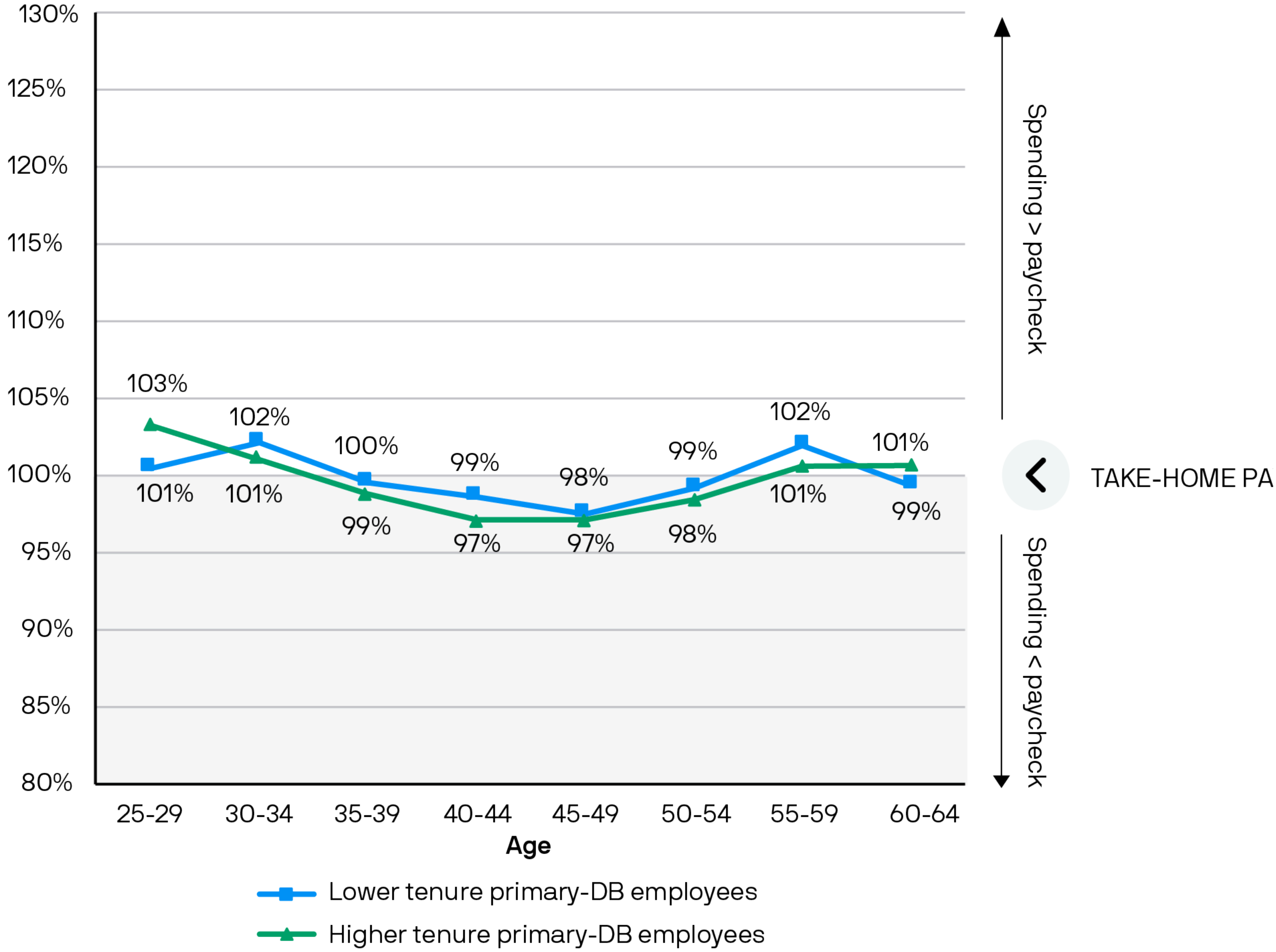
Lower tenure primary-DB workers spend nearly the same as higher tenure workers, whose benefits tend to be more generous

EXHIBIT 2: MEDIAN SPENDING-TO-NET-INCOME RATIOS BY INCOME QUARTILE AND TENURE



Source: "Spending and saving behavior of public-sector defined contribution plan participants," Public Retirement Research Lab and J.P. Morgan Asset Management.

EXHIBIT 3: MEDIAN SPENDING-TO-NET-INCOME RATIOS BY AGE AND TENURE



Source: "Spending and saving behavior of public-sector defined contribution plan participants," Public Retirement Research Lab and J.P. Morgan Asset Management.

From a retirement readiness perspective, these levels of spending are troubling. First, they inhibit employees' ability to save outside of what they are already saving into their employer-sponsored vehicles. Second, they set a higher expectation for what retirement success looks like, since it takes a higher amount of replacement income to fund a similar lifestyle. Employees planning to rely solely on their DB benefits, particularly those that have been reduced, without any kind of meaningful additional savings may be disappointed with their retirement outcomes. Moreover, employees may not even be aware that they need to sav outside of their DB plan to prepare adequately for retirement, especially if nobody is helping them think about their pension benefits in the context of their owr retirement funding success.

Factor 3: Employee saving outside of DB plans is generally low

Next, we wanted to measure whether primary-DB employees were actively saving in their supplemental DC plans to help bridge potential retirement income replacement shortfalls, especially for lower tenure employees.

Surprisingly, newer-hire primary-DB employees, the group that needs to save the most outside of their DB plan based on reduced benefits, were saving the least, as presented in Exhibit 4. Almost four out of 10 people were contributing 0%.

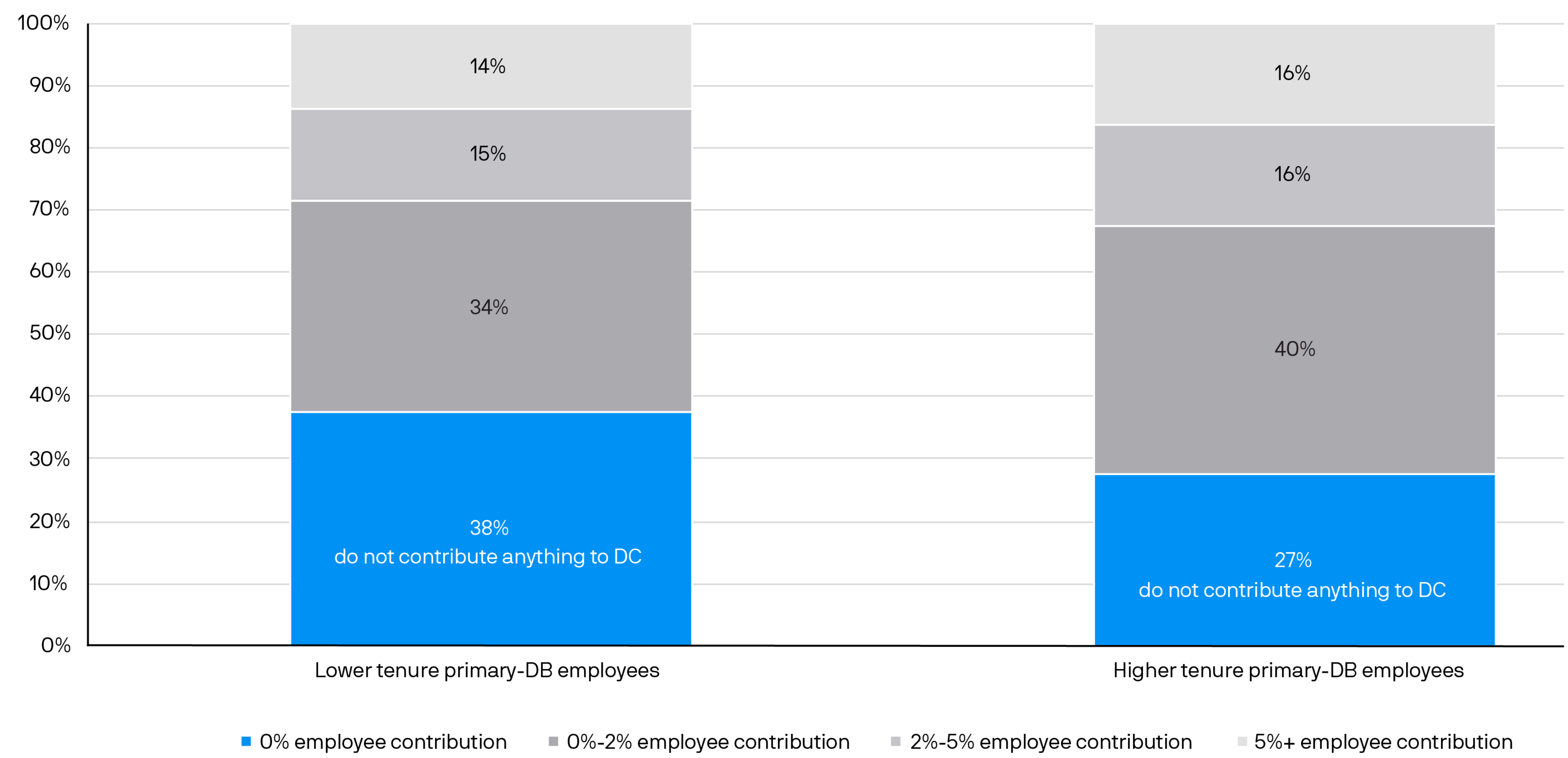
Higher tenure primary-DB employees demonstrated slightly more constructive saving behaviors, with about one-third currently not contributing anything, 40' making some sort of contribution up to 2% and another third saving above 2%.

It is important to note that these figures vastly underestimate the number of employees who have not and are not contributing anything to their DC plans, sinc the figures are based on individuals with existing DC balances. Estimates suggest that more than 50% of public sector employees eligible for a DC plan have never made a contribution.

The key takeaway is that many—and a steadily growing number of—employees are likely to fall short of achieving full retirement readiness unless they start to save more.

Lower tenure primary-DB employees, despite being the group most likely to experience reduced DB benefits, save less than their higher tenure colleagues

EXHIBIT 4: DISTRIBUTION OF EMPLOYEE CONTRIBUTIONS AS A PERCENTAGE OF INCOME FOR LOWER TENURE AND HIGHER TENURE PRIMARY-DB POPULATIONS



Source: "Spending and saving behavior of public-sector defined contribution plan participants," Public Retirement Research Lab and J.P. Morgan Asset Management.

Quantifying the potential shortfall

So, what do all of these numbers mean? To help demonstrate how scaled-back DB benefits might interact with current spending and saving behaviors, consic two hypothetical employee profiles. "John" represents someone retiring today with a generous pension package, and "Ashley" represents someone currently entering the public sector with reduced pension benefits. Both John and Ashley will spend 30 years as public sector employees, and both have the same job. What is different are their DB benefits: The employee entering the public sector today has pension benefits that are about one-third less than the employee retiring today.

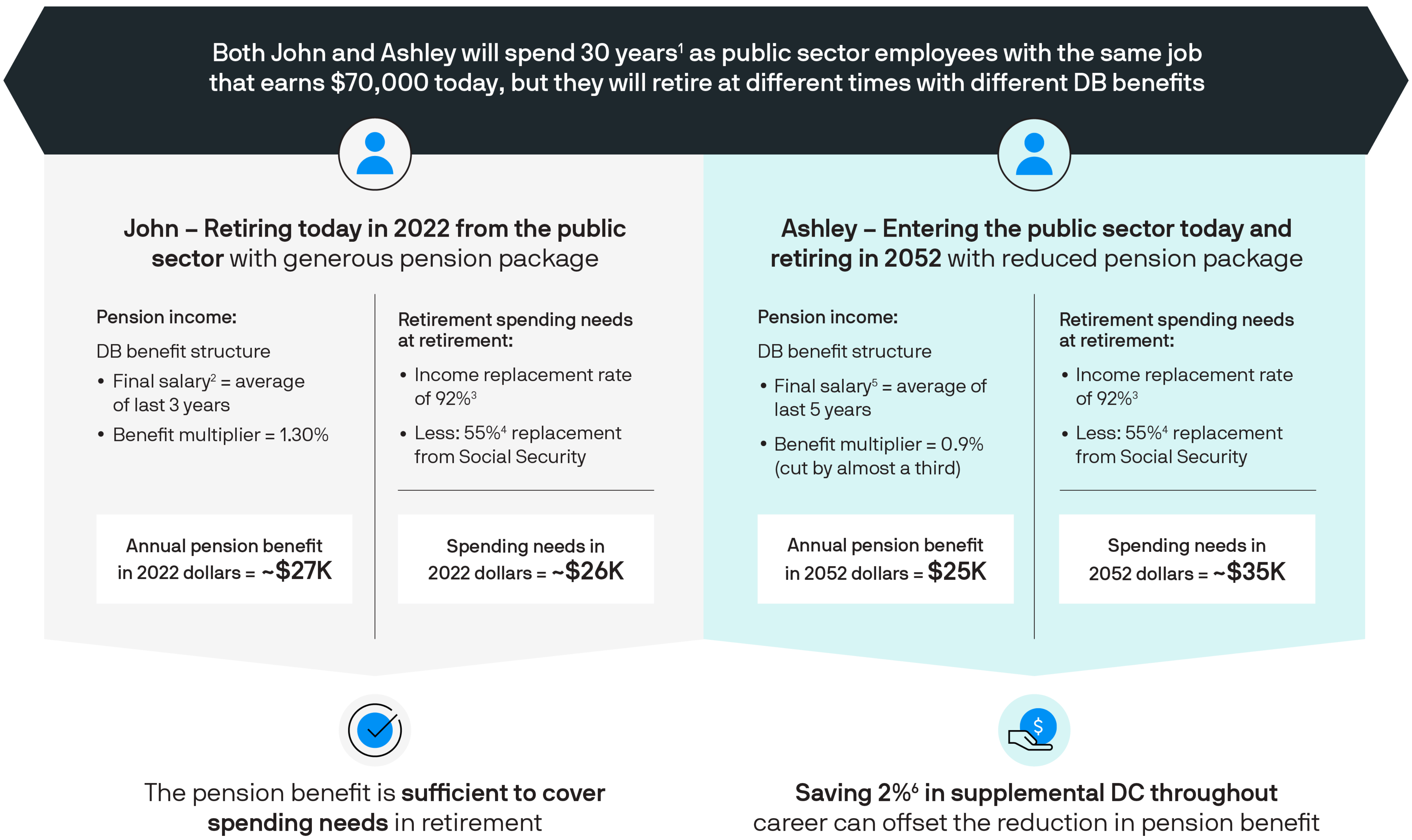
The outcome at retirement:

- John, the employee retiring today, will receive a pension benefit that is roughly equal to his income replacement needs net of what Social Security will cover.
- Ashley, the employee entering the public sector today, will receive a pension benefit that covers only about 70% of her income replacement needs net (what Social Security will cover.

The good news is that, in this example, Ashley can achieve retirement success by contributing 2% of her income a year to a supplemental DC plan to overcome the shortfall. With careful planning, reducing spending by 2% to save more is likely achievable (see **Exhibit 5**). In our previous joint research with EBRI,[7] we analyzed the spending patterns of individuals at similar income levels and noted how making small changes can help add up to higher retirement funding success over time, with one group saving 3% more by spending less.

Employees facing scaled-back DB benefits can help address potential replacement income shortfalls with supplemental DC plan contributions

EXHIBIT 5: HYPOTHETICAL COMPARISON OF AN EMPLOYEE RETIRING TODAY ("JOHN") AND A YOUNGER EMPLOYEE JUST ENTERING THE PUBLIC SECTOR ("ASHLEY



Source: J.P. Morgan Asset Management. [1] Assumes a career employee for the state from age 35 to 65; [2] Starting salary of $52,000 and ending salary of $70,000, assuming annual salary growth of 1%. Salaries are in nominal terms; [3] Source: J.P. Morgan Asset Management analysis, 2021; [4] Assumes a single wage earner at age 65 and a spousal benefit at age 63; [5] Starting salary of $70,000 and ending salary of $93,000, assumi annual salary growth of 1%. Salaries are in nominal terms; [6] Modeling uses a blend of proprietary Long-Term Capital Market Assumptions (first 10 years) and equilibrium returns, and a 90% confidence level. Assume portfolio allocation of 60% equity and 40% fixed income during working years and 40% equity and 60% fixed income during retirement years. Total spending needs in retirement are based on a 92% income replacement rate at retirement and the spending curve for partially and fully retired households with $250,000–$750,000 in wealth; see J.P. Morgan Asset Management, Retirement by the Numbers, 2021 for more detail.

To help illustrate what failing to take action to address a potential replacement income gap might mean, imagine being in a cafeteria where a cheeseburger costs $10 and you have $11. You can get lunch and also a cookie. If you only have $9, however, you cannot afford the cheeseburger at all. Having $1 too little hu far more than the extra $1 helps. Consider this scenario on a far bigger scale in retirement.

Of course, the hypothetical example above is for illustrative purposes only. How much any individual may need to save in a DC plan can vary widely, depending on an array of factors, including specific DB benefits, costs of living, salaries, retirement age, tenure, Social Security participation and personal investment returns.

Exhibit 6 demonstrates how the potential size of DB benefit reforms can affect the projections of how much employees may need to contribute to DC savings i order to achieve retirement security. Using the earlier case study, adjusting the multiplier as well as the time frame used to calculate average salary will impac adequate DC saving projections, with an amplifying effect as benefits are reduced. Still, even in the most extreme examples presented below, adequate DC contribution requirements hover around 2% to 3% per year.

Even at the higher end of potential DB reductions, the projected DC contributions required to bridge the shortfall gap may be achievable with careful financial planning

EXHIBIT 6: HYPOTHETICAL COMPARISON OF MINIMUM TO SAVE TO DC BASED ON CHANGES TO MULTIPLIER AND TIME FRAME USED TO CALCULATE AVERAGE SALARY

Employee entering the public sector today and retiring in 30 years[1]:
amount of DC savings needed to offset the reduction in pension benefit

Benefit multiplier	Final salary based on the last…			
	3 years	5 years	7 years	10 years
1.30%	0.0%	0.1%	0.1%	0.1%
1.20%	0.3%	0.4%	0.4%	0.5%
1.10%	0.7%	0.8%	0.8%	0.9%
1.00%	1.2%	1.2%	1.3%	1.4%
0.90%	1.9%	2.0%	2.0%	2.2%
0.80%	2.9%	3.0%	3.1%	3.2%

Source: J.P. Morgan Asset Management. [1] Assumes a career employee for the state from age 35 to 65 with a starting salary of $70,000 and an ending salary of $93,000, assuming annual salary growth of 1%. Salarie are in nominal terms. Note: Modeling uses a blend of proprietary Long-Term Capital Market Assumptions (first 10 years) and equilibrium returns, and a 90% confidence level. Assumes portfolio allocation of 60% equ and 40% fixed income during working years and 40% equity and 60% fixed income during retirement years. Total spending needs in retirement are based on a 92% income replacement rate at retirement and the spending curve for partially and fully retired households with $250,000–$750,000 in wealth; see J.P. Morgan Asset Management, Retirement by the Numbers, 2021 for more detail.

Placing employees on a more secure retirement path with defined contribution plans

This research reinforces the increasing importance of DC in the public sector as employees adjust to changing DB benefits. In our view, the goal should be to strike the right balance to help employees access and integrate the benefits of both types of programs, as necessary, in order to be able to retire as safely anc securely as possible.

Employers can start by:

- **Reframing measures of success:** Employers with DB plans often define funded status as the main measure of success. As benefits are reduced, however, it becomes increasingly important also to consider potential individual outcomes, to help employees identify possible shortfalls and strategi to address them.
- **Taking a holistic view of DB and DC benefits:** DB and DC plans are often viewed as separate entities, even within the same employer, but they can serve as strong complements to each other to help address potential DB shortfalls. DC plans are not perfect, but they have been shown to be both highly effective and resilient when used correctly, particularly with the advancements and proactive engagement programs that have continued to be introduced to help make saving in a plan as streamlined as possible.

- **Tapping into education:** Help employees understand their overall financial pictures and the trade-offs between spending and saving. Communicating target saving percentages can also be useful. Unlike DB plans, the choice to take advantage of a DC plan is largely up to the employee in many instances. The goal is to help them make better conscious choices and reduce the risk of taking no action simply because they do not know better.

The retirement partnership between public sector employers and employees remains powerful. However, it is evolving, and this requires an evolution in minds as well. Considering and implementing strategies, even small changes, that may help employees start adapting today can help them be better positioned to achieve safer levels of retirement readiness tomorrow.

[1] Source: "Spending and saving behavior of public-sector defined contribution plan participants," Public Retirement Research Lab and J.P. Morgan Asset Management.
[2] JPMorgan Chase Bank, N.A. (Chase) serves nearly half of America's households with a broad range of financial services. In this analysis, the select Chase data sample represented approximately 22 million households in 2019. For more information, visit our website: https://www.chase.com/digital/resources/about-chase.
[3] Source: "Significant Reforms to State Retirement Systems," National Association of State Retirement Administrators, December 2018.
[4] Source: "Effects of Pension Plan Changes on Retirement Security," Center for State & Local Government Excellence and NASRA, April 2014.
[5] Source: "Spending and saving behavior of public-sector defined contribution plan participants," Public Retirement Research Lab and J.P. Morgan Asset Management. The specific household net income thresholds to determine the income quartiles are $35,549, $51,774 and $81,408.
[6] Source: Chase data, including select Chase credit and debit card, electronic payment, ATM withdrawal and check transactions in 2019. Information that would have allowed identification of specific customers v removed prior to the analysis. Asset estimates for de-identified and aggregated households supplied by IXI/Equifax, Inc. Total retirement wealth is the sum of investible wealth and the present value of observed retirement income sources, including Social Security (inflated), pensions and annuities (both not inflated) until age 90. Households with $500,000–$1 million in total retirement wealth spent differently based on how much of their wealth was from investible wealth vs. retirement income. Those with 60%–80% of their total retirement wealth coming from retirement income spent $36,000 per year at median vs. those with 20%–40% of their retirement wealth coming from retirement income, who spent $28,000 per year at median.
[7] "The 3% difference: What leads to higher retirement savings rates?" Employee Benefit Research Institute and J.P. Morgan Asset Management, June 2020.

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Disclosures

Article Tags Defined Contribution Retirement Retirement Income

Eight Percent of Public School Teachers Left Teaching in 2021, a Rate Unchanged Since Last Measured in 2012

December 13, 2023

New NCES survey data point to retirement as a top motivation for leaving

WASHINGTON (December 13, 2023)— Eight percent of teachers in public schools exited the profession between the 2020-21 and 2021-22 school years a pivotal time when K-12 education was heavily impacted by the pandemic. This departure rate was unchanged from nearly a decade earlier, according to the Teacher Follow-Up Survey, a longitudinal component of the National Teacher and Principal Survey, released today by the National Center for Education Statistics (NCES), the statistical center within the U.S. Department of Education's Institute of Education Sciences.

Overall, 84 percent of public school teachers remained at the same school during the 2020-21 and 2021–22 school years ("stayers"), 8 percent moved to a different school between the 2020-21 and 2021-22 school years ("movers"), and 8 percent left the teaching profession ("leavers"). Eighty-two percent of private school teachers remained at the same school during the 2020-21 and 2021–22 school years ("stayers"), 6 percent moved to a different school between the 2020-21 and 2021–22 school years ("movers"), and 12 percent left the teaching profession ("leavers").

"These new data provide a snapshot of the teaching profession at a time when the U.S. education system was under incredible stress due to the COVID-19 pandemic," said NCES Commissioner Peggy G. Carr. "And yet, these rates for teacher turnover were not statistically different from those between the 2011-12 and 2012-13 school years, the last time these data were collected."

For those public and private school teachers who voluntarily left K-12 teaching after the 2020-21 year, a top rationale was to retire or receive retirement benefits. This was cited as the "most important reason" by 17 percent of public and 13 percent of private school teachers. Thirteen percent of public and 24 percent of private school teachers cited "other personal life reasons (e.g. health, pregnancy/childcare, caring for family)," and 14 percent of public and 10 percent of private school teachers said a desire to pursue a position other than as a K-12 teacher. Nine percent of public and 11 percent of private school teachers identified the desire for a higher salary as their chief motivation.

Public and private school teachers who left teaching after the 2020-21 year provided further insights on their new positions, such as how the work-life balance, autonomy, and prestige compared to teaching. Former teachers reported that the ability to balance personal life and work (66 percent), autonomy or control over their own work (60 percent), manageability of their workload (58 percent), and professional prestige (58 percent) were better in their new profession than in teaching.

The report released today includes selected findings from the Teacher Follow-up Survey (TFS), a longitudinal component of the National Teacher and Principal Survey (NTPS), which is a nationally representative survey of public and private K-12 schools, principals, and teachers in the 50 states and the District of Columbia. Data were collected from January 2022 through July 2022. The sample included about 8,500 public school teachers and about 1,800 private school teachers, for a total sample size of about 10,300 teachers.

The data were collected as a follow-up to the 2020-21 NTPS to provide attrition and mobility information about teachers in K-12 public and private schools. The purpose was to ascertain how many teachers from the 2020-21 school year still worked as a teachers in the same school 1 year later ("stayer"), how many had moved to become a teacher in another school ("mover"), and how many were no longer working as a principal ("leaver").

To access the 2021-22 Teacher Follow-up Survey data and technical documentation, please visit https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2023046.

Key Findings

Trends in Teacher Attrition by Teacher Characteristics

- Among public school teachers who were teaching during the 2020–21 school year, 84 percent remained at the same school during the 2021–22 school year ("stayers"), 8 percent moved to a different school between school years ("movers"), and 8 percent left the teaching profession ("leavers") after the 2020–21 school year. Among private school teachers who were teaching during the 2020–21 school year, 82 percent remained at the same school during the 2021–22 school year (“stayers”), 6 percent moved to a different school (“movers”), and 12 percent left the teaching profession (“leavers”).

  - These data are not statistically different from during the 2012-13 school year, when, among public school teachers who were teaching during the 2011–12 school year, 84 percent remained at the same school during the 2012-13 school year (“stayers”), 8 percent moved to a different school (“movers”), and 8 percent left the teaching profession (“leavers”).[1]

- Among public school teachers whose total teaching experience in 2020–21 was 3 years or less, 80 percent remained at the same school during the 2021–22 school year, 13 percent moved to another school, and 7 percent left teaching.
  - A higher percentage of public school teachers with 3 years or less total teaching experience in 2020-21 (13 percent) moved to a different school than did teachers with 10-14 (8 percent) or 15 or more years (6 percent) during the 2021-22 school year.

- Among public school teachers with 15 or more total years of teaching experience in 2020–21, some 86 percent remained at the same school during the 2021–22 school year, 6 percent moved to another school, and 9 percent left teaching.

Trends in Teacher Attrition by School Characteristics

- Among public school teachers who were teaching at schools where less than 35 percent of K–12 students were approved for a free or reduced-price lunch in the 2020–21 school year, 85 percent remained at the same school during the 2021–22 school year, 7 percent moved to another school, and 8 percent left teaching.
- Among public school teachers who were teaching at schools where 75 percent or more of K–12 students were approved for a free or reduced-price lunch in the 2020–21 school year, 82 percent remained at the same school during the 2021–22 school year, 9 percent moved to another school, and 9 percent left teaching.
- Among teachers in 2020–21 who were voluntarily no longer teaching in the 2021–22 school year, 16 percent indicated that their most important reason for leaving was because they decided to retire or receive retirement benefits from the previous year’s school system, 15 percent indicated that their most important reason for leaving was because of other personal life reasons (e.g. health, pregnancy/childcare, caring for family), 13 percent indicated that their most important reason was because they decided to pursue a position other than that of a K–12 teacher, and 9 percent indicated that their most important reason for leaving was because they wanted or needed a higher salary.

Former Teachers in New Jobs

- Among teachers in 2020–21 who were no longer teaching in the 2021–22 school year, 39 percent of public school teachers were working for a school or school district in a position in the field of K–12 education, but not as a regular K–12 classroom teacher. About 12 percent of public school teachers who were no longer teaching in 2021–22 were working in an occupation outside the field of education, including military service.
- Among teachers in 2020–21 who were working but no longer teaching in the 2021–22 school year,[2] 66 percent indicated that the ability to balance personal life and work was better in their current position than in teaching, 60 percent indicated that autonomy or control over their own work was better in their current position than in teaching, and 58 percent indicated that both manageability of their workload and professional prestige were better in their current position than in teaching.

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The National Center for Education Statistics (NCES), a principal agency of the U.S. Federal Statistical System, is the statistical center of the U.S. Department of Education and the primary federal entity for collecting and analyzing data related to education in the U.S. and other nations. NCES fulfills a congressional mandate to collect, collate, analyze, and report complete statistics on the condition and progress of American education; conduct and publish reports; and review and report on education activities internationally.

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