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

ND TFFR Board Meeting
Thursday, September 26, 2024, 1:00 p.m.
WSI Board Room (In Person),
1600 E Century Ave, Bismarck ND
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. Executive Summary
   D. New Board Member Introduction – Ms. Murtha

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

III. **EDUCATION (45 minutes)** ***(Information)***
   A. AI State Policy and Practices – Ms. Weis, NDIT
   B. AI Application in Retirement Services – Mr. Roberts

IV. **GOVERNANCE (60 minutes)**
   A. Governance & Policy Review Committee Update *(Information)* – Mr. Mickelson, Mr. Roberts
      1. 2nd Reading & Final Adoption-Multiple Policies-TFFR Gov Manual *(Board Action)*
      2. 2025 Legislative Session Planning *(Board Action)* – Ms. Murtha
   B. Audit Committee Update *(Information)* – Treasurer Beadle
   C. Pioneer Project Update *(Information)* – Mr. Roberts

(Break)

V. **REPORTS (75 minutes)** ***(Board Action)***
   A. Annual/Quarterly Investment Report – Mr. Posch
   B. Annual Internal Audit Activities Report – Ms. Thorsen
   C. Annual Technology Report – Ms. Blumhagen, NDIT
   D. Quarterly TFFR Ends Report – Mr. Roberts
   E. Executive Limitations/Staff Relations Report – Ms. Murtha

VI. **CONSENT AGENDA –** Disability Application[1] ***(Board Action)***

VII. **OTHER BUSINESS**
   A. Board Reading Materials – Material References Included
   B. Next Meetings:
      1. TFFR GPR Committee – Wednesday, November 6, 2024, at 3:30 p.m.
      2. TFFR Board Meeting - Thursday, November 21, 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.

EXECUTIVE SUMMARY
TFFR Regular Meeting
September 26, 2024 – 1:00pm CT

I. **Agenda:** The **September Board Meeting will be held in the Conference 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.
- 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).]
- New Board member update: Welcome new Trustee Rasset.

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

III. **EDUCATION**

A. AI State Policy and Practices (Information): Ms. Weiss, Chief Data and Analytics Officer at NDIT will present on the development of a policy regarding the use of artificial intelligence by state agencies as well as highlight opportunities for its application.

B. AI Application in Retirement Services (Information): Mr. Roberts will present on opportunities for leveraging AI in in support of retirement services activities.

IV. **GOVERNANCE**

A. GPR Committee Update (Information): Committee Chair Mickelson and Mr. Roberts will report on committee activities.

1. **2nd Reading and Final Adoption of Policies for TFFR Governance Manual. (Board Action):** Mr. Roberts will review proposed changes to the manual.
2. **2025 Legislative Session Planning (Board Action):** Ms. Murtha will review topics and recommendations of the GPR committee in preparation for the upcoming session.

B. Audit Committee Update (Information): Committee Chair Treasurer Beadle and Ms. Seiler will update the board on current audit committee activities.

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

V. **Reports (Board Action):** Staff will provide reports on year end investment performance, annual internal audit activities, annual technology report, quarterly TFFR Ends, and executive limitations/staff relations.

Adjournment.

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

BOARD MEMBERS PRESENT:	Mike Burton, Vice President Kirsten Baesler, State Supt. DPI Thomas Beadle, State Treasurer Scott Evanoff, Trustee Cody Mickelson, Trustee
BOARD MEMBER ABSENT:	Dr. Rob Lech, President
STAFF PRESENT:	Scott Anderson, CIO Jayme Heick, Retirement Spec. Missy Kopp, Exec. Assistant 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 Tami Volkert, Retirement Compliance Spec. Denise Weeks, Retirement Program Mgr.
OTHERS PRESENT:	Jill Baber, NDIT Dean DePountis, Atty. General's Office Sam Unruh, NDIT Members of the Public

CALL TO ORDER:

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

THE FOLLOWING MEMBERS WERE PRESENT REPRESENTING A QUORUM: SUPT. BAESLER, TREASURER BEADLE, MR. BURTON, MR. EVANOFF, AND MR. MICKELSON.

ACCEPTANCE OF AGENDA:

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

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

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

Ms. Murtha provided an update on the appointment of a new TFFR Board member.

ACCEPTANCE OF MINUTES:

The Board considered the minutes for the April 25, 2024, TFFR Board meeting.

IT WAS MOVED BY MR. MICKELSON AND SECONDED BY MR. EVANOFF AND CARRIED BY A VOICE VOTE TO ACCEPT THE APRIL 25, 2024, MINUTES AS DISTRIBUTED.

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

GOVERNANCE:

Election/Appointment of Officers:

Board members made the following nominations:
- Dr. Lech as Board President
- Mr. Burton as Board Vice President
- Mr. Mickelson and Dr. Lech as State Investment Board (SIB) Representatives
- Mr. Burton as SIB Alternate
- Mr. Mickelson, Mr. Burton, and Dr. Lech as TFFR GPR members
- Mr. Mickelson as the SIB Audit Committee representative

IT WAS MOVED BY MR. EVANOFF AND SECONDED BY TREASURER BEADLE AND CARRIED BY A ROLL CALL VOTE TO APPROVE AND APPOINT THE NOMINATION SLATE.

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

Annual Governance and Policy Review Report:

Mr. Mickelson provided an overview of the review process for the governance manual by staff and the Governance and Policy Review (GPR) Committee. Mr. Roberts commented on the proposed edits to the manual.

IT WAS MOVED BY MR. MICKELSON AND SECONDED BY MR. EVANOFF AND CARRIED BY A ROLL CALL VOTE TO APPROVE THE INTRODUCTION AND FIRST READING OF TFFR GOVERNANCE MANUAL POLICIES: SECTION 1, SUBSECTIONS A, B, C, D, E, G, H, J, K, M, O, Q, R AND SECTION 2, SUBSECTIONS D, E, F, AND G.

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

Annual TFFR Program Review:

Mr. Roberts provided the Annual TFFR Program review which includes the Board's mission, goals, policies, and by-laws. The materials included a program monitoring summary, board awards, customer satisfaction reports, and the annual code of conduct policy affirmation. Each Board Member is required to complete the code of conduct affirmation annually. Board discussion followed.

IT WAS MOVED BY MR. MICKELSON AND SECONDED BY TREASURER BEADLE AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE ANNUAL TFFR PROGRAM REVIEW.

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

Employee Benefits Programs Committee Update:

Ms. Murtha provided an update from the June 17, 2024, EBPC meeting. Staff appeared before the EBPC to present on the actuarial impact of two bills relating to the TFFR program. Board discussion followed.

Pioneer Project Update:

Mr. Roberts provided an update on the pension administration system project. The first and second phases of user acceptance testing was completed. Staff have begun training on the Employer Self-Service portal. The project is currently on time and within the budget. The vendor informed staff that they wouldn't be ready for an October go live date and provided options for a later date. Staff and the project manager discussed the options and decided to choose the later option to ensure the entire system is ready. Any cost related to a later launch date will be absorbed by the vendor. Board discussion followed.

REPORTS:

Quarterly Investment Report:

Mr. Anderson provided an investment performance update as of March 31, 2024, and July 16, 2024. Mr. Anderson provided a summary of market returns. As of March 31, 2024, TFFR's total relative return is 0.3% year to date. Mr. Anderson reviewed the returns for the one, three, and five-year periods. TFFR has performed at or above median compared to peers for most time periods. One time period shows lower performance because of real estate. Mr. Anderson reviewed the upcoming changes in the SIB investment program which is becoming more specialized. The consulting plan has been updated and approved by the SIB. Staff are currently in the process to hire an Asset Allocation consultant which will allow for a simpler more uniform asset allocation. Mr. Anderson provided information from pension fund level studies on actuarial experience, asset/liability, and asset allocation studies and summarized the advantages of retaining an Asset Allocation consultant. Board discussion followed.

Quarterly Internal Audit Report:

Ms. Seiler provided the Internal Audit report for the quarter ended March 31, 2024. The Executive Limitations audit was completed, and no exceptions were found. Ms. Seiler summarized IA staff activities including committee meetings, meetings with the IA consultant, and retirement program activities. Board discussion followed.

Quarterly Outreach Report:

Ms. Mudder provided the outreach report for the quarter ended March 31, 2024. Lists were provided of media coverage on RIO programs and meetings in which RIO staff participated. Ms. Mudder provided a summary of outreach activities, publications sent through GovDelivery to TFFR members and Business Partners, and the engagement rates for TFFR topics. RIO now had a LinkedIn account which is mostly investment focused. The agency also made its existing YouTube page public. The content on this page is mostly retirement focused. Board discussion followed.

Quarterly TFFR Ends Report:

Mr. Roberts provided the TFFR Ends Report for the quarter ended June 30, 2024. The Retirement Specialists attended a customer service workshop hosted by the National Council on Teacher Retirement (NCTR). Ms. Murtha attended the NCTR Director's Meeting. The GPR Committee completed their annual review of the TFFR policy manual. Ms. Murtha and Mr. Roberts presented to the EBPC. Board discussion followed.

Executive Limitations/Staff Relations:

Ms. Murtha provided the Executive Limitations/Staff Relations report. The first year of the enhanced new board member onboarding process has been completed. RIO has begun posting some of the new internal investment positions. Two positions were posting internally and offers have been accepted by current RIO staff. Interviews are underway for the new Investment Accountant and Portfolio Manager of Fixed income positions. Ms. Murtha reviewed RIO participation in statewide initiatives, ongoing project activities, and ED activities. Board discussion followed.

IT WAS MOVED BY MR. EVANOFF AND SECONDED BY MR. MICKELSON AND CARRIED BY A VOICE VOTE TO ACCEPT THE QUARTER INVESTMENT, QUARTERLY INTERNAL AUDIT, QUARTERLY TFFR ENDS, QUARTERLY OUTREACH, AND THE EXECUTIVE LIMITATIONS/STAFF RELATIONS REPORTS.

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

The Board recessed at 2:50 p.m. and reconvened at 3:00 p.m.

<u>EDUCATION</u>:

<u>Survey Approaches and Metrics</u>:

Ms. Jill Baber and Mr. Sam Unruh, NDIT, presented on survey approaches. The presentation included information on collecting valid data, determining the purpose of the information you will collect, designing surveys, and the necessary communications during the survey process. Board discussion followed.

<u>CONSENT AGENDA</u>:

IT WAS MOVED BY MR. MICKELSON AND SECONDED BY TREASURER BEADLE AND CARRIED BY A ROLL CALL VOTE TO APPROVE DISABILITY APPLICATIONS 2024-5D AND 2024-6D.

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

<u>ADJOURNMENT</u>:

With no further business to come before the Board, Mr. Burton adjourned the meeting at 3:45 p.m.

Prepared by,

Missy Kopp, Assistant to the Board

AI STATE POLICY & PRACTICES

SEPTEMBER 26/27, 2024

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Agenda

- NDIT introduction(s)
- Introduction to State AI policy
- General AI Guidance
- Team ND tools & education for generative AI
- AI efforts at the State
- Q&A

AI Policy Updates

- AI policy published January 31, 2024
  - Minor revisions (revised 2/8) made to AI policy based on feedback from Agency and Technology Business Partner (TBP) feedback
- ***Policy and guideline are living, breathing documents, with regular review and updating of the policy/guideline annually, or as immediate changes are required***

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Created: 8/10/2023
Revised: 2/8/2024
Reviewed: 2/8/2024

State of North Dakota Artificial Intelligence Policy

INTRODUCTION

1.0 PURPOSE

The purpose of the Artificial Intelligence (AI) Policy is to embrace the innovative benefits AI can provide to increase productivity and citizen experience, while reducing risks and concerns in using this emerging technology. This policy protects the safety, privacy, and intellectual property rights of the State of North Dakota by ensuring all forms of AI are handled in a transparent, consistent, responsible, ethical and secure manner.

2.0 BACKGROUND

Artificial Intelligence develops data processing systems that perform functions normally associated with human intelligence, such as reasoning, learning, and self-improvement. Generative AI is a prevalent example of AI and includes examples such as chatbots, virtual assistants, and other systems based on it, including:

- Standalone systems (i.e. OpenAI – ChatGPT, DALL-E, Microsoft Copilot),
- Integrated as features within search engines (i.e. Microsoft Bing chat, Google Bard), or
- Embedded in other software tools.

Generative AI tools can enhance productivity by assisting with tasks, like drafting documents, editing text, generating ideas, creating images, and software coding. However, these technologies also come with potential risks that include inaccuracies, bias, and unauthorized use of intellectual property in generated content. Content created by AI, and the public availability of information submitted to AI, could pose security and privacy concerns.

The State of North Dakota consulted the following sources:

- National Institute of Standards and Technology (NIST) Special Publication (SP) 1270 Towards a Standard for Identifying and Managing Bias in Artificial Intelligence,
- NIST AI 100-1 Artificial Intelligence Risk Management Framework, and

AI Policy & Guidelines

Questions: *aiquestions@nd.gov*

1. AI Policy

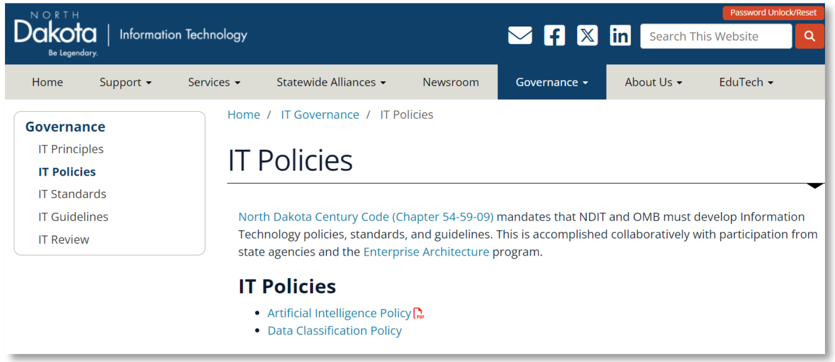
   NDIT has partnered with the Governor's Office and Cabinet Agency leadership to develop the first formal AI Policy which centers around supporting healthy exploration of new AI tools in a responsible and secure manner. Also, related: Data Classification Policy

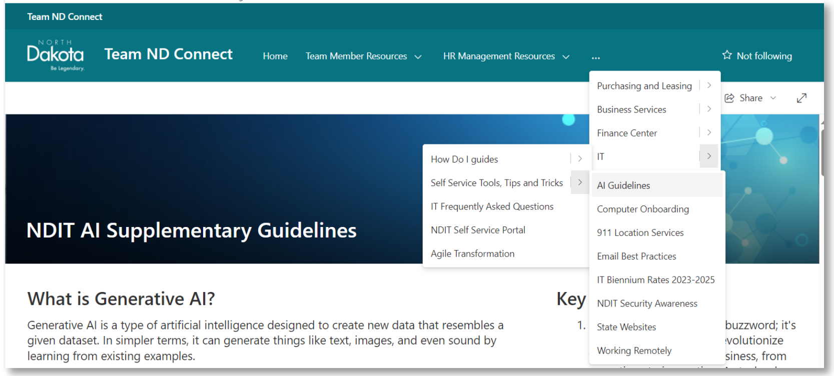
2. AI Guideline

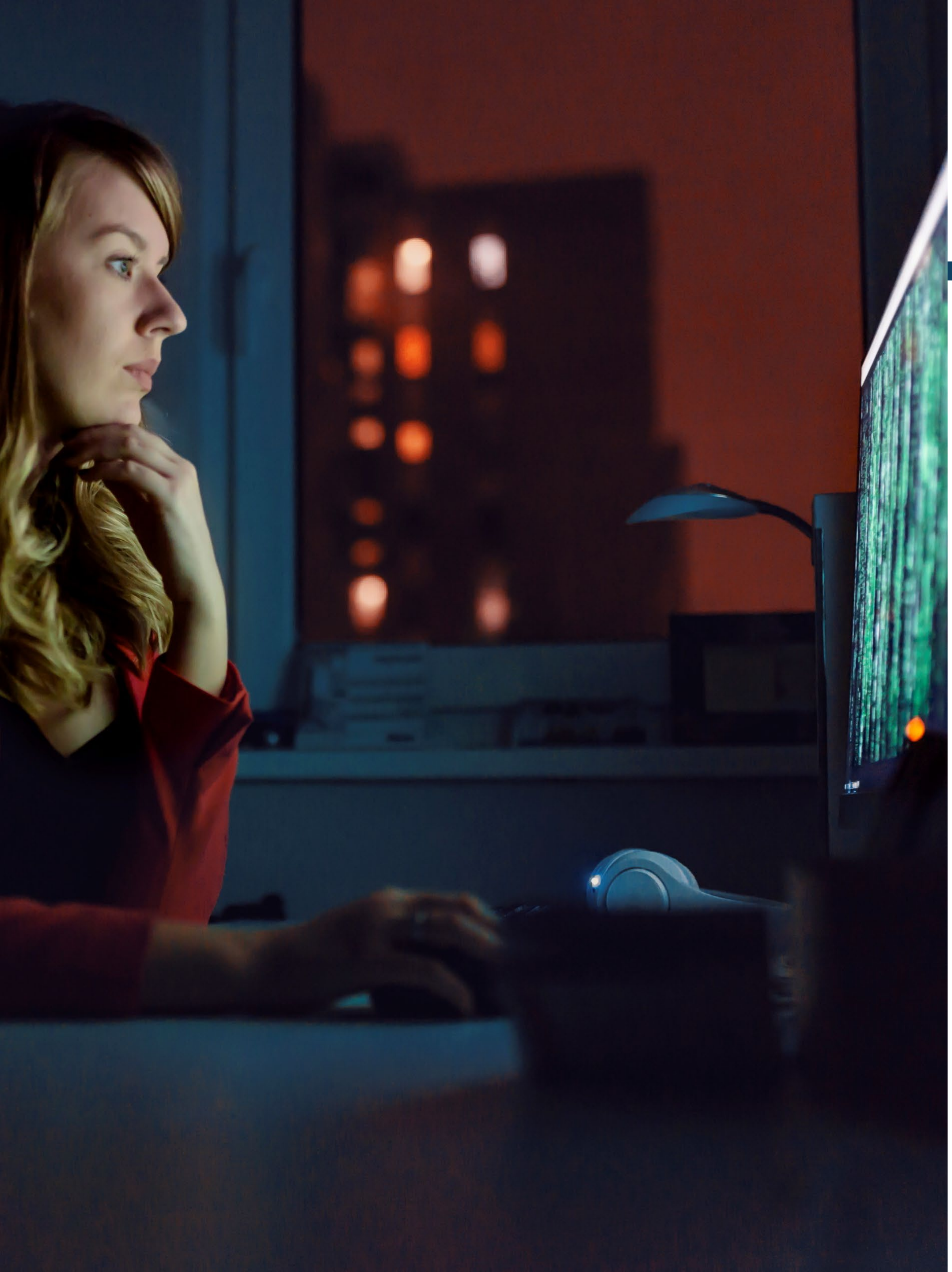
   The formal guideline document outlines best practices around responsible, ethical and secure use of AI tools. Since the topic is vast, this document focuses on the highest impact areas.

3. AI Supplementary Guidance

   Because there is a large amount of content on this subject, it can be hard to know where to focus and what applies to us within the State. We've also curated some supplementary guidance where we can expand on concepts introduced in the formal guideline. The content found here is closer to the depth of content used in our presentations.







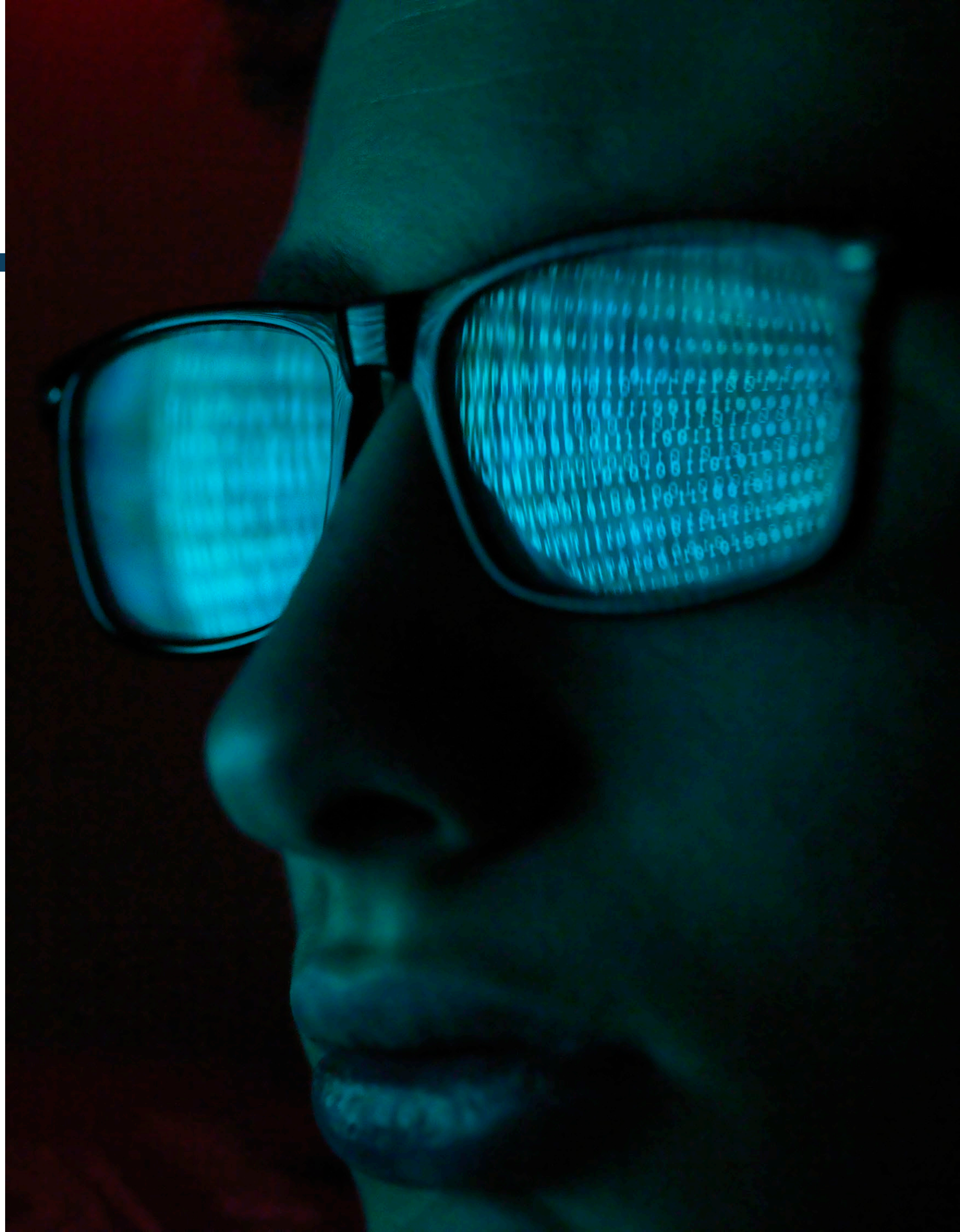
AI Policy High Level

- Validity and reliability
  - AI technology must be verified as consistently accurate and valid.
  - AI technology should be monitored over time.
- Transparency
  - Agencies should disclose when citizens are interacting directly with AI or outputs generated by AI.
  - Agencies should have records regarding where and how they are using AI.
- Accountability
  - Agencies are responsible for their responsible use of AI.
  - Follow standard/AI security rules.
  - Having AI and Data Governance policies in place strongly supports AI use.

AI Policy High Level

- Security and Risk Management
  - Third-party use of AI
  - System risk assessment
    - ServiceNow Request

      Service Catalog / Submit a Service Request / Find or Improve a Tech Solution / IT Review Request
  - Training
  - Privacy
  - Records retention



AI Policy High Level

- Ethics, fairness, and bias
  - All data are biased—agencies should understand their data
  - In addition to legal and copyright concerns, we must also ensure AI does not infringe on human rights, civil liberties, or dignity→→Foundation of Governance.

ND Data Classification

Data Classifications		
Low Risk	**Moderate Risk**	**High Risk**
1. The data is intended for public disclosure. 2. Unauthorized disclosure, alteration, or destruction of the data would result in little or no risk to the state and its citizens.	1. The data is not generally available to the public. 2. Unauthorized disclosure, alteration, or destruction of the data could result in a moderate level of risk to the state or its citizens.	1. The data requires protection by law/regulation. 2. Unauthorized disclosure, alteration, or destruction of the data could cause a significant level of risk to the state or its citizens.

How to Use Generative AI

Common Generative AI use cases:

- Content Creation
- Customer Service
- Image Generation
- Writing assistance
- Summarization
- Product Design
- Coding assistance
- Music generation
- Language Translation
- Document generation
- Assisting in Data Analytics

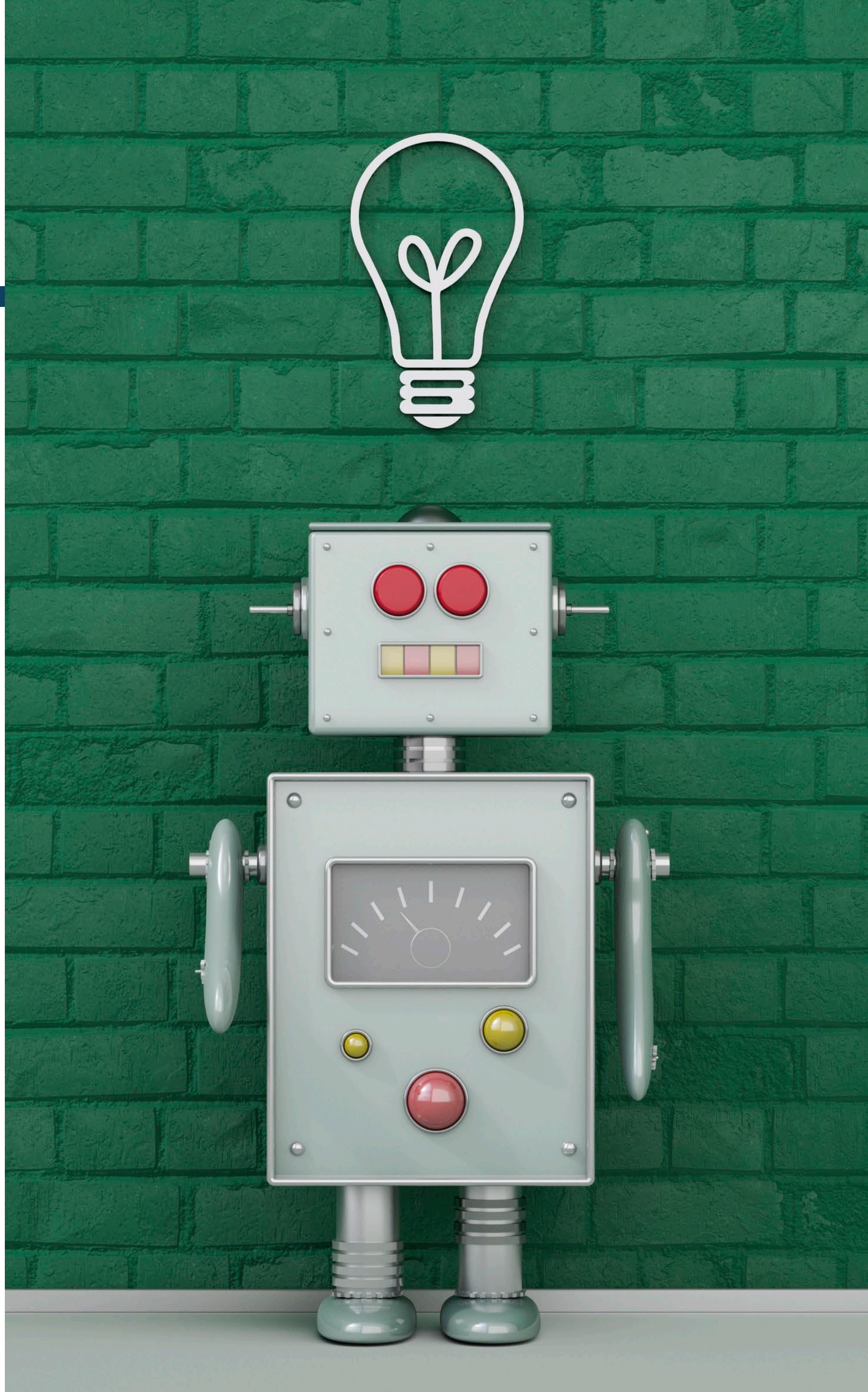
AI Dos and Don'ts

Do

- Be specific in your prompt creation.
- Ask for things about which you have some understanding (ex. understand the code you are creating or the Data you are summarizing).
- Review results for accuracy and verify the information is correct

Do Not

- Assume the generated material is accurate or truthful.
- Assume the generated material is copyright free.
- Include sensitive or confidential information in the prompt.

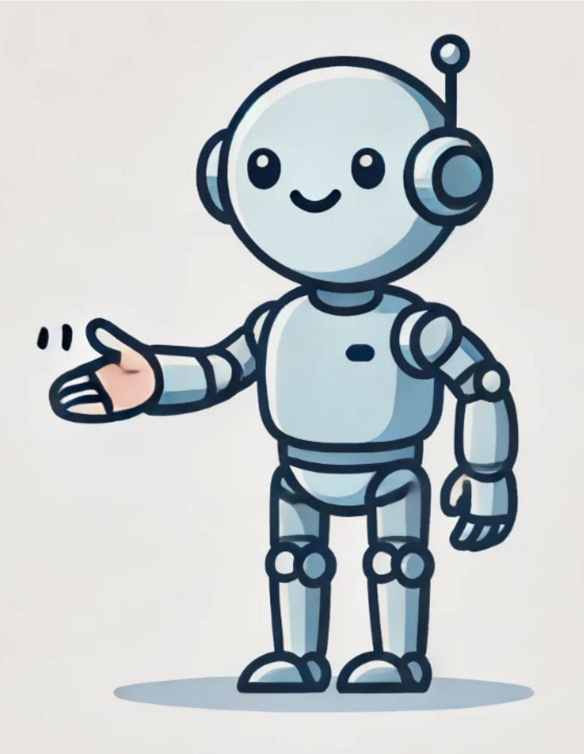


AI Considerations

- **<u>Bias</u>**: Be vigilant to eliminate bias in data and algorithms to ensure fairness.
- **<u>Validity</u>**: Ensure data quality and model accuracy for reliable AI outcomes.
- **<u>Ethics</u>**: Prioritize ethical AI practices to avoid harm and promote accountability.
- **<u>Big Data</u>**: AI works best with absolutely massive data sets.
- **<u>Security</u>**: AI can introduce significant security and privacy risks.

Team ND Resources

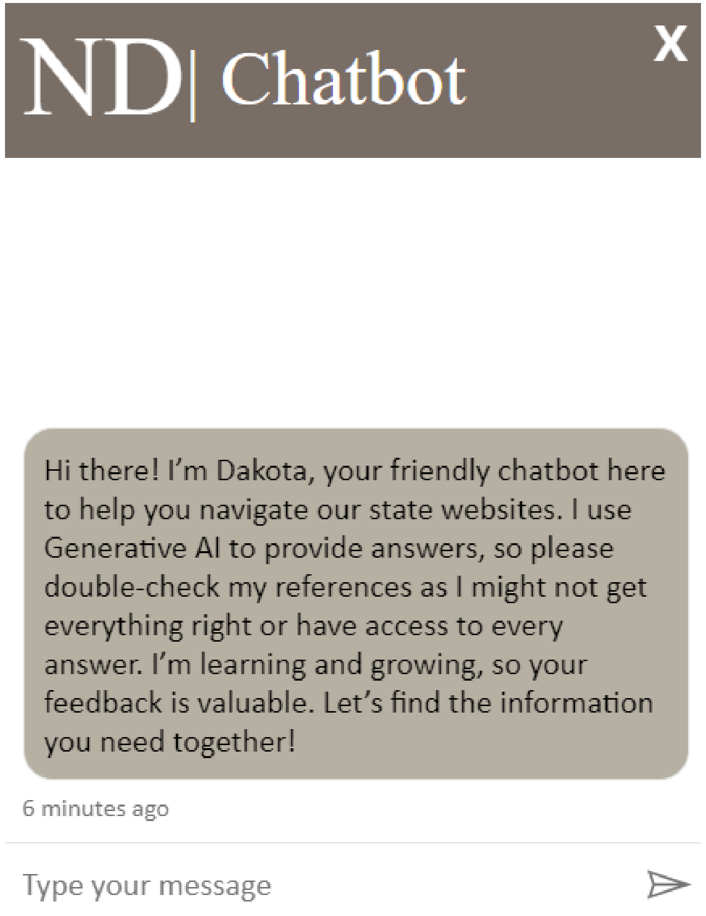
- Resources and educational materials found on Team ND Connect
- NDIT is producing guidance and short instructional videos for AI topics:
  - Tools:
    - ChatGPT
    - Microsoft Copilot (general web LLM)
  - Responsible AI
    - Overview
    - Generative AI Do’s and Don’ts



Project: North Dakota Chatbot

Working with Department of Commerce and other agencies to pilot a chatbot for ND.gov.

- Focus is on Commerce website to start, but also testing statewide versions
- Began as a POC originating from the Governor’s AI Cohort, has moved to pilot phase
- Allows us to test different chatbot tools and functionality
  - Currently working with 140+ volunteers to test two versions
- Project highlights need for clean source data (web content)



Additional AI Efforts in State Government

- Implementation of statewide data strategy and modern data platform to help agencies better use data for insights and impact
  - Data is critical! Data must be "AI-ready"; quality data is foundational to realizing the full potential/value of AI
- AI Cohort in ND Government
  - AI use case exploration and development
- AI governance activities
  - AI Executive working group launched in June 2024
    - Collaboration between NDIT, NDUS/Higher Ed, K12 and other State Agencies
    - Organized to conduct exploratory study to result in a formal budget request or series of requests to enable affordable, accessible, transparent, consistent, responsible, and secure AI integration and use within State government
- Evaluation of potential generative AI productivity tools to support efficiencies across Team ND
  - Generative AI solutions (e.g., Microsoft Copilot, OpenAI ChatGPT)
  - NDIT is working to procure and test AI-based development tools which would allow for faster and cheaper development and cross-training (e.g., github Copilot)
- Inventory of AI solutions, including process to identify solutions that have AI capabilities at intake of project

Questions?

Contact Info

- aiquestions@nd.gov

- NDIT
  - Kim Weis, Chief Data Officer
    - kimweis@nd.gov
  - Jill Baber, Product Owner, Data Science & Analytics Scrum Team
    - jkbaber@nd.gov

AI OVERVIEW & OPPORTUNITIES FOR TFFR

Overview of Artificial Intelligence

Definition of Artificial Intelligence (AI):

- AI is the simulation of human intelligence in machines that analyze data, recognize patterns, and make informed decisions.

AI Applications in Financial Services:

- Fraud detection, risk assessment, automated trading, and customer service.
- Enhances decision-making and manages large-scale data effectively.

Overview of Artificial Intelligence

Specific AI Applications in Pension Administration:

- Data Processing & Management: Automating updates and verification processes.
- Member Communications: Chatbots and virtual assistants for real-time interactions.
- Investment Optimization: AI models for portfolio management and risk control.
- Compliance Monitoring: Ensures regulatory adherence through real-time tracking.

Overview of Artificial Intelligence

Key Drivers for AI Adoption:

- Efficiency Gains: Automation of complex administrative tasks.
- Accuracy and Error Reduction: Minimizing errors in benefit calculations.
- Cost Reduction: Reducing operational costs through automation.
- Data-Driven Decision-Making: Better forecasting and insight generation.
- Customization and Personalization: AI-tailored retirement planning based on individual profiles.

Opportunities of AI in Pension Administration

- Automation of routine tasks: Data entry, compliance, member communications.
- Enhanced decision-making: Analyzing large datasets for better investment decisions.
- Fraud detection: Identifying anomalies in transactions.
- Predictive analytics: Accurate forecasting of liabilities and contributions.
- Personalized member experience: Real-time answers and retirement planning.

Advantages of AI in Pension Administration

- Efficiency gains: Reduced manual workloads and faster response times.
- Improved accuracy: Fewer errors in calculations and documentation.
- Scalability: Handling growth in member bases or regulation changes.
- Better investment management: Optimizing portfolios and risk management.

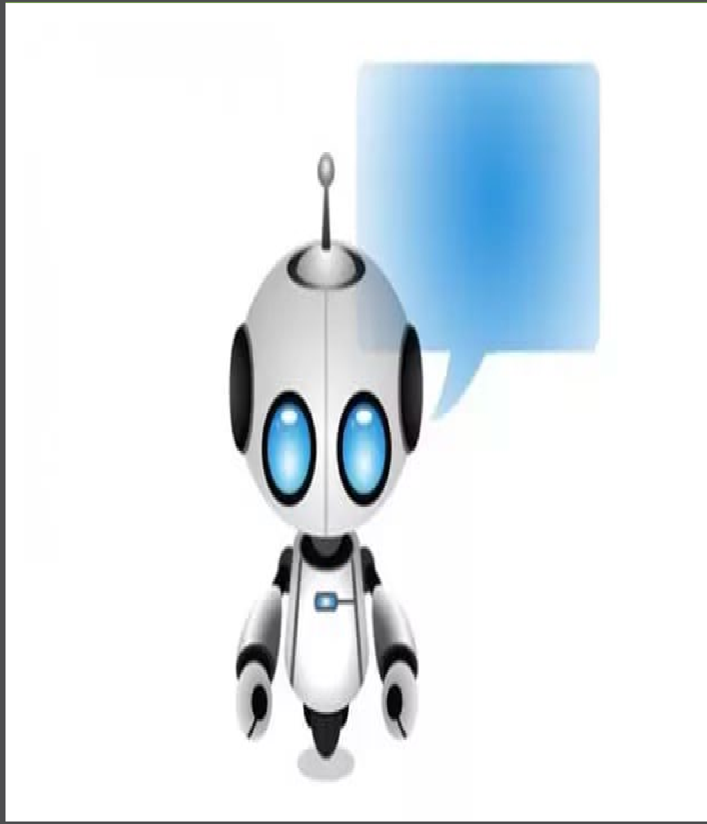
Case Studies

CalPERS introduced an AI-powered chatbot to handle inquiries like benefit status, contact updates, and retirement guidance, reducing call center volume and improving member satisfaction.

- 24/7 availability, reduced wait times, enhanced member satisfaction.

The UK Teachers' Pension chatbot assists with contribution details, benefit forecasts, and form filling.

- Faster response times and personalized interactions based on pension history.



RISKS OF AI IN PENSION ADMINISTRATION

Data security: Protecting sensitive personal and financial data.

• Bias in algorithms: Ensuring fairness in decision-making.

• Job displacement: Automation leading to potential job loss.

• Dependence on technology: Avoid over-reliance on AI systems.

• Regulatory compliance: Navigating complex pension regulations.

RISK MITIGATION STRATEGIES

- Human oversight: Integrating human decision-makers in AI systems.
- Transparency and ethics: Ensuring AI systems are explainable and ethical.
- Data security: Implementing encryption, regular audits, and strong protocols.
- Regulatory compliance: Adhering to privacy and pension regulations.

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MEMORANDUM

TO: **TFFR**

FROM: **Chad Roberts, DED/CRO**

DATE: **September 18, 2024**

RE: **September TFFR GPR Committee update**

The TFFR GPR Committee met on Tuesday, September 10, 2024, at 3:30 pm. All members of the committee were present. The committee took the following actions:

- Reviewed and approved the committee work plan for the 2025 fiscal year.
- Reviewed the changes to the TFFR policy manual and added one change in wording to Section 1, sub-section G, identifying the Governor of North Dakota or designee as a member of the SIB.
- Received a legislative planning presentation from ED Murtha and discussed the proposed legislation.

Board Action Requested: Information only

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MEMORANDUM

TO: **TFFR**
FROM: **Chad Roberts, DED/CRO**
DATE: **September 17, 2024**
RE: **2nd Reading of TFFR Policy Manual revisions as recommended by GPR committee**

Summary

As part of the established work plan for the TFFR GPR Committee adopted during the September 2023 meeting, the committee undertook a full review of the TFFR Policy Manual. The committee reviewed the 2023 manual in parts at the November 2023, February 2024, and May 2024 committee meetings.

The committee finalized its review at the May 2024 meeting and recommended the following policy manual changes to the full TFFR Board for the first reading at the July 2024 meeting.

According to policy, proposed policy amendments require two readings before the full Board can pass them, but amendments may be proposed at any time. The Board conducted a first reading of the proposed changes at the July 2024 meeting; no proposed amendments were made.

At its September meeting, the TFFR GPR Committee once again reviewed the proposed changes. Only one minor change was recommended, and that change is denoted in the last section of this memo.

TFFR Policy Manual sections reviewed at the November 2023 committee meeting

Program Manual Section 1 Sub-section I
Program Manual Section 1 Sub-section J
Program Manual Section 1 Sub-section K
Program Manual Section 1 Sub-section O
Program Manual Section 1 Sub-section P
Program Manual Section 1 Sub-section S
Program Manual Section 2 Sub-section A
Program Manual Section 2 Sub-section B
Program Manual Section 2 Sub-section C

TFFR Policy Manual sections reviewed at the February 2024 committee meeting

Program Manual Section 1 Sub-section A
Program Manual Section 1 Sub-section B
Program Manual Section 1 Sub-section C
Program Manual Section 1 Sub-section D
Program Manual Section 1 Sub-section E
Program Manual Section 1 Sub-section F
Program Manual Section 1 Sub-section L
Program Manual Section 1 Sub-section T
Program Manual Section 1 Sub-section U
Program Manual Section 2 Sub-section D

TFFR Policy Manual sections reviewed at the May 2024 committee meeting

Program Manual Section 1 Sub-section G
Program Manual Section 1 Sub-section H
Program Manual Section 1 Sub-section M
Program Manual Section 1 Sub-section N
Program Manual Section 1 Sub-section Q
Program Manual Section 1 Sub-section R
Program Manual Section 2 Sub-section E
Program Manual Section 2 Sub-section F
Program Manual Section 2 Sub-section G

Recommended revisions to policy reviewed at the May 2024 committee meeting by section

Section 1, subsection A: Formatting and grammatical changes, change ‘employer’ to ‘business partner’

Section 1, subsection B: Formatting and grammatical changes

Section 1, subsection C: Formatting and grammatical changes

Section 1, subsection D: Formatting and grammatical changes

Section 1, subsection E: Formatting and grammatical changes, change ‘employer’ to ‘business partner’

Section 1, subsection G: Formatting and grammatical changes only.

Section 1, subsection H: Formatting and grammatical changes, updated agency address.

Section 1, subsection J: Change verbiage from “employer” to “business partner” and punctuation corrections. Renumber subsection 3 to 2 to correct misnumbering.

Section 1, subsection K: Change verbiage from “employer” to “business partner”.

Section 1, subsection M: Formatting and grammatical changes, eliminated sentence regarding filing with Secretary of State, changed “employer” to “business partner,” eliminated sentence address signing of the minutes by the Board President, and updated expense form name.

Section 1, subsection O: Reformatted citation of the North Dakota Administrative Code to the recommendation of the Communication and Outreach Director based on State guidelines.

Section 1, subsection Q: Updated expense form names.

Section 1, subsection R: Updated North Dakota Century Code cited and updated conflicts of interest to reflect language in SIB policy manual.

Section 2, subsection D: Formatting and grammatical changes; change ‘employer’ to ‘business partner’; removed “database” as the TFFR program maintains files in multiple modes such as the cloud, physical, database, etc.; changed “counseling” to “education”; changed “teachers” to “members” to establish uniformity throughout the document. In-staff subbing contribution and reporting rules updated to comply with changes in statutes.

Section 2, subsection E: Changed “employer” to “business partner,” clarified section on Model 3 election specifying that it has been eliminated as an option, clarified that Model 2 partial contributions must be full percentages after July 1, 2025.

Section 2, subsection F: Changed “employer” to “business partner,” clarified agreements with mailing companies and third parties must be executed before sharing membership information.

Section 2, subsection G: Section eliminated and merged into section F.

<u>Recommended revisions to policy reviewed at the September 2024 committee meeting by section</u>

Section 1, subsection G: Replace “Lt. Governor of the State of ND” with “Governor of the State of North Dakota or designee.”

ACTION REQUESTED: Motion to Approve Second Reading and Final Adoption to the following policies: TFFR Governance Manual Section 1, subsections A, B, C, D, E, G, H, J, K, M, O, Q, R and Section 2, subsections D, E, F, and G.

TEACHERS' FUND FOR RETIREMENT BOARD PROGRAM MANUAL

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NORTH Dakota | Teachers' Fund For Retirement

~~Board Program Manual~~

~~ND~~ TEACHERS' FUND FOR RETIREMENT ~~(NDTFFR)~~ BOARD

PROGRAM MANUAL

~~C~~TABLE OF CONTENTS

~~ND~~ TEACHERS’ FUND FOR RETIREMENT ~~(NDTFFR)~~ BOARD PROGRAM MANUAL

SECTION I: TFFR GOVERNANCE POLICIES

A. Introduction and Purpose

The ~~ND~~ North Dakota Teachers’ Fund for Retirement (TFFR) Board of Trustees is dedicated to ethically serving the members and stakeholders of the TFFR pension plan and ensuring that the plan is effectively managed. The Board is committed to excellence in Board governance. An effective governance structure is essential to fulfilling fiduciary duties and Board responsibilities in accordance with the highest standards of professional responsibility, accountability, and transparency.

The Board developed and adopted this TFFR Board Program Manual to establish the framework within which the Board intends to set governance and oversight policy.

The purpose of th~~e~~is m~~M~~anual is to:

1. Provide orientation material and exhibits for new TFFR trustees and executive staff as to the roles, responsibilities, policies, procedures, and activities in the governance and oversight of the TFFR plan.

2. Serve as an ongoing reference manual for current trustees and staff.

3. Describe the roles and responsibilities of the Board of Trustees as a Board, I~~i~~ndividual Trustees, Committees, Staff, and Service Providers.

4. Describe the relationship between the TFFR Board, the State Investment Board (SIB), and the ~~Retirement and Investment Office (RIO~~Retirement and Investment Office~~)~~ (RIO) as it relates to the administration of the TFFR plan.

5. Establish a Board meeting protocol that outlines the manner in which the Board will conduct itself to enable the Board to carry out its responsibilities as effectively and efficiently as possible, and in accordance with state and federal law.

6. Facilitate the organized, efficient, and cohesive functioning of the Board.

7. Facilitate effective communication among the Trustees, staff, plan members, ~~employer~~business partners, and other external parties.

8. Define responsibility and accountability for hiring and monitoring outside service providers.

9. Document the method by which the Board will conduct a Board self- assessment.

10. Document Board governance and program policies, administrative rules, and state statutes governing the plan.

The TFFR Board Program Manual is an evolving set of documents that reflect the Board's current governance practices. The ~~Manual~~manual will be reviewed by the Board on an annual basis. Board trustees, the Executive Director, Deputy Executive Director-Chief Retirement Officer, and/or legal counsel may recommend modifications for Board consideration and approval.

The contents of the TFFR Board Program Manual are intended to be consistent with state and federal laws, rules, and regulations. If there is any conflict between the provisions included in this ~~Manual~~manual and state or federal law, the law prevails.

B. TFFR Program Overview

1. History

The ~~ND Teachers' Fund for Retirement (ND~~TFFR~~)~~, ~~(~~formerly the ~~ND~~ North Dakota Teachers' Insurance and Retirement Fund or NDTIRF,~~)~~ was created by the ~~ND~~ State Legislature in 1913. The defined benefit plan provides lifetime retirement, ~~disability~~disability, and survivor benefits for ~~ND~~ North Dakota public school educators.

Membership participation, benefits provided, contribution requirements, and plan provisions are described in State Law and the TFFR Member Handbook.

2. Legal Framework

~~ND Century Code (~~NDCC~~)~~ § ~~Chapter~~ 15-39.1 contains the legal authority and statutory language governing the TFFR plan, and is supplemented by ND ~~Administrative Code~~AC § ~~Title~~ 82. ~~-~~ TFFR is a qualified (tax exempt) defined benefit public pension plan covered under Section 401(a) of the Internal Revenue Code (IRC).

C. TFFR Mission, Vision, and Values

1. Our Mission

To administer a comprehensive retirement program that provides North Dakota public educators with a foundation for retirement security.

2. Our Vision

To be a trusted leader in the administration of a financially sound retirement program for North Dakota educators by providing exceptional customer service, professional plan management, and organizational effectiveness by adhering to the principles of good governance, transparency, and accountability.

3. Our Core Values

a. Customer Satisfaction and Commitment to Excellence which are demonstrated by our trustworthiness, accountability, and respectfulness.

~~a.~~

b. Strong Governance and Operational Effectiveness through our strategic leadership, fiduciary responsibility, ethical practices, and transparency.

~~b.~~

D. TFFR Board Authority, Composition, Appointment, Terms

1. Board Authority

TFFR is governed by a ~~7-member TFFR~~ Board of Trustees who are charged with oversight, policy making, and administration of the TFFR retirement program as provided under NDCC § 15-39.1-05. The trustees are fiduciaries, and as such have the highest standard of law placed on them.

2. Board Composition

a. The Board is composed of seven trustees consisting of:

1) Two elected state officials:

- State Treasurer (ex officio)
- State Superintendent of Public Instruction (ex officio)

2) Five members appointed by the Governor:

- Two board members who are actively employed as elementary or secondary teachers in full-time positions not classified as school administrators. The appointment is made from a list of three nominees submitted to the Governor by ND United (NDU).
- One board member who is actively employed as a full-time school administrator. The appointment is made from a list of three nominees submitted to the Governor by the ND Council of Educational Leaders (NDCEL.
- Two board members who are retired members of the Fund. The appointment is made from a list of three nominees submitted to the Governor by the NDRTA.

3. Board Trustee Desired Attributes

Board trustees should possess or develop the following desired attributes in order to become an effective board trustee.

a. Unwaveringly ethical.

b. Perpetually inquisitive.

c. Knowledgeable about the membership.

d. Ability to understand complex actuarial, financial, and investment concepts.

e. Committed to strong board governance practices.

f. Diligent and willing to spend time to learn best pension practices.

g. Professional, respectful, and courteous demeanor.

h. Proactive and responsive approach to member needs.

i. Committed and engaged.

j. Active listening and communication skills.

k. Critical thinking skills.

l. Ability to make fair and timely decisions.

m. Open and accountable to stakeholders.

4. Board Appointment Process

When a TFFR Board trustee term expires or vacancy occurs, the Executive Director will notify the Governor's Office and the applicable stakeholder group (i.e., NDU~~ND United~~, ~~ND Council of Educational Leaders~~NDCEL, or ~~ND~~NDRTA~~ Retired Teachers Association~~) of the vacancy. Board trustee desired attributes and board responsibilities will be provided to the Governor's Office and applicable stakeholder group to assist them in making board nominee or trustee selection.

NDU, NDCEL, or NDRTA will submit a list of three Board nominees to the Governor's Office, as required by state law. Board nominees must complete the "Application for Boards and Commissions" from the Governor's Office in order to be considered for TFFR Board appointment. This application contains information about the nominee's background, education, experience, financial disclosures, and references.

After reviewing the Board nominee applications, the Governor will make the trustee appointment, and will notify the selected nominee and the Executive Director. The Governor's Office will send the newly appointed trustee a Certificate of Appointment which provides formal documentation of appointment to the TFFR Board. The Governor's office will also send an Oath of Office and Statement of Intent which must be signed by the trustee and returned to the Governor's Office. These documents confirm the trustee's appointment is official. Trustees can then carry out their official duties as a Board member and can be paid for authorized expenses.

5. Trustee Terms, Resignations and Vacancies

The State Treasurer is an ex-officio member of the Board and serves on the Board throughout the term of the State Treasurer's elected position. A lawful Deputy of the State Treasurer (pursuant to NDCC 44-03-01) may act with the full authority of the State Treasurer, and may vote when serving as the State Treasurer's official designee on the Board.

The State Superintendent of Public Instruction is an ex-officio member of the Board and serves on the Board throughout the term of the State Superintendent's elected position. The State Superintendent may designate an individual to attend and participate in Board meetings, however the designee may not vote since the designee does not have the lawful authority to vote on behalf of the State Superintendent.

Each of the five Governor-appointed trustees are appointed for a term of five years. The terms of office are staggered with the five appointed trustee positions beginning July 1 and expiring on June 30 of each successive year. There is no limit to the number of terms a trustee may serve on the Board. Trustees may remain on the Board until they are reappointed or until their successors are appointed.

Appointed active trustees who terminate employment may not continue to serve on the Board as active teacher representatives. Appointed active and retired trustees may resign from the Board by providing written notice to the Governor and the TFFR Board.

Appointed trustee position vacancies which occur before the expiration of a term will be filled by the Governor, and the new appointee will complete the term for which the original trustee was selected.

E. TFFR Board - Duties and Responsibilities

1. Fiduciary Duties

TFFR trustees are fiduciaries, and as such, have the highest standard of law placed upon them. Trustees are expected to discharge their duties with the utmost honesty and integrity and to act solely in the interest of the members, retirees, and beneficiaries for the exclusive purpose of providing benefits and paying reasonable expenses of administering the TFFR program.

Fiduciary duties include the following:

a. Duty of loyalty. The obligation to act for the exclusive benefit of the plan participants and beneficiaries. Regardless of how trustees are selected, trustees must put the interests of all plan participants and beneficiaries above their own interests or those of any third parties.

b. Duty of care. The responsibility to administer the plan efficiently and properly. The duty of care includes consideration and monitoring of the financial sustainability of funding practices and the effective administration of plan benefits in compliance with applicable laws.

c. Duty of prudence. The obligation to act prudently in exercising power or discretion over the interests that are subject of the fiduciary relationship. A trustee should act in a manner consistent with a reasonably prudent person exercising care, skill, and caution.

2. Board Responsibilities

The TFFR Board of Trustees is responsible for oversight, policy making, and administration of the TFFR plan as provided under NDCC 15-39.1-05.2.

Board responsibilities include:

a. Establish and monitor policies for the administration of the TFFR plan.

b. Set legislative priorities and positions, submit legislative proposals, and monitor legislation affecting the plan.

c. Develop and adopt administrative rules and board policies to administer the plan.

d. Establish and monitor TFFR plan funding policy and progress.

e. Establish and monitor TFFR investment policies and asset allocation under NDCC 21-10-02.1.

f. Select and monitor the performance of consultants, advisors, and service providers for the plan.

g. Select and monitor actuarial consultant(s) to provide actuarial and technical consulting services including annual actuarial valuations and GASB reports, periodic actuarial experience studies, independent actuarial audits, and other special projects and studies; develop and monitor actuarial funding policy, assumptions, methods, and factors; analyze proposed legislative changes; and advise the Board on actuarial, technical, and administrative issues.

h. Select and monitor medical consultant to conduct disability reviews.

i. Select and monitor investment consultant to perform asset allocation and liability studies.

j. Monitor and pay plan benefits, consulting fees, administrative and investment expenditures.

k. Administer the plan so as to maintain the plan's qualified status under Internal Revenue Code requirements.

l. Review and approve applications for disability retirement, Qualified Domestic Relations Orders (QDROs), and other special benefit payments.

m. Review and decide board appeals.

n. Determine appropriate levels of service and monitor outreach programs provided to members and ~~employer~~business partners.

o. Monitor RIO budget, expenditures, financial reporting system, and financial audit.

p. Monitor RIO information technology systems, projects, and security.

q. Select TFFR representatives to serve on SIB and monitor investment program activities and fund performance.

r. Select TFFR representative to serve on SIB Audit Committee and monitor audit program activities.

s. Inform the ~~State Investment Board (~~SIB~~)~~, which is the administrative board of the ~~Retirement and Investment Office (~~RIO~~)~~, of the TFFR program needs, policies, and services expected to be provided through RIO.

t. Participate with the RIO Executive Director in the hiring of the ~~TFFR~~ Chief Retirement Officer – ~~RIO~~ Deputy Executive Director.

F. TFFR Board Trustees and Officers – Duties and Responsibilities

1. TFFR Trustee

Trustees must be willing and able to devote the necessary time to fulfill their duties on the Board. This commitment includes the responsibility to:

a. Act as a member of a seven-member Board of Trustees to provide leadership, oversee plan administration, and set the strategic direction for the TFFR program.

b. Prepare for and attend Board and Committee meetings.

c. Be an informed and active member of the Board, fully participating in the decisions and actions of the Board and its Committees by making independent assessments and reasonable judgments.

d. Acquire and maintain the knowledge and skills necessary to perform trustee duties.

e. Follow Board policies and procedures, applicable state and federal laws and rules.

f. Be accurate when communicating with other trustees, members, beneficiaries, interested parties, the public, and RIO staff.

g. Act collegially with the other trustees and staff in the conduct of TFFR business.

h. Bring to the attention of the Board matters of concern that affect the TFFR plan.

i. Seek the advice of the Executive Director, legal advisor, and other trustees when necessary to fulfill their fiduciary duties.

j. Comply with the Board's Code of Conduct and Ethics.

k. Adhere to state law regarding confidentiality of member records and benefits.

l. Adhere to state law regarding Open Meetings and Open Records.

m. Evaluate trustee's individual performance and the Board's performance as a whole.

2. TFFR Board President

The Board President's principal role is to lead the Board in the conduct of Board business by managing the affairs of the Board and ensuring the integrity of the Board's process. The Board President must be willing and able to devote the time necessary to fulfill these special responsibilities. This commitment includes the responsibility to:

a. Convene and preside over all Board meetings in a collegial, fair, and efficient manner following Board policies, procedures, and applicable state laws and rules.

b. Review and approve the agenda for regular and special Board meetings.

c. Ensure proper and timely flow of adequate information to the Board.

d. Solicit input from trustees regarding matters before the Board.

e. Ensure adequate time is provided for effective study and discussion of business.

f. Make Committee assignments.

g. Execute documents and other legal instruments on behalf of TFFR as required by state law, authorized by the Board, or determined in conjunction with the Chief Retirement Officer.

h. Represent the Board to outside parties and organizations.

i. Lead the Board's self-assessment and self-development processes.

j. Perform all other duties identified by the Board.

3. TFFR Board Vice President

The Vice President will perform the duties of the President in the absence of the President.

4. TFFR Representatives to SIB

The TFFR Board selects two trustees to represent TFFR on the SIB. The TFFR Board also selects one trustee as an alternate to serve on the SIB in the absence of either designated representative. TFFR representatives to the SIB must be from the following categories: active or retired members. A third trustee from either category will be appointed to serve as the alternate to the SIB.

The TFFR representatives to the SIB have the same authority and responsibilities as do other SIB trustees as provided in NDCC 21-10 and outlined in the SIB Governance Manual.

5. Alternate TFFR Representative to SIB

The TFFR Board selects one alternate TFFR representative to serve on the SIB.

The Alternate TFFR representative to the SIB will perform the duties of the regular TFFR representative on the SIB in the absence of that trustee.

6. TFFR Representative to SIB Audit Committee

The TFFR Board selects one TFFR representative on the SIB to serve on the SIB Audit Committee, subject to official appointment by SIB Chair.

The TFFR representative on the SIB Audit Committee has the same authority and responsibilities as do other trustees on the SIB Audit Committee which are outlined in the SIB Audit Committee Charter.

G. State Investment Board

The ~~ND State Investment Board (~~SIB~~)~~ is responsible for oversight, policy making, and administration of the SIB investment program as provided under NDCC § 21-10. As such, TFFR assets, as well as other state pension, insurance, and other state funds, are invested by the SIB.

The SIB is composed of thirteen trustees consisting of:

a. ~~Lt.~~ Governor of the State of ~~ND~~North Dakota or Designee~~.~~
b. State Treasurer.
c. Director of Office of Management and Budget.
d. Director of Workforce Safety & Insurance.
e. Commissioner of University and School Lands.
f. Two TFFR trustees.
g. Two PERS trustees.
h. Two members, each of whom by experience is familiar with institutional investments, appointed by the governor. One initial appointee shall serve a term of three ~~-~~years, one initial appointee shall serve a term of five years, and all subsequent appointees shall serve five-year terms.
i. Two members, one from the senate and one from the house of representatives, or the member's designee, who serve on the legacy and budget stabilization fund advisory board, as selected by that board.

Investment of TFFR assets is based on the asset allocation and investment policy statement approved by the TFFR Board and accepted by the SIB. Funds are invested following the "prudent investor rule" and must be invested exclusively for the benefit of TFFR members.

The SIB is also the governing body of~~ the ND Retirement and Investment Office (~~RIO~~)~~.

Retirement and Investment Office

~~The ND Retirement and Investment Office (~~RIO~~)~~ coordinates the activities of the TFFR retirement program and SIB investment program as provided under NDCC 54-52.5. The governing body of RIO is the SIB, although the TFFR Board and SIB each maintain their legal identities and authority under state law.

RIO is responsible for developing the agency budget, providing the staff, and allocating necessary resources to administer both the TFFR and SIB programs, subject to budget approval by the Legislature. The TFFR Board and SIB provide input to RIO Executive Management to ensure retirement and investment program needs, policies, and services are considered.

RIO Executive Director is the administrator of RIO and is responsible for oversight and administration of all RIO programs and operations. RIO Deputy Executive Director – Chief Retirement Officer assists in the administration of RIO and the TFFR retirement program.

RIO is an administrative agency of the State of North Dakota and operates from an office located at 1600~~3442~~ East Century Avenue, Suite 3 in Bismarck, North Dakota.

I. Delegation to Staff and Organizational Structure

The TFFR Board delegates administration of the TFFR program to the RIO Executive Director. Daily operations of the program are delegated to the RIO Deputy Executive Director - TFFR Chief Retirement Officer, subject to approval by the RIO Executive Director.

The RIO Deputy Executive Director – TFFR Chief Retirement Officer reports directly to the RIO Executive Director.

J. Staff - Duties and Responsibilities

1. Deputy Executive Director – Chief Retirement Officer

The RIO Deputy Executive Director – Chief Retirement Officer is hired by the RIO Executive Director, serves in an unclassified position, and is paid such salary as the Executive Director determines. The Board delegates responsibility for administering the TFFR program to the RIO Executive Director, some or all of those duties may be delegated to the RIO Deputy Executive Director – Chief Retirement Officer by the RIO Executive Director. The Board will participate with the Executive Director in the hiring of the Deputy Executive Director-Chief Retirement Officer.

Duties and responsibilities include:

a. Assist the Executive Director in planning, supervising, and directing overall RIO programs in accordance with the SIB governance policies and state laws and rules, and represent the Executive Director in his/her absence.

b. Assist the Executive Director in administering the TFFR retirement program in accordance with governing statutes, rules, and TFFR Board policies and perform related work as assigned by the TFFR Board, including interpretation of the state and federal law which governs the retirement program.

c. Assist the Executive Director in developing annual and long-range plans for the retirement program.

d. Assist the Executive Director in the development of administrative rules, policies, and procedures necessary to administer the program.

e. In the absence of or at the direction of the Executive Director, represent the TFFR Board on retirement program issues.

f. Assist the Executive Director in the direction of TFFR legislative agenda and process.

g. Maintain effective relationships with TFFR members, beneficiaries, ~~employer~~business partner~~s~~, state officials, legislators and legislative committees, member and ~~employer~~business partner- stakeholder groups, the media, and the public at large.

h. Work with actuarial consultant, medical consultant, legal counsel, auditor, investment consultant, and other service providers in administering the plan, and in coordination with the Executive Director to keep staff and Board members apprised of consultant services and recommendations.

i. Assist the Executive Director in the formulation of RIO's budget, including staffing needs, program costs, operating costs, information technology requirements, and resources to assure that retirement program obligations are met.

j. Assist the Executive Director in the development and preparation of Board and Committee meeting agendas and materials, meeting minutes, required notices, procedures, and applicable rules and regulations of the fund, and attend all Board and Committee meetings.

k. In coordination with the Executive Director, advise the Board on significant issues, problems or developments pertaining to the plan, and provide recommended courses of action as appropriate regarding Board policy or action.

l. Maintain the data, records, and files of TFFR members, beneficiaries, and ~~employer~~business partners including membership data, salary, service, contributions, and benefit payments.

m. Ensure the accurate and timely collection of member and ~~employer~~business partner contributions, maintenance of member accounts, processing of account claims, and payment of pension, disability, ~~death~~death, and refund benefits as allowed under state and federal law.

n. In the absence of the Executive Director the Deputy Executive Director-Chief Retirement Officer will be responsible for the administration of the TFFR program. In the absence of both the Executive Director and the Deputy Executive Director – Chief Retirement Officer, the TFFR Board may recommend to the SIB that another RIO staff member serve as Interim Deputy Executive Director- Chief Retirement Officer.

2. Executive Director

The Executive Director (ED) is hired by the SIB, serves in an unclassified position at the SIB's pleasure, and is paid such salary as the SIB determines.
Duties and Responsibilities include:

a. Administer the investment and retirement programs of RIO, oversee planning, supervising, and directing overall RIO programs in accordance with SIB and TFFR governance policies, federal and state laws, and rules, and perform related work as assigned by the SIB and TFFR Board.

b. Responsible for the developing the annual, ~~biennial~~biennial, and strategic long-range plans for RIO and both the SIB and TFFR Board.

c. Develop administrative rules, ~~policies~~policies, and procedures necessary to administer the retirement and investments programs and seek committee and board approval for changes when appropriate.

d. Direct the preparation and execution of the RIO budget and legislative agenda for the agency and both the SIB and TFFR boards.

e. Represent RIO, promote RIO programs, and has the authority and responsibility to carry out the day-to-day administrative duties for RIO including developing and approving policies relating to the effective operation of the Office.

f. Develop and prepare or direct the preparation of agendas and materials, meeting minutes, required notices, procedures, and applicable rules and regulations for the retirement and investment programs and attend all meetings of the SIB and TFFR Board and corresponding committees.

g. Hire staff as necessary to carry out the responsibilities of RIO. Provides leadership, coaching and feedback to assigned staff, recommending measures to improve performance and increase efficiency.

h. The TFFR Board will participate with the Executive Director in the hiring of the Deputy Executive Director-Chief Retirement Officer and participate in any surveys conducted by the SIB – Executive Review and Compensation Committee for executive team members.

i. Maintain effective relationships with clients, members, beneficiaries, ~~employer~~business partner~~s~~, state officials, legislators and legislative committees, member and ~~employer~~business~~-~~ partner stakeholder groups, the media, and the public at large relevant to both the retirement and investment programs.

j. Advise the SIB and TFFR Board on significant issues, problems or developments pertaining to the plan, and provide recommended courses of action as appropriate regarding Board policy or action.

K. Service Providers – Duties and Responsibilities

1. Actuary

The TFFR Board is responsible for selecting and monitoring the actuarial consultant for the plan.

Duties and responsibilities include:

a. Provide actuarial and technical consulting services for the plan.
b. Prepare annual actuarial valuation and GASB reports, periodic actuarial experience studies, and other special projects and reports.
c. Develop and monitor actuarial funding policy, assumptions, methods, factors, etc.
d. Analyze proposed legislative changes.
e. Advise the Board on actuarial, technical, and administrative issues.

The Board utilizes a request for proposal (RFP) process to periodically select and approve the plan's consulting actuary. It is the Board's intent to issue RFP's every 6 to 10 years, however the timing may be adjusted at the Board's discretion.

The Board monitors actuarial costs and services and may extend the actuarial consulting service contract for 2-year terms, as approved by the TFFR Board.

The Board also hires an independent actuary to periodically perform an actuarial audit of the plan's consulting actuary. The Board utilizes an RFP process to select and approve the plan's actuarial auditor.

2. Medical Consultant

The TFFR Board is responsible for selecting and monitoring a medical consultant for the plan to conduct disability reviews, disability re-certifications, and perform other medical reviews as necessary.

The Board monitors medical consulting costs and services and may extend the medical consulting contract for 2-year terms, as approved by the TFFR Board. The Board may delegate this responsibility to the Executive Director.

3. Legal Counsel

The ~~ND~~North Dakota Attorney General's Office (AGO) provides legal services to the TFFR Board and staff. The AGO assigns an assistant attorney general to advise the Board on legal issues related to plan administration.

Duties and Responsibilities include:

a. Represent the Board and staff in all legal matters.
b. Draft proposed legislation, administrative rules, and other legal documents.
c. Review and advise on retirement program issues.
d. Research and interpret state statutes and federal regulations.
e. Review Board policies, procedural issues, contracts, and other legal documents.
f. Respond to legal questions from staff, members, ~~employer~~business~~s~~ partners, and other individuals.
g. Advise and educate the Board and staff on legal matters that relate to the administration of the retirement system including Board appeals, fiduciary duties, ethics, open records and meetings, potential litigation, and other legal issues.
h. Work with staff from the AGO in representing the retirement plan in administrative hearings, litigation, and other matters involving the AGO.
i. Work with outside legal counsel on application of Internal Revenue Code technical requirements and plan qualification issues.

4. Auditor (External financial)

The ~~ND~~North Dakota State Auditor's Office selects the external financial auditor for RIO, with input from the SIB Audit Committee.

Duties and Responsibilities include:

a. Perform annual audit of RIO's financial statements.
b. Perform annual audit of TFFR's GASB 68 schedules.
c. Provide report on internal controls and compliance.
d. Provide required written communications.

Results of the annual financial audit are reported directly to SIB Audit Committee and communicated to the TFFR Board in conjunction with annual audit services report.

5. Investment Consultant, Managers, and Advisors

The SIB is responsible for investment of TFFR trust fund assets, and selects the investment consultant, managers, custodian, and advisors for the SIB program.

The governing body of each fund invested by the SIB is required to use RIO staff and consultants in developing asset allocation and investment policies. The TFFR Board has contracted with the SIB investment consultants to perform asset allocation and liability modeling studies in the past.

L. Election of TFFR Board Officers and SIB trustee positions

1. Board Officers

The TFFR Board will elect the following Board officers each year. Any trustee may serve as a TFFR Board officer.

- Board President
- Board Vice President

The TFFR Board will select the following representatives to the SIB each year. Any trustee may serve as a TFFR representative to the SIB, except the State Treasurer is required to be an ex officio member of both the TFFR Board and SIB so may not be selected as a TFFR representative to the SIB.

- Two TFFR representatives to SIB
- One TFFR alternate representative to SIB
- One TFFR representative to SIB Audit Committee (from SIB)
- Three Board members to serve on the TFFR Governance & Policy Review Committee.

2. Election Procedure

The TFFR Board will elect the Board officers, TFFR representatives to the SIB, and members of any committees, at the first regular Board meeting immediately following July 1 of each year. There must be a quorum of four board members in attendance to elect officers.

Four affirmative votes are required to elect.

3. Term

Board officers and TFFR representatives to SIB will hold office for one year, or until their successors are elected.

There is no limit to the number of years a trustee may hold office.

4. Vacancies

A Board officer or TFFR representative to the SIB may resign from their position by providing written notice to the Board and Chief Retirement Officer.

Board officer or TFFR representative to the SIB vacancies that occur before the expiration of a term will be filled by the Board at the next regular meeting of the Board following the vacancy.

M. Board and Committee Meetings

1. Open Meetings

All Board and Committee meetings are open to the public in accordance with ~~ND~~North Dakota Open Meetings laws pursuant to NDCC 44-04-17.1.

Meetings include any gathering of a quorum of the members of the Board (four members constitute a quorum for TFFR Board) regarding public business, and includes committees, subcommittees, informal gatherings or work sessions, and discussions where a quorum of members are participating by phone or any other electronic communication (either at the same time or in a series of individual contacts).

Emails or text messages between Board members regarding public business may constitute a meeting and violate open meeting laws even if done on personal devices under circumstances and within the parameters established by the ~~ND~~North Dakota Office of Attorney General.

Training seminars and purely social gatherings attended by a quorum of the Board or Committee are not meetings, however, as soon as the members discuss any public business, it becomes a meeting.

2. Rules of Order

All Board and Committee meeting will be conducted in accordance with Robert's Rules of Order Newly Revised, except as superseded by state law and Board governance policies.

3. Meeting Schedule

The Board will hold meetings as often as necessary for the transaction of business but will conduct a minimum of six Board meetings each year.

The Board will approve an annual Board meeting schedule identifying the time, date, and location of regular Board meetings. Board meetings will generally be scheduled for the Thursday afternoon preceding SIB meetings beginning in July of each year unless a different day is determined. (Note: SIB meetings are generally scheduled for the 4th Friday of each month.) The Board or Board President may modify this schedule, if needed. ~~This schedule must be filed annually with the Secretary of State's office.~~

The Board President, or any two members of the Board, may call for special or emergency Board meetings.

At the July Board meeting each year, the Board will elect officers, review governance and program policies, and develop the annual board agenda and education plan.

The Board may hold an annual Board retreat, either on-site or off-site, to focus on board development, strategic planning, legislative planning, developments in public pension administration, and other topics as determined by the Board. A Board Retreat must also be noticed as a meeting of the Board.

4. Meeting Notice

Public notice of all Board and Committee meetings is made in accordance with state law pursuant to NDCC 44-04-20.

Meeting notices are posted on the Secretary of State website, RIO public website, RIO office, and the meeting location.

5. Meeting Agendas

An annual schedule of agenda topics, reports, and education items for each regular board meeting will be developed by the Executive Director and approved by the Board. The annual schedule will also include review of the Board Governance Manual over several meetings.

Board meeting agendas will be prepared by the Executive Director and approved by the Board President using the annual schedule as a basis for topics to be included on each regular meeting agenda. Additional topics may be added by the Executive Director, Chief Retirement Officer, Board President, and Board trustees subject to approval by the Board President.

The meeting agenda should contain enough detail so trustees, members, interested parties, and the general public can understand the nature of each agenda item.

Any individual or organization who desires to appear on the agenda of a Board or Committee meeting must notify the Executive Director in writing at least ten working days prior to the meeting date. The request must include the reason or topic to be discussed with the Board. Subject to approval by the Board President, the individual will be placed on a Board meeting agenda.

Regular Board meeting agendas may be added to or altered at the time of the meeting. For special or emergency meetings, only the specific topics included in the meeting notice may be discussed.

The meeting agenda will identify if the item requires Board action, information only, consent agenda, or executive session. The agenda will also note the estimated amount of time expected for each topic.

a. **Action** items on the agenda contain information that require Board discussion and vote (annual reports, policy changes, benefit determinations, legislative positions, etc.)

b. **Information** only items contain information that it is important for the Board to know, but do not require Board action or a Board vote (project updates, status reports, education, etc.)

c. **Consent agenda** items will primarily consist of approval of disability applications, QDROs, ~~employer~~business partner reviews, or other routine administrative matters that require Board action as recommended by staff, but which typically do not require Board discussion. Trustees may request any item to be removed from the Consent agenda `to allow for Board discussion and action.

d. If an **Executive session** is required or anticipated, the Executive session must be listed as an agenda item (i.e., confidential member information, attorney consultation, etc.)

6. Meeting Materials

The Executive Director will coordinate the preparation of Board meeting materials and develop an Executive Summary.

Meeting materials will generally be sent to trustees 5-7 days before the meeting, unless otherwise indicated.

Materials will be posted on the public RIO website, except for Executive Session or confidential items which will be sent via secure email to the trustees only.

7. Meeting Attendance and Quorum

Attendance at Board meetings is an essential element of a trustee's fiduciary responsibility. Therefore, Board members are expected to attend all Board and applicable Committee meetings.

Board members may attend meetings in person, by telephone or video conference.

A quorum of four members must be present for the Board to conduct business.

Board members should come to meetings having read the materials prepared and circulated by staff and/or consultants.

Board members should be inquisitive, and should appropriately question staff, advisors, and fellow trustees as circumstances require.

Board members should conduct themselves with integrity and dignity, always maintaining the highest ethical conduct.

Board members should make every effort to engage in collegial deliberations and to maintain an atmosphere in which trustees can speak freely and explore ideas before becoming committed to positions.

8. Voting

Voting on matters before the Board will be by roll call vote, except for procedural matters.

Board members have a duty to vote unless there is an applicable statute that would require or permit abstention.

Each Board member is entitled to one vote. Proxy voting is not allowed.

Four members constitutes a quorum.

Four votes are required for resolution or action by the Board.

Board minutes will show the recorded vote of each Board member.

9. Public Access and Comment

All Board and Committee meetings are open to the public and all persons who wish to attend may do so in accordance with ~~ND~~North Dakota Open Meeting laws, NDCC 44-04-17.1.

Public participation or comments during Board meetings may be allowed and limited to reasonable time limits at the discretion of the Board President as follows:

a. By written request to appear on a Board meeting agenda.
b. By written request to speak on a specific Board meeting agenda topic.
c. By written request to speak on any TFFR related topic which is not on a regular Board meeting agenda.
d. By submitting a letter or written document for distribution to the Board.

See TFFR Board Public Participation Guidelines (Exhibit 2).

10. Executive Sessions

The Board or Committee may conduct business in Executive Session only as permitted by state law, NDCC 44-04-19.2. Executive sessions shall be presided over by the Board President or Committee Chair.

Only the portions of a public meeting that are specifically confidential or exempt from the Open Meetings law may be closed to the public and held in Executive Session. The remainder of the meeting must be open to the public.

11. Closed Meeting Procedures

State law specifies the following general procedure for holding an executive session.

a. Convene meeting in an open session preceded by public notice.
b. Announce during the open portion of the meeting the topics to be considered during the executive session and the legal authority for holding an executive session on those topics.

c. Pass a motion to hold an executive session unless motion is unnecessary because a confidential meeting is required to discuss confidential information.
d. Record the executive session electronically.
e. Limit the topics considered during the executive session to the announced, authorized topics.
f. Take final action on the topics considered in the executive session during the open portion of a meeting.
g. All substantive votes must be recorded by roll call.

12. Meeting Minutes and Records

Minutes will be taken at all Board and Committee meetings and presented for approval at the next regular meeting. ~~The Board President or Committee Chair will sign the minutes after Board approval.~~

At a minimum, minutes must include:

a. The names of the members attending the meeting.
b. The date and time the meeting was called to order and adjourned.
c. A list of topics discussed regarding public business.
d. A description of each motion made at the meeting and whether the motion was seconded.
e. The results of every vote taken at the meeting; and
f. The vote of each member on every recorded roll call vote.

Approved meeting minutes will be made available on the RIO-TFFR website, or upon request. Meeting minutes and records of the Board and Committee activities and actions will be maintained as required by state law.

13. Meeting Payment and Travel Expense Reimbursement

Board members, excluding ex-officio members, will receive compensation and travel expenses for attending Board and Committee meetings as provided in state law, NDCC 15-39.1-08.

Board members will be paid $148 for each Board or Committee meeting attended. Board members will be paid the full amount for each meeting attended that lasts for two or more hours. Meetings lasting less than two hours will be paid at one half the amount. Mileage and travel expense reimbursement will be paid as provided in state law.

Board members may not lose regular salary, vacation pay, vacation or any personal leave, or be denied attendance by the state or political subdivision while serving on official business of TFFR.

To receive meeting payment, Board members must complete a ~~travel expense form~~Board Meeting Payroll & Expenses form SFN62436 and submit it to RIO.~~ *See RIO Board Meeting In-State Travel Expense Voucher (Exhibit 3).*~~

N. Committees

1. Standing Committees

The TFFR Board may establish permanent standing committees. The TFFR Board has created a permanent standing Governance and Policy Review Committee.

a. POLICY OF THE TFFR BOARD – Governance & Policy Review Committee
The Governance & Policy Review Committee is authorized to:
- Review and recommend policies for the governance manual.
- Ensure the governance manual reflects best practices and governance.
- As directed by the board, review specific governance concerns, and make recommendations for improvement.
- Request RIO staff for specific topic training or education

2. Special Committees

The Board may establish special ad hoc committees as needed to carry out duties specified by the Board.

The Board President will appoint the Committee Chair and Committee members for special committees.
Committee Chairs are responsible for organizing the work of the Committee. In fulfilling this function, Committee Chairs:

a. Schedule Committee meetings as often as necessary.
b. Consult with the Executive Director or designee in setting the meeting agenda in accordance with the Committee's delegated responsibilities.
c. Conduct Committee meetings in a collegial, fair, and efficient manner following Board policies, procedures, and applicable state law such as the open meetings law.
d. Ensure the Committee operates to assist the Board consistent with its delegation.
e. Provide Committee updates and reports to the Board.

When the Committee's duties are completed, the Committee automatically ceases to exist.

3. Audit Committee

The SIB Audit Committee also functions as the Audit Committee for the TFFR Board since the SIB is the governing body of the RIO agency and RIO administers both the TFFR retirement program and SIB investment program.

The TFFR Board selects one TFFR representative on the SIB to serve on the SIB Audit Committee, subject to official appointment by SIB Chair. This representative will act as the TFFR Board's liaison to the SIB Audit Committee.

The TFFR Board's representative on the SIB Audit Committee and/or the Audit Supervisor, will provide Audit Committee updates and monitoring reports to the Board.

O. Board Appeals

Any member, beneficiary, ~~employer~~business partner, or affected individual may appeal a determination made by the Executive Director or designee regarding TFFR eligibility, benefits, or other plan provisions with which the individual does not agree.

The affected individual must file a written request for Board review within thirty days after notice of the determination of the Executive Director or designee has been mailed to the affected individual. If a request for Board review is not filed within the thirty-day period, the decision of the agency is final. The request for Board review must include the decision being appealed, the reason(s) the individual believes the decision should be reversed or modified, and any relevant documentation.

To review the matter, an appeal hearing will be scheduled as part of a regularly scheduled Board meeting. A summary of the relevant facts and documentation will be presented. The affected individual and/or designee may attend and speak at the hearing. After review of the facts, documentation, and testimony, the Board will make its decision. The Board's decision will be communicated in writing to the affected individual within 30 days of the decision.

Any individual aggrieved by a decision of the Board may initiate a formal administrative action against the Board in accordance with NDAC § ~~Admin.istrative Code Chapter~~ 82-10 and ND C~~entury~~ C~~ode Chap.~~ § 28-32.

P. Board Communications

The TFFR Board President and Executive Director; or Deputy Executive Director – Chief Retirement Officer in the absence of or at the direction of the Executive Director; are authorized to represent the Board on retirement program issues and in announcing Board positions and decisions, unless otherwise determined by the Board.

Board members may respond to general inquiries about the TFFR retirement program, however specific questions from members, beneficiaries, ~~employer~~business partners, and the public should be referred to the Communications Director or other ~~Retirement and Investment Office~~RIO staff to provide more detailed information about the retirement program.

Q. Trustee Orientation and Education Program

Trustees are responsible for making policy decisions affecting all major aspects of TFFR plan administration. Therefore, trustees should acquire and maintain an appropriate level of knowledge that provides and improves core competencies necessary to govern a large, complex pension fund.

1. Board Member Core Competencies

Board members should develop and maintain their knowledge and understanding of the issues involved in the prudent management of the retirement plan. Specific areas include:

a. Public pension plan governance
b. Asset allocation and investment management
c. Actuarial principles and funding policies
d. Financial reporting, controls, and audits
e. Benefits administration
f. Open meeting and open records laws
g. Fiduciary responsibilities
h. Ethics and conflicts of interest

2. Board Member Education

To permit Board members to develop core competencies, discharge their fiduciary duties, and ensure Board members have a full understanding of the issues facing the TFFR plan, the Board encourages trustee education including:

a. New trustee orientation
b. Mentoring program
c. Educational conferences, workshops, and other training programs
d. In-house education sessions
e. Fiduciary education and ethics training

f. Open meeting and open records training
g. Webinars, Reports, and Studies

Board members should identify areas in which they might benefit from additional education, and work with the Executive Director to find or develop educational opportunities to best address those needs.

Board members must annually report trustee education received each year. *See TFFR Board Education Report Form*~~. (Exhibit 4).~~

3. New Trustee Orientation

Each new Board member should attend a new trustee orientation session(s) as soon as possible after appointed to the Board or elected to office. The orientation sessions will be developed by the Executive Director, and will include, at minimum, review of the following topics and materials:

a. Introduction to RIO staff
b. Tour of RIO office
c. Board Governance Manual
d. Board duties and responsibilities
e. History and overview of the plan
f. Overview of TFFR-SIB-RIO organizational structure
g. Laws, rules, and board policies governing the plan
h. Benefit structure, administration, outreach services
i. Fiduciary responsibilities, conflict of interests, and ethics
j. Open meetings and open records
k. Board meeting schedule and protocol
l. Board meeting minutes and materials
m. Actuarial valuation report, assumptions, methods, and funding policy
n. Actuarial experience report
o. Actuarial audit report
p. Annual financial report
q. Investment program, investment policy statement, asset allocation, and performance
r. RIO website – TFFR and SIB sections
s. Legislative issues
t. List of educational conferences and training sessions
u. Other relevant information or materials deemed appropriate

4. Mentoring Program

The Board President will assign each new trustee an experienced Board mentor to assist the new trustee in becoming familiar with Board responsibilities. The Board mentor should have at least two years of experience on the Board.

The Board mentor should contact the new Board member periodically outside of regularly scheduled Board meetings for consultation or discussion related to Board member duties and responsibilities. The new Board member should contact the Board mentor as often as necessary.

Appointment of a Board mentor does not constitute appointment of a committee and does not implicate open meeting notice requirements.

5. Educational Conferences, Workshops, and other Training Programs

The Executive Director or designee will maintain a list of educational conferences, workshops, and other training programs appropriate for Board members to attend. The list will be provided at least annually to Board members. Board members may attend such conferences or others deemed to be appropriate by the Executive Director.

Subject to budget availability, Board members may attend at least one out of state educational conference each year. New trustees, or trustees with investment or other specialized Board responsibilities, may attend additional educational training sessions to help develop core competencies and become proficient in performing their duties.

The Executive Director will review conference agendas and materials to ensure they are geared toward trustee education, and subject to budget availability, will approve Board travel requests. Board travel outside of the continental United States must be approved by the Board President and Executive Director.

Any Board member who attends a conference, workshop, or other training program will present an oral report to the Board.

The Executive Director will inform the Board of educational conferences, workshops, or other training programs attended by trustees on an annual basis.

6. In-House Education Sessions

Based on the education needs identified by Board members, the Executive Director will arrange for staff or outside service providers to conduct educational sessions at regularly scheduled Board meetings. Topics may include pension board governance, actuarial and funding issues, investments, retirement operations and benefits, workforce demographics and shortages, and other topics determined by the Board.

7. Fiduciary Education and Ethics Training

At least every two years, a fiduciary education and ethics training session will be conducted at a regularly scheduled Board meeting. The session will review and update trustees regarding fiduciary issues and ethical conduct affecting their service on the Board.

8. Open Meetings and Open Records Training

At least every two years, an open meetings and open records training session will be conducted at a regularly scheduled Board meeting. The session will review and update trustees regarding open meetings and open records requirements affecting their service on the Board.

9. Webinars, Reports, and Studies

Board members are encouraged to subscribe to mailing lists and review websites for information about public pension plan conferences, webinars, reports, and studies from pension and investment organizations. Examples include:

a. National Council on Teacher Retirement (NCTR)
b. National Institute on Retirement Security (NIRS)
c. National Education Association-Retired (NEA-R)
d. National Retired Teachers Association (NRTA-AARP)
e. International Foundation for Employee Benefit Plans (IFEBP)
f. Center for State and Local Government Excellence (SLGE)
g. Center for Retirement Research at Boston College (CRR)
h. Callan Investment Institute (Callan)
i. Council of Institutional Investors (CII)

The Chief Retirement Officer will also provide links to recent published reports and studies with Board meeting materials.

10. Reimbursement of Education Expenses

Trustees must request approval for travel to educational conferences or other educational programs. Trustees should notify the Chief Retirement Officer of their interest in attending an educational conference or other program. RIO will complete the travel authorization form which must be signed by the trustee and approved by the Executive Director. *See ~~ND~~North Dakota Authorization for Out of State Travel ~~(Exhibit 5)~~.*

RIO will make all travel arrangements and pay conference registration fees, unless otherwise agreed to by the Chief Retirement Officer and trustee.

Payment of travel-related expenses for trustee education will be in accordance with state of ~~ND~~North Dakota travel policies. Trustees will be reimbursed for travel related expenses including lodging, meals, transportation, etc. In order to receive reimbursement, a trustee must complete an expense form and attach receipts as required. *See RIO Travel Authorization Form~~RIO Conference Expense Voucher – Board Members (Exhibit 6~~).*

R. ~~Code of Conduct, Ethics, and Conflicts of Interest~~ Board Members' Code of Conduct

The following will be the Code of Ethical Responsibility for the~~Following is the Code of Conduct, Ethics, and Conflicts of Interest policy for the~~ TFFR Board of Trustees:

~~1.~~ Board members owe a duty to conduct themselves so as to inspire the confidence, respect, and trust of the TFFR members and to strive to avoid not only professional impropriety but also the appearance of impropriety.

Board members ~~shall~~ should perform the duties of their offices impartially and diligently. Board members are expected to fulfill their responsibilities in accord with the intent of all applicable laws and regulations and to refrain from any form of dishonest or unethical conduct. Board members should be unswayed by partisan interest, public sentiment, or fear of criticism.

~~2.~~

~~3.~~ Conflicts of interest and the appearance of impropriety shall be avoided by Board members. Board members must not allow their family, social, professional, or other relationships to influence their judgment in discharging their responsibilities. Board members must refrain from financial and business dealings that tend to reflect adversely on their duties. If a conflict of interest unavoidably arises, the board member shall immediately disclose the conflict to the board. A board member must abstain in those situations where the board member is faced with taking some official action regarding property or a contract in which the board member has a personal interest. Conflicts of interest to be avoided include but are not limited to: receiving consideration for advice over which the board member has any direct or indirect control, acting as an agent or attorney for a person in a transaction involving the board, and participation in any transaction involving for which the board member has acquired information unavailable to the general public, through participation on the board. ~~.~~

1. "Conflict of Interest means a situation in which a board member has a conflict of interest as that term is defined in North Dakota statute and rules promulgated by the North Dakota Ethics Commission under N.D.A.C. Chapter 115-04-01.

~~4.~~ The board should not unnecessarily retain consultants. The hiring of consultants shall be based on merit, avoiding nepotism and preference based upon considerations other than merit that may occur for any reason, including prior working relationships. The compensation of such consultants shall not exceed the fair value of services rendered.~~The Board shall not unnecessarily retain consultants. The hiring of consultants shall be based on merit, avoiding nepotism and preference based upon considerations other than merit that may occur for any reason, including prior working relationships. The compensation of such consultants shall not exceed the fair value of services rendered.~~

~~5.~~2. ~~Board members shall abide by NDCC 21-10-09, which reads: "No member, officer, agent, or employee of the state investment board shall profit in any manner from transactions on behalf of the funds. Any person violating any of the provisions of this section shall be guilty of a class A misdemeanor."~~

~~6.~~3. Board members shall perform their respective duties in a manner that satisfies their fiduciary responsibilities.

~~7. Political contributions are regulated under NDCC 16.1-08.1-03 and are not restricted under this policy.~~

4. All activities and transactions performed on behalf of public pension funds must be for the exclusive purpose of providing benefits to plan participants and defraying reasonable expenses of administering the plan.

~~8.~~ Prohibited transactions are those involving self-dealing. Self dealing refers to the fiduciary's use of plan assets or material, non-public information for personal gain; engaging in transactions on behalf of parties whose interests are adverse to the plan; or receiving personal consideration in connection with any planned transaction.~~Prohibited transactions. Prohibited transactions are those involving self-dealing. Self-dealing refers to the fiduciary's use of plan assets or material, non-public information for personal gain; engaging in transactions on behalf of parties whose interests are averse to the plan; or receiving personal consideration in connection with any planned transaction.~~

~~9.~~5. Violation of these rules shall result in an official reprimand from the TFFR Board. No reprimand shall be issued until the board member has had the opportunity to be heard by the ~~B~~board.

~~10.~~6. Board members are required to affirm their understanding of this policy annually, in writing, and must disclose any conflicts of interest that may arise. *See TFFR Code of Conduct Annual Affirmation (Exhibit ~~7)~~6*

~~11.~~7. RIO Deputy Executive Director- Chief Retirement Officer is required to affirm his/her understanding of RIO Administrative Policy – Code of Conduct for RIO Employees – annually, in writing, and must disclose any conflicts of interest that may arise.

~~12.~~8. RIO Executive Director is required to affirm his/her understanding of RIO Administrative Policy – Code of Conduct for RIO Employees – annually, in writing, and must disclose any conflicts of interest that may arise.

S. Strategic Planning

The Board and RIO Executive Director will work collaboratively to develop a long-term strategic plan which may:

1. Identify and prioritize TFFR program issues and initiatives.
2. Assess the strengths, weaknesses, opportunities, and threats for TFFR.
3. Focus resources on high value activities.
4. Develop strategies to address priorities.
5. Monitor the progress and implementation of the strategic plan.
6. Work with RIO to ensure adequate resources are in place to support the successful execution of the plan.

T. Board Policy Approval Process

Board governance and program policies may be adopted or amended from time to time based on the following process.

New policies or policy amendments may be proposed by RIO staff or a Board member. The Executive Director shall maintain an internal agency process for the development and presentation of staff recommendations. All new policies or amendments must be submitted to the Board's legal counsel at the Attorney General's office for review prior to Board approval.

Upon request of RIO staff or a Board member, a new policy or amendment shall be placed on the Board's agenda for action as follows:

1. Introduction and first reading. A brief explanation or summary of the new policy or amendment shall be presented to the Board. Upon approval of introduction and first reading, the policy shall be placed on the agenda of the next scheduled meeting of the Board for second reading and adoption. When appropriate, the policy shall be distributed to interested parties.

2. Second reading and adoption. Interested parties and the public shall be allowed an opportunity to comment on the policy or amendment before final action by the Board. The policy shall take effect immediately following second reading and adoption by the Board unless a different effective date is stated.

3. Amendments. Amendments may be proposed at any time before final adoption of the policy. Upon determination by the Board that adoption of an amendment constitutes a substantive change that significantly changes the meaning or effect of the policy, the Board shall continue consideration of second reading and adoption to the next meeting to permit further review and comment.

4. Emergency measures. Upon determination that an emergency or other circumstances calling for expeditious action exists; the Board may waive the requirement of a second reading and immediately approve the new policy or amendment following introduction and first reading.

Board policies will be reviewed at least annually, or more often as needed.

U. Board Self-Assessment

On an annual basis, the Board will engage in a self-assessment process to evaluate the trustee's individual performance and the Board's overall performance. The Board President is responsible for overseeing implementation of this assessment, with assistance of the Executive Director and Supervisor of Audit Services.

Individual Trustee and Overall Board Assessments may contain topics including:

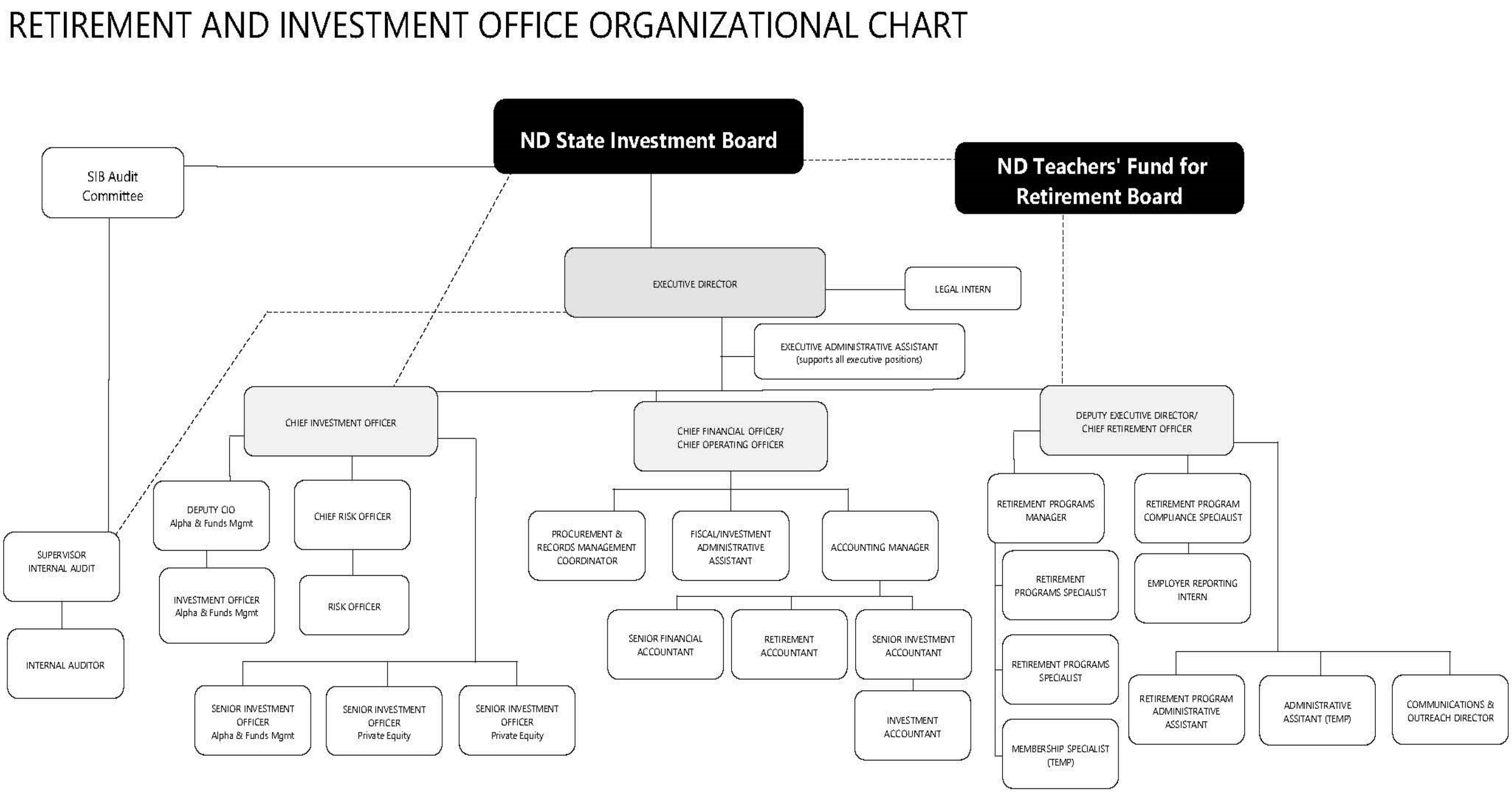
1. Board and staff roles.
2. Board and Committee structure.
3. Board meetings.
4. Policy making and reviews.
5. Financial management practices.
6. Pension plan administration practices.

See TFFR Board Self- Assessment (Exhibit 8 Process and Survey to Be Developed).

Board Governance Policies Approved ________________________________
Date

Board Governance Section Exhibits

1. RIO Organizational Chart



2. TFFR Board Public Participation Guidelines

NORTH Dakota Be Legendary.

Teachers' Fund For Retirement

RETIREMENT & INVESTMENT

TFFR Board Meeting

Public Participation Guidelines

All TFFR Board and Committee meetings are open to the public and all persons who wish to attend may do so in accordance with ~~ND~~North Dakota Open Meetings laws, NDCC 44-04-17.1.

The Board is responsible for oversight, policy making, and administration of the TFFR plan. The Board may seek public input to assist in making decisions, but time spent answering routine questions or criticisms must not be taken from Board business. Generally, if an individual has a question or concern about the operation of the TFFR program or a specific member or ~~employer~~business partner issue, he/she is encouraged to contact the Executive Director or Chief Retirement Officer to get the needed response directly.

Although there is no legal requirement that the public be given an opportunity to speak at TFFR Board meetings, it is the Board's policy that public participation or comments during Board meetings may be allowed and limited to reasonable time limits at the discretion of the Board President. (See TFFR Board and Committee Meetings – Public Access and Comment, Policy M-9.)

Subject to approval of the Board President, public participation or comments may be provided to the Board as follows:

1) **By written request to appear on a Board meeting agenda.** The request must include the topic to be discussed and must be provided to the Executive Director at least ten working days prior to the meeting date.

2) **By written request to speak on a specific Board meeting agenda topic at the meeting.** The request must include the topic to be discussed and must be provided to the Executive Director at least two hours prior to the meeting.

3) **By written request to speak on any TFFR related topic which is not on a regular Board meeting agenda under "Other Business."** The request must include the topic to be discussed and must be provided to the Executive Director at least two hours prior to the meeting.

4) **By submitting a letter or written document** to the Executive Director for distribution to the Board.

SPEAKER INFORMATION

- Speaker should stand (if able to do so) and be recognized by the Board President.
- Speaker should state Name and Organization Representing (if applicable).
- Speaker should state agenda number and topic which the speaker will address.
- 5-minute time limit for speaker unless additional time is allowed by Board President.
- No undue interruption, disorderly conduct or remarks made out of order.
- No charges or complaints against staff will be allowed.
- Questions and comments by the Board and Executive Director will be allowed.
- Board or Staff response to the Speaker's remarks will be allowed but is not required.

TFFR BOARD

PUBLIC PARTICIPATION REQUEST FORM

Date and Time Submitted ____

Name ____

Organization Representing (if applicable) ____

Contact Information (phone number, email, or mailing address) ____________________________

____

____

Topic or Agenda Item ____

~~RIO Board Meeting In-State Travel Expense Voucher~~

RETIREMENT AND INVESTMENT OFFICE
Board Meeting Travel Expense Voucher

____
Name (please print)

MEETING ATTENDED:

Meeting	Date	Time	Office Use
☐ TFFR	Date		
☐ SIB	Date		
☐ Audit Committee	Date		
☐ Securities Litigation Committee	Date		
☐ Executive Review & Compensation Committee	Date		
☐ TFFR Governance & Policy Review Committee	Date		
☐ SIB Governance & Policy Review Committee	Date		
☐ SIB Investment Committee	Date		

TRAVEL EXPENSES

MEALS (Reimbursed at state rate effective 8/1/15:

Date ________	☐ Breakfast (1st Qtr - 6am)	$9.00	Date ________	☐ Breakfast (1st Qtr - 6am)	$9.00
	☐ Lunch (2nd Qtr - Noon)	$14.00		☐ Lunch (2nd Qtr - Noon)	$14.00
	☐ Dinner (3rd Qtr - 6pm)	$22.00		☐ Dinner (3rd Qtr - 6pm)	$22.00
Date ________	☐ Breakfast (1st Qtr - 6am)	$9.00	Date ________	☐ Breakfast (1st Qtr - 6am)	$9.00
	☐ Lunch (2nd Qtr - Noon)	$14.00		☐ Lunch (2nd Qtr - Noon)	$14.00
	☐ Dinner (3rd Qtr - 6pm)	$22.00		☐ Dinner (3rd Qtr - 6pm)	$22.00

MILEAGE (Round trip):

FROM: ______________________

TO: ______________________

Total Miles: ________ @65.5¢/mile Effective 1/1/2023

LODGING (Attach Receipts - reimbursed at actual cost up to $88.20/night + tax)
Effective 10/1/22:

Number of Nights: ________

MISCELLANEOUS (Attach Receipts):

Telephone Calls ______________________

Taxi, car rental, etc ______________________

Other ______________________

SIGNATURE:
DATE:

Office Use	
521020/521035 Total Meals $	
521030 Total Mileage $	
521015 Total Lodging $	
Total Misc. $	
TOTAL TRAVEL $	

8/22/2023

~~North Dakota Travel Expense Voucher~~

TRAVEL EXPENSE VOUCHER
STATE OF NORTH DAKOTA
SFN 52785 (03-2015)

Month	Year	Department Name	Official Position

Employee Name	Employee ID	Business Unit	Fiscal Month	Biennium

Day	Points Covered By Travel	Hour (Show AM or PM) Depart	Hour (Show AM or PM) Arrive	Vehicle Miles	Ref	Comm'l Air Trans.	Ref	Taxi & Other Air Trans.	Ref	Misc. Exp.	Meals In State	Meals Out of State	Ref	Lodging In State	Lodging Out of State

Purpose of Travel and Explanation of Expenses:

Lodg. in State	521015	
Lodg. out of State	521075	
Meals in State	521020	
Meals out of State	521080	
IRS Meals-Taxable	521035	
Miscellaneous Expenses		
Other Transportation in State	521025	
Other Transportation out of State	521085	
Air Transportation in State	521010	
Air Transportation out of State	521070	
Vehicle Miles in State	X 521030	
Vehicle Miles out of State	X 521090	
Total Expenses		
(Ref. Doc. No. of Advance):	Less Travel Advance	
NET EXPENSES		

Line	Due Date	Dept. ID	Account	Oper. Unit	Class	Fund	Project ID	Activity ID	Resource Type	Resource Category	Amount

I hereby certify that the within itemized statement representing a claim for payment or per diem, mileage or travel expenses or a combination thereof, truthfully and accurately states the days of service and the mileage traveled, and the purpose thereof.

TOTAL

Employee Signature	Date
Departmental Approval	Date

INSTRUCTIONS FOR THE TRAVEL EXPENSE VOUCHER

Be sure to "Tab" from one field to another, rather than using the mouse.

Month – Enter the month of travel.

Year – Enter the year of travel.

Department Name – Enter the name of your Agency.

Official Position – Enter your job title.

Employee Name – Enter your name.

Employee ID – This number is assigned by payroll.

Business Unit – Your agency's 5-digit number.

Fiscal Month – Enter the fiscal month.

Biennium – Enter the biennium.

Day - Enter the day of the month in which the activity occurred.

Points Covered By Travel – Enter the departure/destination points.

Hour – Enter the departures and arrival time for the actual travel day (example: 7:00 am).

Vehicle Miles – Enter the number of vehicle miles traveled. If you have in state and out of state miles, separate them and list them on separate lines.

Ref – Enter an "I" for in-state travel or an "O" for out-of-state travel. **If this is not entered, the form will not calculate correctly.**

Comm'l Air Trans. – Enter the amount of commercial air transportation.

Ref – Enter an "I" for in-state travel or an "O" for out-of-state travel. **If this is not entered, the form will not calculate correctly.**

Taxi & Other Air Trans. – Enter taxi fares and any other air transportation.

Ref – Enter an "I" for in-state travel or an "O" for out-of-state travel. **If this is not entered, the form will not calculate correctly.**

Misc. Exp – Enter your other expenses that do not belong in any other column. Explain these expenses in the "Purpose of

Travel and Explanation of Expenses" section.

Meals In State – Enter the dollar amount of the meals in state.

Meals Out of State – Enter the dollar amount of the meals out-of-state.

Ref – Enter a "T" if your meals are taxable. Meals are taxable if no overnight stay is involved.

Lodging in State – Enter the dollar amount of lodging in state.

Lodging Out of State – Enter the dollar amount of lodging out-of-state.

Purpose of Travel and Explanation of Expenses – Enter the reason for travel and any explanations for your miscellaneous expenses.

The amounts entered in the top section of the form will automatically be totaled and filled in the appropriate fields of the middle section, as long as the correct reference codes were entered and you used the tab key to navigate between fields. The only exceptions are the following two fields:

Vehicle Miles in State – Calculates the total vehicle miles traveled within the state. You will need to enter the current rate. The total will then automatically calculate.

Vehicle Miles out of State – Calculates the total vehicle miles out of state. You will need to enter the current rate. The total will automatically calculate.

Total Expenses – Calculates the total expenses automatically.

Ref. Doc. No. of Advance – Enter the document number if you received a travel advance and the dollar amount.

Net Expenses – Calculates the net expenses automatically.

Print two copies of the Travel Expense Voucher.

Sign one copy, attach all of your receipts, and submit it for approval. Once approved and forwarded to accounting, the bottom fields will be cost-coded and entered. Remember to keep copies of the receipts for yourself as well.

~~1.~~ 3. TFFR Code of Conduct Annual Affirmation

NORTH Dakota | Retirement & Investment
Be Legendary.

MEMORANDUM

TO: **TFFR Board**
FROM: **Name, Title**
DATE: **Month ##, YYYY**
RE: **Annual Affirmation of Code of Conduct Policy**

The *TFFR Board Members' Code of Conduct and Ethics Policy,* which is attached to this memorandum, details the Code of Ethical Responsibility for the TFFR Board. Item #11 of this policy indicates that each Board Member is required to reaffirm their understanding of this policy annually and disclose any conflicts of interest. Therefore, please read and sign the statement below to comply with this requirement.

"I have read and understand TFFR Board Members' Code of Conduct and Ethics Policy. I have disclosed any conflicts of interest as required by this policy."

Name (printed) ______________________________

Signature ______________________________

Date ______________________________

Detail of any conflicts of interest (if any):

SECTION II: –TFFR Program Policies

A. Investment Policy Statement

1. Plan Characteristics and Fund Constraints

~~The North Dakota Teachers' Fund for Retirement (~~TFFR~~)~~ is a successor pension benefit plan to the Teachers' Insurance and Retirement Fund (TIRF). TIRF was established in 1913, 24 years after North Dakota became a state, to provide retirement income to all public school and certain state teachers and administrators in the state of North Dakota. TIRF became TFFR in 1971. The plan is administered by a seven-member Board of Trustees comprised of: two active teachers, two retired teachers and one school administrator appointed by the Governor of North Dakota and two elected officials - the State Treasurer and the State Superintendent of Public Instruction.

The plan is a multi-~~employer~~business partner defined benefit public pension plan that provides retirement, disability, and death benefits in accordance with Chapter 15-39.1 of the North Dakota Century Code (NDCC). Monthly retirement benefits are based on the formula: Number of Years of service X 2.0% X Final Average Salary. Adjustments to the basic formula are made depending on the retirement option selected.
Funding is provided by monthly employee and ~~employer~~business partner contributions scheduled to increase as follows:

	7/1/11	7/1/12	7/1/14
Employee	7.75%	9.75%	11.75%
~~Employer~~Business partner	8.75%	10.75%	12.75%

Employee and ~~employer~~business partner contributions will be reduced to 7.75% each when TFFR reaches 100% funded level on an actuarial value basis.

The TFFR Board has an actuarial valuation performed annually and an Experience Study and Asset Liability Study performed every five years. The actuarial assumed rate of return on assets was reduced to 7.25% from 7.75% as of July 1, 2020. Key plan and financial statistics are recorded in the most recent valuation report on file at the North Dakota Retirement and Investment office (RIO).

2. Fund Goals

The Plan benefits are financed through both statutory ~~employer~~business partner and employee contributions and the investment earnings on assets held in the Fund. The TFFR Board recognizes that a sound investment program is essential to meet the pension obligations.

As a result, the Fund goals are to:

a. Improve the Plan's funding status to protect and sustain current and future benefits.
b. Minimize the employee and ~~employer~~business partner contributions needed to fund the Plan over the long term.
c. Avoid substantial volatility in required contribution rates and fluctuations in the Plan's funding status.

d. Accumulate a funding surplus to provide increases in retiree annuity payments to preserve the purchasing power of their retirement benefit.

The Board acknowledges the material impact that funding the pension plan has on the State/School District's financial performance. These goals affect the Fund's investment strategies and often represent conflicting goals. For example, minimizing the long-term funding costs implies a less conservative investment program, whereas dampening the volatility of contributions and avoiding large swings in the funding status implies a more conservative investment program. The Board places a greater emphasis on the strategy of improving the funding status and reducing the contributions that must be made to the Fund, as it is most consistent with the long-term goal of conserving money to apply to other important state/local projects.

3. Responsibilities and Discretion of the State Investment Board ~~(SIB)~~

The TFFR Board is charged by law under NDCC 21-10-02.1 with the responsibility of establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and investing the assets of the Fund in the manner provided in NDCC 21-10-07, the prudent investor rule. Under this rule, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income. The Fund must be invested exclusively for the benefit of the members and their beneficiaries in accordance with this investment policy.

Management responsibility for the investment program not assigned to the SIB in Chapter 21-10 of the North Dakota Century Code (NDCC) is hereby delegated to the SIB, who must establish written policies for the operation of the investment program, consistent with this investment policy.

The SIB may delegate investment responsibility to professional money managers. Where a money manager has been retained, the SIB's role in determining investment strategy and security selection is supervisory, not advisory.

At the discretion of the SIB, the Fund's assets may be pooled with other funds. In pooling funds, the SIB may establish whatever asset class pools it deems necessary with specific quality, diversification, restrictions, and performance objectives appropriate to the prudent investor rule and the objectives of the funds participating in the pools.

The SIB is responsible for establishing criteria, procedures, and making decisions with respect to hiring, keeping, and terminating money managers. SIB investment responsibility also includes selecting performance measurement services, consultants, report formats, and frequency of meetings with managers.

The SIB will implement changes to this policy as promptly as is prudent.

~~1.~~ 4. Risk Tolerance

The Board is unwilling to undertake investment strategies that might jeopardize the ability of the Fund to finance the pension benefits promised to plan participants.

However, funding the pension promise in an economical manner is critical to the State/School Districts ability to continue to provide pension benefits to plan participants. Thus, the Board actively seeks to lower the cost of funding the Plan's pension obligations by taking on risk for which it expects to be compensated over the long term. The Board understands that a prudent investment approach to risk taking can result in periods of under-performance for the Fund in which the funding status may decline. These periods, in turn, can lead to higher required contribution rates. Nevertheless, the Board believes that such an approach, prudently implemented, best serves the long-run interests of the State/School District and, therefore, of plan participants.

5. Investment Objective

The Board's investment objectives are expressed in terms of reward and risk expectations relative to investable, passive benchmarks. The Fund's policy benchmark is comprised of policy mix weights of appropriate asset class benchmarks as set by the SIB.

a. The fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

b. The fund's risk, measured by the standard deviation of net returns, should not exceed 115% of the policy benchmark over a minimum evaluation period of five years.

c. The risk-adjusted performance of the fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

6. Policy Asset Mix

Benefit payments are projected to occur over a long period of time. This allows TFFR to adopt a long-term investment horizon and asset allocation policy for the management of fund assets. Asset allocation policy is critical because it defines the basic risk and return characteristics of the investment portfolio. Asset allocation targets are established using an asset-liability analysis designed to assist the Board in determining an acceptable volatility target for the fund and an optimal asset allocation policy mix. This asset-liability analysis considers both sides of the plan balance sheet, utilizing both quantitative and qualitative inputs, in order to estimate the potential impact of various asset class mixes on key measures of total plan risk, including the resulting estimated impact of funded status and contribution rates. After consideration of all the inputs and a discussion of its own collective risk tolerance, the Board approves the appropriate policy asset mix for the Fund.

Asset Class	Policy Target (%)
Global Equity	**55%**
- Public Equity	45%
- Private Equity	10%
Global Fixed Income	**26%**
- Investment Grade	18%
- Non-Investment Grade	8%
Global Real Assets	**18%**
- Real Estate	9%
- Other	9%
Cash & Equivalents	**1%**
Total	100%

An allocation to Global Alternatives of up to 10% is authorized but shall not increase the expected volatility of the portfolio as measured in Section 5; and if utilized, all other targets will be adjusted pro-rata. The Board does not endorse tactical asset allocation; therefore, it is anticipated the portfolio be managed as close to the policy target as is prudent and practicable while minimizing rebalancing costs. Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy.

7. Restrictions

a. While the SIB is responsible for establishing specific quality, diversification, restrictions, and performance objectives for the investment vehicles in which the Fund's assets will be invested, it is understood that:

1) Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
2) Derivatives use will be monitored to ensure that undue risks are not taken by the money managers
3) No transaction shall be made which threatens the tax-exempt status of the Fund.
4) All assets will be held in custody by the SIB's master custodian, or such other custodians as are acceptable to the SIB.
5) No unhedged short sales or speculative margin purchases shall be made.
6) Social investing is prohibited unless it meets the Exclusive Benefit Rule, and it can be substantiated that the investment must provide an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

b. For the purpose of this document, Social Investing is defined as "The investment or commitment of public pension fund money for the purpose of obtaining an effect other than a maximized return to the intended beneficiaries."

1) Economically targeted investing is prohibited unless the investment meets the Exclusive Benefit Rule.

c. For the purpose of this document economically targeted investment is defined as an investment designed to produce a competitive rate of return commensurate with risk involved, as well as to create collateral economic benefits for a targeted geographic area, group of people, or sector of the economy.

Also, for the purpose of this document, the Exclusive Benefit Rule is met if the following four conditions are satisfied:

1) The cost does not exceed the fair market value at the time of investment.

2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar task.

3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.

4) The safeguards and diversity that a prudent investor would adhere to are present.

Where investment characteristics, including yield, risk, and liquidity are equivalent, the Board's policy favors investments which will have a positive impact on the economy of North Dakota.

8. Internal Controls

A system of internal controls must be in place by the SIB to prevent losses of public funds arising from fraud or employee error. Such controls deemed most important are the separation of responsibilities for investment purchases from the recording of investment activity, custodial safekeeping, written confirmation of investment transactions, and established criteria for broker relationships. The annual financial audit must include a comprehensive review of the portfolio, accounting procedures for security transactions and compliance with the investment policy.

9. Evaluation and Review

Investment management of the Fund will be evaluated against the Fund's investment objectives. Emphasis will be placed on five-year results. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the appropriateness of the Investment Policy Statement for achieving those objectives.

Performance reports will be provided to the TFFR Board periodically, but not less than annually. Such reports will include asset returns and allocation data as well as information regarding all significant and/or material matters and changes pertaining to the investment of the Fund, including but not limited to:

A list of the advisory services managing investments for the board.

A list of investments at market value, compared to previous reporting period, of each fund managed by each advisory service.

Earnings, percentage earned, and change in market value of each fund's investments.

Comparison of the performance of each fund managed by each advisory service to other funds under the board's control and to generally accepted market indicators.

All material legal or legislative proceedings affecting the SIB.

Compliance with this investment policy statement.

TFFR Board Adopted: May 25, 1995.
Amended: November 30, 1995; August 21, 1997; July 15, 1999; July 27, 2000; September 18, 2003; July 14, 2005; September 21, 2006; September 20, 2007; October 27, 2011; September 26, 2013; January 21, 2016; September 21, 2017; January 25, 2018; November 19, 2020, April 22, 2021, and July 22, 2021.

Approved by SIB: November 18, 2011, February 26, 2016, September 22, 2017, February 23, 2018, November 20, 2020, May 21, 2021, and October 28, 2022.

~~ND~~North Dakota Teachers' Fund for Retirement	~~ND~~North Dakota State Investment Board
______________________	______________________
Date	Date
______________________	______________________
Janilyn Murtha Executive Director	Scott Anderson Chief Investment Officer

B. Plan Management Policy Overview

~~The North Dakota Teachers' Fund for Retirement (~~TFFR~~)~~ Plan Management Policy is a risk assessment and management tool that monitors the ongoing health of TFFR using the most recent actuarial valuation results and stochastic projections. The objective of the Plan Management Policy is to provide a basis for balancing the Fund's obligations with current assets and expected future contributions in order to maintain its long-term health and viability. The Policy also provides a framework that the Board can follow in establishing metrics for future funding and benefit changes. The Plan Management Policy is based upon metrics and a scoring system that were established at the July 24, 2019, Board meeting. The Plan Management Policy Score will be updated subsequent to each annual actuarial valuation.

1. Background

The Plan Management Policy is different from the Funding Policy. The Funding Policy sets parameters for the determination of the actuarially determined contribution (ADC) as of each actuarial valuation date. The Plan Management Policy establishes the parameters for a forward-looking assessment of TFFR.

An ADC is used as a benchmark to compare to the statutory contribution rate. An ADC reflects an asset valuation method (i.e., smoothing method), actuarial cost method (e.g., entry age normal), and amortization method for paying down unfunded liabilities or recognizing surplus assets. A description of the ADC is contained in a separate document ("Actuarial Funding Policy Statement"). In summary, the current TFFR funding policy relies on an ADC that is equal to the sum of (a) the ~~employer~~business partner normal cost rate and (b) the level percentage of pay required to amortize the unfunded actuarial accrued liability over the 30-year closed period that began July 1, 2013

2. Risk Assessment and Management

The Plan Management Policy is a risk assessment tool. The risks facing TFFR can be broadly classified into three categories: risks related to economic variables, risks related to demographic events, and risks related to external forces. An overview of the primary risks facing TFFR stakeholders follows.

a. Risks related to economic variables:
1)Investment return – the risk that actual returns will be different than expected and more volatile than desired.
2)Inflation (price inflation, wage inflation) – the risk that measures of inflation will be inconsistent with other economic measures.

b. Risks related to demographic events:
   1) Mortality/longevity – the risk that participants will live longer than expected
   2) Payroll and/or population growth – the risk that aggregate payroll will increase at a rate less than expected. This is relevant since contributions to TFFR are collected as a percentage of member payroll.
   3) Retirement/disability/termination experience – the risk that members leave active service in a manner than generates actuarial gains or losses relative to the assumptions.

There are even risks related to external forces (e.g., governance risk, regulatory risk, litigation risk, political risk), but these risks are difficult – or impossible – to manage.

The Plan Management Policy is a tool that measures investment return risk since investment return risk has the most significant impact on TFFR's long term financial health.

3. Scoring System Metrics

The scoring system metrics that will be monitored on a periodic basis are:

a. ***The current funded ratio***: This is equal to the ratio of the market value of assets to the actuarial accrued liability as of the latest actuarial valuation date. The purpose of this metric is to assess the current funded status of TFFR.
b. ***The downside funded ratio as of July 1, 2030***: Based on stochastic projections, determine the probability that the funded ratio will be less than 65%. The purpose of this metric is to assess the likelihood of the funded ratio not improving over the short term. The lower the likelihood that the funded ratio will not increase, the higher the score.
c. ***The target funded ratio as of July 1, 2040***: Based on stochastic projections, determine whether the funded ratio is projected to increase above certain thresholds over a longer time horizon with 51% or more probability.
d. ***Improvement in the funded ratio over a 10-year period***: Based on stochastic projections, determine the probability that the funded ratio will improve by 5% over the following 10 years.
e. ***Ability to recover/withstand from a market downturn***: Based on stochastic projections, determine the probability that the funded ratio improves by 5% over 10 years following a market downturn. A market downturn is defined as a two-year period with a compound average return of -10% or worse.

4. Policy Score

The Policy Score is the sum of the points that have been assigned to each metric and can range from 0 to 14 and correspond to a color ranging from red to green. A higher score indicates better overall health of TFFR. The Policy Score is grouped into the following categories:

Color	Policy Score	Indication
Green	11 to 14	TFFR objectives are being met or likely to be met
Yellow	7 to 10	TFFR objectives may be met over a longer period
Orange	4 to 6	Continue to monitor TFFR
Red	0 to 3	Changes to TFFR should be considered

5. Policy Scoring System

Each metric is assigned a score based upon the results of the annual actuarial valuation and resulting analysis as follows:

Metric	Criteria	Score
The current funded ratio	• Funded ratio of 90% or higher • Funded ratio between 80% and 90% • Funded ratio between 70% and 80% • Funded ratio less than 70%	• +3 • +2 • +1 • +0
The downside funded ratio as of July 1, 2030	• Under 65% funded ratio with less than 20% probability • Under 65% funded ratio with less than 30% probability • Under 65% funded ratio with less than 40% probability • Under 65% funded ratio with more than 40% probability	• +3 • +2 • +1 • +0
The target funded ratio as of July 1, 2040	• 85% or higher with 51% or more probability • Between 80% and 85% with 51% or more probability • Between 75% and 80% with 51% or more probability • Between 70% and 75% with 51% or more probability • Not more than 70% with 51% or more probability	• +4 • +3 • +2 • +1 • +0
Improvement in the funded ratio over a 10-year period	• Funded ratio improves by +5% over 10 years with 66% probability • Funded ratio improves by +5% over 10 years with 50% probability • Funded ratio does not improve by +5% over 10 years with 50% probability	• +2 • +1 • +0
Ability to recover from or withstand a market downturn	• Funded ratio after downturn improves by +5% over 10 years with 50% probability • Funded ratio after downturn improves by +5% over 10 years with 33% probability • Funded ratio after downturn does not improve by +5% over 10 years with 33% probability	• +2 • +1 • +0

For purposes of scoring, probabilities and funded ratios will be rounded to the nearest whole percentage. For example, a probability of 49.6% would be rounded up to 50%.

6. Outside Factors

Other factors outside of TFFR could have an effect on the directional trend of future Policy Scores. These factors include, but are not limited to:

a. Projected economic conditions
b. Market cycles
c. North Dakota economy

TFFR Staff and the actuary will discuss the appropriate outside factors and determine whether these factors are expected to potentially improve or worsen the Policy Score.

7. Actuarial Assumptions

The actuarial assumptions used will be the same as those used for the annual actuarial valuation. The actuarial assumptions are described in detail in the actuarial valuation report. The funded ratio used in the plan management policy is based upon the market value of assets.

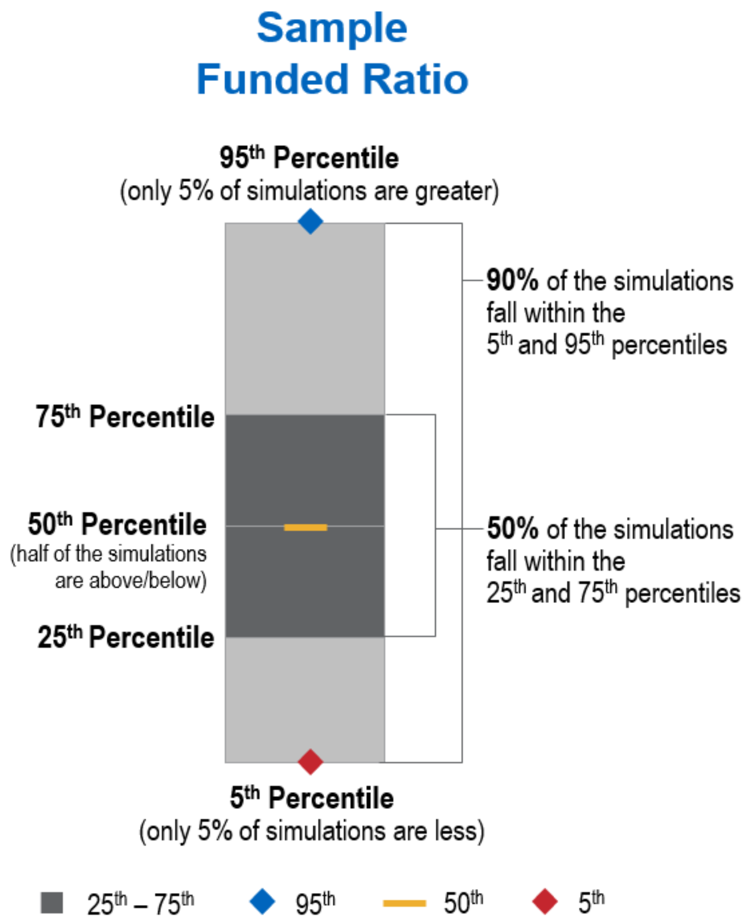
In order to stochastically model investment returns, Capital Market Assumptions are used. Capital Market Assumptions are developed by investment firms and represent expectations for future risk and returns for different asset classes. The Capital Market Assumptions used for the analysis are those published in the most recently available Horizon's Annual Survey of Capital Market Assumptions. If Horizon discontinues the publication of this survey, a suitable replacement or alternative will be used.

Projected liabilities are based upon an "open group" liability forecast. An open group projection generates projected populations for each future valuation date based on assumptions related to retirement, termination, salary increases, mortality, etc. New entrant records are generated to replace active members that decrement in the model in order to maintain a level active membership in the future. The profile of new entrants is based on recent demographics of new hires, subject to input from TFFR staff and Board.

8. Stochastic Modeling

The Capital Market Assumptions are used with TFFR's target asset allocation in order to simulate 5,000 investment portfolio return scenarios, each simulation representing a 20-year period. The simulated investment returns, along with open group liability forecasts, are used to model the projected funded ratio. The results are grouped into percentiles and summarized as a range:

a. **Best Case**: Better cases would occur only 5% of the time (above the 95th percentile in the example below)
b. **Most Likely**: Better or worse cases (50th percentile) are equally likely
c. **Worst Case**: Worse cases would occur only 5% of the time (below the 5th percentile in the example below)



TFFR Board Adopted: October 24, 2019

Amended: January 23, 2020

C. Actuarial Funding Policy Statement

1. Introduction

The purpose of this Actuarial Funding Policy is to record the funding objectives and policy set by the Board of Trustees (Board) for ~~the North Dakota Teachers' Fund for Retirement~~ ~~(~~TFFR~~)~~. Effective with the July 1, 2013, actuarial valuation, the Board establishes this Actuarial Funding Policy to help ensure the systematic funding of future benefit payments for members of TFFR. The contributions made to TFFR are set by statute. These statutory contributions will be compared to the contributions determined under the funding policy in order to assess the appropriateness of the statutory contributions. Based upon this comparison, the Board will decide what action to take, if any. The ~~employer~~business partner contribution determined under the funding policy is called the actuarially determined ~~employer~~business partner contribution (ADEC). In addition, this document records certain guidelines established by the Board to assist in administering TFFR in a consistent and efficient manner.

This Actuarial Funding Policy supersedes any previous Actuarial Funding Policies and may be modified as the Board deems necessary.

2. Goals of Actuarial Funding Policy

a. To achieve long-term full funding of the cost of benefits provided by TFFR;

b. To seek reasonable and equitable allocation of the cost of benefits over time;

c. To maintain a policy that is both transparent and accountable to the stakeholders of TFFR, including plan participants, ~~employer~~business partners, and residents of the State of North Dakota.

3. Actuarially Determined ~~Employer~~Business partner Contribution and Funding Policy Components

TFFR's actuarially determined ~~employer~~business partner contribution is comprised of the Normal Cost and an amortization of the Unfunded Actuarial Accrued Liability (UAAL). The Normal Cost and the amortization of the UAAL are determined by the following three components of this funding policy:

a. Actuarial Cost Method: the techniques to allocate the cost/liability of retirement benefits to a given period;

b. Asset Smoothing Method: the techniques that spread the recognition of investment gains or losses over a period of time for the purposes of determining the Actuarial Value of Assets used in the actuarial valuation process; and

c. Amortization Policy: the decisions on how, in terms of duration and pattern, to reduce the difference between the Actuarial Accrued Liability and the Actuarial Value of Assets in a systematic manner.

4. Actuarial Cost Method:

The Entry Age Normal method shall be applied to the projected benefits in determining the Normal Cost and the Actuarial Accrued Liability. The Normal Cost shall be determined as a level percentage of pay on an individual basis for each active member.

5. Asset Smoothing Method:

The investment gains or losses of each valuation period, as a result of comparing the actual market return to the expected market return, shall be recognized in level amounts over 5 years in calculating the Actuarial Value of Assets. Deferred investment gains or losses cannot exceed 20% of the Market Value of Assets (i.e., the Actuarial Value of Assets cannot be more than 120%, nor less than 80%, of the Market Value of Assets as of any valuation date).

6. Amortization Policy:

a. The UAAL, (i.e., the difference between the Actuarial Accrued Liability and the Actuarial Value of Assets), as of July 1, 2013, shall be amortized over a "closed" 30-year period. In other words, the UAAL as of July 1, 2014, shall be amortized over 29 years, the UAAL as of July 1, 2015, shall be amortized over 28 years, etc.

b. Beginning with the July 1, 2024, valuation, the Board shall have the discretion to continue the “closed” amortization period, or instead to amortize the UAAL over another period, not to exceed 20 years.

c. Any new UAAL as a result of change in actuarial assumptions or methods will be amortized over a period equal to the amortization period of the UAAL. The Board shall have the discretion to amortize the new UAAL as a result of change in actuarial assumptions or methods over a period of 20 years.

d. Unless an alternative amortization period is recommended by the Actuary and accepted by the Board based on the results of an actuarial analysis, the increase in UAAL as a result of any plan amendments will be amortized over a period not to exceed 20 years.

e. In a situation where the amortization of the UAAL has more than one component, a single equivalent amortization period will be determined by the Actuary.

f. UAAL shall be amortized as a level percentage of payroll so that the amortization amount in each year during the amortization period shall be expected to be a level percentage of covered payroll, taking into consideration the current assumption for general payroll increase.

g. If an overfunding exists (i.e., the UAAL becomes negative so that there is a surplus), such surplus and any subsequent surpluses will be amortized over an “open” amortization period of 30 years. Any subsequent UAAL will be amortized over 20 years as the first of a new series of closed period UAAL amortization.

7. Actuarial Assumptions Guidelines

The actuarial assumptions directly affect only the timing of contributions; the ultimate contribution level is determined by the benefits and the expenses actually paid offset by actual investment returns. To the extent that actual experience deviates from the assumptions, experience gains and losses will occur. These gains (or losses) then serve to reduce (or increase) the future contribution requirements.

Actuarial assumptions are generally grouped into two major categories:

a. Demographic assumptions – including rates of termination, retirement, disability, mortality, etc.

b. Economic assumptions – including investment return, salary increase, payroll growth, inflation, etc.

The actuarial assumptions are described in detail in the actuarial valuation report. They represent the Board’s best estimate of anticipated experience under TFFR and are intended to be long term in nature. Therefore, in developing the actuarial assumptions, the Board considers not only past experience but also trends, external forces and future expectations.

Actuarial experience studies are completed every five years or at the Board’s direction.

8. ~~8.~~ Glossary of Funding Policy Terms

a. **Present Value of Benefits (PVB) or total cost**: the "value" at a particular point in time of all projected future benefit payments for current plan members. The "future benefit payments" and the "value" of those payments are determined using actuarial assumptions as to future events. Examples of these assumptions are estimates of retirement patterns, salary increases, investment returns, etc. Another way to think of the PVB is that if the plan has assets equal to the PVB and all actuarial assumptions are met, then no future contributions would be needed to provide all future service benefits for all current members, including future service and salary increases for current active members.

b. **Actuarial Cost Method:** allocates a portion of the total cost (PVB) to each year of service, both past service and future service.

c. **Normal Cost:** the cost allocated under the Actuarial Cost Method to each year of active member service.

d. **Entry Age Normal Actuarial Cost Method:** A funding method that calculates the Normal Cost as a level percentage of pay or level dollar amount over the working lifetime of the plan's members.

e. **Actuarial Accrued Liability (AAL)**: the value at a particular point in time of all past Normal Costs. This is the amount of assets the plan would have today if the current plan provisions, actuarial assumptions and participant data had always been in effect, contributions equal to the Normal Cost had been made and all actuarial assumptions came true.

f. **Market Value of Assets (MVA):** the fair value of assets of the plan as reported in the plan's audited financial statements.

g. **Actuarial Value of Assets (AVA):** the market value of assets less the deferred investment gains or losses not yet recognized by the asset smoothing method.

h. **Unfunded Actuarial Accrued Liability (UAAL):** the portion of the AAL that is not currently covered by the AVA. It is the positive difference between the AAL and the AVA.

i. **Surplus:** the positive difference, if any, between the AVA and the AAL.

j. **Actuarial Value Funded Ratio:** the ratio of the AVA to the AAL.

k. **Market Value Funded Ratio:** the ratio of the MVA to the AAL.

l. **Actuarial Gains and Losses:** changes in UAAL or surplus due to actual experience different from what is assumed in the actuarial valuation. For example, if during a given year the assets earn more than the investment return assumption, the amount of earnings above the assumption will cause an unexpected reduction in UAAL, or "actuarial gain" as of the next valuation. These include contribution gains and losses that result from actual contributions made being greater or less than the level determined under the policy.

m. **Valuation Date:** July 1 of every year.

D. Operations

1. Membership Data and Contributions

A. Ensure the security and accuracy of the members' permanent records and the collection of member and ~~employer~~business -partner contributions from every governmental body employing a TFFR member.

B. Accordingly, the administrative means will be to:

1. Retain member and ~~employer~~business -partner documents applicable to the retirement program.

2. Safeguard TFFR ~~database~~ files.

3. Protect the confidential information contained in member and ~~employer~~business partner-business partner files.

4. Collect the member and ~~employer~~business -partner contributions from the ~~employer~~business- partners based on retirement salary earned by the member.

5. Monitor the ~~employer~~business -partner reporting process including the timely filing of information, consistency of month-to-month data, and changes in the ~~employer~~business partner payment plan models.

6. Review the individual member data, salary, and service credit for accuracy.

7. Post and validate the data received from the ~~employer~~business partner to the individual member accounts.

8. Provide annual statements to every member.

9. Summarize the member data reported and notify the ~~employer~~business

partners annually of the prior fiscal year information.

10. Perform reviews to monitor whether individuals employed as “teachers” in North Dakota school districts, political subdivisions, and state institutions are reported to TFFR in compliance with the North Dakota Century Code (NDCC).

11. Provide publications and reporting instructions to ~~employer~~business partners on TFFR.

Transfer member and ~~employer~~business partner contributions to the investment program in a timely manner.

C. **Monitoring** (Method, Responsibility, Frequency)

1. Internal Report

   a. Disclosure of compliance to the board from RIO’s internal auditors.

   b. Compliance for individual accounts is monitored through internal audits of staff compliance with state laws, rules, board policy, and procedures.

2. External Report

   a. Disclosure of compliance to the board by RIO’s external auditors as a part of the annual audit.

   b. Disclosure of compliance to members through annual statements.

2. Member Services

Provide direct services and public information to members of TFFR.

A. Accordingly, the administrative means will be to:

1. Enroll, update, maintain, and certify all member accounts.

2. Respond to member inquiries on the retirement program.

3. Provide statewide benefits ~~counseling~~ education services to members.

4. Make group presentations and distribute information at conferences and conventions throughout the state.

5. Coordinate and conduct retirement education programs for members on a statewide basis.

6. Certify eligibility for TFFR benefits and purchase of service credit.

7. Calculate and process claims for refund, retirement, disability, survivor, and Qualified Domestic Relations Order (QDRO) benefits, as well as claims for purchasing credit.

8. Permit members to change designated beneficiaries in the event of life occurrences identified in the administrative rules.

9. Close retirement accounts of deceased ~~teachers~~members.

10. Develop and distribute information to the members on the retirement program and related topics through newsletters, annual reports, member handbooks, brochures, and retirement planning materials.

11. Maintain a website and provide online services to provide members with a variety of access methods for TFFR information.

B. Monitoring (Method, Responsibility, Frequency)

1. Internal Report

   a. Disclosure of compliance to the board through internal audits on compliance with laws, rules, and policies.

   b. Periodic presentations by staff at board meetings.

2. External Report

   a. Receive annual reports from leadership of groups representing the plan's beneficiaries.

   b. RIO's annual audit by independent auditor.

   c. Written and oral communication with board members from ~~teachers~~ members regarding payment and processing of benefit claims.

3. Disclosure of Confidential Information for Treatment, Operational, or Payment Purposes

The TFFR Board of Trustees has determined that confidential information for treatment, operational, or payment purposes under NDCC 15-39.1-30(12) includes:

A. Information related to enrollment, participation, benefits, contributions, and otherwise necessary for the administration and operation of the program may be shared with participating employer~~employer~~s or TFFR contractors, attorneys, and consultants.

B. Information relating to the death benefits and beneficiary designations of a member or beneficiary may be shared with any other person if the beneficiary is unknown or unable to be located, only to the extent necessary to accurately identify the appropriate beneficiary or to close an account subsequent to the death of a member or beneficiary.

TFFR Board adopted: September 25, 2014

4. Account Claims

A. Ensure the payment of benefit claims to members of TFFR.
Accordingly, the administrative means will be to:

1) Pay retirement benefits based on an estimated final salary for members retiring upon completion of their teaching contract and whose final salary has not been reported to TFFR.

2) Allow retired members receiving an annuity from TFFR to have payroll deductions subtracted from their monthly benefit, pursuant to section II.D.5.

3) Distribute payments for benefit claims (annuities, PLSOs, refunds, and rollovers) once per month.

4) Distribute special payments for benefit claims in the event of unforeseen circumstances (i.e., death, disability, Court Order, staff processing delay, etc.) if approved by the Deputy Executive Director/~~-~~Chief Retirement Officer.

5) Produce and make available new account notices and account change notices to retired members and beneficiaries receiving benefits.

B. Monitoring (Method, Responsibility, Frequency)

1) Internal Report
   i. Disclosure of compliance to the board through internal audits on compliance with laws, rules, and policies.

2) External Report
   ii. Disclosure of compliance to the board through annual audit by RIO external auditors.

5. Deductions from Annuity Checks

A. It shall be the policy of the TFFR Board of Trustees to allow retirees and beneficiaries receiving annuity payments to have payroll deductions subtracted from their monthly payments.

B. To initiate, change, or stop a deduction, the retiree must notify the administrative office in writing at least ten working days prior to the date the monthly benefit is issued. All deductions withheld will be forwarded to the appropriate entity within three working days after the first of the month or as required by federal/North Dakota state law. Authorization forms are to be kept on file at the administrative office.

The following deductions are available to retirees and beneficiaries receiving monthly annuity benefits:

1) Health, life, and other insurance premiums payable to the NDPERS.

2) Annual dues payable to the NDRTA and the ~~ND~~NDU ~~United~~ Retired organization.

3) Federal and North Dakota income tax withholdings.

~~3)~~

4) Court ordered payments including child support orders, Qualified Domestic Relations Orders (QDRO), IRS tax levies, federal garnishments, and other court ordered payments, subject to approval by the Attorney General's office.

   4. Additional deductions may be added upon approval by the board.

6. Military Service Credit

It shall be the policy of the TFFR Board of Trustees that a teacher purchasing military service be credited with a full year of credit if the service was rendered for at least 175 school days or a period of nine months within any fiscal year.

7. Payment of Benefits

It shall be the policy of the TFFR Board of Trustees to distribute payments for benefit claims (annuities, refunds/rollovers) once per month. Distributions will be mailed on the last working day of the previous month payable on the first working day of each month.

In order for a teacher to assure receipt of a benefit payment on the first working day of the month, the required information and forms must be filed with the administrative office at least ten working days prior to the distribution date.

The Deputy Executive Director/Chief Retirement Officer may authorize special payments to pay benefit claims due to unforeseen circumstances that delay the processing of the claim.

Payments to a ~~teacher~~ member approved for a refund/rollover will include all contributions and interest paid by a teacher for the purchase and repurchase of service credit. This is in addition to the entitled refund of member contributions plus interest. The Executive Director or Deputy Executive Director/Chief Retirement Officer may waive the 120-day waiting period for refunds/rollovers based on necessary documentation.

8. Retirement Benefit Payments

A. It is the policy of the TFFR Board of Trustees that new retirees will have their initial retirement benefit payment calculated using either estimated or final salary and service credit information:

1) Estimated salary and service credit information

The member's initial retirement benefit is calculated using 90% of the estimated current year salary for final average salary calculation purposes. If the final information reported by the ~~employer~~business partner is different than the estimated information, the member's monthly retirement benefit will be adjusted retroactive to the member's retirement date. Using estimated information allows a member to begin receiving retirement benefits sooner but results in correction of benefits at a later date retroactive to the member's retirement date.

2) Finalized salary and service credit information

The member's retirement benefit is calculated using finalized current year salary and service credit information. After salary, service credit, and last date of employment are reported by the ~~employer~~business partner and verified by TFFR, the member's retirement benefit is calculated, and claim is processed. Using finalized information delays a member's first retirement benefit payment, but when payment is made, it is retroactive to the member's retirement date.

B. Under all circumstances, if any change or error in the records of TFFR or a participating ~~employer~~business partner or if any calculation results in a member receiving more or less in benefits than the member is entitled to receive, TFFR will correct the error and adjust the benefit (NDCC 15-39.1-31 and 32).

9. Voiding Checks

It shall be the policy of the TFFR Board of Trustees to void any uncashed benefit checks for the payment of retirement, disability, survivor, and refund benefits after six months. Should the payee request payment after six months, the RIO will reissue a check, but without additional interest.

10. In-Staff Subbing Contract Period

It is the policy of the TFFR Board of Trustees that the following guidelines apply for the purpose of determining the contract period for in-staff subbing for active members and re-employed retirees as provided for in NDCC 15-39.1-04 (4) and (12), 15-39.1-19.1, 15-39.1-19.2, and NDAC 82-05-06-01.

A. In-staff subbing is defined as substitute teaching duties performed by a contracted teacher for the contracting TFFR participating ~~employer~~business partner.

B. If the active member or re-employed retiree has a contract or written agreement with the participating ~~employer~~business partner for full or part time work, TFFR will view the beginning and ending calendar dates indicated on the contract as the contract term to determine the contract period, unless the contract period is otherwise specifically detailed in the active member or re-employed retiree's contract.

1) If substitute teaching duties are performed during the contract term, those duties are considered in-staff subbing, and retirement contributions are required to be paid on the substitute teaching pay. The in-staff subbing hours are reported as

compensated hours for active members and are counted toward the annual hour limit for re-employed retirees (700 – 1000 hours depending upon length of contract).

2) If substitute teaching duties are performed before the beginning calendar date or after the ending calendar date of the contract term, those duties are not considered in-staff subbing, and no retirement contributions are required to be paid on the substitute teaching pay. The subbing hours are not reported as compensated hours for active members and are not counted toward the annual hour limit for re-employed retirees.

C. If the active member does not have a contract or written agreement with the participating ~~employer~~business partner, then no retirement contributions are required to be paid on the substitute teaching pay. The subbing hours are not reported as compensated hours for active members. If a re-employed retiree does not have a contract or written agreement with the participating ~~employer~~business partner then professional development, extracurricular duties and non-contracted substitute teaching duties are not counted toward the annual hour limit and no contributions may be collected for these activities.

D. This policy does not prohibit the Board from making an eligible salary determination for an individual member pursuant to N.D.A.C. 82-04-02-01.

11. Plan Beneficiaries

TFFR beneficiaries are:

A. Plan Members:

1) Active – all persons who are licensed to teach in North Dakota and who are contractually employed in teaching, supervisory, administrative, or extracurricular services:
   i. Classroom teachers
   ii. Superintendents, assistant superintendents, county superintendents
   iii. Business managers
   iv. Principals and assistant principals
   v. Special teachers
   vi. Superintendent of Public Instruction, professional employees of Dept. of Public Instruction and Dept. of Career and Technical Education, unless transferred to North Dakota Public Employees Retirement System (NDPERS)
   vii. Professional or teaching staff of Center for Distance Education, Youth Correctional Center, School for the Blind and School for the Deaf.
   viii. Other persons or positions authorized in state statutes

2) Annuitants – All persons who are collecting a monthly benefit:
   i. Retirees
   ii. Disabilitants
   iii. Survivors/Beneficiaries

3) Inactive members:
   i. Vested
   ii. Nonvested

~~ii.~~

B. ~~Employer~~Business partners:

1) School districts, special education units, vocational centers, County superintendents, Regional Education Associations (REA)
2) State institutions and agencies defined in state statutes
3) Other TFFR participating ~~employer~~business partners

12. Head Start Program Employees

It shall be the policy of the TFFR Board of Trustees that employees of a Head Start Program who are certified to teach and contracted with a school district or other participating ~~employer~~business partner, are members of TFFR if the following conditions are met:

A. Grantee agency for the Head Start Program is the school district which is governed by the local school board.

B. Head Start Program employees are on the school district teaching or administrative faculty in positions such as coordinator, director, teacher, or home visitor.

C. Head Start Program employees are on the school district salary schedule and negotiate for salary and benefits like other school district teaching faculty.

13. PERS Retirement Plan Election (DPI and CTE)

A. NDCC 15-39.1-09(3) allows new employees of the Department of Public Instruction (DPI), who are eligible for TFFR coverage and hired after January 6, 2001, excluding the State Superintendent of Public Instruction, to elect to become participating members of ~~ND~~North Dakota Public Employees Retirement System (PERS).

B. NDCC 15-39.1-09(4) allows new employees of the Department of Career and Technical Education (CTE) who are eligible for TFFR coverage and hired after July 1, 2007, to elect to become participating members of PERS.

C. It is the policy of the TFFR Board of Trustees to allow the PERS retirement plan election by eligible new DPI and CTE employees under the following guidelines:

1) Any new employee who is required to participate in TFFR under NDCC 15-39.1-04(11)(b) and who is entered onto the payroll of DPI after January 6, 2001 (except the Superintendent of Public Instruction), or CTE after July 1, 2007, is eligible to make the election to become a participating member of NDPERS.

2) If eligible, the new employee must complete the “NDPERS/TFFR Membership Election” form within ninety days of hire. Until this election is made, the employee will be enrolled in the NDPERS retirement plan. If no election is made, the employee will be transferred to TFFR.

3) If the new employee is a former DPI employee or is retired from DPI and receiving TFFR benefits, the employee must have a one- year break in service to be eligible to elect participation in PERS. If the new employee is a former CTE employee or is retired from CTE and receiving TFFR benefits, the employee must have a one-year break in service to elect participation in PERS.

4) If the new employee is a TFFR retiree (but not a former DPI or CTE employee), the retiree may elect participation in PERS upon date of hire.

The retiree is not subject to the one-year waiting period and is not subject to the TFFR retiree annual hours limit.

E. ~~Employer~~Business partner Policies

1. ~~Employer~~Business partner Payment Plan Models

A. The TFFR Board has developed models relating to ~~employer~~business partner payment of member contributions as provided for in NDCC 15-39.1-09 and NDAC 82-04-01. The models are outlined in ~~employer~~business partner instructions prepared by the fund. Special provisions apply to state agencies and institutions, and ~~employer~~business partners that have not adopted a model.

B. ~~Employer~~Business partners must select the ~~employer~~business partner payment plan model under which they will pay member contributions ~~on a form provided~~through the method prescribed by the administrative office. The model selected by the ~~employer~~business partner can only be changed once each year at the beginning of the fiscal year.

C. The following ~~employer~~business partner payment plan models are available to participating ~~employer~~business partners:

1) Model 1: Member contributions are paid by the member through a salary reduction and remitted to TFFR by the ~~employer~~business partner as tax deferred contributions.

2) Model 2 All: Member contributions are paid by the ~~employer~~business partner as a salary supplement and remitted to TFFR as tax deferred contributions.

3) Model 2 Partial (%): A fixed percentage (1% minimum and increasing increments of full percentages only effective July 1, 2025) of the member contributions are paid by the ~~employer~~business partner as a salary supplement and remitted to TFFR as tax deferred contributions. The remaining member contributions are paid by the member and remitted by the ~~employer~~business partner as tax deferred contributions.

~~3)~~4) Model 3 Partial (4): Model eliminated effective July 1, 2019.

~~4) Model 3 Partial ($): A fixed dollar amount of the member contributions are paid by the employer as a salary supplement and remitted to TFFR as tax deferred contributions. The remaining member contributions are paid by the member and remitted by the employer as tax deferred contributions. Effective July 1, 2003, employers may no longer select Model 3. Any employers currently paying member contributions under this model may continue as a closed group, but Model 3 will no longer be available to other employers. Effective July 1, 2019, Model 3 will be eliminated, and no employers will be allowed to utilize this model.~~

5) Model 4 State Agencies: Four Percent (4%) of the member contributions (or the % of member contributions the State agrees to pay) are paid by the State as a salary supplement and remitted to TFFR as tax deferred contributions. The remaining member contributions are paid by the member and remitted by the ~~employer~~business partner as tax deferred contributions.

D. ~~Employer~~Business partners who do not select one of the above models must report member contributions paid by the member and remitted by the ~~employer~~business partner as taxed contributions. Payment of member contributions cannot be made on a tax deferred basis unless one of the above approved models is selected in writing.

2. ~~Employer~~Business partner Reporting Errors

It is the policy of the TFFR Board of Trustees that when an unintentional error in the reporting of retirement contributions by a TFFR participating ~~employer~~business partner is discovered during an ~~employer~~business partner audit, the following guidelines will apply:

a. The ~~employer~~business partner will be billed for all material shortages due plus interest or refunded for all material overpayments.
b. Materiality limit to be used in determining if a member's account will be corrected is an aggregate total of $500 in a fiscal year per individual member per year, unless otherwise approved by the Deputy Executive Director-Chief Retirement Officer.
c. The interest charged to the ~~employer~~business partner will be the actuarial investment return assumption.
d. Failure of the ~~employer~~business partner to pay the required shortages or provide required information will constitute "failure to make required reports and payments" and require application of section 15-39.1-23, NDCC.
e. The TFFR board reserves the right to negotiate with an ~~employer~~business partner.
f. The ~~employer~~business partner must respond in writing to the finding(s) and/or recommendation(s) within 30 days of being notified.

3. ~~Employer~~Business partner Reports

A. It shall be the policy of the TFFR Board of Trustees to require all participating e m p l o y e r s to file reports and make payment of member and ~~employer~~business partner contributions on a monthly basis to the RIO. Both payment and report are due by the 15th day of the month following the end of the reporting period.

B. The administrative office will monitor late TFFR ~~employer~~business partner reports and payments and establish procedures for minor processing delays. Except for unintentional reporting errors, ~~employer~~business partners that do not meet the established deadlines for filing required reports shall be assessed a civil penalty as required in NDCC 15-39.1-23 unless the Executive Director or Deputy Executive Director/Chief Retirement Officer approves a request for a waiver of the penalty under special circumstances such as:

1) Death, surgery, or illness of the individual responsible for TFFR reports or their family.

2) “Acts of God” that require an ~~employer~~business partner to close school such as blizzards, storms, or floods.

3) Unforeseen events such as resignation of the individual responsible for TFFR reports, computer malfunction, etc.

C. The request for a waiver must be in writing and signed by the administrator.

4. Ineligible TFFR Salary

The TFFR Board desires to provide guidance to TFFR ~~employer~~business partners regarding how eligible salary shall be determined for payments made to licensed teachers for performing certain duties.

NDCC 15-39.1-04(10)(h) provides that eligible salary does not include “*other benefits or payments not defined in this section which the board determines to be ineligible teachers' fund for retirement salary.”*

It is the policy of the TFFR Board of Trustees that effective July 1, 2016, additional payments made by a TFFR participating ~~employer~~business partner to a licensed TFFR member for equipment maintenance and repair, jobsite prep and finish work, and similar types of nonteaching duties are not eligible salary for TFFR purposes if the duties are not included on the member's regular teaching contract(s).

This policy does not prohibit the Board from making an eligible salary determination for an individual member pursuant to N.D.A.C. § 82-04-02-01.

F. Member Communication

1. Disclosure to Membership

It shall be the policy of the TFFR Board of Trustees that member handbooks, member statements, member newsletters, and financial reports be prepared and made available for TFFR members. RIO staff will prepare, and the TFFR Board of Trustees will review for approval at least once a biennium a communications plan that summarizes the content and method for providing member and ~~employer~~business partner education and publications.

2. Information Dissemination

It is the policy of the TFFR Board of Trustees to allow member and ~~employer~~business partner interest groups and other approved third parties to send specific information to the TFFR membership using a “blind mailing” method. The information to be mailed and third-party organization must be approved by the Executive Director in advance. Member and ~~employer~~business partner interest groups include, but are not limited to, ~~North Dakota Council of Educational Leaders~~NDCEL ~~(NDCEL)~~, ~~ND~~North Dakota United (NDU), NDRTA, and North Dakota School Boards Association (NDSBA).

Under the "blind mailing" method, the third party must submit information or materials they wish to send to TFFR members. The third party must sign an agreement that they will not use the mailing to engage in partisan political activities.

If approved, the third party will forward the materials to an independent mailing company approved by TFFR. The mailing company must sign a "no disclosure" agreement with TFFR.

Agreements between TFFR and the mailing companies and third parties must be executed prior to the providing the membership information.

TFFR will then supply membership mailing information to the mailing company. The mailing company will combine the material from the third party with the mailing list and send to TFFR members. The cost of the mailing will be paid by the third party.

TFFR Board Adopted: July 15, 1999.
Amended: November 15, 2001.

3. Outreach Program Facilities

It shall be the policy of the TFFR Board of Trustees that school district facilities used for TFFR outreach programs must meet ADA requirements. In addition, authorized school district employees must be present to direct guests to the proper meeting room and lock the building at the close of the program. RIO employees who are conducting outreach programs for TFFR members are not allowed to be in school district buildings without the presence of an administrator, teacher, or other authorized school district employee.

RIO staff will not be able to conduct outreach programs at that site if the above conditions are not met.

Section II: Program Policies Section Exhibits

1. Asset Allocation Definitions

Overview of Asset Class Definitions

There are three major asset classes:

- ~~1.~~ Equity
- ~~2.~~ Debt
- ~~3.~~ Real Assets (or Other)

Alternative Investments are often cited as the fourth major asset class, but can frequently be re-classified into one of the other three categories with some exceptions (i.e. total return strategies using debt and equity).

Equity investments represent an ownership claim on the residual assets of a company after paying off debt.

Equities should be segregated into two major sectors, Public and Private, given major differences in liquidity:

1. Public equities are generally highly liquid and *valued on a daily basis* in the financial markets. Examples include common stock (Apple, Coca-Cola or McDonalds), options and futures.
2. Private equities are generally less liquid and often *valued on a less frequent basis* (quarterly).

Public equity markets are often sub-classified by geographic region (U.S., International or Global), market capitalization (Large, Medium or Small), investment style (core, growth or value) and level of economic development (developed or emerging markets). The top U.S. and global equity benchmarks are discussed below.

Five major U.S. equity benchmarks include the **S&P 500, Russell 1000, 2000 and 3000,** and **Dow Jones Industrial Average ("Dow")**. The **S&P 500** is based on the market capitalizations of 500 large companies having common stock listed on the NYSE or NASDAQ. The **Russell 1000** represents the highest-ranking 1,000 stocks in the Russell 3000 Index, and represents about 90% of the total market capitalization of that index. The Russell 1000 has a weighted average market capitalization of over $100 billion with a median of approximately $8 billion. The **Russell 2000 Index** is a small-cap index and represents the bottom 2,000 stocks in the Russell 3000 Index. The Russell 2000 has a weighted average market capitalization of less than $2 billion with a median of less than $1 billion. The Russell 2000 is the most common benchmark for funds that identify themselves as "small-cap", while the **S&P 500** index is used primarily for large capitalization stocks. The **Dow** is a price-weighted measure of 30 U.S. blue-chip companies. **The Dow** covers all industries with the exception of transportation and utilities, which are covered by the Dow Jones Transportation Average and Dow Jones Utility Average. While stock selection is not governed by quantitative rules, a stock typically is added to The

Dow only if the company has an excellent reputation, demonstrates sustained growth and is of interest to a large number of investors. Maintaining adequate sector representation within the indices is also a consideration in the selection process.

The MSCI All Country World Index (or "ACWI") measures the equity market performance of developed and emerging markets and consists of 47 country indexes comprising 23 developed and 24 emerging market country indexes. The ACWI includes approximately 2,500 large and mid-cap equity securities and covers 85% of the global investable market. The **MSCI ACWI Investible Market Index** (or "ACWI IMI") captures large, mid and small cap securities across 23 developed and 24 emerging market countries with over 8,700 constituents and covering approximately 99% of the global investment opportunity set. The **MSCI EAFE Index (Europe, Australasia, Far East)** measures the equity market performance of the developed market countries, excluding the US & Canada. The **MSCI Emerging Markets Index** measures equity market performance of emerging markets and consists of 24 countries.

Public equity has historically provided **high investment returns with high volatility and high liquidity when compared to Bonds or Real Assets**. Most investment consultants believe that Private Equity can provide an even higher investment return than Public Equity, albeit with significant less liquidity and potentially higher volatility.

Debt represents a legal obligation between a borrower and a lender for a stated period of time and rate.

Debt or "Bonds" are classified as fixed or floating depending upon whether the interest rate is derived using a fixed rate (i.e. 5%) or a floating rate (i.e. Prime + 1.00%). Duration risk within fixed income is a major driver of investment risk and return particularly for longer term securities, including U.S. Treasury bonds.

Debt is often sub-classified into investment grade (rated BBB- or better) or non-investment grade (rated less than BBB- or non-rated) or by geographic region (U.S., International, Developed Markets or Emerging Markets). Debt can be issued by governments, agencies or companies and represent general obligations of the issuer or be backed by a specified pool of assets (i.e. mortgage backed securities). Bonds serve to diversify a portfolio by offering **lower volatility** than equities along with a **lower expected return and generally high liquidity**. **Real Assets represent an ownership interest in physical assets** such as real estate, infrastructure (airports, electrical grids, energy pipelines, information technology data centers and systems, shipping ports, toll roads, and water supply and treatment facilities), timberland and certain commodities (gold, oil, wheat). Real assets are expected to provide inflation hedging characteristics in periods of unanticipated inflation and diversify a portfolio consisting of debt and equity.

Alternative Investments can include precious metals, art, antiques, and financial assets such as derivatives, commodities, private equity, distressed debt and hedge funds. Real estate, infrastructure and forestry/timber are also often termed alternative. Alternatives are sometimes used as a tool to reduce overall investment risk through diversification and may offer lower correlation with traditional financial investments such as stocks and bonds, although it may be difficult to determine the current market value of the asset, may be illiquid, purchase and sales costs may be high, and there may be limited historical risk and return data, all of which makes analysis complex.

2. Asset Class Definitions

Global Equity

Definition
Investment represents an ownership claim on the residual assets of a company after the discharge of all senior claims such as secured and unsecured debt.

Public Equity

Public equity is traded on a national exchange. Includes common stock, preferred stock, convertible to stock, options, warrants, futures and other derivatives on equities or composites of equities, exchange-traded funds and equity-linked notes, units and partnership shares representing ownership interests in an underlying equity investment.

Private Equity

Private equity represents equity or equity linked securities in operating companies that are not publicly traded on a stock exchange.

Types of investment strategies

- *Leveraged buyout (LBO)* – Acquisition of a company with the use of financial leverage
- *Growth capital* – Investment in mature companies looking for capital to expand, restructure, enter new markets
- *Venture capital* – Investment in typically less mature companies, for launch, early development, or expansion
- *Mezzanine* – Subordinated debt/preferred equity used to reduce amount of equity capital required to finance LBOs
- *Distressed* – Equity securities of financially stressed companies
- *Secondary* – Investment in existing private equity assets

Types of structures

- *Direct investment* – Direct purchase of equity securities of a private company
- *Co-investments* – Investments in equity securities of a private company alongside
- the manager of a direct fund
- *Direct fund* – Pool of capital formed to make direct investments
- *Fund-of-funds* – Pool of capital formed to make investments in direct funds

Strategic Role

- High long-term real returns
- Hedge against active (pre-retirement) liabilities
- Private equity enhances total portfolio return as a tradeoff for illiquidity

Characteristics

Public Developed Markets

- Relatively high returns (long-term) as compared to fixed income and real assets
- Relatively high volatility (standard deviation of returns) as compared to fixed income and real assets
- Relatively high liquidity
- Diversification
- Historically, public developed equities exhibit high correlation with private equity and high yield bonds, moderate correlation with investment grade corporate bonds and real assets,

and negative correlation with sovereign debt.
- Currency adds to volatility but can be hedged, which mutes the diversification benefits

Public Emerging Markets
- Higher expected returns due to economic growth potential
- Liquidity risk is significant, particularly in frontier markets
- High volatility, particularly in frontier markets
- Historically, public emerging equities exhibit high correlation with high yield bonds, moderate correlation with investment grade corporate bonds and real assets, and negative correlation with sovereign debt.
- FX markets not sufficiently developed to hedge currency risk
- Limited access to markets
- Market information less abundant than for developed markets
- Counterparty risk and settlement delays pronounced in frontier markets

Private Equity
- Illiquid, long-term time horizon (7-12 year closed-end partnerships)
- Quality of the managers selected is the key determinant of success
- High volatility of returns compensated by higher expected returns
- Historically, public emerging equities exhibit high correlation with high yield bonds, moderate correlation with investment grade corporate bonds and real assets, and negative correlation with sovereign debt.
- Encompasses three stages: fundraising, portfolio construction and investment, exit and return realization

Risks

Public Equity
- *Absolute risk* – Possible magnitude of price decline
- *Liability hedging risk* – Risk that assets will not increase when liabilities increase
- *Regulatory risk* – Changes may adversely affect markets
- *Tax risk* – Changes may adversely affect markets
- *Liquidity risk* – Difficulty trading securities under adverse market conditions
- *Firm specific risk* – Unique risks associated with a specific firm
- *Tracking risk* – Magnitude of performance deterioration from a benchmark
- *Time horizon* – Horizon too short to weather cycles
- *Benchmark risk* – Benchmark not appropriate proxy
- *Market risks* – Price decline
- *Currency risk* – Unanticipated changes in exchange rate between two currencies
- *Counterparty risk* – Counterparty does not live up to its contractual obligations

Private Equity
- *Liquidity risk* – Absence of liquidity and appropriate exits could significantly increase time horizon
- *Firm specific risk* – Unique risks associated with a specific firm
- *Leverage risk* – Historical excess use of leverage and current inability to secure financing may adversely affect LBOs
- *Manager selection risk* – Selecting managers that fail to deliver top performance results
- *Diversification risk* – Inability to properly diversify the portfolio by vintage year, industry

groups, geography

- *Tax risk* – Changes may adversely affect markets
- *Regulatory risk* – Changes may adversely affect markets
- *Strategy risk* – Continuing applicability of investment strategy in context of capital flows
- *Market risks* – Price decline

Global Fixed Income

Definition

Investment represents a legal obligation between a borrower and the lender with a maturity in excess of one year. Evidence of indebtedness and securities that evidence an ownership interest in debt obligations that are issued, insured, guaranteed by, or based on the credit of the following: companies, governmental entities or agencies, banks and insurance companies. Includes agency and non-agency mortgage-backed securities, collateralized mortgage obligations, commercial mortgage- backed securities, asset-backed securities, private placements, and options, futures or other derivatives on fixed income securities or components of fixed income.

Strategic Role

- Diversification within a multi-asset class, total return portfolio
- Hedge against a long duration accrued liability
- Current income
- Non-U.S. provides hedge against unanticipated domestic inflation and diversification to U.S. assets

Characteristics

- Medium volatility asset class
- Relatively high liquidity
- Broadly diversified by market sector, quality, and maturity
- Historically, developed sovereign debt exhibits low to negative correlation with real assets and negative correlation with equities; investment grade corporate bonds exhibit moderate correlation with equities and low correlation with real assets; high yield exhibits high correlation with equities and moderate correlation with real assets.
- A large currency component exists within international fixed income returns
- Developed markets are extremely liquid. Many issues of less developed markets are also relatively liquid.

Risks

- *Duration risk* – Price volatility from a change in overall interest rates
- *Convexity risk* – Negative convexity is the risk of price declines being greater than the price increase due to interest rates moving equally up versus down
- *Default or credit risk* – The uncertainty surrounding the borrower's ability to repay its obligations
- *Structure risk* – Risk that arises from the options implicit in bonds (like call ability and sinking funds) or the rules that govern cash flow differ from expectations
- *Sector risk* – Risk of holding sectors that are in different proportions than the benchmark
- *Liquidity risk* – Cost of trading in a security which is reflected in the bid-ask spread or the cost of selling due to cash flow needs
- *Reinvestment risk* – The uncertainty surrounding future yield opportunities to invest funds which come available due to call, maturities, or coupon payments

- *Benchmark risk* – Risk of the benchmark being inappropriate
- *Yield curve risk* – Price changes induced by changes in the slope of the yield curve
- *Currency risk* – The risk of currency movements vs. the dollar for each market. Currency may contribute greatly to return and lower correlation.

Global Real Assets

Definition
Investment represents an ownership interest in real return assets that provide inflation hedging characteristics in periods of unanticipated inflation. Includes inflation-linked securities, private or public real estate equity or equity-linked investments, private or public real estate debt, infrastructure, timber, real asset mezzanine debt or equity, non-fixed assets and other opportunistic investments in real assets.

Strategic Role
- Reduces risk of composite multi-asset portfolios through diversification
- Relatively low correlations to traditional asset classes
- Can serve as a possible inflation hedge during periods of high inflation
- Provides an attractive return relative to fixed income asset class in periods of low to moderate inflation
- Infrastructure provides inflation protection as he revenues of the underlying assets are typically linked to CPI
- Potential for high returns in niche opportunities

Characteristics

Real Estate

- *Risk* – Volatility of private real estate falls between publicly-traded debt and publicly-traded equities
- *Returns* – Nominal returns are expected to fall between equities and fixed income
- *Correlation* – Expected to exhibit low to no correlation with government and investment grade corporate bonds, and moderate correlation with high yield and equities.
- *Illiquidity* – Transactions require a significantly longer period to execute than other asset classes
- *Inefficient Market* – Information affecting real estate asset valuation and market trading is not rapidly, accurately, or efficiently reflected or interpreted in its pricing

Infrastructure

- *Long life assets* – Capital intensive assets with 25 to 99 year concessions, match for liability duration
- *Inflation protection* – Revenues typically linked to CPI
- *Monopoly or quasi monopoly* – High barriers to entry due to scale and capital cost
- *Steady and predictable cash flow* – Produce strong and predictable yields
- *Low correlation* – Provides portfolio diversification, low beta; expected to exhibit low to no correlation with fixed income and equities
- *Inelastic demand* – Predictable demand with little volatility, less susceptibility to economic downturns
- *Limited commodity risk* – Not subject to commodity pricing
- *Insensitive to changes in technology* – Low risk of redundancy or technology obsolescence
- Investments are usually illiquid and involve a long (10 to 20 year) holding period

Timberland

- *Return* – Low correlation with other asset classes, returns stem from four distinct sources: biological growth, timber prices, land values and management strategy
- *Income* – Driven almost entirely by the sale of harvested mature trees
- *Correlation* – Expected to exhibit low to no correlation with government and investment grade corporate bonds, and moderate correlation with high yield and equities.
- *Appreciation* – Driven by increased volume and value on timber and appreciation of underlying land
- Categorized by type of land (e.g. plantation, natural forest), type of tree (e.g., hardwood, softwood), country and region

Commodities

- *Real assets* – Raw materials that are the physical inputs of production, relatively homogenous in nature, lending itself to be traded via contracts with standardized terms
- *Inflation protection* – Storable commodities (such as energy) directly related to the intensity of economic activity exhibit positive correlation with unexpected inflation
- *Insurance risk premium* – Commodity futures prices tend to be priced at a discount to spot prices in order to induce speculators to bear volatile commodity price risk that inventory holders and producers wish to lay off
- *Positive event risk* – Surprises that occur in the commodities markets tend to be those that unexpectedly reduce the supply of the commodity to the market, resulting in price spikes
- *Negatively correlated with financial assets* – Unlike stocks and bonds, commodities are not as directly impacted by changes in discount rates as they are by the current supply and demand of the underlying commodity, thus they should be expected to have little or even negative correlation with capital assets.

Risks

Real Estate

- *Property type risks* – Negative changes in demand/supply conditions by property type (e.g., office, industrial, retail, lodging, mixed-use, multi-family)
- *Location risks* – Local market condition relative to the adverse changes surrounding a property, or in discovery of hazardous underlying conditions, such as toxic waste
- *Tenant credit risks* – Failure by a tenant to pay what is contractually owed
- *Physical/functional obsolescence* – Negative influences on buildings due to technological changes, outdated layout and design features, and physical depreciation
- *Interest rate risk* – Higher rates can negatively impact both sales strategies and leveraged properties at refinancing
- *Reinvestment risk* – In a declining rental rate market, cash flow received may not be reinvested at the same level
- *Business cycle risk* – As economies slow down, there may be less demand for space
- *Inflationary risk* – Rent levels may not always keep up with rising operating expense levels
- *Illiquidity* – Inability to effectively liquidate a property into cash
- *Natural disaster risk* – Weather, floods, earthquake
- Regulatory concerns are critical, especially in emerging markets
- Capital and managerial intensive

Infrastructure

- *Leverage* – Deals with leverage between 40% and 80% can transform low risk assets into risky investments. Changes in the credit environment alter refinancing risk.
- *Market inefficiencies* – Competitive auctions lead to overpaying. There is a limited history and track record in the U.S. infrastructure space.
- *Political and headline risk* – Public acceptance and understanding of infrastructure needs to expand. In addition, the political landscape in every state and municipality differs.
- *Regulatory risk* – Regulated assets are subject to government changes
- *Construction and development* – Project overruns and delays should be shared with construction partners. Volume/demand risk for new developments can vary.
- *Labor issues* – Greenfield projects could generate new jobs while the privatization of brownfield assets could eliminate skilled labor members
- *Asset control* – Stipulations via concession agreements limit some management control (pricing, growth, decision approvals, etc.). Asset control needs to be appropriately priced.
- *Firm specific risk* – Unique risks are associated with specific firm

Timberland

- *Liquidity risk* – Liquidity is thin, marketplace characterized by few buyers and sellers, transactions are complicated and can take many months to execute
- *Valuation risk* – Annual appraisal process can lead to disparities between carrying value and realized sales prices during downturns
- *Physical risk* – Subject to losses from natural and human-caused events such as fire, insect and vermin infestations, disease, inclement weather, and theft
- *Political and regulatory risk* – Environmental regulations can restrain or prohibit timberland management activities
- *Leverage* – Can amplify volatility and potentially lead to an inability to refinance properties or lead to a distressed sale, requires a minimum level of generated income
- *Location risks* – Real estate dispositions may also be impacted by weakness in local residential real estate markets

Commodities

- *Price risk* – Commodities with difficult or non-existent storage situations (heating oil, live cattle, live hogs, copper) coupled with a long-lead time between the production decision and the actual production of the commodity can lead to very volatile spot prices
- *Negative futures roll* – When the future contract's price is at a premium to the spot price, the cost to roll contracts forward is negative: an investor continuously locks in losses from the futures contracts converging to a lower spot price
- *Regulatory risk* – Concerns about the role played by investors in commodity markets could lead to new regulations impacting available investment opportunities, ultimately affecting investors' "license to invest".
- *Leverage* – A commodity futures program that is not fully collateralized (for every desired $1 in
  commodity futures exposure, an investor sets aside $1 in cash) can amplify volatility and potentially lead to greater losses
- *Implementation* – Because futures contracts are levered, cash management for the collateral is an important consideration due to the value

Global Alternatives

Definition

Investment has a distinct return/risk factor profile as compared to other specified broad asset class groupings. Examples: Low market exposure/absolute return strategies such as market neutral, and other niche strategies with low asset class beta such as insurance-linked investments, volatility, intellectual property, healthcare royalty, shipping, litigation finance and fine art.

Strategic Role

- More robust diversification achieved through the introduction of non-traditional return driver/risk factors
- Low or negative correlations to other asset classes
- Return profile less dependent on economic growth and interest rates
- Potential for attractive risk-adjusted returns

Characteristics

- *Returns* – Exhibits lower correlations to broader equity and credit markets in periods of market distress
- *Illiquidity* – Transactions may require a longer period to execute than other asset classes
- *Inefficient Market* – Information affecting asset valuation and market trading may not be accurately or efficiently reflected or interpreted in its pricing

Risks

- *Market risk* – Cost of carry on being long volatility
- *Natural disaster risk* – Weather, floods, earthquake affect natural catastrophe-based insurance-linked products
- *Due diligence* – Complicated to evaluate and monitor
- *Illiquidity* – Transactions may require a longer period to execute than other asset classes
- *Implementation* – Complexity of implementation may be an impediment

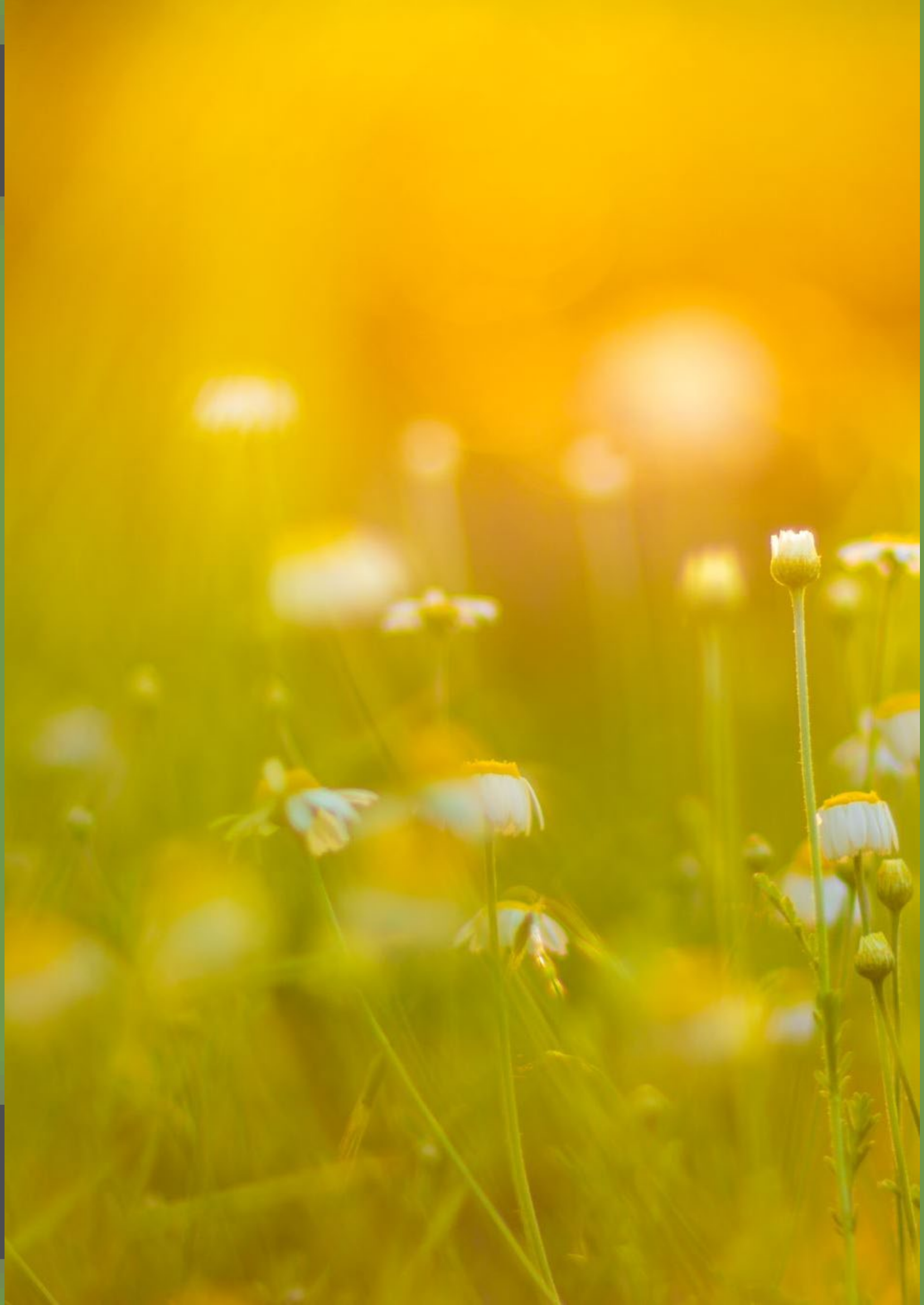
TFFR BOARD

2025 Legislative Session Planning

Presented by

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

September 26, 2024



TOPICS

I. Proposed Legislation Position Recommendations
II. Retirement Education Initiative Planning
III. Teacher Retention and Recruitment Findings Discussion

I. PROPOSED LEGISLATION – BILL DRAFT 25.0129.01000

SECTION 1. AMENDMENT. Subsection 4 of section 15-39.1-10 of the North Dakota Century Code is amended and reenacted as follows:

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 [26 U.S.C. 401(a)(9)], as amended, and the regulations issued under that section, as applicable to governmental plans.

Next steps: IRS Compliance bill submitted to EBPC by Board. RIO staff to submit bill to Legislative Council in December 2024.

I. PROPOSED LEGISLATION – BILL DRAFT 25.0143.01000

SECTION 2. APPROPRIATION - TRANSFER - GENERAL FUND TO TEACHERS' FUND FOR RETIREMENT - SUPPLEMENTAL PAYMENT.

1. There is appropriated out of any moneys in the general fund in the state treasury, not otherwise appropriated, the sum of $49,200,000, which the office of management and budget shall transfer to the teachers' fund for retirement during the biennium beginning July 1, 2025, and ending June 30, 2027.

2. The amount of funding transferred under this section, which represents one-half of the estimated general fund cost of providing state employee compensation increases of 6 percent the first year and 4 percent the second year of the 2023-25 biennium, must be used for a one-time supplemental payment to eligible retirees in recognition of cost-of-living adjustments.

Next Steps: The GPR Committee discussed this bill and recommends the Board take a position of support for the funding of a one-time payment for retired TFFR members from the general fund, but a neutral position regarding the amount, the method of distribution, and the nexus between the payment and increases appropriated for state employees. Board to discuss and provide staff guidance regarding position on legislation.

II. RETIREMENT EDUCATION PLANNING

Timing to Achieve Goals

Phase I: 7/2024 – 6/2027

Education and Research

Phase II: 7/2027 - 3/2028

Plan Design Changes

Discussion and Proposal

Phase III 4/2028 – 4/2029

Proposed Changes through Legislative Session.

II. RETIREMENT EDUCATION INTIATIVE PLANNING

FACTORS

A. Costs for additional resources included in 2025-2027 proposed budget.
B. Staff to discuss/develop content of initiative/timing of surveys.
C. Legislative Planning Deadlines

TIMING

A. Completed

B. Scheduled internal discussion 10/2024. Collaborating on Financial Literacy Initiative

C. March 2026 to EMBC for 2027
March 2028 to EMPC for 2029

III. TEACHER RETENTION AND RECRUITMENT

Dr. Lech participated on the Teacher Retention and Recruitment Task Force and will share with the board an overview of task force findings and discussion opportunities for TFFR.

RIO was informed that the final task force report will likely be made available to the public after the September TFFR Board meeting. Once the report is made available RIO will distribute that information to Board members for discussion at a future Board meeting.

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MEMORANDUM

TO: **TFFR Board**
FROM: **Sara Seiler, Supervisor of Internal Audit**
DATE: **September 4, 2024**
RE: **Audit Committee Update**

The Audit Committee met on August 14, 2024. The Audit Committee reviewed and approved the 2023–2024-year end audit activities, audit report to State Investment Board, and an update on current audit activities. Weaver presented a status update on the internal audit maturity development project. The project is near completion. The Audit Committee discussed next steps for internal audit and approved staff to develop a request for proposal for additional auditing resources for internal audits. An internal audit workplan was approved for the 2024-2025 fiscal year. The Audit Committee also approved updated version of the Audit Committee and Internal Audit Charters to be compliance with the 2024 Institute of Internal Auditors Standards.

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/sibauditmat20240814.pdf

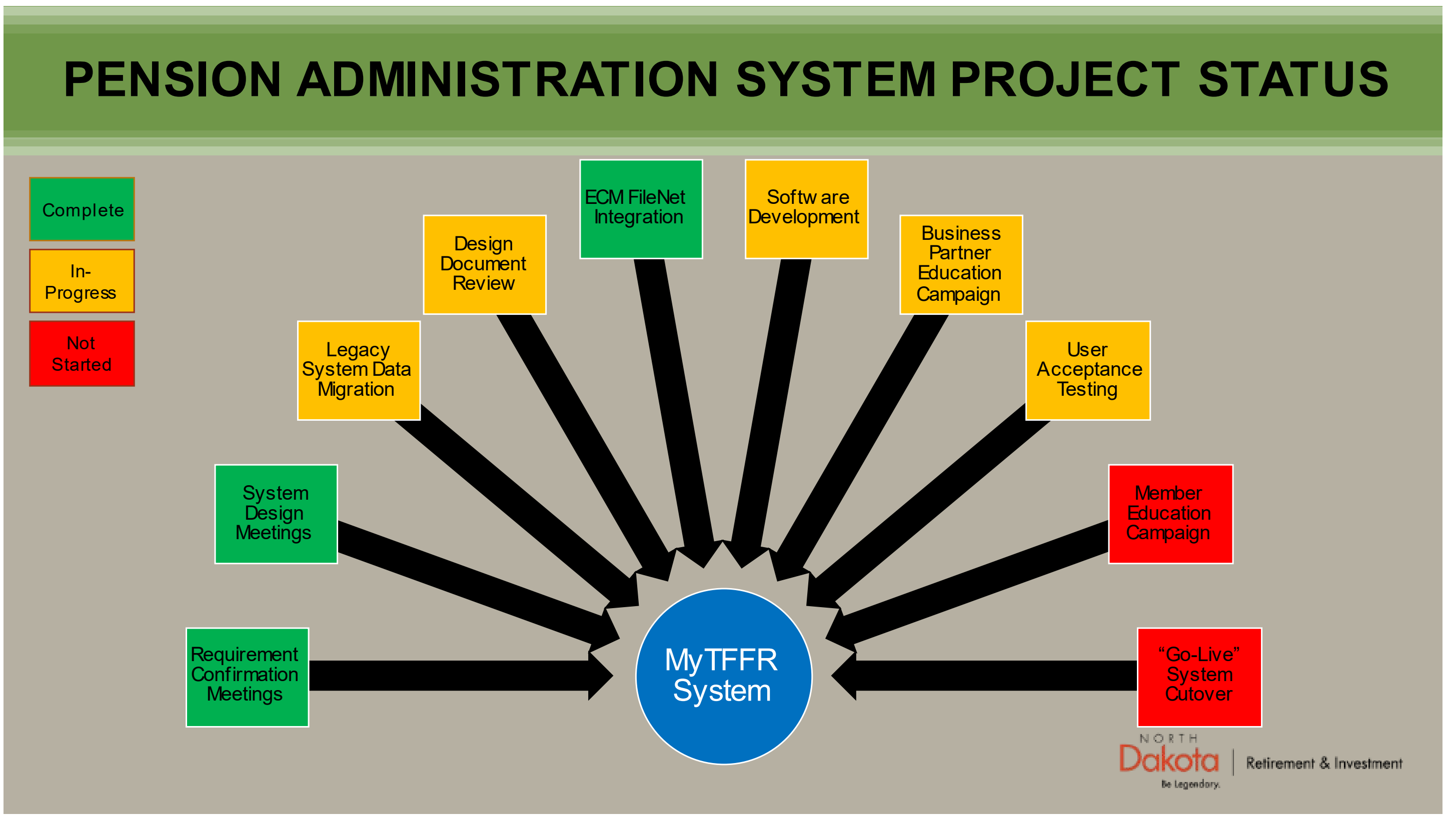
BOARD ACTION REQUESTED: Information Only.

Retirement & Investment

MEMORANDUM

TO: TFFR
FROM: Chad R. Roberts, DED/CRO
DATE: September 18, 2024
RE: September 2024 pension administration system project update

Project Status



RIO staff completed phase 3 of user acceptance testing in late August 2024. The third phase consisted of the employer reporting module. The three vendors that provide employer software have finalized their integration designs so that the employer software can interface with the new pension system. Those vendors are now deploying their updated software to employers.

Phase 4, the testing of the member self-service portal, began on September 10, 2024. This testing is going well, and the staff is impressed with the member experience in the system. The testing of this part of the system will continue for the next few weeks.

NDRIO and NDPERS held meetings to develop the dual member service credit calculation interface. This interface will eliminate a manual process that consumes significant staff time tracking dual-member participants and calculating retirement benefits for dual-member retirees. The interface design is complete. NDPERS will update their software in October 2024 to facilitate automation between NDRIO and NDPERS.

Data migration from the old system to the new system is nearing completion. Most of the data has been migrated, and the cleanup of small data sectors remains. This has been a significant lift, but it has proceeded much more smoothly than anticipated and is ahead of schedule.

Testing of the scanning function of documents and their preservation in the North Dakota FileNet system is progressing, and no issues have been found with this component.

Staff has begun planning the cutover tasks necessary to switch from one system to another. Additionally, planning and communication for the cutover are underway with the employers to ensure employers are prepared for the transition.

Budget Status

In late August 2024, the project realized a savings of approximately $60,000 by discovering an alternative method to incorporate text messaging at a reduced cost. These savings will offset the additional hosting expense for the delay in going live from October to December. It will also offset the approximate $13,000 cost related to adding a return to teaching benefits calculator to the system.

The overtime budget has been utilized very little, creating a possible reserve for any remaining unexpected costs.

Unanticipated Issues

The vendor is ambiguous about whether they will be able to deliver certain functional modules of the project by the December 9th go-live. Discussions are ongoing with the project management team from NDIT and the vendor.

Board Action Requested: Information only

INVESTMENT PERFORMANCE

Investment Team

September 26 2024

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THE MARKET

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PERFORMANCE – BENCHMARK INDICES

Summary of Returns
June 30, 2024

Benchmark Indices (% change, annualized)	YTD	1 Yr	5 Yr	10 Yr	10 Yr Volatility
Russell 1000	14.2%	23.8%	14.6%	12.5%	17.9%
Russell 2000	1.7%	10.0%	6.9%	7.0%	22.6%
S&P 500	15.3%	24.5%	15.0%	12.8%	17.7%
MSCI ACWI IMI Net	10.3%	18.3%	10.3%	8.2%	14.3%
MSCI World ex US	5.0%	11.2%	6.5%	4.3%	14.4%
MSCI Emerging Markets	7.5%	12.5%	3.1%	2.8%	15.7%
Bloomberg Aggregate	-0.7%	2.6%	-0.2%	1.3%	4.7%
Bloomberg Gov/Credit	-0.7%	2.7%	-0.1%	1.5%	5.0%
Bloomberg US High Yield	2.6%	10.4%	3.9%	4.3%	5.2%
NCREIF Property Index (06/30/2024)	-1.2%	-5.5%	3.4%	6.1%	4.1%

Source: Bloomberg

PERFORMANCE – BENCHMARK INDICES

Summary of Returns
September 20, 2024

Benchmark Indices (% change, annualized)	YTD	1 Yr	5 Yr	10 Yr	10 Yr Volatility
Russell 1000	20.0%	30.9%	15.3%	12.7%	18.0%
Russell 2000	11.0%	24.8%	8.8%	8.3%	22.9%
S&P 500	20.8%	31.4%	15.6%	13.0%	17.9%
MSCI ACWI IMI Net	15.8%	25.3%	11.3%	8.7%	14.4%
MSCI World ex US	10.8%	18.2%	7.7%	5.2%	14.5%
MSCI Emerging Markets	10.4%	16.8%	4.1%	2.9%	15.8%
Bloomberg Aggregate	4.7%	10.4%	0.5%	1.9%	4.7%
Bloomberg Gov/Credit	4.6%	10.3%	0.6%	2.0%	5.0%
Bloomberg US High Yield	7.8%	14.5%	4.6%	4.9%	5.2%
NCREIF Property Index (06/30/2024)	-1.2%	-5.5%	3.4%	6.1%	4.1%

Source: Bloomberg

HAS INFLATION PEAKED?[1]

+9.1%

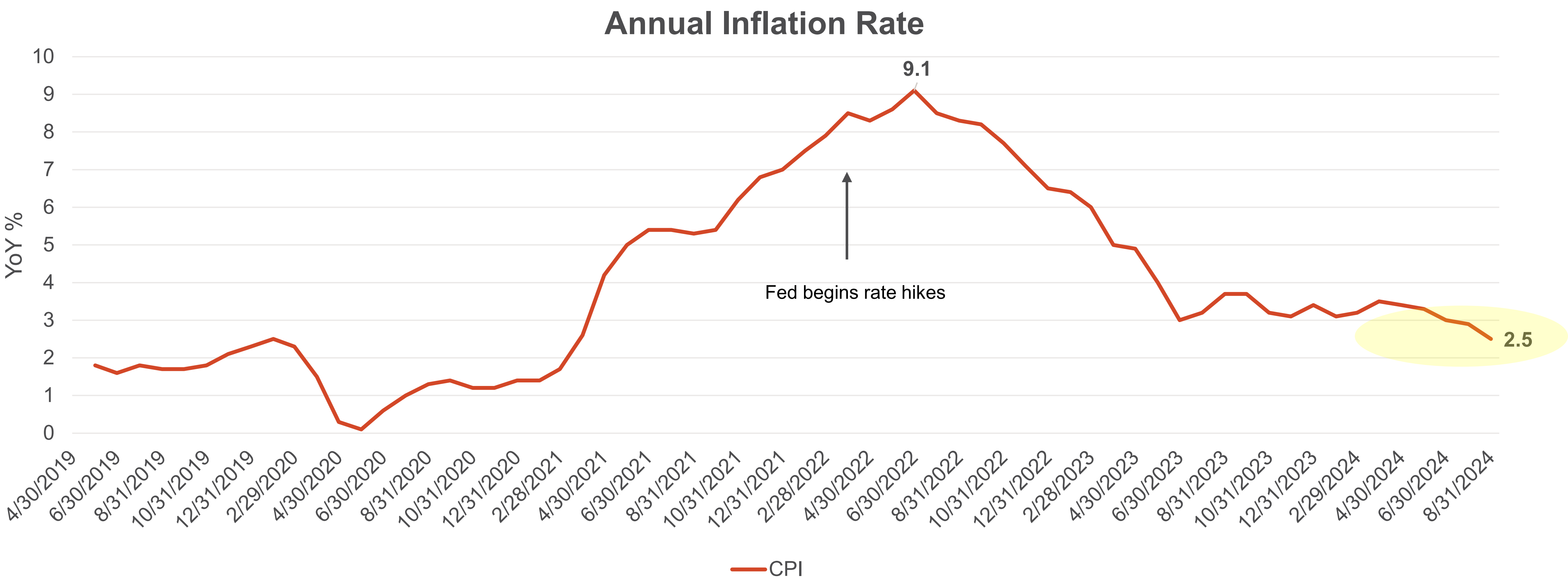
ANNUAL INFLATION RATE
(June 2021 thru June 2022)

+2.5%

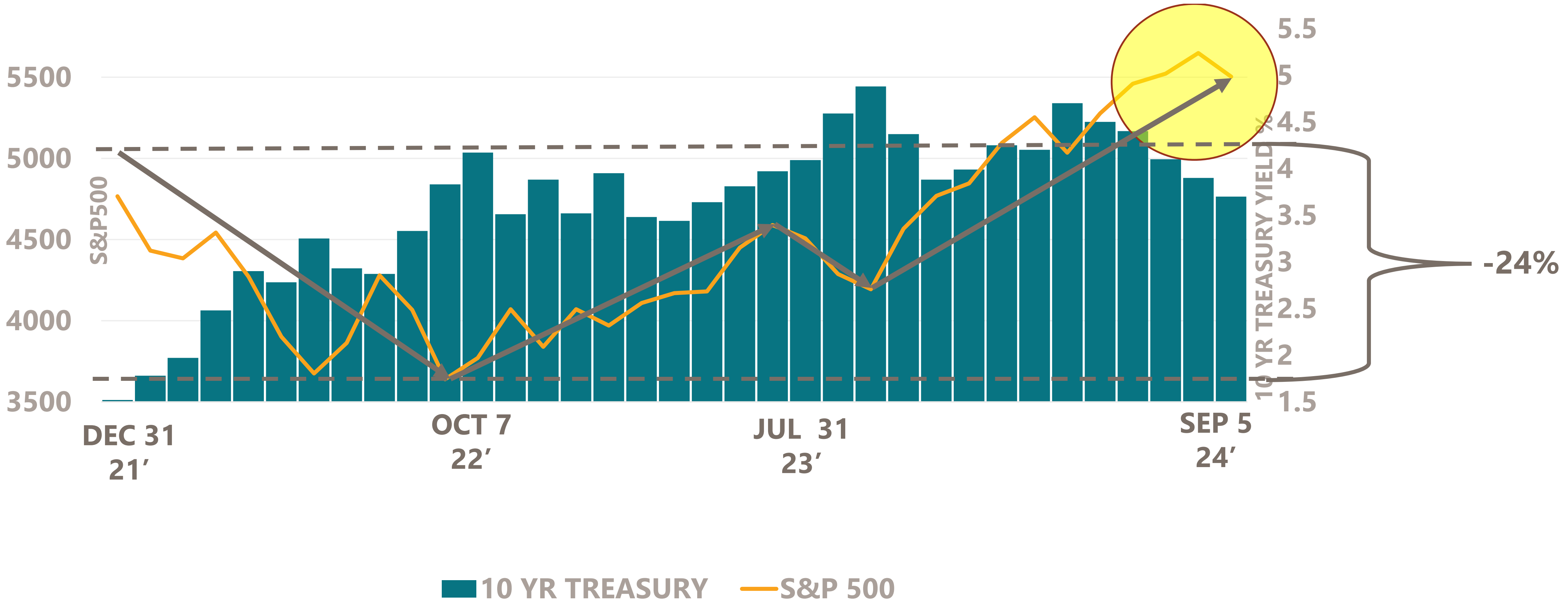
ANNUAL INFLATION RATE
(June 2023 thru June 2024)
3.2% Ex Food & Energy

1. Bureau of Labor Statistics

INFLATION PAST 5 YEARS



INFLATION EXPECTATIONS TRACKED BY S&P500[1]



1. FRED

COMPETING NARRATIVES

	LOW GROWTH	HIGHER 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	**(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 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	**(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]: 4.21%

BEST GUESS FOR FUTURE BOND RETURN!

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

PERFORMANCE

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TFFR INVESTMENT MANAGEMENT BENEFITS

TFFR TEN YEAR AVERAGE RETURN[1]

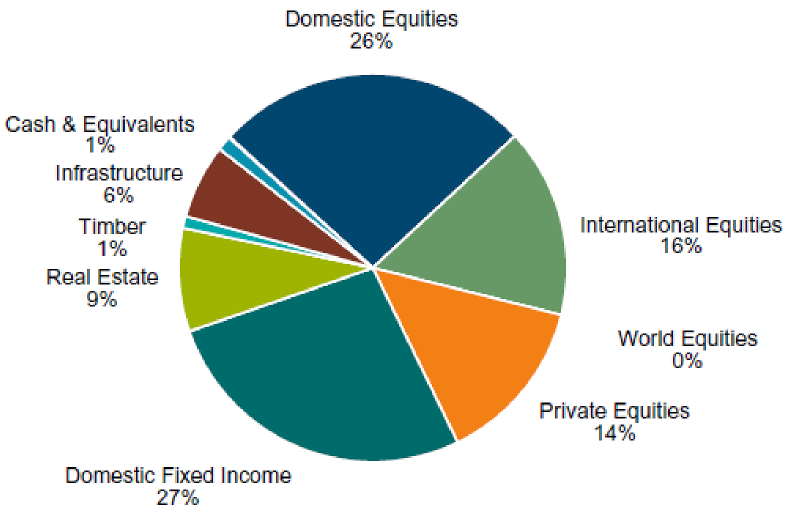
6.8% > **6.3%** > **5.4%**

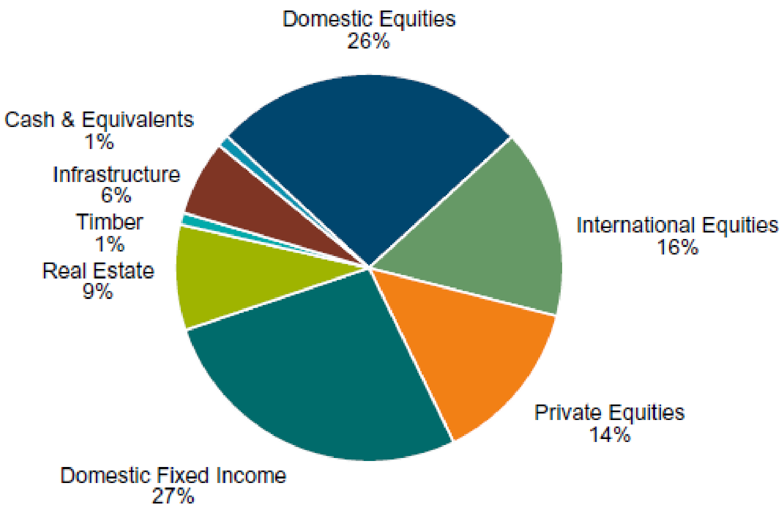
FUND RETURN	POLICY RETURN	60% EQUITIES/40% FIXED INCOME RETURN[3]
6.8%	6.3%	5.4%

1.4%/$491 MILLION Benefit[2]

1. Thru June 2024; North Dakota RIO ACFR
2. Starting with $3.3 Billion of assets
3. 60% MSCI World/40% Bloomberg Aggregate – 10 years

TFFR ASSET ALLOCATION





Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equities	865,928	26.3%	26.4%	(0.1%)	(1,821)
International Equities	520,032	15.8%	15.8%	(0.0%)	(771)
World Equities	255	0.0%	0.0%	0.0%	255
Private Equities	456,805	13.9%	13.8%	0.1%	4,312
Domestic Fixed Income	885,992	26.9%	27.0%	(0.0%)	(1,079)
Real Estate	283,270	8.6%	8.8%	(0.1%)	(4,722)
Timber	33,367	1.0%	1.0%	(0.0%)	(243)
Infrastructure	204,024	6.2%	6.3%	(0.1%)	(2,929)
Cash & Equivalents	39,894	1.2%	1.0%	0.2%	6,999
Total	3,289,567	100.0%	100.0%		

1. June 2024 values – Callan

TFFR PERFORMANCE

AS OF June 30, 2024 TFFR $3.3 Billion	Year to Date	1 Year	3 year	5 Year[1]	Risk (5 Year)
Total Fund Return - Net	4.6%	8.1%	2.9%	7.4%	9.5%
Policy Benchmark Return	4.8%	8.4%	2.8%	6.9%	9.9%
Total Relative Return[1]	-0.2%	-0.3%	0.1%	0.5%	

1. Corridor benchmark applied only in year-to-date numbers

TFFR BY YEAR PERFORMANCE

TFFR $3.3 Billion – June 30, 2024	Year to Date	23′	22′	21′	20′
Total Fund Return - Net	4.6%	10.3%	-10.5%	16.2%	12.1%
Policy Benchmark Return	4.8%	10.0%	-10.6%	15.1%	11.4%
Total Relative Return[1]	-0.2%	0.3%	0.1%	1.1%	0.7%

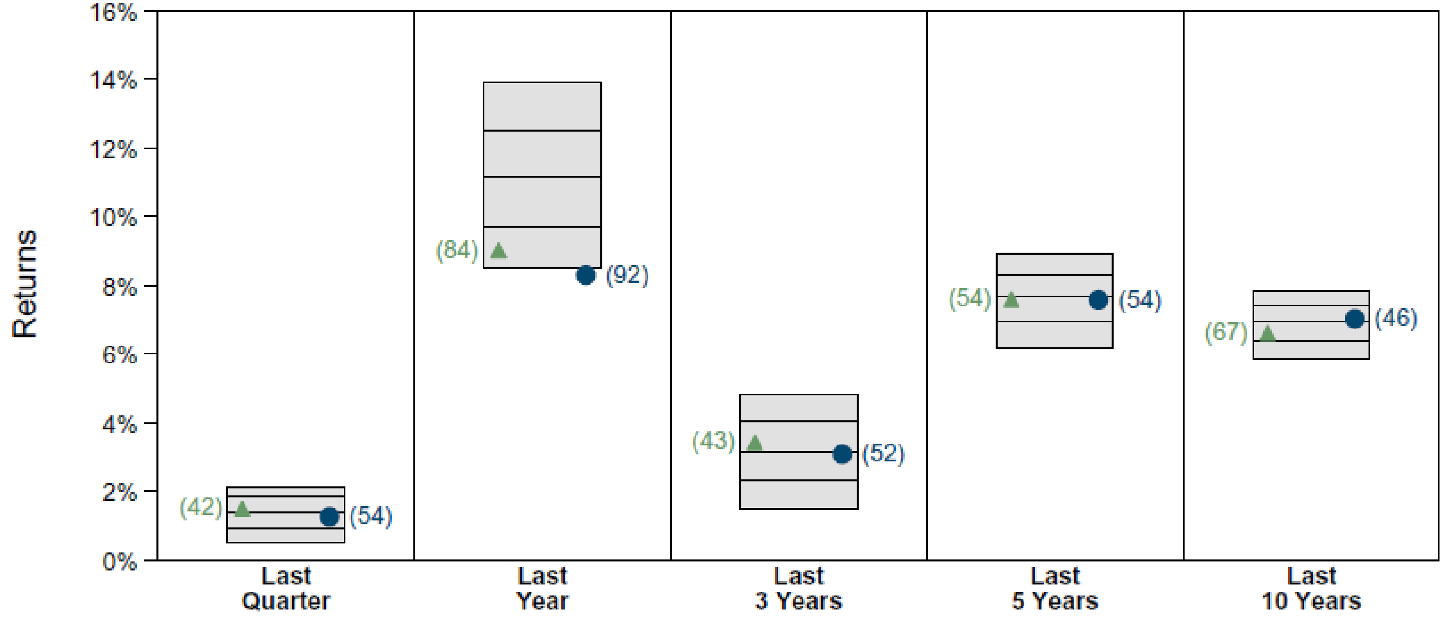
PENSION COMPOSITE PERFORMANCE

PENSION COMPOSITE[1] $7.9 Billion – June 30, 2024	Year to Date	23'	22'	21'	20'
Total Fund Return - Net	5.0%	10.7%	-10.7%	16.4%	12.1%
Policy Benchmark Return	5.0%	10.6%	-10.9%	15.2%	11.6%
Total Relative Return[1]	0.0%	0.1%	0.2%	1.2%	0.5%

1. PERS, TFFR, Bismarck, Employees, Bismarck Police, Grand Forks, Grand Forks Parks, Job Service

TFFR PERFORMANCE

Callan Public Fund Sponsor Database



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	2.13	13.92	4.84	8.90	7.84
25th Percentile	1.88	12.48	4.03	8.28	7.40
Median	1.38	11.13	3.16	7.70	6.96
75th Percentile	0.95	9.71	2.34	6.95	6.39
90th Percentile	0.53	8.49	1.50	6.15	5.85
Total Fund ●	1.27	8.30	3.09	7.58	7.03
Policy Target ▲	1.51	9.02	3.43	7.59	6.62

1. June 2024 values – Callan

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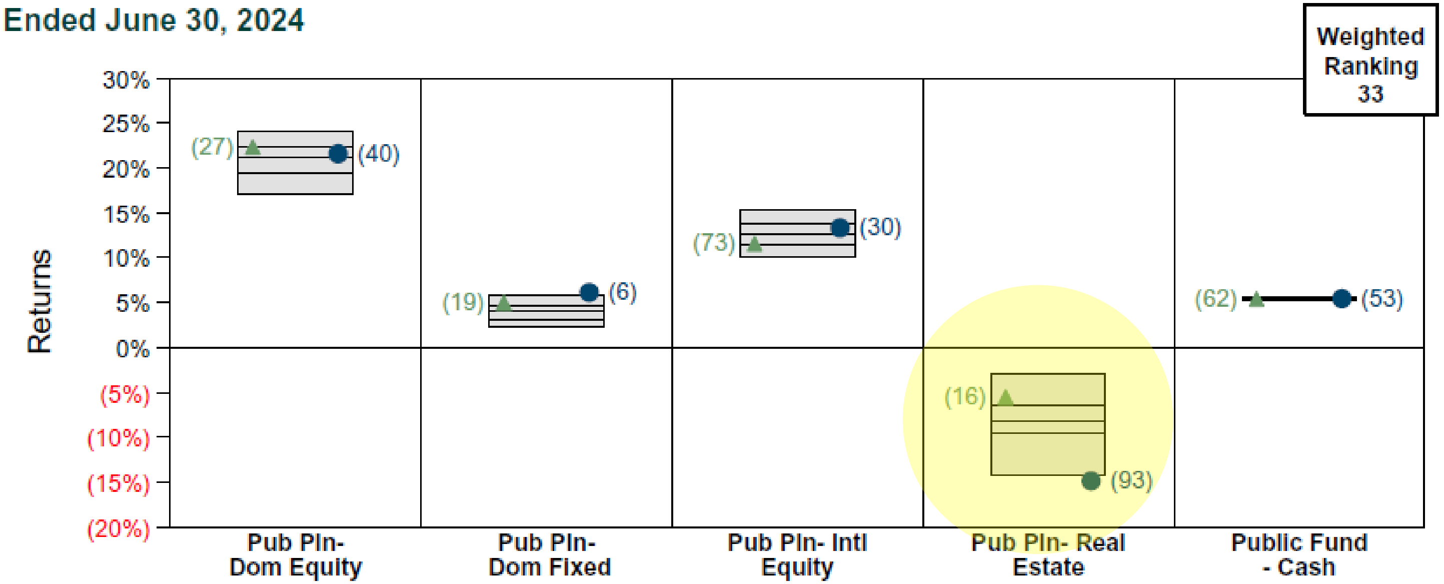
TFFR ASSET CLASS PERFORMANCE

Total Asset Class Performance
One Year Ended June 30, 2024

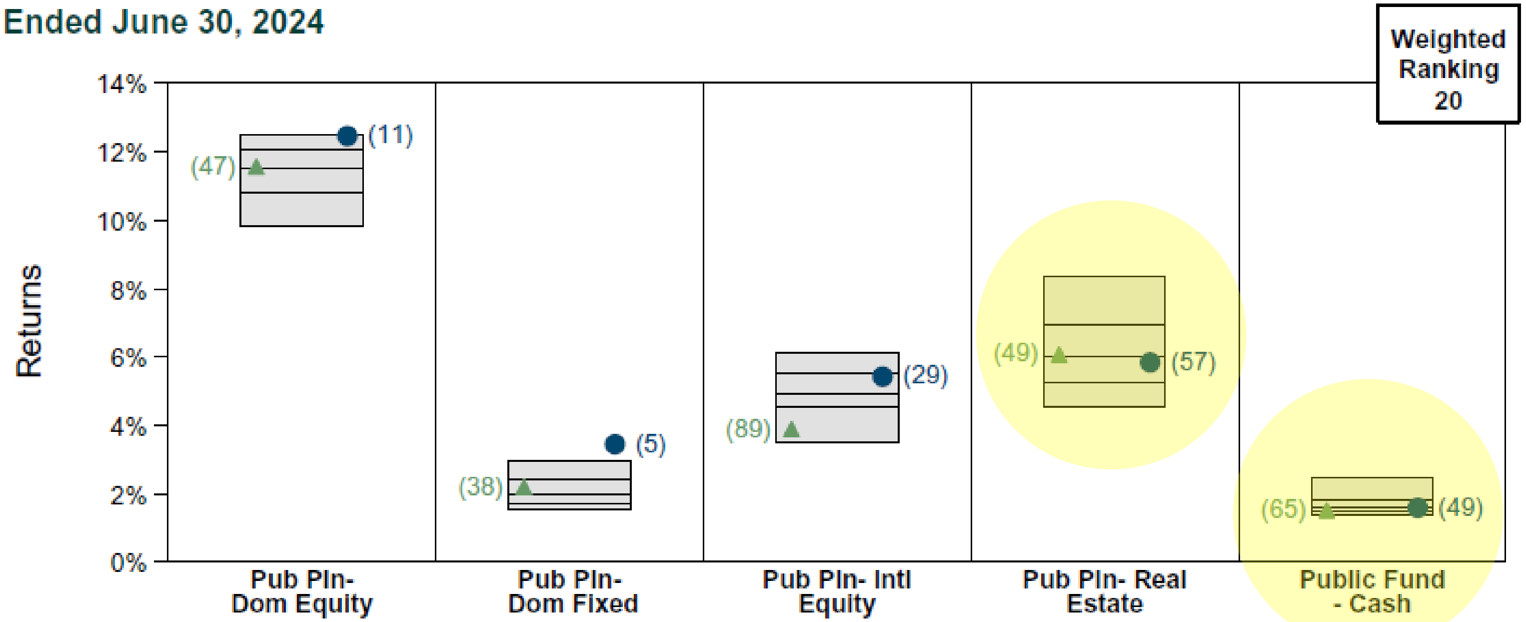


	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	24.01	5.74	15.30	(2.85)	5.69
25th Percentile	22.41	4.68	13.70	(6.51)	5.54
Median	21.15	4.02	12.62	(8.27)	5.45
75th Percentile	19.36	3.05	11.54	(9.66)	5.35
90th Percentile	17.08	2.40	10.04	(14.21)	5.23
Asset Class Composite ●	21.59	6.13	13.32	(14.87)	5.43
Composite Benchmark ▲	22.31	4.98	11.57	(5.53)	5.40

1. June 2024 values – Callan

TFFR ASSET CLASS PERFORMANCE

Total Asset Class Performance
Ten Years Ended June 30, 2024



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	12.49	2.96	6.14	8.34	2.49
25th Percentile	12.08	2.40	5.52	6.96	1.83
Median	11.54	1.97	4.94	6.00	1.59
75th Percentile	10.79	1.72	4.53	5.24	1.47
90th Percentile	9.85	1.53	3.53	4.57	1.37
Asset Class Composite ●	12.47	3.45	5.43	5.84	1.59
Composite Benchmark ▲	11.57	2.20	3.89	6.07	1.51

1. June 2024 values – Callan

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MEMORANDUM

TO: **TFFR Board**
FROM: **Sara Seiler, Supervisor of Internal Audit**
DATE: **September 13, 2024**
RE: **Fiscal Year End Audit Committee Activities**
July 1, 2023 to June 30, 2024

The Audit Committee is a standing committee of the State Investment Board (SIB) authorized under the SIB Governance Policy B-6, Standing Committees. Its primary function is to assist the SIB in fulfilling its oversight responsibilities of the Retirement and Investment Office (RIO) internal and external audit programs, including the financial reporting process, internal controls, and compliance with laws, regulations, policies, and procedures.

The Audit Committee consists of five members selected by the SIB. Three members of the Audit Committee represent the three groups on the SIB (Teachers' Fund for Retirement (TFFR) Board, Public Employees Retirement System (PERS) Board, and elected and appointed officials). The other two members are selected from outside the SIB, that are both independent and financially literate. Members of the Audit Committee for the 2023 – 2024 fiscal year were:

Treasurer Thomas Beadle, Elected and Appointed Officials, Chair
Cody Mickelson, TFFR Board, Vice Chair
Adam Miller, PERS Board
Dina Cashman, External Member
Todd Van Orman, External Member

The Audit Committee held four regular meetings and two special meetings for the fiscal year ended June 30, 2024. The meetings occurred: August 2, 2023, November 14, 2023, January 18, 2024 (special), February 15, 2024, May 9, 2024, and June 21, 2024 (special).

Activities of the Audit Committee during the past year included:

- The Committee approved a July 1, 2023, through June 30, 2024, Internal Audit workplan. Progress was monitored on a quarterly basis. Audit activities included:
    - Executive Limitations Audit was completed. The audit determined the Executive Director's level of compliance with SIB Governance Manual Executive Limitation policies (A-1 through A-11) for the calendar year ending December 31, 2023. The audit report was presented to the SIB on February 15, 2024.
    - State Investment Board Self-Evaluation was administered by Internal Audit. The SIB requested Internal Audit's assistance in administering the self-evaluation and presenting the results. The SIB self-evaluation was presented at the February 23, 2024, SIB meeting.
    - Internal Audit Maturity Development Steering Committee – At the August 2023 meeting, the Audit Committee approved the development of a Steering Committee to implement the

recommendations of Weaver's maturity assessment for the Internal Audit Division. The Steering Committee consists of the Supervisor of Internal Audit, Executive Director, and Chief Financial Officer/Chief Operating Officer.

- Internal Audit Maturity Development Process Review – The Supervisor of Internal Audit developed a workplan for the Internal Audit Maturity Process that was presented and approved at the November 2023 Audit Committee meeting. The Supervisor of Internal Audit, Executive Director, and Chief Financial Officer/Chief Operating Officer developed a request for proposal (RFP) for additional resources needed to implement the recommendations. The SIB Audit Committee approved the RFP in Nov. 2023. Weaver was selected and kick off the project was in March 2024. Projects to be completed were a RIO risk assessment (fiscal and investment divisions), internal audit manual, and document templates.
- Audit Committee Charter - The annual review of the Audit Committee's responsibilities was completed in August 2023. In November 2023, the Audit Committee approved the proposed changes to the charter from the addressed recommendations from the internal audit process review. The Audit Committee also updated the Audit Committee Charter to align the language with the SIB Governance Manual, reflect the composition changes on the SIB Board, and to reflect the SIB Governance Manual outline oversight responsibilities in February 2024. The SIB Governance & Policy Review Committee and the SIB approved updated Audit Committee Charter and Internal Audit Charter in April 2024.
- Employee Exit Review – The Internal Audit Division conducted three exit interviews in August and September of 2023.
- RIO Onboarding and Offboarding Procedures – The Supervisor of IA is a committee member on developing onboarding and offboarding procedures. The group has been reviewing and enhancing RIO's current onboarding and offboarding procedures. Members of the working group are the Deputy Executive Director/Chief Retirement Officer, Chief Financial Officer/Chief Operating Officer, Executive Assistant, and Procurement and Records Management Coordinator. This project was completed in July 2023.
- TFFR File Maintenance Audit – Internal Audit will review system generated (CPAS) audit tables to ensure transactions initiated by staff are expected and appropriate given an individual's role with the organization. Member account information from Member Action Forms, Address Change Forms, and Direct Deposit Authorization Forms are reviewed to verify that contact and demographic information has been updated correctly. A sample of purchases, refunds, and deaths will be reviewed as part of the audit. The audit is in progress.
- TFFR Participant Data Review-Model 2 Partial Focus - This salary review focused on business partners that report to TFFR using Model 2 Partial. Internal Audit selected one participant from forty-one business partners to ensure model compliance. The review determined if the retirement salaries and contributions reported to TFFR by the participating employers were following the definition of salary as it appears in the North Dakota Century Code (N.D.C.C. § 15-39.1-04 (10)). Reported service hours and eligibility for TFFR membership were also verified. The completed audit report was dated April 22, 2024, and was presented to the SIB Audit Committee at the May 2024 meeting.
- TFFR Pioneer Project – Internal Audit staff participated in the design, elaboration, training, and testing sessions of the Pioneer project. RIO is expected to "go live" at the end of calendar year 2024.
- Internal Audit worked with staff on reviewing and updating the Administrative Policy Manual. Policies were written and updated to ensure compliance with state and federal policies. RIO also adopted other federal and state policies as found on the ND State OMB website. This project was completed in January 2024.
- RIO's Internal Audit division assisted our external audit partners, CliftonLarsonAllen, LLP (CLA), during the 2022-2023 financial audit of the RIO as well as the GASB 68 Census Data Audit.
- RIO's Internal Audit division assisted our external audit partners, UHY, LLP, during the 2023-24 financial audit of RIO as well as the GASB 68 Census Data Audit.
- Supervisor of Internal Audit had presentations on Governance Overview and Internal Audit Overview as part of the SIB member onboarding process.
- Internal Audit staff continued to pursue networking and professional development opportunities via the IIA's local chapter and the APPFA (Association of Public Pension Fund for Auditors). Staff

attended all day RIO training, four quarters of NDIT training, open records/open meetings, Fiduciary duties and Ethics, onboarding sessions on Fiscal Accounting, Governance, Investment risk, and retirement, and annual training on RIO policies, Workforce Safety, and Risk Management.

- The Committee received the results of the RIO financial audit for the fiscal year ended June 30, 2023, from independent auditors, CliftonLarsonAllen, LLP at the November 2023 meeting. They issued an unmodified “clean” opinion.

- The Committee reviewed the RIO financial audit plan for the fiscal year ended June 30, 2024, with independent auditors, UHY, LLP at the June 2024 special Audit Committee meeting. Discussion included scope and approach for the audit to ensure complete coverage of financial information and GASB 68 Audit.

- The Committee adopted an interim audit workplan in May 2024 for the fiscal year 2024-25.

The above activities support the Committee’s fulfillment of its oversight responsibilities. Please inform the Committee if there are special audits or activities the Board would like to have reviewed.

BOARD ACTION. Acceptance of report.

IT REVIEW – SEPT 24

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Information Technology

Agenda

- Agency Collaboration
- Delivery Update
- Security Update
- What's Coming
- Q&A

NDIT – RIO Collaboration

NDIT Dedicated Staff

- Technology Business Partner (TBP)
- Information Security Officer (ISO)
- Business Application Support
- Enterprise Architect (EA)

- End User Compute & Collaboration Team (EUCC)

Positive Trends FY2024 Highlights

- Third Party Risk Management (TPRM)
- Printer Logic
- One Stop IT Shop

Delivery Update

How to Engage with NDIT

Incident

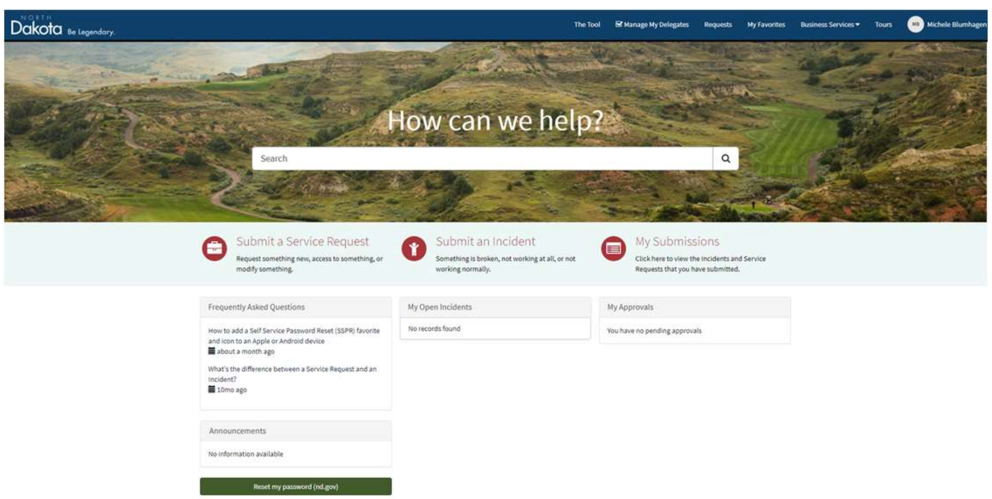
- Something is broken, not working at all or not working normally

Service Request

- Request something new, access to something or modify something

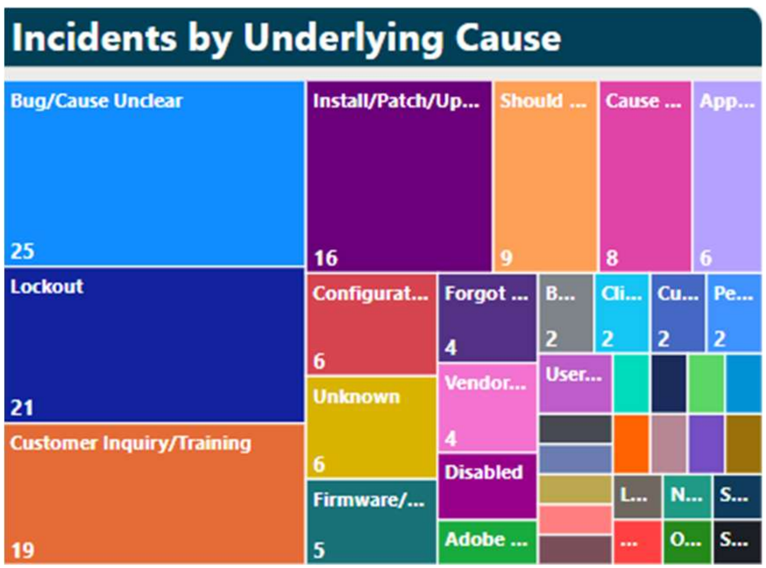
Incident

- Request to solve a business problem.
  - Brand new technology
  - Improve processes
  - Enhance / upgrade / replace current solution
  - Explore possibilities



RIO Incidents

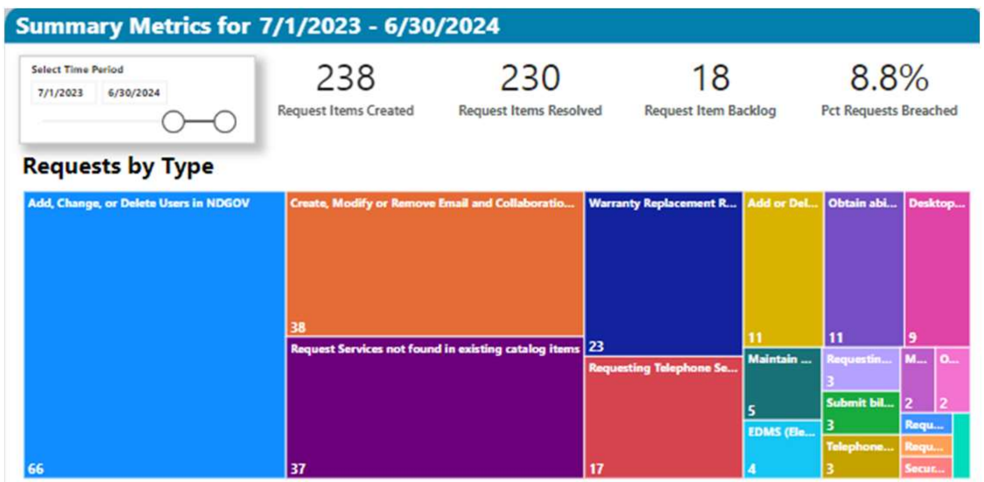
Fiscal Year	Incidents Created	Incidents Outstanding	% Change
2022	125	1	
2023	214	2	71%
2024	163	1	-24%



- Incidents Created FY 2024 – 163
  - 24% decrease from FY2023
- Incidents Outstanding – 1
- Underlying Cause
  - Bug / Cause Unclear
  - Lockout
  - Customer Inquiry / Training

RIO Service Requests Submitted

Fiscal Year	Requests Created	Requests Outstanding	% Change
2022	169	3	
2023	272	10	61%
2024	238	18	-13%



- Requests Created FY 2024 – 238
  - 13% decrease from FY2023
- Incidents Outstanding – 18
- Main Request Types
  - Add, Change, Delete Users in NDGOV
  - Create, Modify or Remove Email/Collab
  - Request Services not found (Generic)

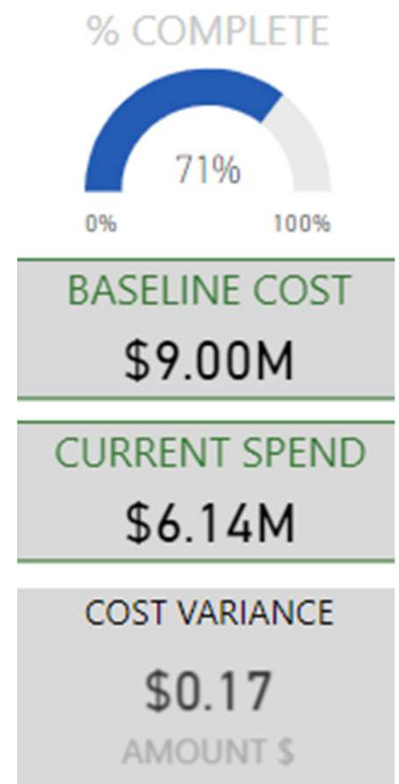
Initiative Intake Submissions

Request:	Short Description:
• Fiscal and Investment Data Lake	• RIO has data located in multiple locations in multiple formats. The goal is to better manage the disparate data and preserve it for ongoing analysis. (on hold for Investment project)
• RIO Investment Data	• Request to determine if there is a way to automate workflows to move and organize data. Possible solution to move data into the data lake and run the process form there.
• SharePoint Architecture & Agency Site	• Set up a SharePoint site for RIO to allow for better storage and file sharing of internal documents, procedures, communications, etc.

RIO Projects In-Flight

Large Project – Teachers Fund for Retirements Pension System Replacement

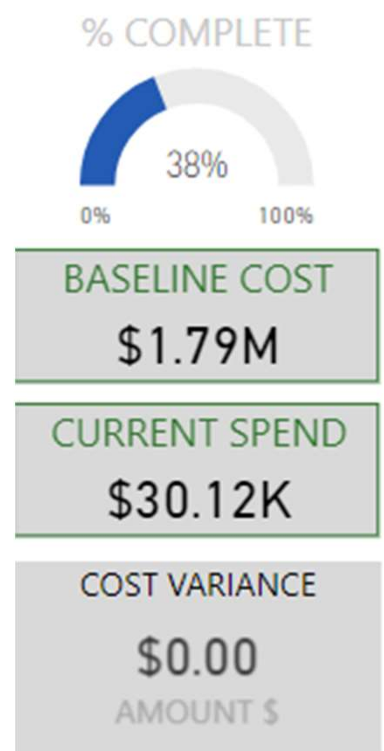
- **Key Update:** Employer Self-service UAT and Pilot 3 UAT was completed. Pilot 3 UAT retesting in progress. Work continues on implementation and transition planning.
- **Current Estimated Go-Live:** December 9, 2024
- **Costs:**
  - Current Project Budget: $9,100,568
  - Actual Cost: $6,139,455



RIO Projects In-Flight

Large Project – Investment Information Technology System

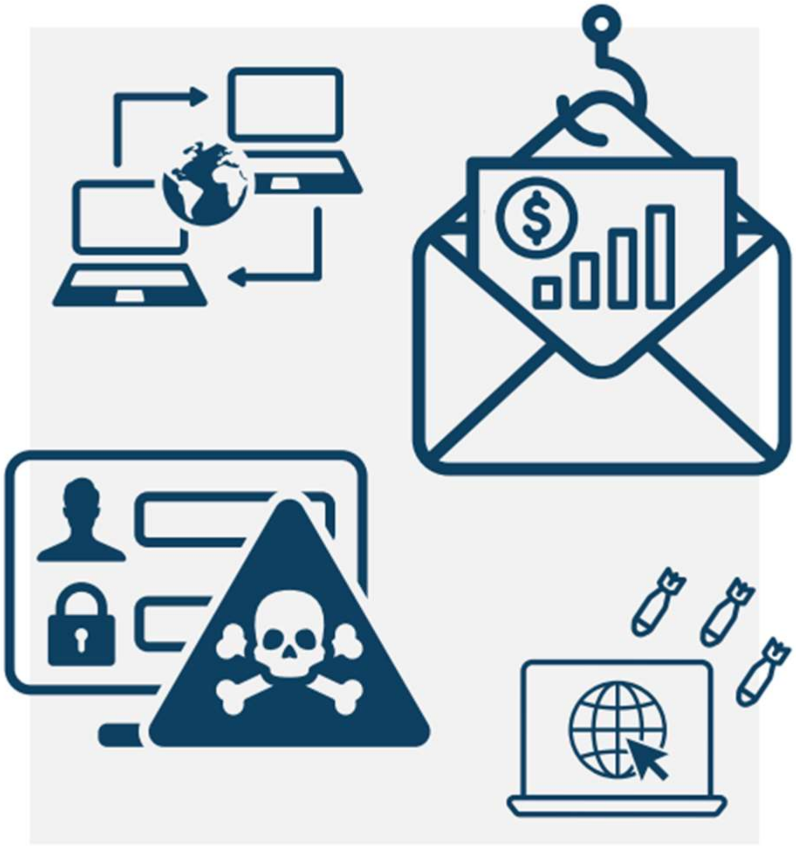
- **Key Update:** Project plan under final review with State Project Team. Started working on project schedule.
- **Current Estimated Go-Live:** March 31, 2025
- **Costs:**
  - Current Project Budget: $1,794,897
  - Actual Cost: $30,120



Security Update

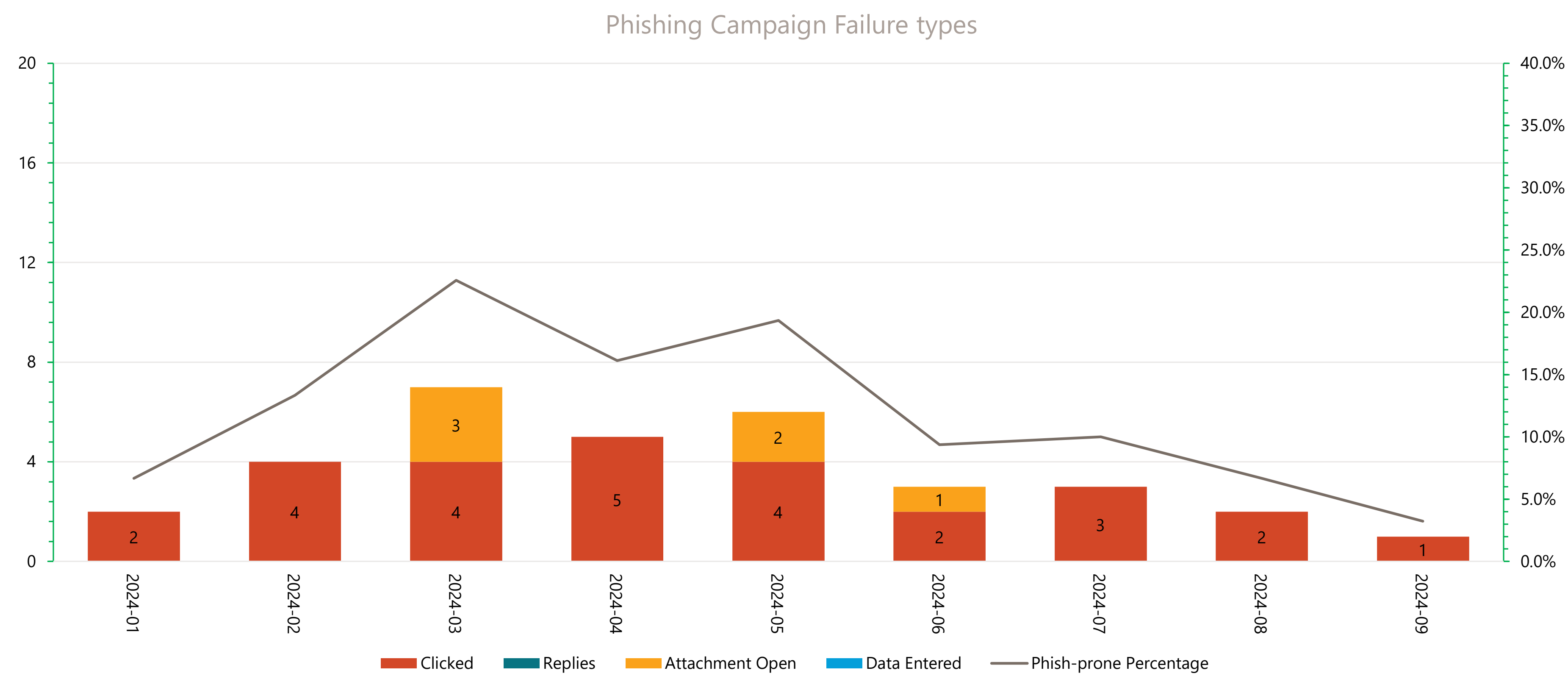
Major Incidents Against the State

- **Large and most notable incidents in the last 18 months**
  - **ScreenConnect**
    - 3rd Party Risk – Attackers exploited vulnerability to compromise remote access software to push malware
  - **VPN Brute Force**
    - Poor password hygiene allowed attacker onto the state network with a shared account
  - **Business Email Compromise (BEC) Attempted Payroll Theft**
    - Attacker phished a user for financial gain.
  - **NDGOV Website DDoS**
    - NDGOV websites targeted for multiple DDoS attacks



Training by Campaign

Phishing Campaign Failure Types



What’s Coming?

Upcoming Demand- Projects & Programs

- Artificial Intelligence
- Application Inventory & Vulnerability Remediation
- Statewide Data Strategy
- Business Gateway
- Mandatory VPN for All Agencies
- Windows 11 for all State Employees

Q&A

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Information Technology

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MEMORANDUM

TO: **TFFR**
FROM: **Chad Roberts, DED/CRO**
DATE: **September 24, 2024**
RE: **TFFR Ends Report – 4th Qtr. ending June 30, 2024**

This report highlights exceptions to the TFFR program's normal operating conditions from April 1, 2024, to June 30, 2024.

- RIO staff completed testing of the pilot 2 modules of the pension project. These included the line of business functions conducted by staff. These areas included functions such as payroll, withdrawals, refunds, and reporting.
- Several RIO staff members attended a Microsoft Power BI training opportunity. The training was an introduction to using the Power BI dashboard and artificial intelligence features to better analyze and collect data.
- Trustee Jordan Willgohs resigned from the TFFR board.
- Began Q&A and information sessions with business partners about the new pension administration system.
- The internal audit was completed, and the file maintenance audit report was delivered to Retirement Services.

BOARD ACTION REQUESTED: Board acceptance.

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MEMORANDUM

TO: SIB
FROM: Jan Murtha, Executive Director
DATE: September 20, 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. New Board & Committee Member Update

The TFFR Board has welcomed a new member. The Governor appointed Alexis Rasset, a special education teacher at Mandan Public Schools to represent active members on the TFFR Board. More information may be found on the RIO website here: [Rasset appointed to TFFR board | Retirement Investment Office (nd.gov)].

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

Position Title	Status
Internal Equity Portfolio Manager (new)	Filled.
Internal Equity Senior Investment Analyst (new)	Filled.
Internal Fixed Income Portfolio Manager (new)	Filled.
Investment Accountant (new)	Filled.
Private Markets Senior Investment Analyst	Interviews pending. Vacancy due to internal transfer.
Public Funds Investment Analyst	Interviews pending. Vacancy due to internal transfer.
Internal Equity Investment Analyst (new)	Posting pending.
Investment Administrative Assistant (new)	Posting pending.
Retirement Services Temp Admin Assistant	Vacancy as of 10/3/2024

III. Current Project Activities/Initiatives:

- **Cash Management Study:** The study has concluded. Director Sisk and representatives from RVK presented the study to the Government Finance Committee on September 17, 2024 (https://ndlegis.gov/events/2024/09/17/government-finance-committee), and the Budget Section Leadership Division on September 18, 2024 (https://ndlegis.gov/events/2024/09/18/budget-section-leadership-division) .
- **Internal Audit Co-Sourcing:** The current internal audit co-sourcing project with Weaver has concluded and final deliverables were presented to the Audit Committee in August. An update on these activities and next steps will be provided as part of the Audit Committee Update.

- **Investment Program Software Solutions:** The Executive Steering Committee for the project met on September 20, 2024, to discuss next steps. RIO and NDIT team members are working with the vendor to finalize a project plan and schedule. Both CFO/COO Skor and Chief Risk Officer Vaidya completed the Change Management Practitioner training in September. Mr. Vaidya is the project sponsor and Mr. Skor is the change management officer for the project. An update on these activities and next steps will be provided by CIO Anderson.
- **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.
- **Retirement Literacy Initiative:** RIO team members continue to participate in collaboration efforts and meetings with other agencies participating in the Fiscal Literacy Initiative, most recently on September 13, 2024.
- **TFFR Pioneer Project**: There have been some adjustments to the project schedule. The tentative go live date is December 2024. Additional details will be provided at the meeting.
- **All Staff Training:** RIO team members participate in an annual agency wide all staff training. This year the training is scheduled for Monday September 23, 2024, and the office will be closed to the public so that all team members may participate in the training. The focus of the 2024 training is on staff wellness and engagement; these were identified as priority topics through our strategic planning process. As part of the activities scheduled Tina Stanger from HRMS will present and RIO team members will participate in training on how to leverage the Working Genius of our team.
- **AG Opinion Request:** As of the date of this report an opinion from the AGO has not been issued. I will provide an overview of the discussions and inquiries the opinion request has prompted thus far at the meeting.
- **Investment Seminar:** RIO will host its inaugural investment seminar on Wednesday September 25, 2024. A brief review of seminar content will be provided at the September SIB meeting, while a more formal review of the event will be provided as part of the quarterly outreach activities report to the board at a later date.

IV. Executive Director Activities

Subsequent to the July 26, 2024, SIB meeting activities through the September 27, 2024 SIB meeting include:

- Prepared materials for and/or attended the following meetings:
    - 8-2-24 through 8-7-24: Attended the NASRA (National Association of State Retirement Administrators) conference. Conference topics include both institutional investment and retirement program discussion and education.
    - 9-10-24 SIB GPR Committee meeting.
    - 9-10-24 TFFR GPR Committee meeting.
    - 9-13-24 Investment Committee meeting.
    - 9-13-24 Financial Literacy Committee meeting.
    - 9-16-24 Investment Committee meeting.
    - 9-19-24 SIB GPR Committee meeting.
    - 9-23-24 RIO All Staff Training.
    - 9-25-24 RIO Investment Seminar.
    - 9-26-24 TFFR Board meeting.
    - 9-27-24 SIB Board meeting.

- During this time, I had several meetings with HRMS and internal staff on two topics: preparing for the all-staff training activities and discussing the process for implementing guidance from the AGO relating to best HR practices for team members that remote work in other states. Additional details regarding these topics will be provided at the meeting.

- Over the course of many meetings I collaborated with other RIO team members and presenters in preparation for the investment seminar. Ms. Mudder, RIO Communications Director, provided outstanding leadership in preparing, producing and organizing our team and speakers for the event.

- I also had several external meetings and discussions with legislators and other agency leaders on program operations and statewide initiatives, as well as internal meetings with consultants, direct reports, executive team and division specific meetings.

- I am scheduled to attend the NCTR (National Council on Teacher Retirement) Annual Conference in October. I have agreed to moderate a panel on securities litigation at the conference. I have also joined the Fiduciary and Plan Governance Committee of NAPPA (National Association of Public Pension Attorneys).

Board Action Requested: Board acceptance.

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MEMORANDUM

TO: **TFFR**

FROM: **Chad R. Roberts, DED/CRO**

DATE: **September 18, 2024**

RE: **Board reading materials for September 2024 TFFR Board of Trustees**

Three suggested readings on pensions, retirements, and factors impacting retirement funds and retirees' retirements are attached.

The first suggested reading is an article from the Center for Retirement Research. The article "*Is The Retirement Picture for Millennials Looking Better?",* published on August 27, 2024, provides a current snapshot of the retirement picture for the millennial generation.

The second suggested reading is a September 2024 article from the Employee Benefits Research Institute titled "How Financial Factors Outside of a Defined Contribution Plan Can Impact Retirement Readiness: An Examination of Public-Sector Participants." It discusses how outside economic factors affect public-sector plan participants.

The third suggested reading is the 2024 Retirement Confidence Survey from the Employee Benefit Research Institute, published in September 2024.

Board Action Requested: Information only

Is the Retirement Picture for Millennials Looking Better?

August 27, 2024 **Issue Brief** by Anqi Chen, Nilufer Gok, and Alicia H. Munnell

The *brief's* key findings are:

- Millennials started their careers in weak labor markets, so initially they lagged behind Late Boomers and Gen Xers at the same ages in life events and wealth.
- Strikingly, data for 2022 show a big reversal: Millennials had caught up on most indicators, and they surpassed earlier cohorts in wealth accumulation.
- The main reason was a huge runup in housing wealth, which soared during COVID, but gains in financial wealth also boosted balance sheets.
- It's not clear, however, what this good news means for retirement security, since house prices may reverse and few retirees tap their equity for consumption.

Introduction

The release of the Federal Reserve's 2022 *Survey of Consumer Finances* offers a chance to catch up on the retirement saving of Millennials – those born during 1981-1999. This group, despite being more educated than earlier ability to accumulate wealth. Our initial 2016 snapshot showed Millennials way behind earlier cohorts, at the same ages, on every dimension.[1]

Our next check-in with Millennials was 2019.[2] After three years of a strong economy just prior to the pandemic, this cohort had caught up in many ways: they had similar homeownership and marriage rates, labor force participation, and earnings. However, they were still behind earlier cohorts in retirement readiness – measured by the net worth-to-income ratio – primarily due to high levels of student loans.

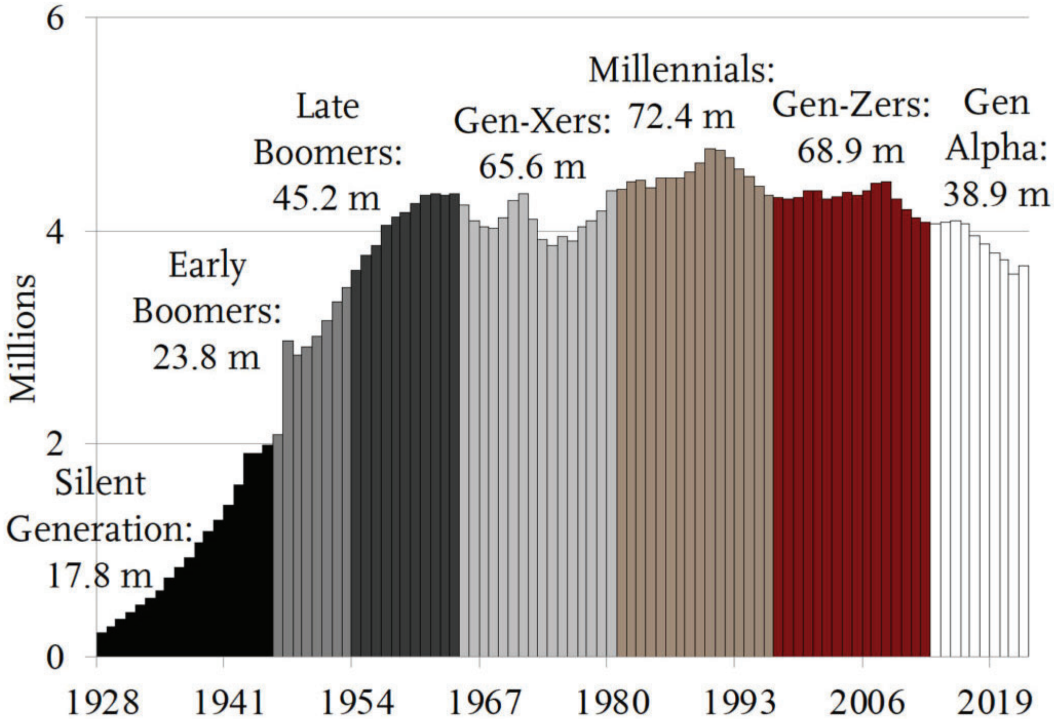
Since 2019, the nation has experienced a global pandemic and economic disruption. At the same time, the government provided unprecedented fiscal support, employment remained strong, home values rose substantially, and the stock market – even with the drop in 2022 – ended up significantly higher than in 2019. The question addressed in this *brief* is how all these factors affected the retirement preparedness of Millennials.

The discussion proceeds as follows. The first section defines Millennials and the earlier generations that are used as a basis for comparison. The second section presents wealth-to-income ratios from the *Survey of Consumer Finances* for Millennials, Gen-Xers, and Late Boomers, showing that by 2022 Millennials are outpacing earlier cohorts. The third section explores the reasons for this reversal – primarily the increase in house prices but also gains in financial assets due to increased saving and a strong stock market. The fourth section concludes that while Millennials' balance sheets now look robust compared to those of earlier cohorts at the same ages, the bulk of the gain comes from housing and it is unclear the extent to which housing

Defining the Exercise

Journalists and social scientists often give names to generations who grew up in similar circumstances. Those who lived through the Great Depression and fought in World War II have been characterized as the "Greatest Generation," and those who came after – born in the 1920s to mid-1940s – the Silent Generation. With the sharp uptick in fertility rates after World War II, those born from the mid-1940s to mid-1960s were called Baby Boomers. Generation X – those born in the mid-1960s and 1970s – followed. The Millennial Generation (also called Generation Y) consists of Americans born during the 1980s and 1990s. Figure 1 shows how the current U.S. population breaks down by age cohort and birth year.

Figure 1. U.S. Population by Birth-Year Cohort, in Millions, 1928-2022

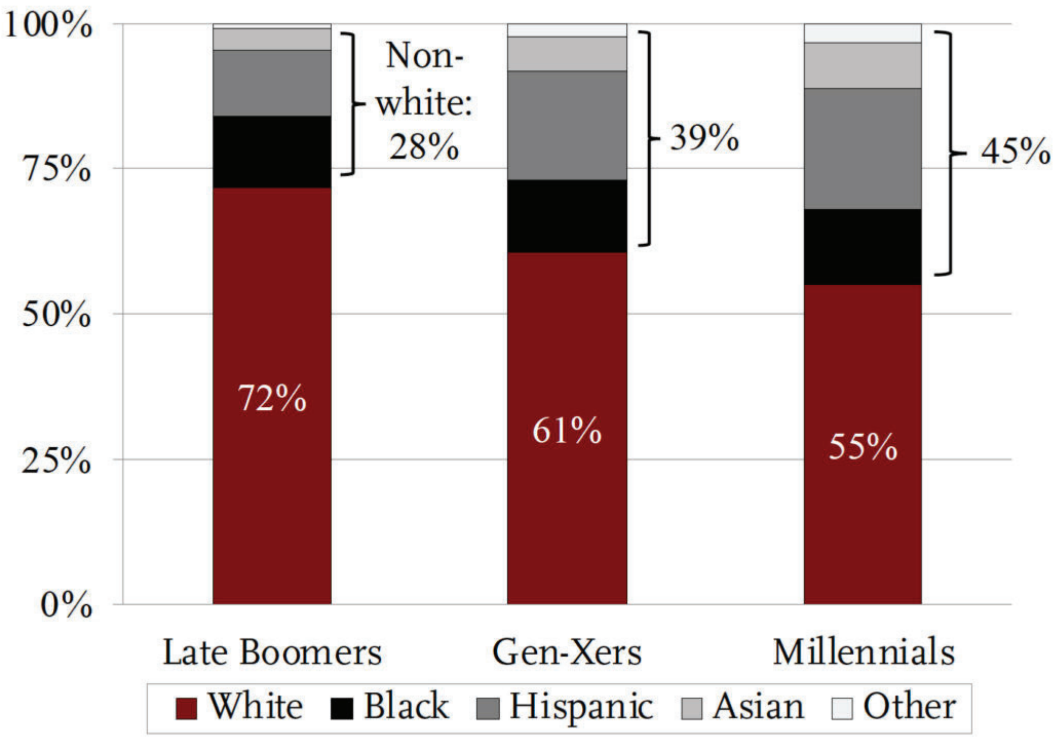


Source: U.S. Census Bureau (2024).

The focus here, and in our prior series, is on the segment of Millennials who were ages 31-41 in 2022, which means those born from 1981-91. These individuals are compared to Gen-Xers and Late Boomers when they were the same ages. The Gen-Xers were the same ages in 2010 (which covers those born from 1969-79), and the Late Boomers were the same ages in 1995 (which covers those born from 1954-64).

Millennials are unique in a number of ways. They were the first full generation to grow up with computers. Social scientists tend to characterize previous cohorts; as shown in Figure 2, the share of Whites declined from 72 percent of Late Boomers to 55 percent of Millennials.

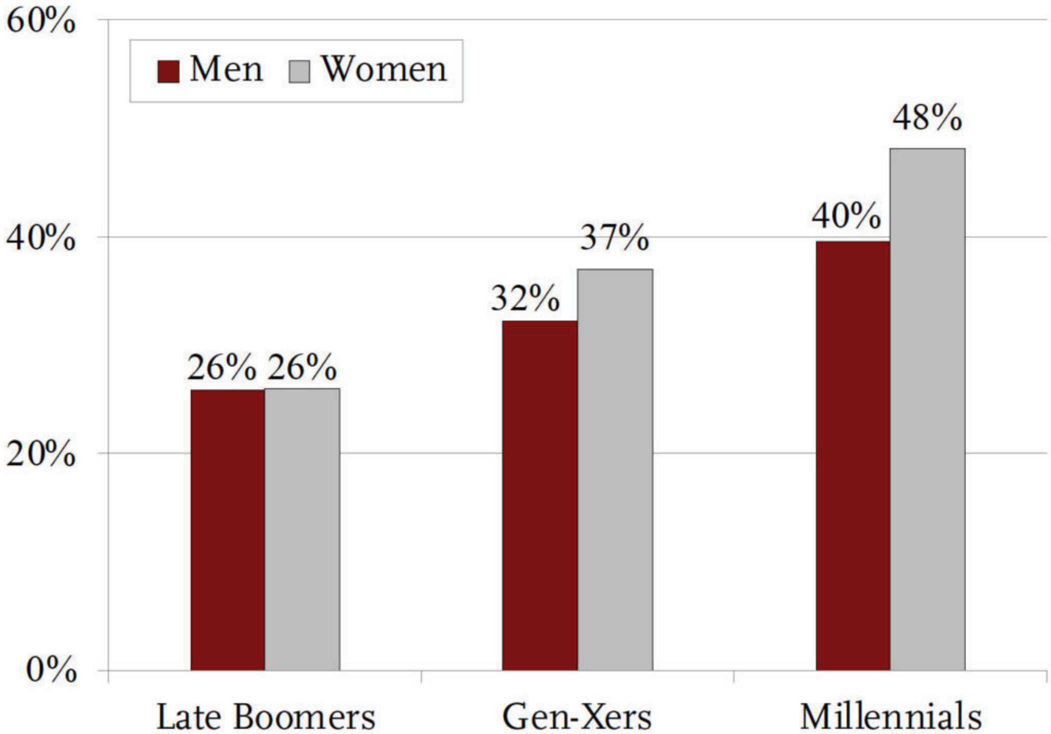
FIGURE 2. COHORTS BY RACE/ETHNICITY, AGES 31-41



Source: Authors' calculations from U.S. Census Bureau, *Current Population Survey* (CPS) (1996, 2011, and 2023).

Millennials are also more educated than previous cohorts, with almost half of women and 40 percent of men having a college degree, compared to only a quarter of Late Boomers and a third of Gen-Xers (see Figure 3). One would expect that this higher level of education would bode well for work, earnings, and wealth accumulation.

Figure 3. Percentage of Individuals with a College Degree by Cohort, Ages 31-41



Source: Authors' calculations from CPS (1996, 2011, and 2023).

Unfortunately, as noted, Millennials entered the labor market during tough times.[4] The group examined here turned 21 between 2002 and 2012, which meant that they were coming out of school during a period that included the bursting of the dot.com bubble and the Great Recession. This experience was particularly hard on Millennial men, who had labor force participation rates below those in earlier cohorts.

Consistent with the 2019 update, data for 2022 show that virtually all the wealth of Millennials during and after the pandemic and how they now compare to earlier generations when they were the same age.

Table 1. Characteristics of Cohorts at Ages 31-41

	Late Boomers	Gen-Xers	Millennials
% in labor force			
Men	92%	91%	90%
Women	76	75	78
% married	66	62	58
% homeowners	60	58	57

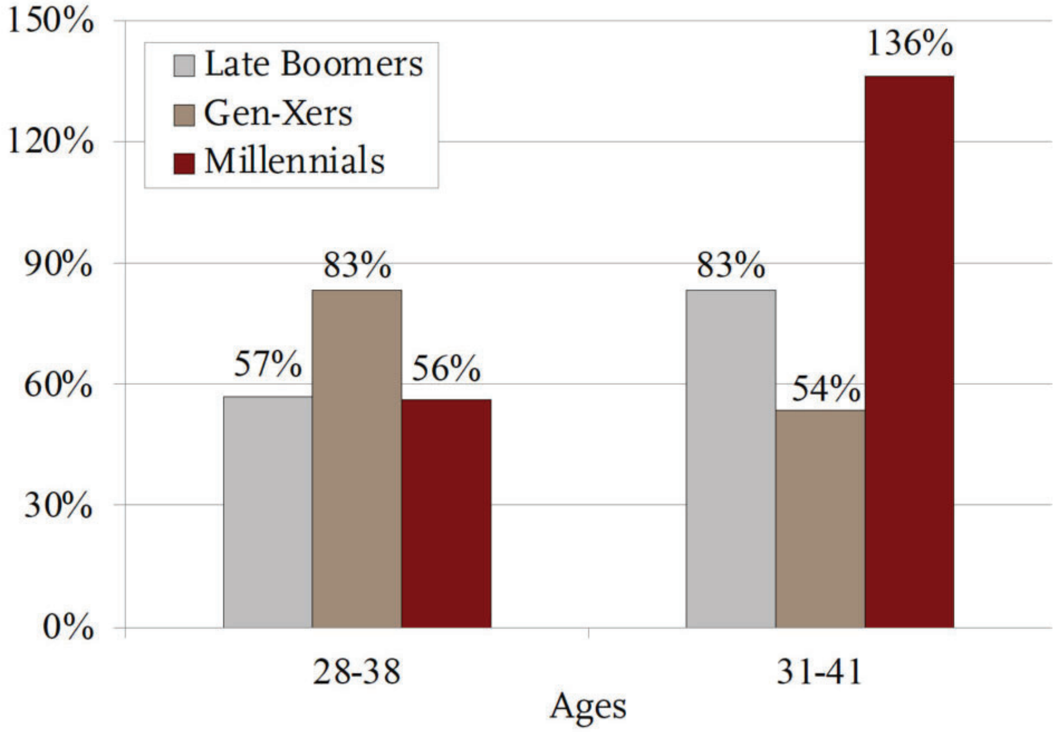
Note: Data for married are for individuals, and data for homeowners are for households.
Source: CPS (1996, 2011, and 2023).

Wealth Holdings by Cohort

In 2019, pre-pandemic, despite the fact that Millennials had caught up on many metrics, their wealth holdings still lagged substantially behind the accumulations of earlier cohorts, largely due to their high levels of student loans. The low wealth of Millennials has been a source of serious concern given that they will live longer – and need to support more years of retirement than previous cohorts – and that, with the increase in Social Security's Full Retirement Age to 67, they will receive lower benefits relative

Data for 2022, however, show a dramatic reversal in the fortunes of Millennials (see Figure 4).[5] The first group of bars show the wealth-to-income ratios for those ages 28-38 in each cohort, at which point Millennials were behind. Three years later, in 2022, when this group was 31-41, the pattern had dramatically reversed, with Millennials pulling way ahead of earlier cohorts. While Millennials are still more likely to have student debt and the value of their debt is higher (see Table 2), clearly other factors have more than compensated for that burden.

Figure 4. Median Net Wealth-to-Income Ratio, Ages 28-38 (1992, 2007, and 2019) and 31-41 (1995, 2010, and 2022)



Source: Authors' calculations from U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances* (SCF) (1992, 1995, 2007, 2010, 2019, and 2022).

Table 2. Student Loan Holdings by Cohort, Ages 31-41

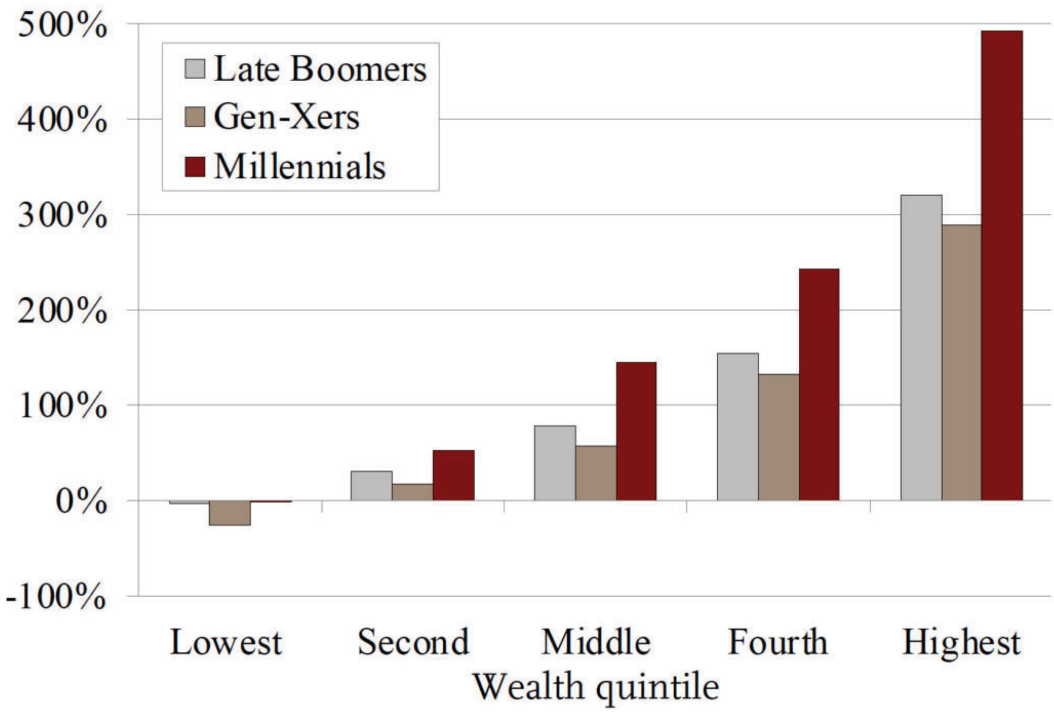
	Late Boomers	Gen-Xers	Millennials
Percentage with student loans	17%	31%	38%
Median student loan	$1,856	$6,404	$13,006

Source: CPS (1996, 2011, and 2023).

The relative gains of Millennials in wealth-to-income ratios need to be interpreted with some caution. First, the success relative to Gen-Xers is a little exaggerated because Gen-Xers were 31-41 in 2010, when equity and house prices had been battered by the Great Recession. Second, the wealth measure used in this analysis excludes two major sources of retirement wealth: Social Security and defined benefit pensions – both of which were larger for earlier cohorts.

On a more positive note, the improvement in wealth holdings among Millennials was not just concentrated among the wealthy, but rather occurred across the whole wealth distribution (see Figure 5). Strikingly, Millennials in each wealth group are better off.

FIGURE 5. MEDIAN NET-WORTH-TO-INCOME RATIO BY WEALTH QUINTILE, BY COHORT, AGES 31-41

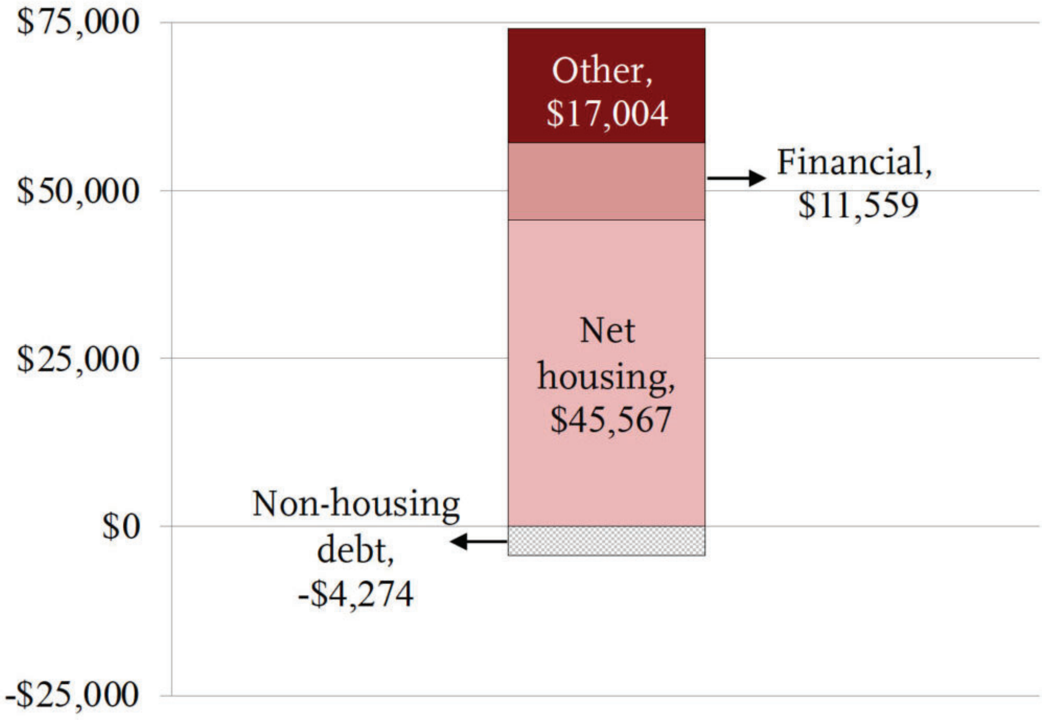


Source: SCF (1995, 2010, and 2022).

Source of the Improvement

Why did Millennials pull ahead? Figure 6 breaks down the source of the increase in median net worth ($72,280) by component. Most of the wealth gain – 63 percent – has come through housing, but financial assets have also increased.

Figure 6. Change in Median Net Worth for Millennials from 2019 to 2022

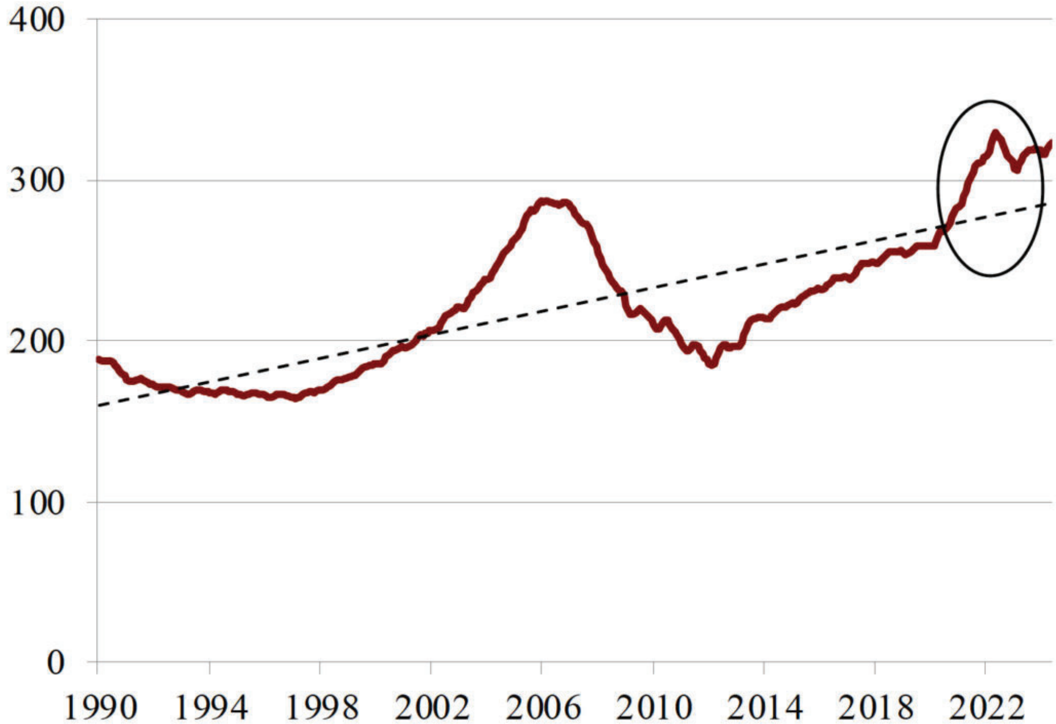


Note: Data for "other" includes business, net vehicle, other non-financial, and other real estate.
Source: SCF (2019 and 2022).

Housing Wealth

The increase in housing wealth reflects the dramatic increase in house prices that occurred during the pandemic (see Figure 7). When thinking about retirement saving, however, it is not clear how to assess housing wealth. The house is an illiquid asset, and few people take advantage of their home equity to support their consumption in retirement.[6] Rather they tend to

Figure 7. Index of Average U.S. Home Prices (Real), January 1990 to May 2024



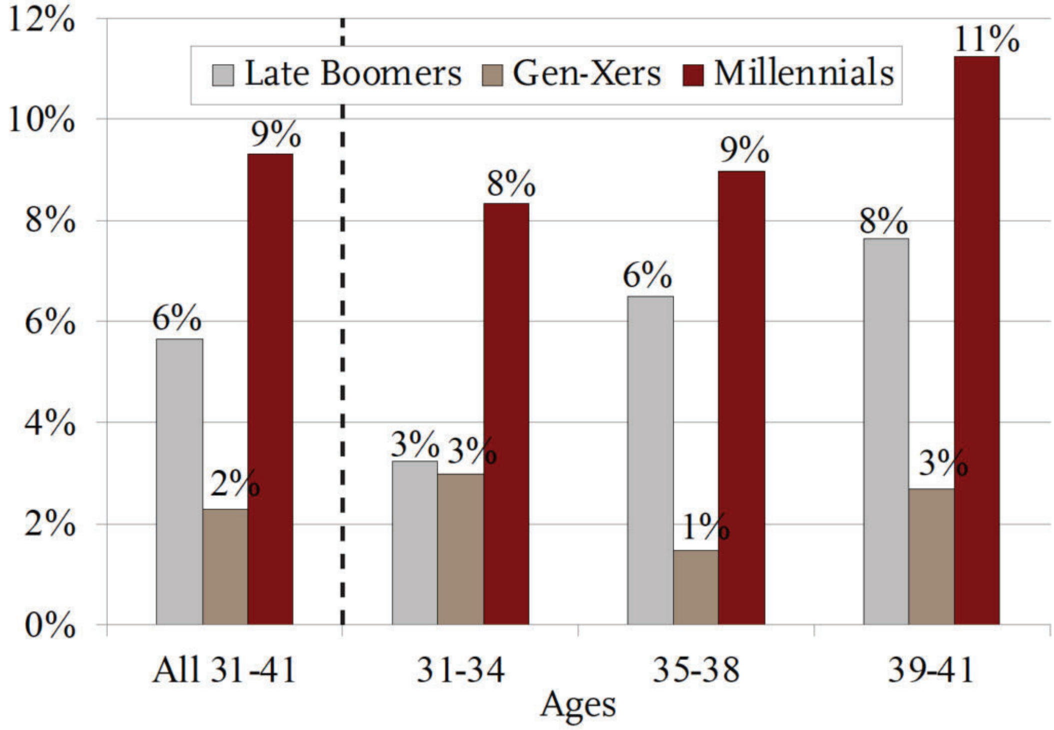
Sources: S&P Global (2024); and U.S. Bureau of Labor Statistics (2024).

Not all Millennials have enjoyed the pandemic housing market boom. Millennial renters pay a higher share of income for housing costs than prior generations, and the expensive housing market may mean they will have a harder time becoming homeowners and enjoying future gains in the housing market.

Financial Wealth

assets (see Figure 8). This improvement reflects both increased saving and a run-up in equity prices.

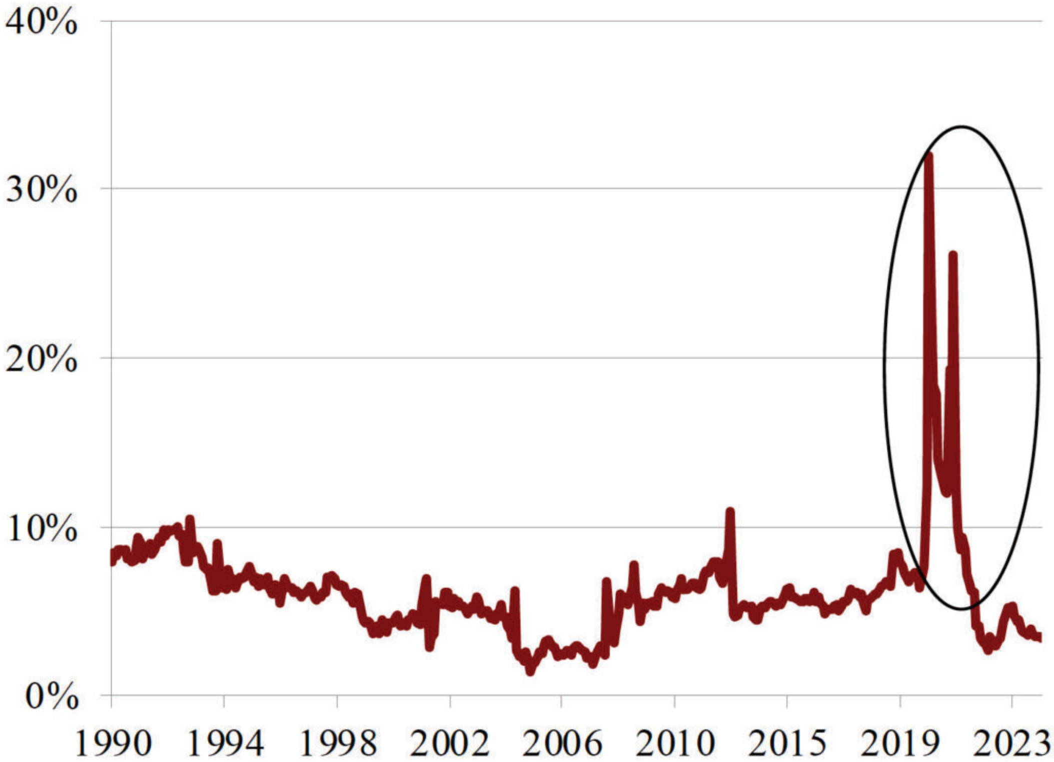
Figure 8. Median Net Financial Wealth-to-Income Ratio, by Cohort, Ages 31-41



Source: SCF (1995, 2010, and 2022).

Fueled by the federal stimulus spending and student loan pause, personal savings jumped to over 30 percent during the first two years of the pandemic (see Figure 9). All households, including the Millennials, were able to build up savings and make their balance sheets stronger. Millennials, however, are more likely to be in two-earner households, have higher

Figure 9. Personal Saving Rate, January 1990-July 2024



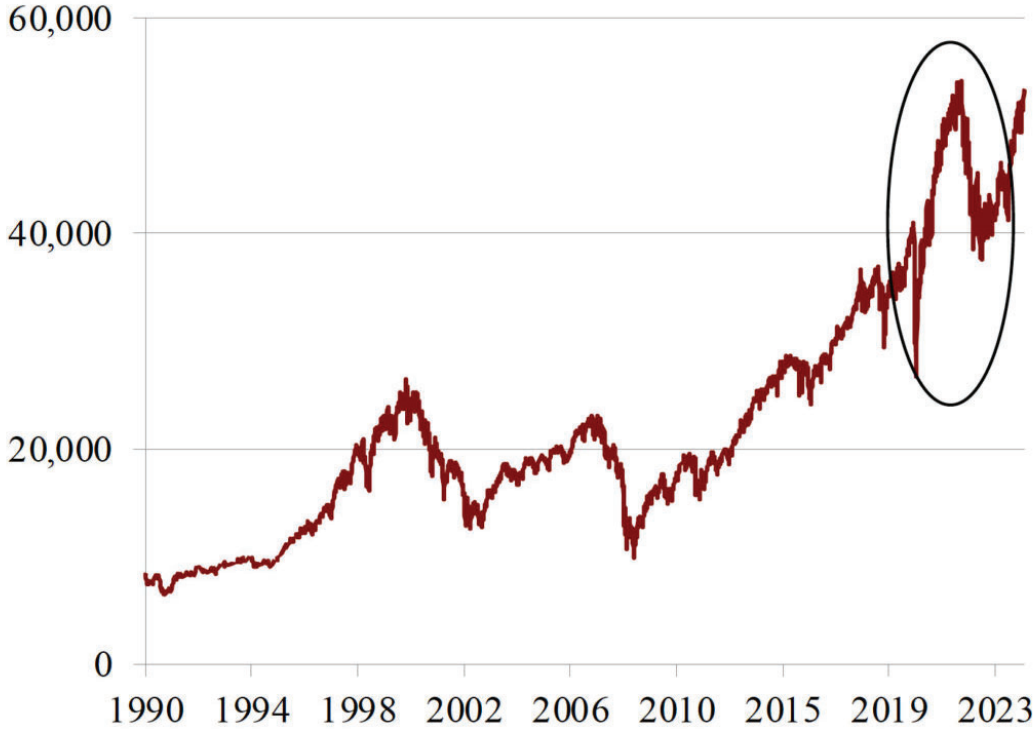
Source: U.S. Bureau of Economic Analysis (2023).

Table 3. Select Characteristics at Ages 31-41, by Cohort

	Late Boomers	Gen-Xers	Millennials
Number of kids	1.5	1.6	1.3
Two-earner households	40%	37%	46%

Similarly, while all cohorts benefit from a rising stock market, Millennials are also more likely to invest in stocks. Over 60 percent of Millennials hold some equities, mainly in their retirement accounts, compared to 48 percent of Gen Xers and 37 percent of Late Boomers at the same ages. Additionally, close to a quarter of Millennial households hold stocks outside of their retirement accounts – roughly twice the share of earlier cohorts.[7] As a result of their broad holdings in equities, they were well-situated to benefit from a strong stock market (see Figure 10).

FIGURE 10. DOW JONES WILSHIRE 5000 (REAL), JANUARY 1990 - JUNE 2024



Sources: Wilshire Associates (2024); and U.S. Bureau of Labor Statistics (2024).

Conclusion

Millennials now have more net wealth relative to income in their 30s than Gen Xers and Late Boomers had, despite still having more student debt. Most of the improvement in their balance sheets is due to the rapid increase in housing prices during the pandemic. They also have higher non-housing wealth as well, thanks to increased saving and being positioned to profit advantage of their home equity to support their consumption in retirement. Hence, it is not clear the extent to which housing equity should be counted as retirement saving.

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How Financial Factors Outside of a Defined Contribution Plan Can Impact Retirement Readiness: An Examination of Public-Sector Participants

By Craig Copeland, Michael Conrath, Sharon Carson, Alex Nobile, and Matt Petersen

AT A GLANCE

Workers' finances can face many challenges over their careers, including irregular expenses, which are sometimes quite large. How workers deal with covering these expenses and how they affect other aspects of their financial goals are ripe areas of analysis, particularly with respect to retirement preparations. This study builds on prior work done by the Employee Benefit Research Institute (EBRI) and J.P. Morgan Asset Management focused on 401(k) plan participants' behavior when faced with irregular expenses. This analysis examines the behavior of public-sector defined contribution (DC) plan participants on the tradeoff between credit card debt and a plan loan. Key findings from the study:

- A monthly unfunded spending spike is defined as a spike at least 25 percent above the previous 12 months' median spending that cannot be funded by the household's income and available cash reserves in that month. In this study, 29 percent of the household observations were found to have had at least one month where an unfunded spending spike occurred.
- On a dollar basis, among those with incomes of $150,000 or less, 60 percent of the household observations had spikes not covered by income and cash reserves larger than $2,500 aggregated over the year, and 82 percent had spending not covered by income alone above this threshold.
- The likelihood of experiencing a spike increased with the spending ratio and beginning-of-the-year credit card utilization. In contrast, the likelihood of a spike decreased as gross income increased. However, nearly one-quarter of the households with incomes of $100,000 or more had a spike, so these spikes do not only occur among those with lower incomes.
- These spending spikes have a clear impact on the likelihood of public-sector DC plan participants taking a plan loan and increasing their credit card debt in the year of the spike. Of those with a spending spike in the analysis year, 7.0 percent took a new plan loan and 31.7 percent increased their credit card debt, compared with 2.7 percent and 25.9, respectively, of those without a spending spike in that same year.
- Households are more likely to take on additional credit card debt before taking the plan loan, as approximately 37–47 percent of those with credit card utilization of >0–79 percent increased their credit card debt, while less than 8 percent took a new plan loan with that level of credit card utilization. However, when credit card utilization reached 80 percent or more, the likelihood of increasing credit card debt decreased to 22.4 percent, while the increasing trend of taking a new plan loan went up by nearly twice the amount it had before the increase to 80–100 percent at 11.5 percent.

This research found that, like private-sector DC plan participants, public-sector DC plan participants who lack income and cash reserves to support a spending spike are likely to end up with more credit card debt. This higher debt can have a long-lasting impact on retirement security, since higher credit card utilization is correlated with lower DC plan contributions and account balances, even when controlling for income. Thus, the availability of emergency savings to cover spending spikes can be a critical factor in preventing or stalling a cycle of increasing debt that can significantly impact retirement readiness, wherever the individual works.

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Table of Contents

Figures

How Financial Factors Outside of a Defined Contribution Plan Can Impact Retirement Readiness: An Examination of Public-Sector Participants

By Craig Copeland, Michael Conrath, Sharon Carson, Alex Nobile, and Matt Petersen

Introduction

Workers' finances can face many challenges over their careers, including irregular expenses, which are sometimes quite large. How workers deal with covering these expenses and how they affect other aspects of their financial goals are ripe areas of analysis, particularly with respect to retirement preparations. In many cases, workers' only source of significant savings is an employment-based retirement savings plan, typically a 401(k) plan or other defined contribution (DC) plan. Thus, some DC plan participants could take a loan from the plan or adjust their contributions to these plans, while others could access credit outside of a plan or use some combination of all three to cover unusually high expenses. Balancing these decisions is a key component of participants' financial well-being.

This study builds on prior work done by the Employee Benefit Research Institute (EBRI) and J.P. Morgan Asset Management focused on 401(k) plan participants' behavior when faced with irregular expenses.[1] In particular, changes in credit card utilization, 401(k) plan contributions, and/or 401(k) plan loan use were examined after these participants experience a significant spending "spike." This analysis examines the behavior of public-sector DC plan participants on the tradeoff between credit card debt and a plan loan.

Although DC plan loans are a source of leakage from retirement savings if they are not paid back in full when a participant leaves their employer, they do provide flexibility that can lead to higher participation and contributions.[2] As a result, plan loans are an option in some public-sector DC plans. Results from the Public Retirement Research Lab (PRRL) Database cross-sectional studies show the incidence of loans and the loan amounts across specific participant demographic factors but not in regard to the participants' overall finances or potential reasons for taking the loans.[3]

The analysis presented here, which links public-sector DC plan data and banking data, builds on the cross-sectional PRRL results to evaluate the impact of financial factors outside of the plan, such as overall spending levels and debt accumulation, on behavior inside the plan.[4] It also follows the methodology of the prior EBRI and J.P. Morgan Asset Management study examining the impact of these same factors on behavior inside 401(k) plans.[5]

This study is part of a joint effort between the Employee Benefit Research Institute (EBRI) and J.P. Morgan Asset Management to deliver data-driven research to better understand how the financial factors that exist outside defined contribution plans that face DC plan participants impact their retirement preparations. Thus, the aim is to provide unique fact-based insights to help build a stronger retirement system by policymakers, plan sponsors, and plan providers.

Specifically, public-sector DC plan participants who experience spending spikes are compared with those who do not experience them in terms of their credit card utilization and DC plan loan use. First, the households with participants who have a spending spike are identified. Once identified, the impact of the spending spikes on credit card debt and plan loan usage are then assessed.

Data Sources

PRRL Database — The PRRL Database is an opt-in collaboration among public retirement plan sponsors, the Employee Benefit Research Institute (EBRI), and the National Association of Government Defined Contribution Administrators (NAGDCA). The database includes data from two hundred and sixty-seven 457(b), 401(a), 401(k), and 403(b) defined contribution (DC) plans; over 3.0 million retirement accounts across 2.5 million state, county, city, and subdivision government employees; and $170 billion in assets as of year-end 2021.[6]

Chase Data — JPMorgan Chase Bank, N.A. (Chase) serves 66 million U.S. households with a broad range of financial services including checking, savings, investments, credit cards, and loans. Chase's scale and wide reach allows for a comprehensive view of household finances. In this analysis, the Chase data sample referenced herein is restricted to the households in 2019–2021 who use Chase as their primary banking institution, and their total household spending through all payment mechanisms (including select credit and debit card transactions, electronic payment transactions, check and cash payments) and sources of income including wage income, Social Security, annuity, pensions, etc. can be linked to the PRRL Database. For more information about Chase, visit the following website: https://www.chase.com/digital/resources/about-chase.

Data privacy is fully protected. No personally identifiable information is contained within the data and all spending and saving attributes analyzed in this research are kept completely anonymous.[7]

Longitudinal Sample Construction

In this study, spending and public-sector DC plan data from 2019–2021 at the household level are examined. In order to create this household view, the following steps were taken to merge the spending data from Chase and the public-sector DC plan data from the PRRL Database to create the full data sample:

1) Using the unique participant/customer identifier (not personally identifiable information) in each dataset, the individuals in both sets of data are established. These individuals with both the spending and the saving data are then grouped into households using Chase's method for determining members of a household.[8] The unit of observation in this study is the household. The number of people in these households may not truly reflect the exact household size, as the household size can only be approximated based on the number of unique individuals who have Chase accounts. As an example, if only one spouse has a Chase account, this will be considered a one-person household. This household unit observation necessitates the defining of specific data variables.

2) In order to ensure that the data sample only includes households where the Chase data have all or the majority of their spending, filters are applied to the households to meet the full (majority) spending criteria. These filters include but are not limited to: all 12 months of spending data, households with spending more than 50 percent of their estimated gross income, and households with credit card spending outside of Chase of less than 30 percent of their overall spending.[9]

3) Once these households are identified, at least one of the individuals in the household is also a DC plan participant where a loan is available in their plan. The demographic and financial characteristics of the person identified as the DC plan participant are those used in the analysis.

4) Since the status of many of the variables must be known at the beginning and the end of the study year, these households must have two contiguous years in the sample to be included. Thus, each instance of a household having two contiguous years of complete data during 2019–2021 is an observation for this analysis. This results in 5,755 observations from 3,709 unique households.

Data Definitions

Spending — Total spending is the annual sum of the monthly spending captured through credit and debit cards, electronic payment transactions, Chase checks, and cash across 10 specific spending categories: apparel & services, education, entertainment, food & beverage, health care, housing, transportation, travel, charitable contributions, and other.

Income — Since all the spending data are at the household level, the income used in this study is also at the household level. There are two income values used in this study from the Chase data.

Net Income — This is the observed deposited amount from the Chase data for salaries and wages that is net of any taxes and deductions taken out before the paycheck is deposited. This income source is used for calculating the spending ratios.

Gross Income — This is an estimate based on net income described above with the addition of estimated federal income and Federal Insurance Contributions Act (FICA) taxes for the household.

Unfunded Spending Spike — An unfunded spending spike is determined to occur when a household's monthly spending is at least 25 percent or more than the previous 12 months' median monthly spending, and this spending cannot be covered by the household's income and cash reserves (checking and savings accounts), i.e., it is not funded by immediate liquid assets. Year two is the test year of whether a spending spike occurs.

Credit Card Utilization — This is measured by the ratio of the revolving credit card balances in the last month of the year to the credit limit on those cards. A ratio of 0 percent means that the household has no revolving credit card debt, while 100 percent means that the household has used the full allowable credit on their credit card(s).

New Plan Loan — Plan loan data are only available at year end, so any participant who has no outstanding loan balance at the end of year one but has a balance at the end of year two is considered to have a new loan in year two. In addition, any participant who has a higher outstanding loan balance at the end of year two than they had at the end of year one is also considered to have taken a new loan in year two.

Spending Ratio — This is the ratio of total annual spending to annual net income.

Tenure — This is the number of years that the DC plan participant of the household has been with their current employer.

Household Demographics

As shown in Figure 1, the household participants were widely distributed across ages, incomes, and tenures with their current employer. For example, 11.2 percent were less than age 30, 24.2 percent were ages 40–49, and 13.6 percent were ages 60 or older. For incomes, 5.1 percent had incomes of $20,000–$29,999 and 27.7 percent had incomes of $100,000 or more. Just over one-fifth (21.1 percent) of the participants had tenures with their current employers of less than two years and 13.2 percent had 20 or more years.

As far as financial factors, 21.0 percent of the household participants had DC plan account balances of less than $2,000 and 6.5 percent had balances of $2,000–$4,999, while 17.2 percent had balances of $100,000 or more (Figure 2). Over two-fifths (43.7 percent) of these households had no revolving credit card debt at the end of year one, while 16.4 percent were using 80–100 percent of their credit card limit. Over two-fifths (43.2 percent) of the households had spending ratios of 1.05 or more, while one-third (33.4 percent) had ratios of less than 0.95.

Public-sector DC plan participants in most cases are also covered by a defined benefit plan, and the DC plan is considered a supplemental plan to the DB plan. On the other hand, for private-sector participants, the 401(k) plan, in many cases, would be the only retirement plan available through their workplace. Even with the supplemental nature of the public-sector DC plans, public-sector DC plan participants were less likely to take a loan from the plan when eligible than those in the private sector — 7 percent vs. 15 percent.[10] In this study, over 96 percent of the public-sector DC plan participants who were in a plan with a loan option available were in a 457 plan or a non-ERISA 401(k) plan.[11]

Figure 1
Demographic Characteristics of the Sample

Age	
<30	11.2%
30–39	31.6%
40–49	24.2%
50–59	19.4%
60+	13.6%
Gross Income	
$20,000–$29,999	5.1%
$30,000–$49,999	25.3%
$50,000–$74,999	26.7%
$75,000–$99,000	15.2%
$100,000 or more	27.7%
Tenure With Employer	
Less than 2 years	21.1%
2–4 years	21.0%
5–9 years	27.4%
10–19 years	17.2%
20 or more years	13.2%

Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

Figure 2
Financial Characteristics of the Sample

401(k) Account Balance	
Less than $2,000	21.0%
$2,000–$4,999	6.5%
$5,000–$9,999	7.8%
$10,000–$14,999	6.4%
$15,000–$19,999	6.0%
$20,000–$49,999	21.9%
$50,000–$99,999	13.3%
$100,000 or more	17.2%
Credit Card/Limit Ratio-Y1	
0%	43.7%
>0%–19%	14.7%
20%–59%	17.9%
60%–79%	7.3%
80%–100%	16.4%
Spending-to-Income Ratio	
<0.80	21.2%
0.80–0.94	12.2%
0.95–1.04	23.4%
1.05–1.49	23.1%
1.50–1.99	10.5%
2.00 or more	9.6%

Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

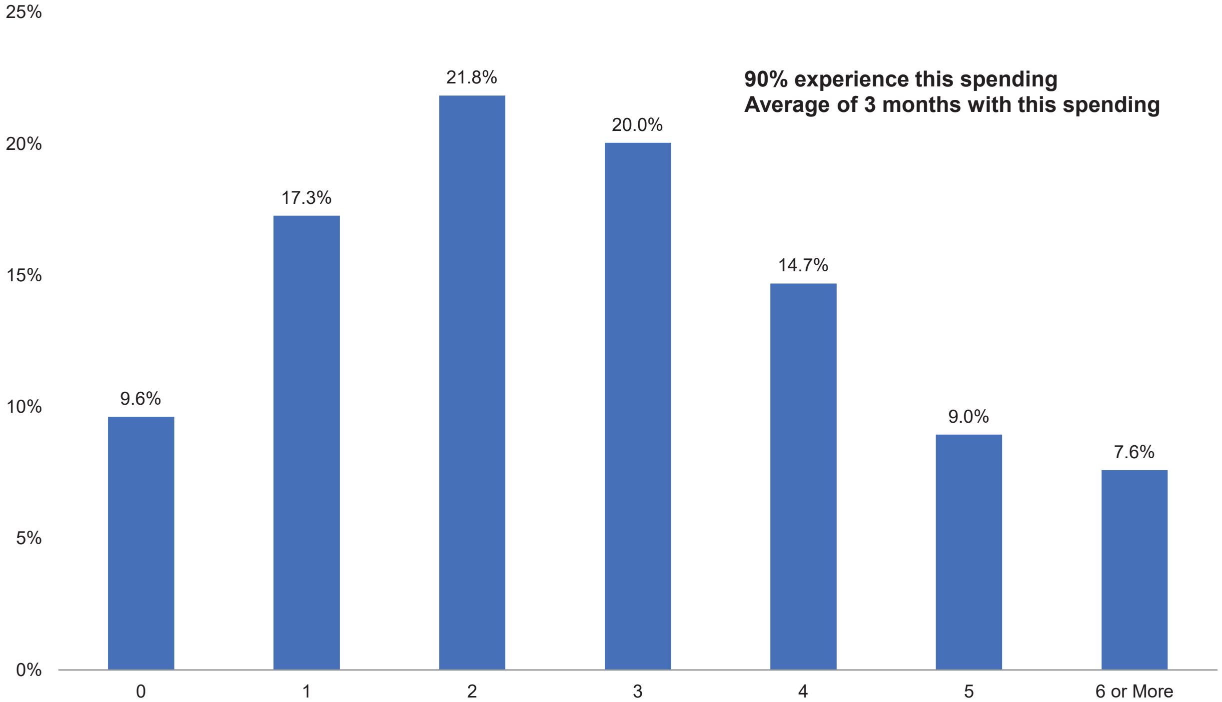
Spending Spikes

Spending surges can play havoc on a household's finances and possibly lead to the need to access more funds. Thus, a study of irregular spending spikes can provide insight into DC plan participants' financial decisions, including taking a plan loan and/or increasing credit card debt. A spending spike could be a result of an unexpected expense, e.g., a car repair, or an expected expense, such as a vacation.[12]

As noted, a monthly unfunded spending spike is defined as a spike at least 25 percent above the previous 12 months' median spending that cannot be funded by the household's income and available cash reserves in that month. Separately, spending that cannot be funded by the household's income alone is discussed.

By any measure, household monthly spending is generally highly variable. In fact, 90 percent of the household observations were found to have had at least one month where their spending was 25 percent or more of their median spending in the prior 12 months and was not covered by that month's income (Figure 3). Thirty-one percent of the households had four or more months where their spending was 25 percent or more of the median spending of the prior 12 months, with an average of three months for those having these spikes. Given that nearly all of the observations had this irregularly high spending, significant differences in participant behaviors based on this spending not covered by income alone were not found. However, this definition is an important measure to consider for policymakers and plan sponsors as they grapple with the appropriate size of emergency reserves for the working population, because what is held outside of the DC plan is not known by plan sponsors.

Figure 3
Percentage of Households With Monthly Spending 25 Percent or More Than the Median Spending of the Prior 12 Months Not Covered by Income

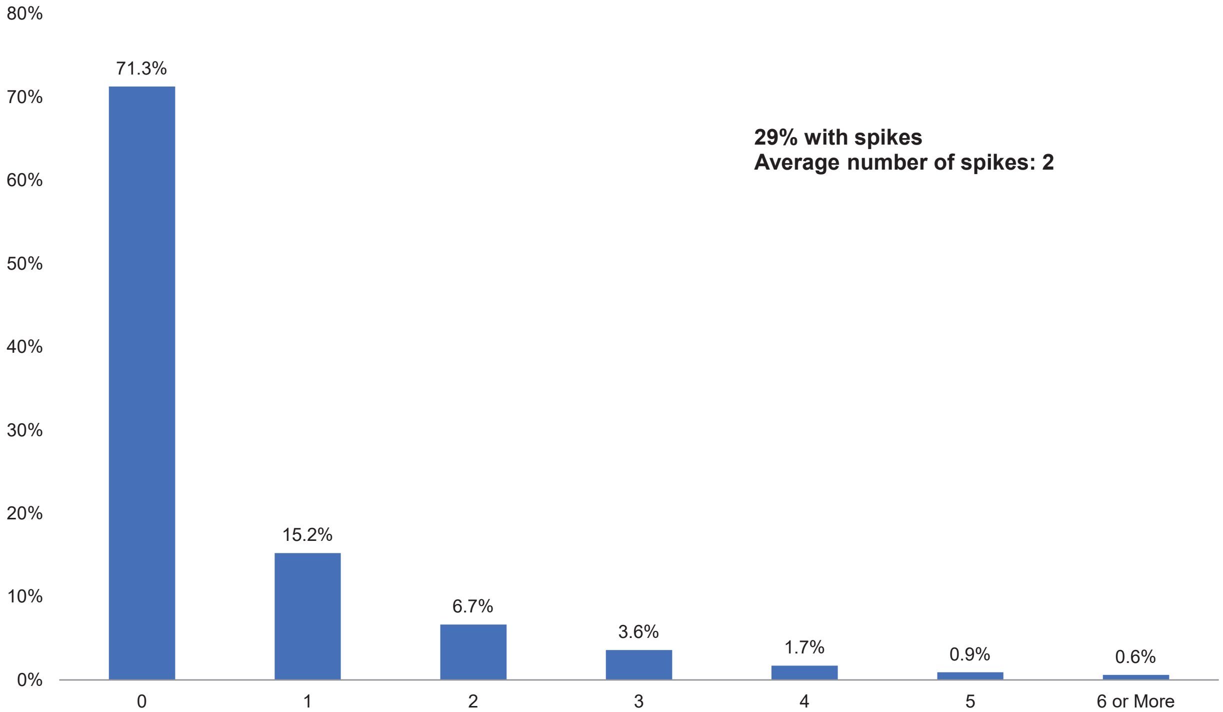


Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

For unfunded spending spikes (spending surges not covered by income and cash reserves), 29 percent of household observations were found to have had at least one month where an unfunded spending spike occurred. In addition, 7 percent of household observations had three or more months of these spikes (Figure 4). Overall, the average number of these spikes among those having them was two.

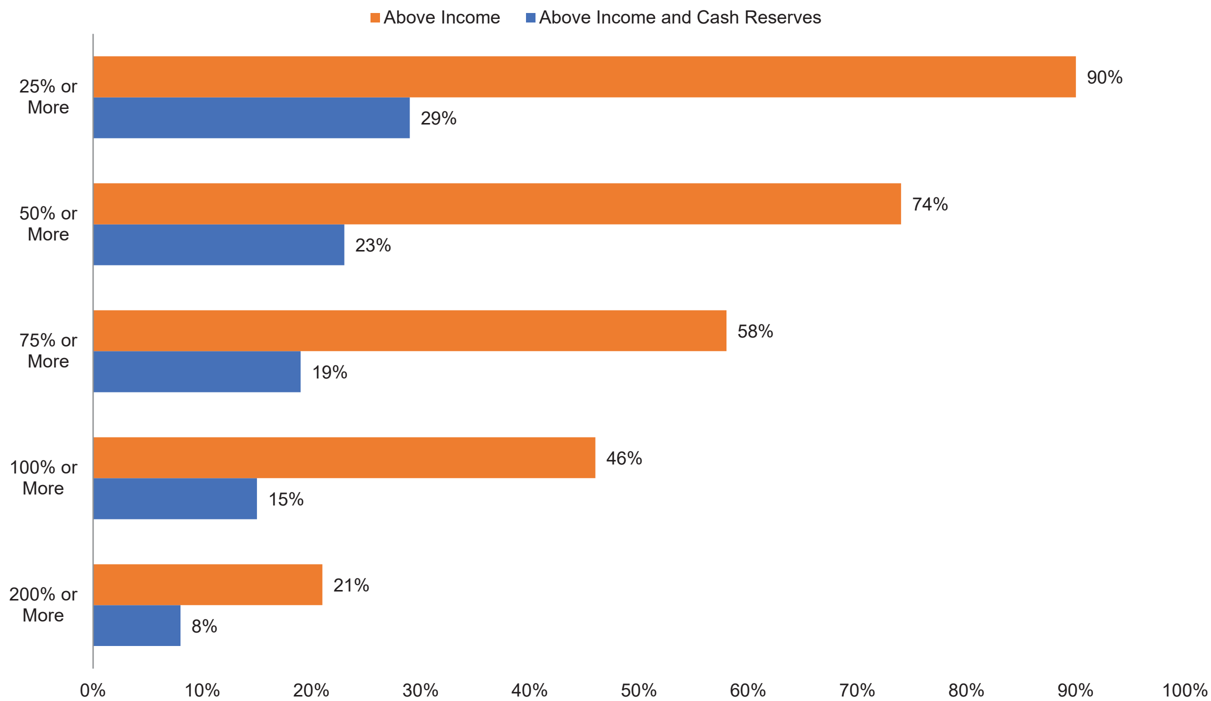
Spikes can be quite large relative to income. While 29 percent of the household observations had spikes of 25 percent or larger, 23 percent had spikes of 50 percent or larger and 19 percent had spikes of 75 percent or larger (Figure 5). On a dollar basis, 60 percent of the household observations had spikes not covered by income and cash reserves larger than $2,500 aggregated over the year, and 82 percent had spending not covered by income alone above this threshold among those with incomes of $150,000 or less (Figure 6).[13] Fifty-nine percent of those with spending not covered by income alone had totals larger than $7,500. For households with incomes of more than $150,000, 79 percent could not fund spending spikes over $2,500 with their income and cash reserves, and 93 percent could not do so with their income alone (Figure 7).[14]

Figure 4
Percentage of Households With Spending Spikes of 25 Percent or More Than the Median Spending of the Prior 12 Months Not Covered by Income and Cash Reserves



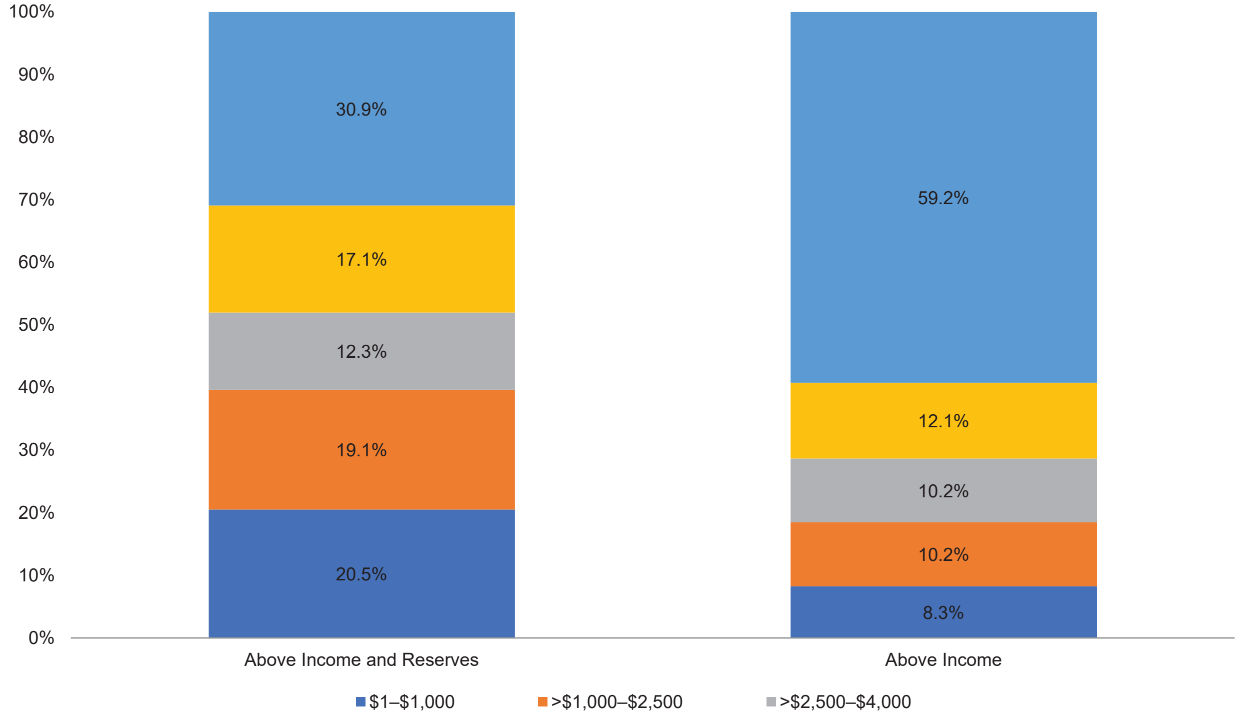
Source: Estimates from PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

Figure 5
Spending Relative to the Median of the Prior 12 Months of Spending — Percentage Above Specific Thresholds of Median Monthly Spending



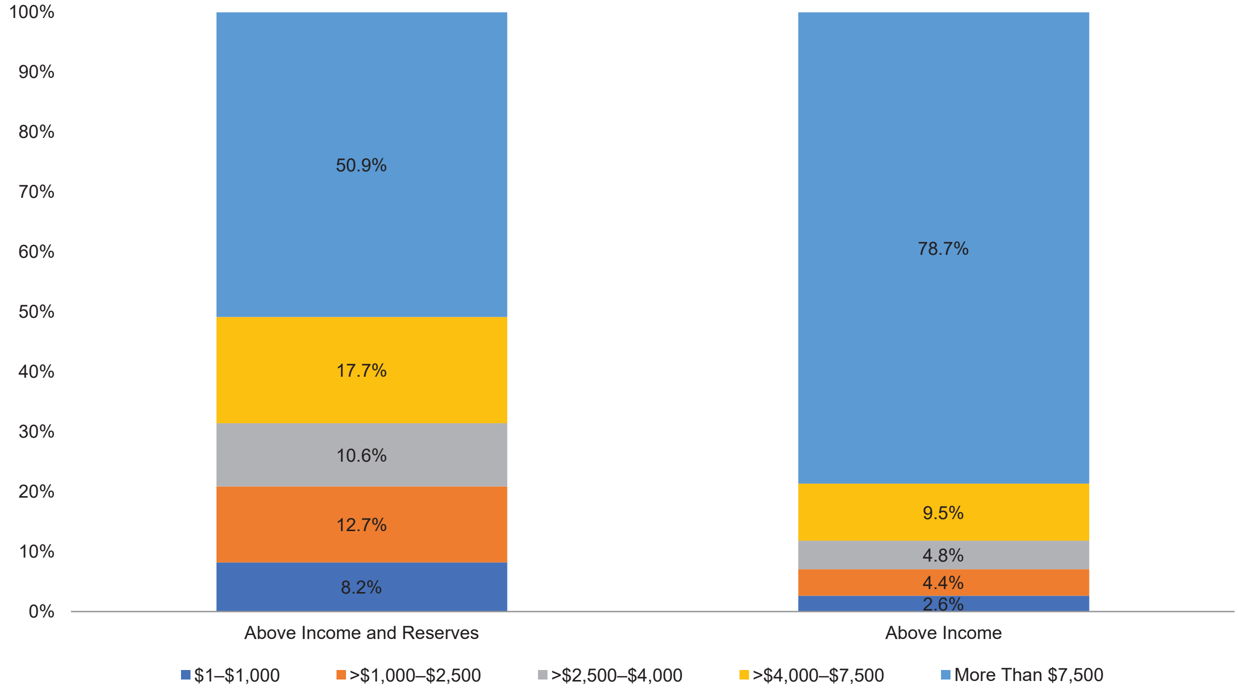
Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

Figure 6
Distribution of Annual Spending Amounts Above Income and Cash Reserves
(Households With Incomes of $150,000 or Less)



Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

Figure 7
Distribution of Annual Spending Amounts Above Income and Cash Reserves and Above Income
(Households With Incomes of More Than $150,000)



Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

Unfunded Spending Spikes' Impact on Financial Behavior

The households with spikes had lower incomes and higher spending ratios than households without spikes (Figure 8). Credit card utilization and revolving credit card balances were also both higher at the beginning and end of the year of the spike analysis, but age was not significantly different. Specifically, the median gross income of those with a spike was $59,917 vs. $69,702 for those without a spike. The median spending ratio was 0.97 for those without a spike, compared with 1.29 for those with a spike. The median credit card utilizations were particularly higher among those with a spike at the beginning of the spike year analysis at 27.2 percent vs. 1.9 percent for those without a spike.

Figure 8
Median Demographic and Financial Factors, by Unfunded Spending Spike Occurrence

Factor	Spike	No Spike
Age	42	43
Gross Wage Income	$59,917	$69,702
Spending Ratio	1.29	0.97
Credit Card Utilization Beginning of Year	27.2%	1.9%
Credit Card Utilization End of Year	17.7%	0.0%
Credit Card Revolving Balance Beginning of Year	$1,592	$196
Credit Card Revolving Balance End of Year	$1,357	$0

Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

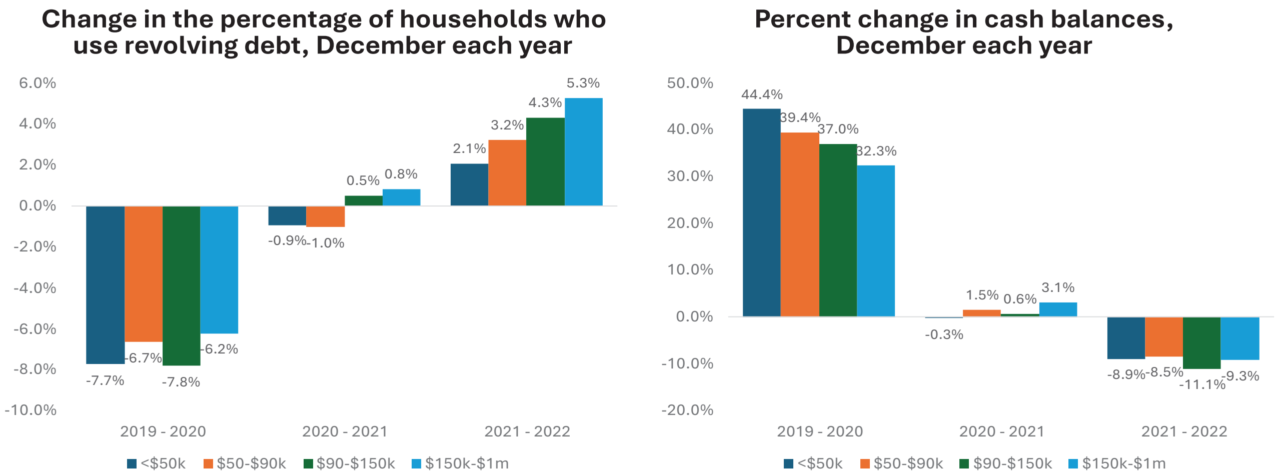
While the median revolving credit card balance at the end of the year was higher for those with a spike than for those without a spike, this median balance was lower than the median balance at the beginning of the year. This was not the result for the study focusing on 401(k) plans, where the median end-of-year balance was higher for those with spikes. However, this result is driven by the decrease in credit card debt during 2020, when the impact of the pandemic was the strongest. In fact, the Chase data showed a significant decline in revolving debt and a significant increase in cash balances from 2019 to 2020 that were considerably outside what was seen in the years directly after 2020 (Figure 9). Furthermore, overall revolving credit card debt in the economy decreased by 0.3 percent.[15] When the observation years were split between 2020 and 2021, the end-of-year credit card debt decreased in 2020 but increased in 2021 among those with spikes in the respective years. Thus, the pandemic closures and government support that was provided during 2020 appears to have offset some of the overall impact of the spike on credit card debt, but the larger credit card balances of those with a spike vs. those without one still held.

The likelihood of experiencing a spike increased with the spending ratio and beginning-of-the-year credit card utilization (Figures 10 and 11). In contrast, the likelihood of a spike decreased as gross income increased (Figure 12).

These spending spikes have a clear impact on the likelihood of DC plan participants taking a plan loan and increasing their credit card debt in the year of the spike. Of those with a spending spike in the analysis year, 7.0 percent took a new plan loan and 31.7 percent increased their credit card debt, compared with 2.7 percent and 25.9, respectively, of those without a spending spike in that same year (Figure 13).[16] This same relative result was found among the private-sector participants, but the percentages increasing debt and taking plan loans among the private-sector participants were larger.

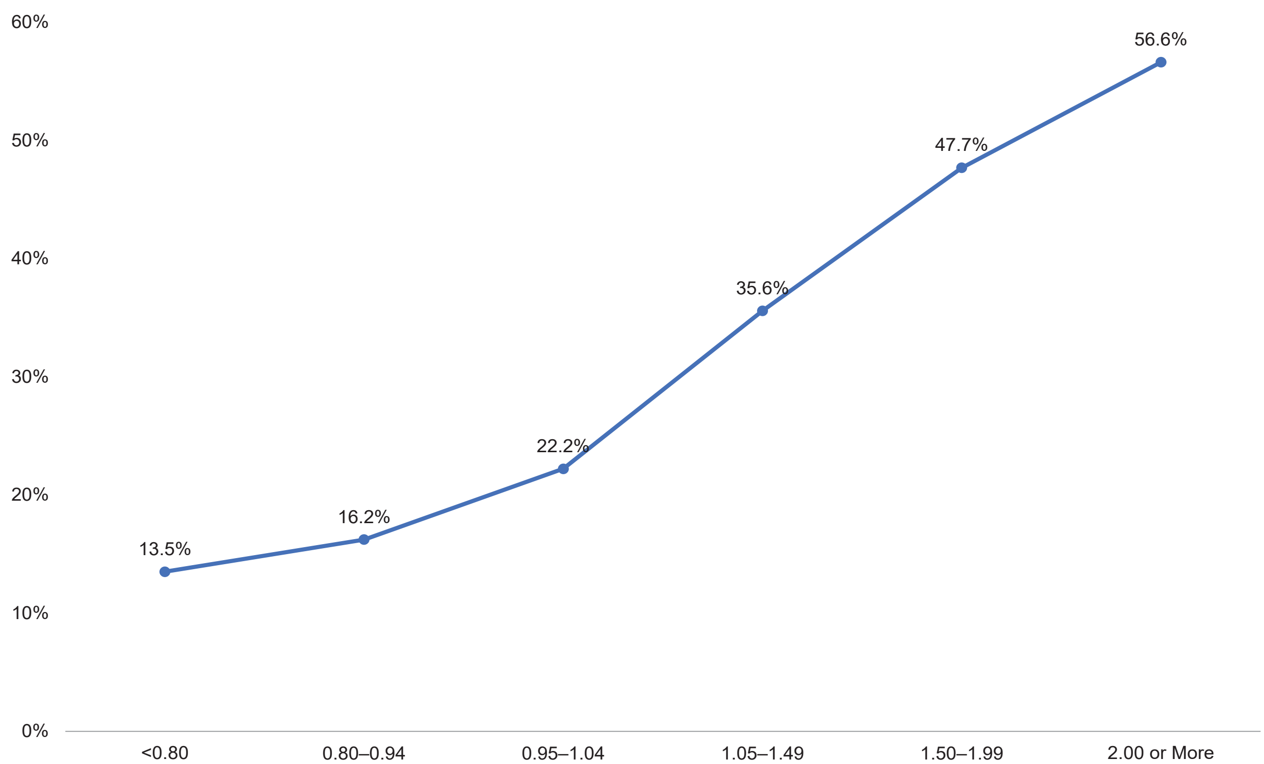
Those with a spending spike not only had greater likelihoods of taking a new plan loan and increasing credit card debt, but the average amount of the loan and the average increase in credit card debt were also larger than they were for those without a spending spike. Those with spikes had an average outstanding new balance, or additional balance for those having a loan increase from the prior year, of $14,015 vs. $10,994 for those without a spike (Figure 14). The average increase in credit card debt for those with a spike was $3,564 compared with $2,977 for those without a spike.

Figure 9
Changes in Revolving Credit Card Debt and Cash Balances of Consistently Employed Households During and After the Pandemic



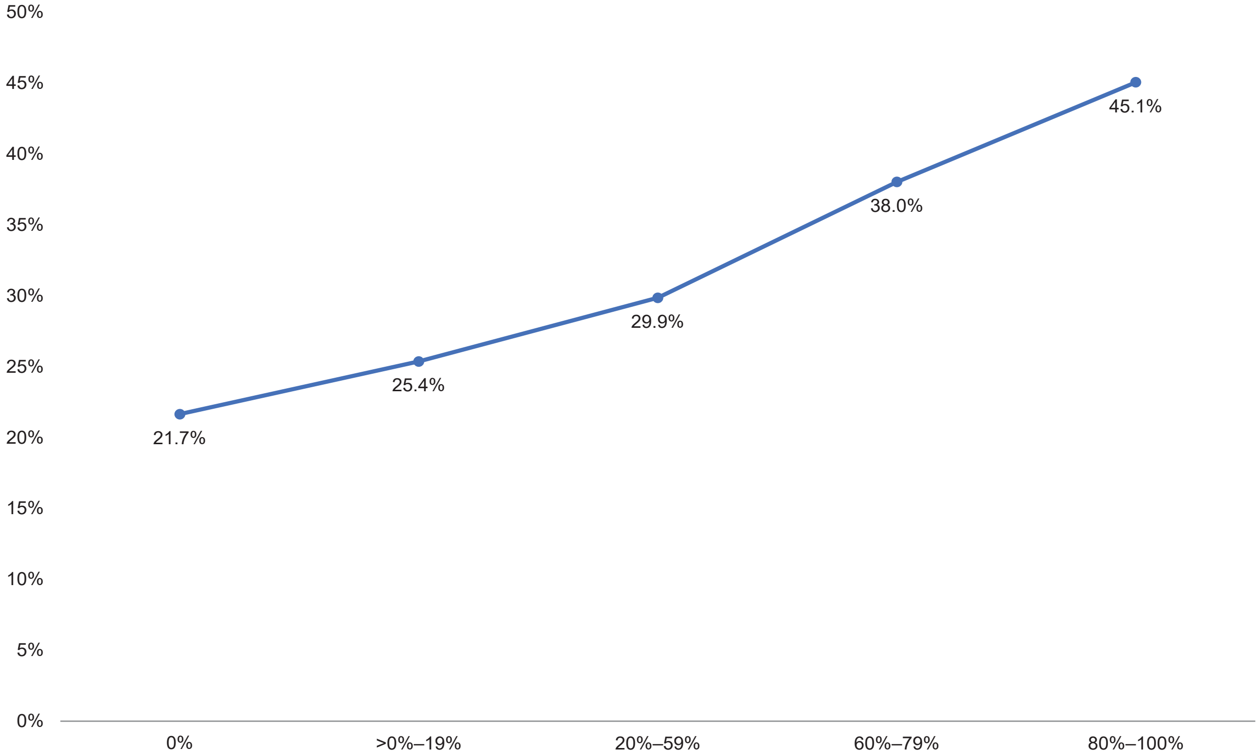
Source: Chase data, J.P. Morgan Asset Management, based on internal select data from JPMorgan Chase Bank, N.A. and its affiliates (collectively "Chase") including select Chase checking and savings accounts data from January 1, 2019, to December 31, 2022. J.P. Morgan analysis. Information that would have allowed identification of specific customers was removed prior to the analysis.

Figure 10
Incidence of an Unfunded Spending Spike, by Spending Ratio



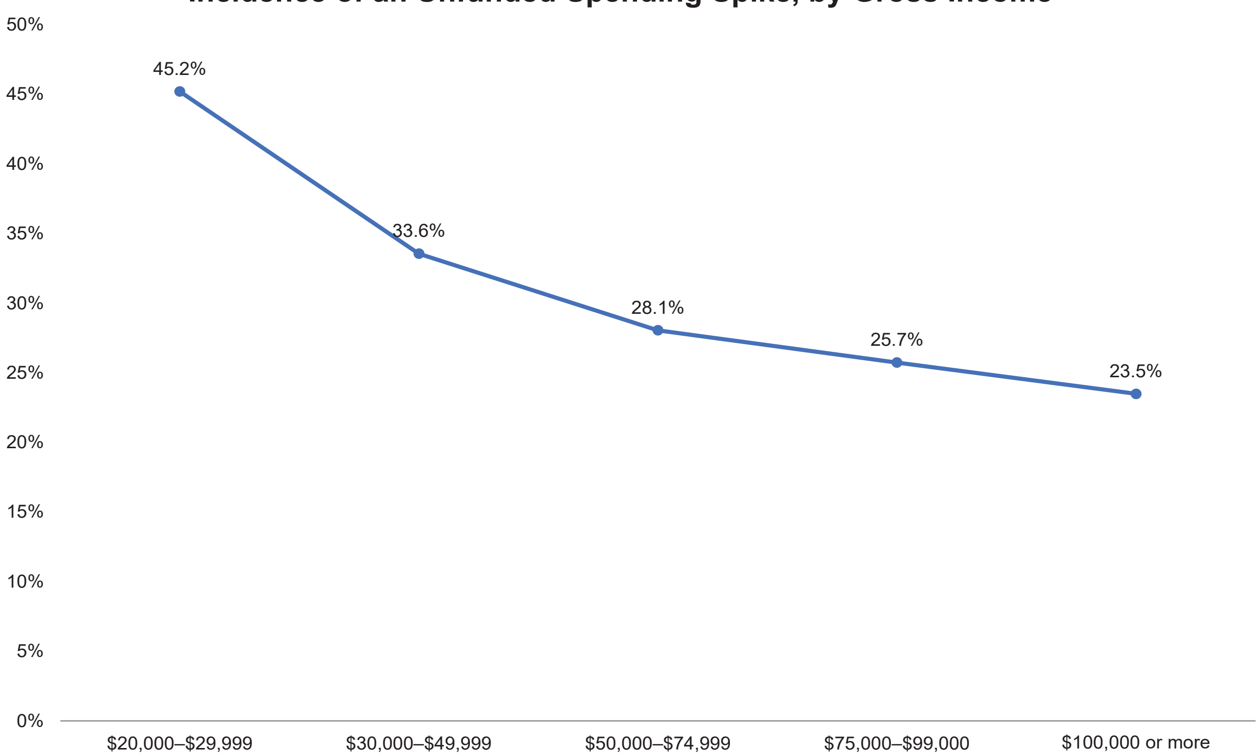
Source: Estimates from PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

Figure 11
Incidence of an Unfunded Spending Spike, by Beginning of Year Credit Card Utilization



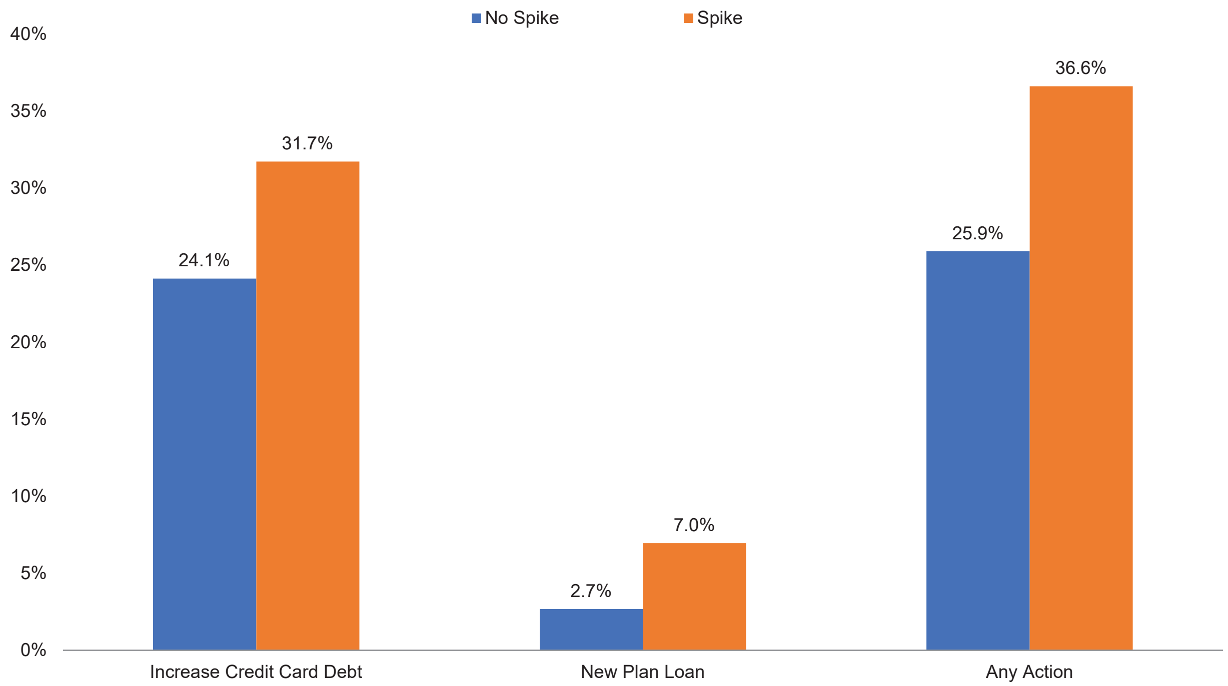
Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

Figure 12
Incidence of an Unfunded Spending Spike, by Gross Income



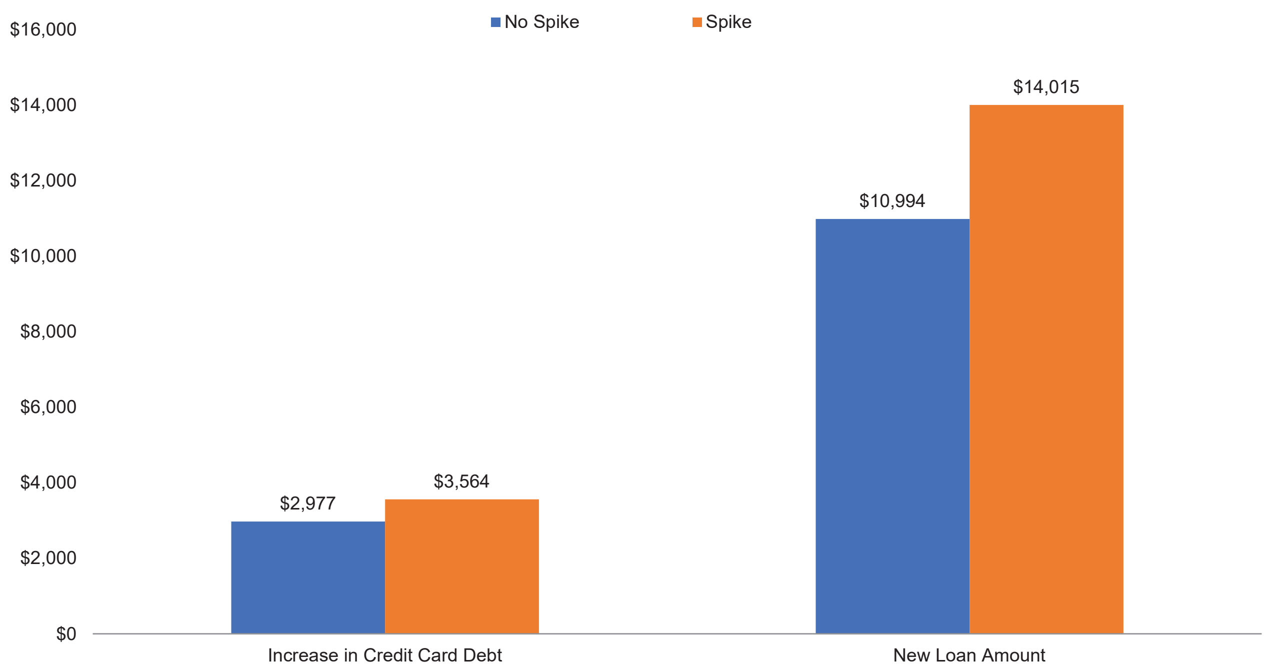
Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

Figure 13
Likelihood of Increasing Credit Card Debt and Taking a New Plan Loan, by Unfunded Spending Spike Occurrence



Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

Figure 14
Average Amount of New Plan Loans and Increases in Credit Card Debt, by Unfunded Spending Spike Occurence



Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

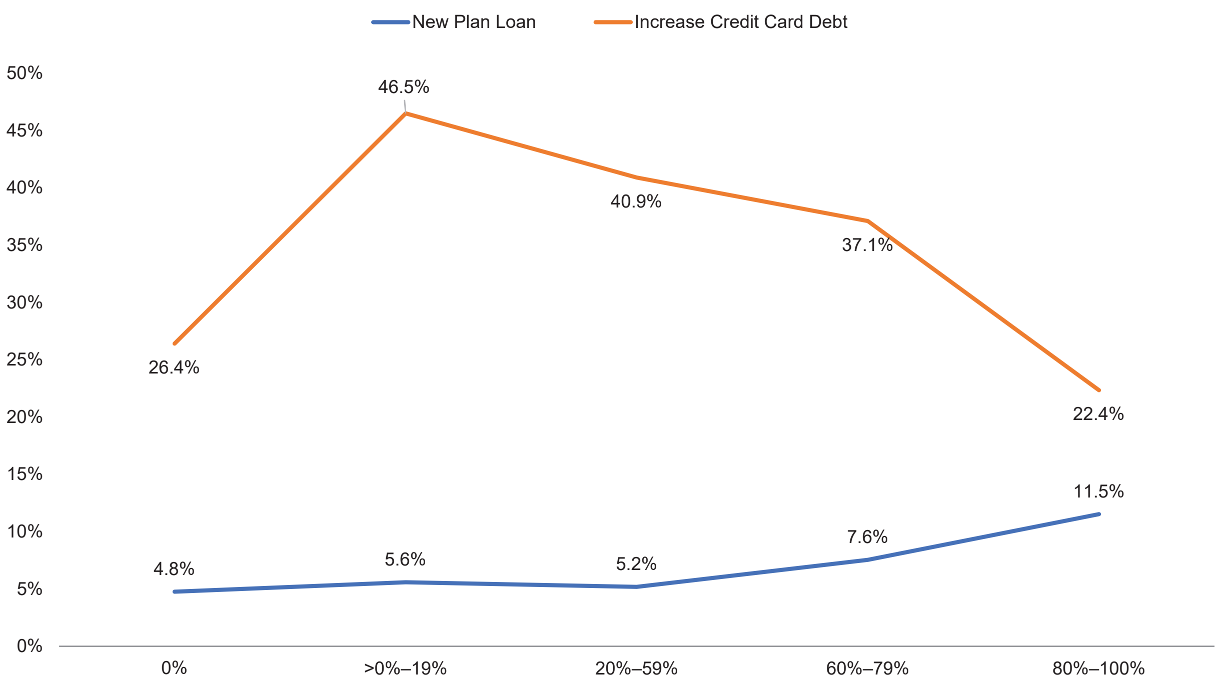
Credit Card Utilization and DC Plan Loans

Credit card utilization is another important factor in determining whether a DC plan participant takes a plan loan. As shown in Figure 2, 43.7 percent of the households had no revolving credit card balances at the beginning of the year, while 16.4 percent had credit card utilization of 80–100 percent. This credit card utilization plays an important role in the participant taking a plan loan, as less availability of credit card borrowing could force the participants to take a plan loan to pay expenses not covered by income or cash reserves. In fact, the median credit card utilization of those taking a plan loan was 66.6 percent compared with 25.5 percent for those who did not take a plan loan.

Also among the households with a spending spike, higher credit card utilization was correlated with a higher likelihood of taking a plan loan. Of the households with a spike having no revolving credit card debt at the beginning of the year, 4.8 percent took a plan loan, compared with 11.5 percent of those having a spike with credit card utilization of 80–100 percent (Figure 15). Interestingly, it appears that the households are more likely to take on additional credit card debt before taking the plan loan, as approximately 37–47 percent of those with credit card utilization of >0–79 percent increased their credit card debt, while less than 8 percent took a new plan loan with that level of credit card utilization.

However, when credit card utilization reached 80 percent, the likelihood of increasing credit card debt decreased to 22.4 percent, while the increasing trend of taking a new plan loan went up by nearly 4 percentage points (7.6 percent to 11.5 percent) from credit card utilization of 60–79 percent to credit card utilization of 80–100 percent. The likelihood of taking a plan loan did not increase by more than 2.5 percentage points in any other instance of increased credit card utilization.

Figure 15
Percentage of Those With Unfunded Spending Spikes Who Took a New Plan Loan or Increased Credit Card Debt, by Initial Credit Card Utilization

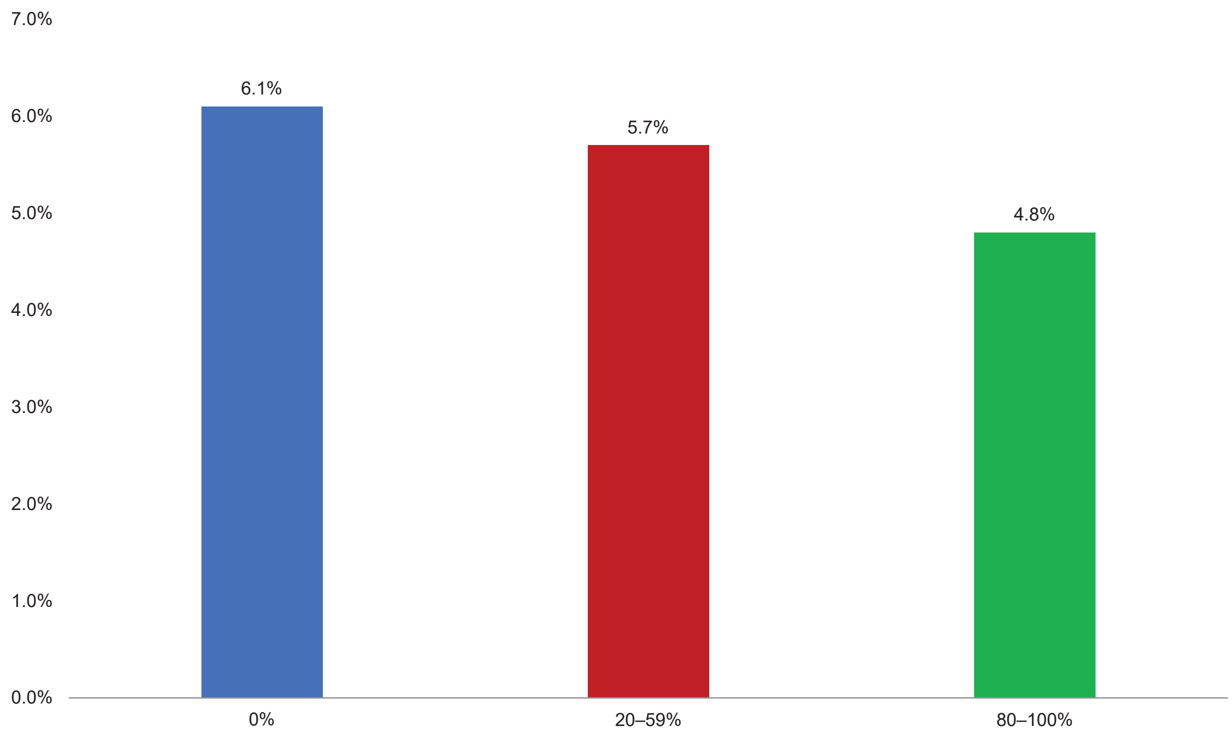


Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

In looking at the potentially long-lasting impact of credit card debt, higher credit card utilization is associated with lower contribution rates. Specifically, the average contribution rate of those with no credit card utilization was 6.1 percent, compared with 5.7 percent for those with 20–59 percent utilization and 4.8 percent for those with 80–100 percent utilization (Figure 16). Correspondingly, the median account balance decreased from $26,084 for those with credit card utilization of 0 percent to $15,423 for those with credit card utilization of 80–100 percent (Figure 17). Furthermore, 20.7 percent of these participants with no revolving credit card debt had a balance of $100,000 or more, compared with 11.1 percent of those with credit card utilization of 80–100 percent.

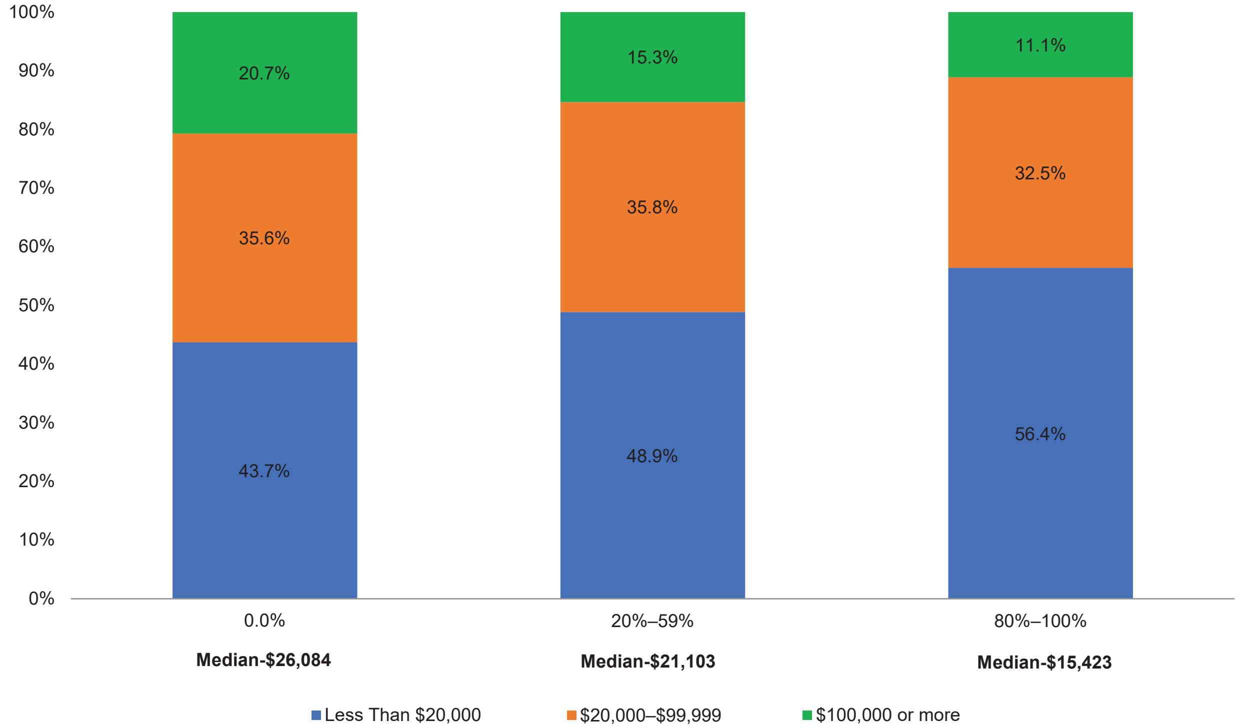
The same trends hold when looking at different income levels. For example, among those making $100,000 or more, the median balance decreased from $36,261 for those with no credit card utilization to $18,746 for those with 80–100 percent utilization (Figure 18). Furthermore, the percentage with balances *less than* $20,000 increased from those with no utilization (37.7 percent) to those with 80–100 percent utilization (52.2 percent).

Figure 16
Mean Contribution Rates, by Initial Credit Card Utilization



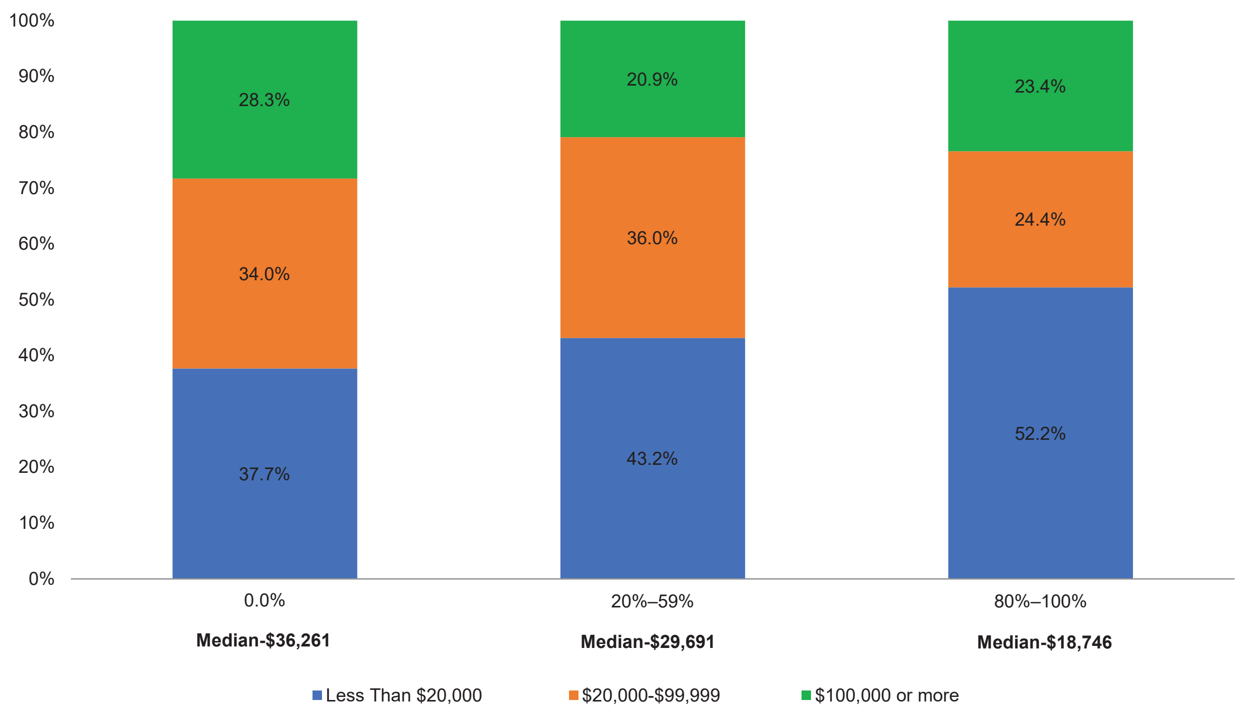
Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

Figure 17
Distribution of Account Balances, by Initial Credit Card Utilization



Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

Figure 18
Distribution of Account Balances for Those With Incomes of $100,000 or More, by Initial Credit Card Utilization



Source: Estimates from the PRRL Database and select Chase data. For more information, see the Data Sources box in the text.

Probit Results on Factors Affecting the Probability of Taking a Plan Loan

In addition to a cross-sectional analysis, a probit regression can be used to see the impact of various factors on the probability of a participant taking a plan loan. This allows for all factors examined to be controlled for to see which ones have a statistically significant impact. Probit only allows for two options for the dependent variable, in this case taking a loan or not taking a loan. The probability of taking a new plan loan is assumed to be a function of specific parameters within the DC plan, such as the account balance (a series of dummy variables for various balance thresholds), the age of the participant (a series of dummy variables for various age thresholds), gross income, and the tenure of the participant with their current employer (a series of dummy variables for various tenure thresholds). Also, this analysis allows for the unique variables outside of the DC plan to be tested as well, including the credit card utilization at the beginning of the year, the change in the revolving credit card balance from the beginning of the year to the end of the year, mortgage payments started during the year (=1 if a new mortgage), the spending ratio, and spike occurrence (=1 if the a spike occurred). (See Appendix Figures 1 and 2 for summary statistics, complete variable definitions, and probit results.)

The unique financial factors outside of the plan that had a highly statistically significant impact on a DC plan participant taking a plan loan included credit card utilization and the occurrence of a spike. The higher the credit card utilization, the more likely a new plan loan was taken. In addition, the occurrence of a spending spike was positively associated with an increased likelihood of taking a plan loan.[17] Consequently, the financial factors outside of what is known within the plan are important, if not the most important, considerations in DC plan participants' decisions to take a plan loan.

Only a few of the demographic factors show a statistically significant impact on taking a new plan loan. Those with account balances of less than $5,000 were less likely to have taken a loan than those with balances of $5,000–$19,999, while those with balances of $50,000–$99,999 were more likely to have taken a loan than the $5,000–$19,999 balance group. In addition, those with tenures with their current employer of 10–19 years were more likely to take loans than those with 2-4 years of tenure, while an increase in gross income was correlated with a higher likelihood of taking a plan loan.[18]

Conclusion

Revolving consumer credit grew by an average rate of 3.3 percent per year during the study period from 2019–2021.[19] However, it grew by 5.7 percent in 2021 and by 7.6 percent in 2022. In the 2024 Retirement Confidence Survey (RCS), 60 percent of workers said that their debt is a problem, and nearly half of workers said debt is negatively impacting their ability to save for retirement.[20] Thus, it is clear that debt is an issue for many Americans. This study builds on the prior J.P. Morgan/EBRI study that looked at the link between spending, credit card debt, and 401(k) plan loans among private-sector DC plan participants to determine if the same links are found among public-sector DC plan participants and found that the same relationships exist among these workers as well. These links between spending and debt suggest that retirement planning is not wholly different by place of employment, even where benefits availability may be dissimilar, but part of a broader holistic financial planning journey where all factors need to be incorporated. In fact, participating in a budget webinar has been found to be associated with higher DC plan contributions.[21] Programs to help with workers' overall finances — for example, financial wellness benefits — could be indispensable. The decision to a take a plan loan is dependent not just on what happens in the plan but on the total financial profile of the participant.

Given the impact of participants' overall finances on the need for a plan loan, it appears clear that prohibiting plan loans would not necessarily improve participants' retirement security. Without the option of taking a plan loan, participants would seek loans outside the plan to fill spending gaps, and those loans may have terms more expensive than those of a plan loan.

This research found that, like private-sector DC plan participants, public-sector DC plan participants who lack income and cash reserves to support a spending spike are likely to end up with more credit card debt. This higher debt can have a long-lasting impact on retirement security, since higher credit card utilization is correlated with lower DC plan contributions and account balances, even when controlling for income. Thus, the availability of emergency savings to

2024
Retirement Confidence Survey

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2024 RCS Overview

34th Annual Retirement Confidence Survey (RCS)

The RCS is the longest-running survey of its kind, measuring worker and retiree confidence about retirement, and is conducted by the Employee Benefit Research Institute (EBRI) and Greenwald Research.

The 2024 survey of 2,521 Americans was conducted online January 2 through January 31, 2024. All respondents were ages 25 or older. The survey included 1,255 workers and 1,266 retirees – this year included an oversample of 721 completed surveys among military individuals (298 workers and 423 retirees).

Data were weighted by age, sex, military status, household income, and race/ethnicity. Unweighted sample sizes are noted on charts to provide information for margin of error estimates. The margin of error would be ± 2.8 percentage points for workers, ± 2.8 retirees, and ± 3.7 for military respondents in a similarly sized random sample.

Please note percentages in the following tables and charts may not total to 100 due to rounding and/or missing categories. Any trend changes or differences in subgroups noted in text are statistically significant; if no trend changes are noted, there were no significant differences.

Key Findings

Workers' and retirees' confidence has not yet fully recovered from the significant drop seen in 2023, but majorities remain optimistic about their retirement prospects.

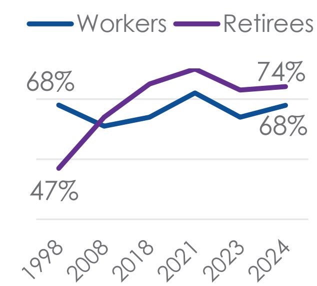
While Americans' confidence has not returned to prior levels, there are signs that it is making a positive recovery, as 68% of workers and 74% of retirees are confident they will have enough money to live comfortably throughout retirement. However, this is not a significant increase from last year (Figures 1 and 2).

Perhaps contributing to this upward trend is workers' and retirees' increased confidence in their income. According to the U.S. Census, wage growth is now outpacing inflation growth. Americans are starting to feel this shift, as 28% of workers and 32% retirees who are confident feel that way due to their finances: stable assets and steady income.

However, inflation remains a top reason for Americans' lack of confidence. Among those who do not feel confident, 31% of workers and 40% of retirees cite inflation as the reason why. Additionally, 39% of workers and 27% of retirees who are not confident feel this way due to their lack of savings.

While most Americans are still worried that inflation will remain high over the next year, their fears are slowly easing as significantly fewer workers (78% vs. 86% in 2023) and retirees (72% vs. 79% in 2023) are concerned about this possibility affecting their retirement. Americans' trust in the economy is also recovering, as significantly fewer workers (71%) and retirees (59%) are concerned about a possible recession over the next year (Figures 3 and 4).

Retirement Confidence



78% of workers
72% of retirees
are concerned inflation will impact their retirement

Key Findings

Social Security remains the top source of actual and expected income for Americans in retirement.

The vast majority of workers (88%) expect Social Security to be a source of income in retirement. Retirees confirm this sentiment, as nearly all (91%) report Social Security as a source of income (Figure 5). However, nearly twice as many retirees (62%) report Social Security is a major source of income compared with the share of workers (35%) who expect it to be.

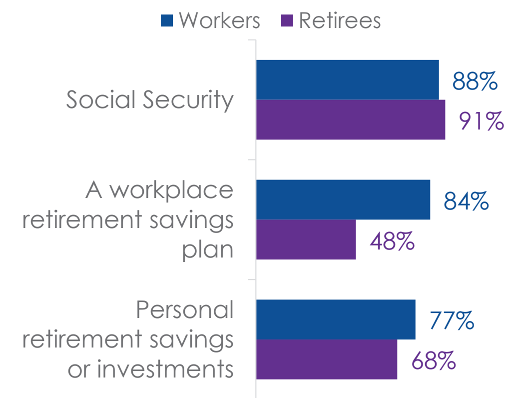
While many Americans expect/report Social Security as a source of income in retirement, not nearly as many understand it. Two-thirds of workers and three-quarters of retirees understand Social Security and the various employment and claiming decisions that impact their retirement benefits at least somewhat well. Yet just two in 10 workers and a quarter of retirees understand it very well.

However, some Americans are taking steps to understand Social Security. Almost half of workers and over three-quarters of retirees have reviewed the amount of their Social Security benefit at their planned retirement age. Additionally, almost three in five workers and four in five retirees have thought about how the age at which they claim Social Security can impact the amount they receive (Figures 6 and 7).

66% of workers **78% of retirees**

understand Social Security

Top 3 Sources of Income



Key Findings

Workers expect to claim Social Security as soon as they retire but also expect to work for pay in retirement.

Workers believe they will start claiming Social Security benefits at a median age of 65, which is the same age at which workers expect to retire. While age 65 has been the historical median age at which workers expect to retire, significantly more workers (28%) this year expect to retire at age 65 (Figure 8).

Retirees, on the other hand, report retiring at a significantly lower age than workers anticipate. Most retirees — seven in 10 — report retiring earlier than age 65, with a median retirement age of 62. Also contradicting workers' expectations, retirees report collecting Social Security later into their retirement but earlier than workers' expectations, at around age 64.

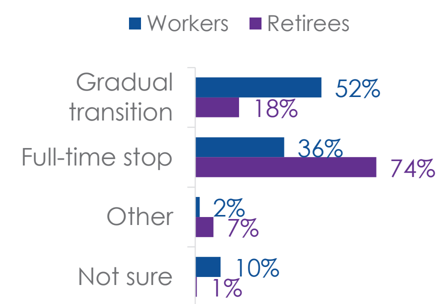
Similar to last year, half of retirees say they retired earlier than expected. While two in five retirees who retired early say they did so because they could afford to, nearly seven in 10 retirees indicate the reason was out of their control.

Another key difference in retirement patterns that the RCS has consistently shown is how workers' desire to retire "gradually, over time" (52% expect) contrasts with retirees' "full-time stop" experience (74% actual). Similarly, three-quarters of workers think that they will work for pay in retirement (75%), while only three in 10 retirees say they actually have worked for pay since retiring (30%) (Figure 9).

Median Age…

	Claim Social Security	Retire
Workers	65	65
Retirees	64	62

Transition Into Retirement



Key Findings

Americans' retirement calculations result in a desire to save more, as estimations drastically differ from what Americans currently have.

Half of Americans have calculated how much money they will need in retirement. In reaction to their calculation, 52% of workers and 44% of retirees started to save more. Even though seven in 10 workers and nearly eight in 10 retirees have saved for retirement, this renewed interest in saving is spurred by the drastic difference in what Americans believe they will need for retirement compared with how much they currently have saved.

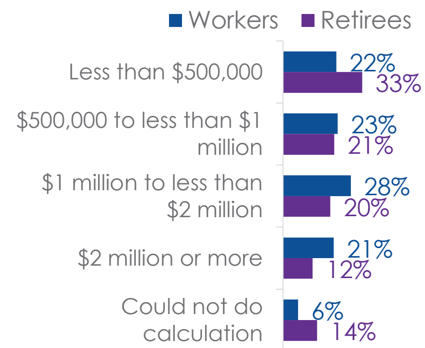
A third of workers who tried to calculate how much they will need in retirement estimate they will need $1.5 million or more. However, a third of workers currently have less than $50,000 in savings and investments. In addition, 14% of workers have less than $1,000 in savings and investments.

As part of their retirement preparations, half of workers have estimated how much income they will need each month in retirement (Figure 6). While a quarter of workers do not know how much preretirement income they will need to replace in retirement, an additional quarter of workers believe they will need to replace 75% or more of their preretirement income.

52% of workers | **52% of retirees**

have calculated how much money they will need in retirement

Retirement Needs Calculation



Key Findings

Workers would like help saving for emergencies through their retirement plan.

Two-thirds of workers and almost three-quarters of retirees believe they have enough savings to handle an emergency expense. Additionally, almost half of workers have planned how they will cover an emergency expense in retirement (Figure 6). However, the ability to save for emergencies is at the top of workers' list of valuable improvements they would like to see be made to their retirement savings plan.*

Some Americans are already using their retirement plans to pay for emergencies, as nearly one in five have taken a loan or withdrawal from their retirement plan. Many of those who took money from their plan did so to pay for unforeseen circumstances such as making ends meet (30%), paying for a home or car repair (17%), and covering a medical expense (15%) (Figure 10).

With this in mind, it comes as no surprise that eight in 10 workers view the SECURE Act's provision that allows employers to set up an Emergency Savings Account as part of their retirement plan offerings as helpful.

66% of workers
73% of retirees
believe they have enough savings to handle an emergency expense

81% of workers view SECURE's Emergency Savings as helpful

*See RCS Fact Sheet #6 "*Workplace Retirement Savings Plans*" for more information.

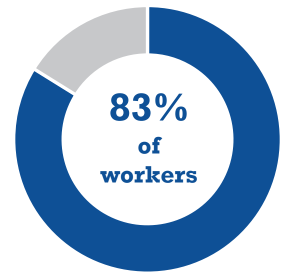
Key Findings

Workers are more likely this year to want to purchase a guaranteed income product with their retirement savings.

Among workers who are offered a workplace retirement savings plan, a third believe having investment options that provide guaranteed lifetime income to be the most valuable improvement to their plan. This landed second on workers' list of most valuable improvements to their plan.

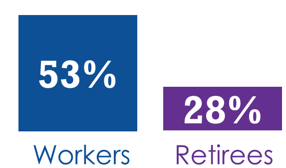
Significantly up this year, more workers who are contributing to their employer's retirement savings — three in 10 — expect to use savings from their workplace retirement savings plan to purchase a product that guarantees monthly income for life once they retire. This is substantiated by the fact that 83% of workers who are participating in a workplace retirement plan would be interested in using some or all of their retirement savings to purchase a product that guarantees monthly income.

Over half of workers expect a guaranteed income product to be source of income in retirement. However, a significantly smaller share of retirees — a little over a quarter — indicate it is a source of income (Figure 5). Currently, only about one in five workers have used a product that guarantees monthly income for life to save for their retirement, while a slightly smaller share of retirees (about one in seven) report they have done the same.



are interested in purchasing an annuity with their retirement savings

Guaranteed Income Product as a Source of Retirement Income



Key Findings

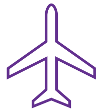
While expenses in retirement are higher than some retirees originally anticipated, retirees' lifestyle in retirement is better than they expected.

Significantly up this year, over a third of retirees say their travel, entertainment, or leisure expenses are higher than they expected (Figure 11). While over half of retirees say their overall expenses in retirement are higher than they originally expected, nearly four in five say they are able to spend money how they want, within reason (Figure 12).

Despite higher-than-expected costs, significantly more retirees this year — three in 10 — believe their overall lifestyle in retirement is better than expected. Additionally, over two-thirds of retirees agree they are having the retirement lifestyle they envisioned. A quarter of retirees strongly agree with this statement (Figure 12).

Not only are retirees managing their current expenses, but 58% say they are still saving for the future. In addition, they are planning for the next generation, as nearly two-thirds of retirees are confident they will have enough money to leave an inheritance. Moreover, about seven in 10 retirees disagree that they need to spend less than they could because they would like to leave a legacy inheritance (Figure 12).

30% of retirees
say their overall lifestyle in retirement is **better** than expected



35% of retirees
say travel, entertainment, or leisure expenses are **higher** than expected