

State Investment Board

RETIREMENT & INVESTMENT

AUDIT COMMITTEE MEETING

Tuesday, November 15, 2022 – 2:30 PM Workforce Safety & Insurance Board Room 1600 E Century Ave Suite 1, Bismarck, ND 58503

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AGENDA

- I. Call to Order and Acceptance of Agenda Chair (committee action) (5 minutes)
- II. Approval of August 9, 2022 Minutes Chair (committee action) (5 minutes)
- III. Introduction of New RIO Staff
 - a. Ryan Skor, CFO/COO
 - b. Jecca Geffre, Communications & Outreach Director
- IV. Presentation of June 30, 2022, Financial Audit Report of RIO and GASB 68 Schedule Audit Paul Niedermuller & Tonia Shulz, CliftonLarsonAllen, LLP (committee action) (30 minutes)
- V. Executive Limitations/Staff Relations Jan Murtha (informational) (15 minutes)
- VI. 2021-2021 First Quarter Audit Activities Sara Seiler (committee action) (20 minutes)
 - a. Payroll Audit
 - b. SIB Client Survey
 - c. File Maintenance Audit
- VII. Internal Audit Business Process Review Sara Seiler (informational) (15 minutes)
- VIII. Update on Current Internal Audit Activities Sara Seiler (committee action) (30 minutes)
- IX. Other Next SIB Audit Committee Meeting RIO Conference Room
 1600 E Century Ave Suite 3, Bismarck, ND 58503
 Wednesday, February 16, 2022 @ 2:30 PM
- X. Adjournment

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

STATE INVESTMENT BOARD AUDIT COMMITTEE MEETING MINUTES OF THE August 9, 2022, MEETING

MEMBERS PRESENT:	Thomas Beadle, State Treasurer, Chair Yvonne Smith, PERS Board, Vice Chair Jon Griffin, External Representative Cody Mickelson, TFFR Board
MEMBER ABSENT:	Julie Dahle, External Representative
STAFF PRESENT:	Rachel Kmetz, Accounting Mgr Jan Murtha, Exec Director Emmalee Riegler, Contracts/Records Assistant Chad Roberts, DED/CRO Sara Sauter, Suprv of Internal Audit Dottie Thorsen, Internal Auditor

CALL TO ORDER:

Ms. Smith called the State Investment Board (SIB) Audit Committee meeting to order at 2:32 p.m. on Tuesday, August 9, 2022, at Workforce Safety & Insurance, 1600 E Century Ave., Bismarck, ND.

The following Audit Committee members were present representing a quorum, Treasurer Beadle, Mr. Griffin, Mr. Mickelson, and Ms. Smith.

AGENDA:

The agenda was considered for the August 9, 2022, meeting.

IT WAS MOVED BY TREASUER BEADLE AND SECONDED BY MR. GRIFFIN AND CARRIED BY A VOICE VOTE TO APPROVE THE AGENDA FOR THE AUGUST 9, 2022, MEETING AS DISTRIBUTED.

AYES: TREASURER BEADLE, MR. GRIFFIN, MR. MICKELSON, AND MS. SMITH NAYS: NONE ABSENT: MS. DAHLE MOTION CARRIED

Mr. Roberts and Ms. Kmetz were introduced.

MINUTES:

The minutes were considered for the May 10, 2022, meeting.

IT WAS MOVED BY TREASURER BEADLE AND SECONDED BY MR. MICKELSON AND CARRIED BY A VOICE VOTE TO ACCEPT THE MAY 10, 2022, MINUTES AS DISTRIBUTED.

AYES: MR. GRIFFIN, MR. MICKELSON, TREASURER BEADLE, AND MS. SMITH NAYS: NONE ABSENT: MS. DAHLE MOTION CARRIED

ELECTION OF CHAIR, VICE CHAIR, AND LIASON:

IT WAS MOVED BY TREASURER BEADLE AND SECONDED BY MR. GRIFFIN AND CARRIED BY A ROLL CALL VOTE TO CAST A UNANIMOUS BALLOT OF TREASURER BEADLE FOR CHAIR, MS. SMITH FOR VICE CHAIR, AND MS. SAUTER AS LIASON.

AYES: TREASURER BEADLE, MR. MICKELSON, MR. GRIFFIN, AND MS. SMITH NAYS: NONE ABSENT: MS. DAHLE MOTION CARRIED

2022-23 AFFIRMATION OF CODE OF CONDUCT:

Ms. Sauter discussed the annual affirmation of the SIB Code of Conduct Policy that Committee members were provided.

EXECUTIVE LIMITATIONS/STAFF RELATIONS:

Ms. Murtha provided an update on staffing at RIO. Chad Roberts, the new Deputy Executive Director/Chief Retirement Officer started his on July 11, 2022. The Chief Financial Officer/Chief Operating Officer position offer has been accepted by Ryan Skor who will start on August 22, 2022. The Legal Intern worked with RIO for the summer. Interviews have been scheduled for the four open investment positions. Ms. Murtha reviewed current projects and initiatives including the Legacy Fund Asset Allocation Study, TFFR Pioneer Project, and the Northern Trust Initiative. Committee discussion followed.

UPDATE ON CURRENT INTERNAL AUDIT (IA) ACTIVITIES:

Ms. Sauter provided an update on current IA activities. Current in-progress activities include the Executive Limitations audit, Model 2 Partial review, Pioneer project, policy manual review, Succession Planning Phase 2, and the TFFR File Maintenance audit. IA will continue to assist the external auditors with the RIO financial audit and the GASB 68 census data audit. Ms. Sauter will continue to work with the DED/CRO and Executive Assistant to complete the review and update of the RIO Administrative Manual. Ms. Thorsen will complete Phase 1 of the Model 2 Partial audit and send requests for information to employers. Committee discussion followed.

IT WAS MOVED BY TREASURER BEADLE AND SECONDED BY MR. GRIFFIN AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE CURRENT IA ACTIVITIES REPORT.

AYES: MR. GRIFFIN, MR. MICKELSON, TREASURER BEADLE, AND MS. SMITH NAYS: NONE ABSENT: MS. DAHLE MOTION CARRIED

2021-22 YEAR END AUDIT ACTIVITIES REPORT:

Ms. Sauter reviewed the 2021-22 Year End Audit Activities Report. IA completed the Executive Limitations Audit in February 2022. IA also conducted the Executive Director Effectiveness survey and assisted the Executive Review Committee (ERC) with the SIB Executive Review survey in April 2022. The SIB Client survey was completed, and the results were reported to the SIB in October 2021. IA worked with the ERC to develop and administer a Board Self-Assessment survey for the SIB. Results were reported to the Board in February 2022. The SIB requested that the Audit Committee review and provide education on board governance. The review was completed, and the Committee presented its recommendations to the Board in November 2021. IA assisted in the search for the Executive Recruitment service and attended the Executive Search Committee meetings. IA conducted a review of RIO's succession planning. Phase I was

completed and presented to the Committee in February 2022. IA participated in strategic planning meetings with RIO staff.

IA staff conducted the TFFR Employer Salary Verification-Participant Data review for fiscal year 2018-19. The report was issued in May 2021 and IA staff worked with Retirement Services staff as they corrected errors. IA staff assisted with the RFP process for the expanded use of automated data analytics for death searches. The TFFR File Maintenance audit report is in progress.

IT WAS MOVED BY TREASURER BEADLE AND SECONDED BY MR. GRIFFIN AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE 2021-22 YEAR END AUDIT ACTIVITIES REPORT.

AYES: TREASURER BEADLE, MR. GRIFFIN, MR. MICKELSON, AND MS. SMITH NAYS: NONE ABSENT: MS. DAHLE MOTION CARRIED

2021-22 AUDIT COMMITTEE REPORT TO SIB:

Ms. Sauter reviewed the 2021-22 Audit Committee report to the SIB. The Audit Committee charter requires an annual report of the Committee's activities to the Board. Ms. Sauter will present the report to the SIB.

IT WAS MOVED BY TREASURER BEADLE AND SECONDED BY MR. GRIFFIN AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE 2021-22 AUDIT COMMITTEE REPORT TO THE SIB.

AYES: MR. GRIFFIN, MR. MICKELSON, TREASURER BEADLE, AND MS. SMITH NAYS: NONE ABSENT: MS. DAHLE MOTION CARRIED

AUDIT CHARTER: 2021-22 REVIEW OF RESPONSIBILITIES:

Ms. Sauter explained the requirement that the Committee review the charter and ensure that the Committee is fulfilling its responsibilities.

IT WAS MOVED BY TREASURER BEADLE AND SECONDED BY MR. MICKELSON AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE ANNUAL REVIEW OF RESPONSIBILITIES IN THE AUDIT COMMITTEE CHARTER.

AYES: TREASURER BEADLE, MR. MICKELSON, MR. GRIFFIN, AND MS. SMITH NAYS: NONE ABSENT: MS. DAHLE MOTION CARRIED

OTHER:

The next Audit Committee meeting is scheduled for Tuesday, November 15, at 2:30 p.m. at Workforce Safety & Insurance, 1600 East Century Ave., Bismarck, ND.

With no further business to come before the Audit Committee, Ms. Smith adjourned the meeting at 3:47 p.m.

Prepared by:

Missy Kopp Assistant to the Board

Financial Statement Audit Results Presentation to ND RIO– Audit Committee

November 15, 2022



We'll get you there.

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Agenda

- 2022 Financial Statement Audit Results
- Required Communications
- Financial Highlights
- 2022 GASB 68 Schedules Audit Update
- Discussion/Questions



2022 Financial Statement Audit Results

- Independent Auditors' Report on the Financial Statements (Page 1)
 - Unmodified "clean" opinion that the financial statements are presented fairly, in all material respects, in conformity with U.S. GAAP
 - Limited procedures were performed, and no opinion rendered, on management's discussion and analysis, required supplemental information, supplemental schedules, and the Introductory, Investment, Actuarial, and Statistical sections
- SAS 134 Implementation restructured Independent Auditors' Report in 2022
 - Reordering of paragraphs and discussion about the audit process
 - No impact on clean opinion





2022 Financial Statement Audit Results (Cont.)

- Independent Auditors' Report on Internal Control and Compliance (Page 4)
 - No material weaknesses were identified
 - No significant deficiencies were identified
- Governance Communication Letter
 - Distributed in a separate communication (to be discussed)





Required Communications

- Significant Risks
 - Management override of controls (required by auditing standards)
 - Valuation of alternative investments
 - Valuation of the TFFR net pension liability
- Significant accounting policies
 - Described in Note 1 to the financial statements
 - No new significant accounting policies adopted/implemented in FY 2022
- No audit adjustments or passed adjustments





Required Communications (Cont.)

- Significant judgments and accounting estimates
 - Valuation of alternative investments
 - Walkthroughs of initial due diligence, on-going monitoring and financial reporting
 - Confirmation with a sample of fund managers
 - Review audited financial statements
 - Evaluate auditor competence
 - Evaluate the opinion (ie. unmodified, modified)
 - Determine if the financial statements are reported in accordance with GAAP and if investments are reported at fair value
 - Reconcile the audited NAV to the fair value reported by NDRIO





Required Communications (Cont.)

- Significant judgments and accounting estimates (cont.)
 - Actuarial information, assumptions and methods used
 - Census data testing
 - Use of an auditor's specialist
 - Confirm TFFR's actuary's independence
 - Review TFFR's actuary's valuation report
 - Evaluate the reasonableness of the long-term rate of return (LTRoR) and other assumptions
 - Compare to industry standards and circumstances specific to TFFR
 - Review most recent asset allocation, actuarial audits, experience studies, long-term historical data and current market data
 - Review of the discount rate calculation





Required Communications (Cont.)

- Financial statement disclosures neutral, consistent and clear
- No significant, unusual transactions
- No disagreements with management or significant matters discussed
- Management did not consult with other accountants on the application of accounting policies
- Management Representations





Financial Highlights – Statements of Net Position – Fiduciary Funds

(in millions)	2022	2021	\$ Change	% Change
Total Investments	\$17,948.5	\$19,948.0	(\$1,999.5)	-10.0%
Securities Lending Collateral	\$147.7	\$88.9	\$58.8	66.1%
Receivables	\$95.3	\$89.4	\$5.9	6.6%
Cash & Other	\$24.4	\$26.1	(\$1.7)	-6.5%
Total Assets	\$18,215.9	\$20,152.4	(\$1,936.5)	-9.6%
Total Liabilities	\$157.5	\$980.5	(\$823.0)	-83.9%
Net Position	\$18,057.2	\$19,173.8	(\$1,116.6)	-5.8%



Financial Highlights – Statements of Changes in Net Position – Fiduciary Funds

(in millions)	2022	2021	\$ Change	% Change
Contributions	\$194.8	\$191.5	\$3.3	1.7%
Total Net Investment Income(Loss)	(\$1,644.9)	\$3,546.0	(\$5,190.9)	-146.4%
Purchase of Units	\$918.7	\$635.2	\$283.5	44.6%
Total Additions	(\$531.4)	\$4,372.7	(\$4,904.1)	-112.2%
Payments to TFFR members	\$251.8	\$241.1	\$10.7	4.4%
Administrative Expenses	\$4.6	\$4.8	(\$0.2)	-4.2%
Redemption of Units	\$328.7	\$1,266.6	(\$937.9)	-74.0%
Total Deductions	\$585.1	\$1,512.5	(\$927.4)	-61.3%
Change in Net Position	(\$1,116.5)	\$2,860.2	(\$3,976.7)	-139.0%



Financial Highlights – TFFR Net Pension Liability

(expressed in billions)





2022 GASB 68 Schedules Audit Update

- Employer Census Testing is Complete
 - Tested individual employee census data at **12** separate employers
 - 137 total employees tested
 - 1 employer with a finding immaterial to the schedules as a whole
- Will start audit of the GASB 68 Schedules this month
- Expect to issue our final report on the Schedules by the end of 2022





Discussion/Questions

We'll get you there.

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State Investment Board Teachers' Fund for Retirement North Dakota Retirement and Investment Office Bismarck, North Dakota

We have audited the financial statements of the North Dakota Retirement and Investment Office (RIO) as of and for the year ended June 30, 2022, and have issued our report thereon dated November 2, 2022. We have previously communicated to you information about our responsibilities under auditing standards generally accepted in the United States of America, as well as certain information related to the planned scope and timing of our audit. Professional standards also require that we communicate to you the following information related to our audit.

Significant audit findings

Qualitative aspects of accounting practices

Accounting policies

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by RIO are described in Note 1 to the financial statements.

No new accounting policies were adopted and the application of existing policies was not changed during fiscal year 2022.

We noted no transactions entered into by RIO during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. There were significant estimates in the valuation of alternative investments and the calculation of the actuarial information included in the footnotes and required supplementary information.

The valuation of alternative investments, including private equity and real asset investments, are a management estimate which is primarily based upon net asset values reported by the investment managers and comprise 18% of the total investment portfolio. The values for these investments are reported based upon the most recent financial data available and are adjusted for cash flows through June 30, 2022. Our audit procedures validated this approach through the use of confirmations sent directly to a sample of investment managers and the review of the most recent audited financial statements for these sampled funds. Furthermore, we reviewed management's estimate and found it to be reasonable.

The actuarially calculated information was based on the assumptions and methods adopted by the Board, including an expected investment rate of return of 7.25% per annum compounded annually. The valuation takes into account all of the promised benefits required by the Retirement Code to which members are entitled as of July 1, 2022. Our audit procedures included reviewing the actuarial valuation and related assumptions used therein and we believe the estimate to be reasonable.

Financial statement disclosures

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. There were no particularly sensitive financial statement disclosures.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties encountered in performing the audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Uncorrected misstatements

Professional standards require us to accumulate all misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Management did not identify and we did not notify them of any uncorrected financial statement misstatements.

Corrected misstatements

Management did not identify and we did not notify them of any financial statement misstatements detected as a result of audit procedures.

Disagreements with management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditors' report. No such disagreements arose during our audit.

Management representations

We have requested certain representations from management that are included in the attached management representation letter dated November 2, 2022.

Management consultations with other independent accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to RIO's financial statements or a determination of the type of auditors' opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Significant issues discussed with management prior to engagement

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to engagement as RIO's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our engagement.

Other audit findings or issues

The following describes findings or issues arising during the audit that are, in our professional judgment, significant and relevant to your oversight of the financial reporting process:

- During the audit we identified the following significant risk(s) of material misstatement that has (have) not previously been communicated to you:
 - Management override of controls (required by auditing standards)
 - Valuation of alternative investments
 - o Valuation of net pension liability

Required supplementary information

With respect to the required supplementary information (RSI) accompanying the financial statements, we made certain inquiries of management about the methods of preparing the RSI, including whether the RSI has been measured and presented in accordance with prescribed guidelines, whether the methods of measurement and preparation have been changed from the prior period and the reasons for any such changes, and whether there were any significant assumptions or interpretations underlying the measurement or presentation of the RSI. We compared the RSI for consistency with management's responses to the foregoing inquiries, the basic financial statements, and other knowledge obtained during the audit of the basic financial statements. Because these limited procedures do not provide sufficient evidence, we did not express an opinion or provide any assurance on the RSI.

Supplementary information in relation to the financial statements as a whole

With respect to the schedules of administrative expenses, consultant expenses, investment expenses, and appropriations – budget basis – fiduciary funds (collectively, the supplementary information) accompanying the financial statements, on which we were engaged to report in relation to the financial statements as a whole, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period or the reasons for such changes, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves. We have issued our report thereon dated November 2, 2022.

Other information included in annual reports

Other information (financial or nonfinancial information other than the financial statements and our auditors' report thereon) is being included in your annual report and is comprised of the introductory,

investment, actuarial and statistical sections. Our responsibility for other information included in your annual report does not extend beyond the financial information identified in our opinion on the financial statements. We have no responsibility for determining whether such other information is properly stated and do not have an obligation to perform any procedures to corroborate other information contained in your annual report. We are required by professional standards to read the other information included in your annual report and consider whether a material inconsistency exists between the other information and the financial statements because the credibility of the financial statements and our auditors' report thereon may be undermined by material inconsistencies between the audited financial statements and other information exists, we are required to describe it in our report. Our auditors' report on the financial statements includes a separate section, "Other Information," which states we do not express an opinion or any form of assurance on the other information included in the annual report. We did not identify any material inconsistencies between the other information, and the audited financial statements and statements and one auditors' report on the financial statements includes a separate section, "Other Information," which states we do not express an opinion or any form of assurance on the other information included in the annual report. We did not identify any material inconsistencies between the other information and the audited financial statements.

Our auditors' opinion, the audited financial statements, and the notes to financial statements should only be used in their entirety. Inclusion of the audited financial statements in a document you prepare, such as an annual report, should be done only with our prior approval and review of the document. You are responsible to provide us the opportunity to review such documents before issuance.

* * *

This communication is intended solely for the information and use of the State Investment Board, the Board of the Teachers' Fund for Retirement and management of RIO and is not intended to be, and should not be, used by anyone other than these specified parties.

Clifton ason Allen LLP

CliftonLarsonAllen LLP

Baltimore, Maryland November 2, 2022



Retirement & Investment

November 2, 2022

CliftonLarsonAllen LLP 1966 Greenspring Drive, Suite 300 Timonium, MD 21093

This representation letter is provided in connection with your audit of the financial statements of North Dakota Retirement and Investment Office (RIO), which comprise the fiduciary net position of the entity as of June 30, 2022, and the related changes in fiduciary net position for the year then ended, and the related notes to the financial statements, for the purpose of expressing opinions on whether the financial statements are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP).

Certain representations in this letter are described as being limited to matters that are material. Misstatements, including omissions, are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

We confirm, to the best of our knowledge and belief, as of November 2, 2022, the following representations made to you during your audit.

Financial Statements

- 1. We have fulfilled our responsibilities, as set out in the terms of the Contract between the State of North Dakota and CliftonLarsonAllen LLP dated March 29, 2021, for the preparation and fair presentation of the financial statements in accordance with U.S. GAAP. The financial statements include all properly classified funds and other financial information of the primary government and all component units required by generally accepted accounting principles to be included in the financial reporting entity.
- 2. We acknowledge and have fulfilled our responsibility for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.
- 3. We acknowledge our responsibility for the design, implementation, and maintenance of internal control to prevent and detect fraud.
- 4. All significant plan amendments, adopted during the period or subsequent to the date of the financial statements, and their effects on benefits and financial status have been disclosed in the financial statements.
- 5. The values of non-readily marketable investments represent good faith estimates of fair value. The methods and significant assumptions used result in a measure of fair value appropriate for financial measurement and disclosure purposes.

- 6. Significant estimates have been appropriately accounted for and disclosed in accordance with the requirements of U.S. GAAP. Significant estimates are estimates at the financial statement date that could change materially within the next year.
- 7. No events, including instances of noncompliance, have occurred subsequent to the financial statement date and through the date of this letter that would require adjustment to, or disclosure in, the financial statements.
- 8. We have not identified or been notified of any uncorrected financial statement misstatements.
- 9. The effects of all known actual or possible litigation, claims, and assessments have been accounted for and disclosed in accordance with U.S. GAAP.
- 10. Guarantees, whether written or oral, under which the entity is contingently liable, if any, have been properly recorded or disclosed in accordance with U.S. GAAP.
- 11. We have no plans or intentions that may materially affect the carrying value or classification of assets and liabilities.
- 12. With respect to actuarial assumptions and valuations:
 - a. Management agrees with the actuarial methods and assumptions used by the actuary for funding purposes and for determining the total pension liability and has no knowledge or belief that would make such methods or assumptions inappropriate in the circumstances. We did not give any, nor cause any, instructions to be given to RIO's actuary with respect to values or amounts derived, and we are not aware of any matters that have impacted the independence or objectivity of RIO's actuary.
 - b. There were no omissions from the participant data provided to the actuary for the purpose of determining the total pension liability and other actuarially determined amounts in the financial statements.
 - c. There have been no changes in the actuarial methods or assumptions used in calculating the amounts recorded or disclosed in the financial statements. There have been no changes in plan provisions between the actuarial valuation date and the date of this letter.
- 13. We believe the plan and trust established under the plan is qualified under the appropriate section of The North Dakota Century Code, and we intend to continue them as a qualified plan and trust.
- 14. We are not aware of any present legislative intentions to terminate the plan.

Information Provided

- 1. We have provided you with:
 - a. Access to all information, of which we are aware, that is relevant to the preparation and fair presentation of the financial statements such as records, documentation, and other matters.

- b. Additional information that you have requested from us for the purpose of the audit.
- c. Unrestricted access to persons within the entity from whom you determined it necessary to obtain audit evidence.
- d. Complete minutes of the meetings of the governing board and related committees, or summaries of actions of recent meetings for which minutes have not yet been prepared.
- e. All actuarial reports prepared for the plan during the year.
- 2. All material transactions have been recorded in the accounting records and are reflected in the financial statements.
- 3. We have disclosed to you the results of our assessment of the risk that the financial statements may be materially misstated as a result of fraud.
- 4. We have no knowledge of any fraud or suspected fraud that affects the entity and involves:
 - a. Management;
 - b. Employees who have significant roles in internal control; or
 - c. Others when the fraud could have a material effect on the financial statements.
- 5. We have no knowledge of any allegations of fraud, or suspected fraud, affecting the entity's financial statements communicated by employees, former employees, regulators, or others.
- 6. We have no knowledge of any instances of noncompliance or suspected noncompliance with laws and regulations and provisions of contracts, or abuse whose effects should be considered when preparing financial statements.
- We have disclosed to you all known actual or possible litigation, claims, and assessments whose effects should be considered when preparing the financial statements.
- 8. There are no other material liabilities or gain or loss contingencies that are required to be accrued or disclosed in accordance with U.S. GAAP.
- 9. We have disclosed to you the identity of the entity's related parties and all the related party relationships and transactions of which we are aware.
- 10. We are responsible for compliance with the laws, regulations, and provisions of contracts applicable to RIO, and we have identified and disclosed to you all laws, regulations, and provisions of contracts that we believe have a direct and material effect on the determination of financial statement amounts or other financial data significant to the audit objectives, including legal and contractual provisions for reporting specific activities in separate funds.

- 11. There are no violations or possible violations of budget ordinances, laws and regulations (including those pertaining to adopting, approving, and amending budgets), provisions of contracts, or any debt covenants whose effects should be considered for disclosure in the financial statements, or as a basis for recording a loss contingency, or for reporting on noncompliance.
- 12. The entity has complied with all aspects of contractual agreements that would have a material effect on the financial statements in the event of noncompliance.
- 13. We have followed all applicable laws and regulations in adopting, approving, and amending budgets.
- 14. Investments, derivative instruments, and land and other real estate held by RIO are properly valued.
- 15. Expenses have been appropriately classified the statement of changes in net position, and allocations have been made on a reasonable basis.
- 16. Revenues are appropriately classified in the statement of changes in net position.
- 17. Interfund, internal, and intra-entity activity and balances have been appropriately classified and reported.
- 18. Deposits and investment securities and derivative instruments are properly classified as to risk and are properly valued and disclosed.
- 19. Capital assets, including infrastructure and intangible assets, are properly capitalized, reported, and, if applicable, depreciated.
- 20. We acknowledge our responsibility for the required supplementary information (RSI). The RSI is measured and presented within prescribed guidelines and the methods of measurement and presentation have not changed from those used in the prior period. We have disclosed to you any significant assumptions and interpretations underlying the measurement and presentation of the RSI.
- 21. We acknowledge our responsibility for presenting the schedules (the supplementary information) in accordance with U.S. GAAP, and we believe the supplementary information, including its form and content, is fairly presented in accordance with U.S. GAAP. The methods of measurement and presentation of the supplementary information have not changed from those used in the prior period, and we have disclosed to you any significant assumptions or interpretations underlying the measurement and presentation of the supplementary information. If the supplementary information is not presented with the audited financial statements, we will make the audited financial statements readily available to the intended users of the supplementary information no later than the date we issue the supplementary information and the auditors' report thereon.
- 22. We acknowledge our responsibility for the preparation of the other information included in our annual report, which is comprised of the Introductory, Investment, Actuarial and Statistical Sections (other information). The other information is consistent with the financial statements and does not contain any material misstatements. With regard to the other information that has not been provided to you, the final version of the

documents will be provided to you when available, and prior to issuance of the annual report by the entity, so that you can complete your required procedures. We agree to correct material inconsistencies that you may identify.

1 16 the Signature: Title: Executive Director

Signature:

Title: Chief Financial Officer

NORTH DAKOTA RETIREMENT AND INVESTMENT OFFICE Bismarck, ND

FINANCIAL STATEMENTS June 30, 2022 and 2021

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INDEPENDENT AUDITORS' REPORT

Governor Doug Burgum The Legislative Assembly Janilyn Murtha, Executive Director State Investment Board Teachers' Fund for Retirement Board North Dakota Retirement and Investment Office

Report on the Audit of the Financial Statements

Opinions

We have audited the accompanying financial statements of the North Dakota Retirement and Investment Office (RIO), a department of the State of North Dakota, which comprise the statement of net position – fiduciary funds as of June 30, 2022 and 2021, and the related statement of changes in net position – fiduciary funds for the years then ended, and the related notes to the financial statements, which collectively comprise RIO's basic financial statements, and the combining and individual fund financial statements as of and for the years ended June 30, 2022 and 2021, as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of RIO as of June 30, 2022 and 2021, and the respective changes in financial position for the years then ended in accordance with accounting principles generally accepted in the United States of America. Also, in our opinion, the combining and individual fund financial statements referred to above present fairly, in all material respects, the respective financial position of each of the individual funds of RIO as of June 30, 2022 and 2021, and the changes in financial position of such funds for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1, the financial statements of RIO are intended to present the financial position and the changes in financial position of only that portion of the State of North Dakota that is attributable to the transactions of RIO. They do not purport to, and do not, present fairly the financial position of the State of North Dakota as of June 30, 2022 and 2021, and the changes in its financial position for the years then ended in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Basis for Opinions

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of RIO and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about RIO's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of RIO's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about RIO's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the schedules of changes in NPL and related ratios - ND Teachers' Fund for Retirement and employer contributions - ND Teachers' Fund for Retirement, investment returns - ND Teachers' Fund for Retirement, employer's share of NPL and NOL – ND Public Employees Retirement System and employer contributions – ND Public Employees Retirement System and related notes, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise RIO's basic financial statements and the combining and individual fund financial statements. The schedules of administrative expenses, consultant expenses, investment expenses, and appropriations – budget basis – fiduciary funds (schedules), as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements. The schedules are the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Audit Standards*, we have also issued our report dated November 2, 2022, on our consideration of RIO's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of RIO's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering RIO's internal control over financial reporting and compliance.

Clifton Larson Allen LLP

CliftonLarsonAllen LLP

Baltimore, Maryland November 2, 2022



INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Governor Doug Burgum The Legislative Assembly Janilyn Murtha, Executive Director State Investment Board Teachers' Fund for Retirement Board North Dakota Retirement and Investment Office

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the North Dakota Retirement and Investment Office (RIO), a department of the State of North Dakota, as of and for year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise RIO's basic financial statements, and the combining and individual fund financial statements, and have issued our report thereon dated November 2, 2022.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered RIO's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of RIO's internal control. Accordingly, we do not express an opinion on the effectiveness of RIO's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether RIO's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of RIO's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering RIO's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Clifton Larson Allen LLP

CliftonLarsonAllen LLP

Baltimore, Maryland November 2, 2022

Our discussion and analysis of the ND Retirement and Investment Office's (RIO) financial performance provides an overview of RIO's financial activities for the fiscal years ended June 30, 2022 and 2021. Please read this in conjunction with the basic financial statements, which follow this discussion.

RIO administers two fiduciary funds, a pension trust fund for the ND Teachers' Fund for Retirement (TFFR) and an investment trust fund for the ND State Investment Board (SIB) consisting of 26 investment clients (noting that TFFR is one of the 26 investment clients) in two investment pools and four individual investment accounts.

Financial Highlights

Total net position decreased in fiscal year 2022 from the previous fiscal year in the fiduciary funds by \$1.12 billion (5.8%). Fiscal year 2021 net position had increased \$2.86 billion (17.5%) from fiscal year 2020. The decrease in FY2022 is primarily due to low investment returns due to weak financial markets during the year. Approximately 39% of the FY2021 increase is due to the growth of the Legacy Fund. The Legacy Fund was created by a constitutional amendment in 2010. The amendment provides that 30% of oil and gas gross production and oil extraction taxes on oil produced after June 30, 2011, be transferred to the Legacy Fund. Transfers into the Legacy Fund totaled \$707.3 million and \$380.6 million in FY2022 and FY2021, respectively. Meanwhile, net investment income for the Legacy Fund was negative \$875 million in FY2022 and exceeded \$1.6 billion in FY2021.

Total additions to the fiduciary funds was negative \$531 million in FY2022 and a positive \$4.4 billion in FY2021. A large portion of this swing was driven by fluctuations in net investment income. Due to weak financial markets throughout the year, net investment income was negative \$1.6 billion in FY2022. This was after posting net investment income of \$3.5 billion in FY2021 due to the exceptionally strong financial markets that followed the pull back that occurred near the end of FY2020. Changes in purchases of units each year are highly dependent on Legacy Fund deposits and thus on oil and gas production. There was an increase in purchases of units in the investment program in FY2021 as oil and gas production activity pulled back due to the global pandemic. Total fiduciary fund purchases of units increased \$283.5 million (44.6%) in FY2022 and decreased \$811.4 million (56.1%) in FY2021.

Deductions in the fiduciary funds decreased in FY2022 by \$927.4 million (61.3%) and increased in FY2021 by \$901.8 million (147.6%). The vast majority of the changes in deductions are driven by redemptions of units due to the constitutionally mandated earnings transfers from the Legacy Fund to the State's general fund every two years. The State Constitution requires that all earnings accrued after June 30, 2017, be transferred to the general fund at the end of each biennium. A transfer of \$871.7 million was made in July 2021 and accrued as of the end of FY2021.

Payments to TFFR members in the form of benefits and refunds increased by \$10.7 million (4.5%) and \$10.3 million (4.5%) in FY2022 and FY2021, respectively. These increases represented a rise in the total number of retirees drawing retirement benefits from the pension fund as well as an increase in the retirement salaries on which the benefits of new retirees are based.

As of June 30, 2022 and 2021, the TFFR pension plan had a Net Pension Liability (NPL) of \$1.46 billion and of \$1.05 billion, and Plan Fiduciary Net Position as a percent of Total Pension Liability (TPL) of 67.5% and 75.7%, respectively.
Overview of the Financial Statements

This report consists of four parts – management's discussion and analysis (this section), the basic financial statements, required supplementary information, and additional supplementary information that presents combining statements for the investment trust funds. The basic financial statements include fund financial statements that focus on individual parts of RIO's activities (fiduciary funds).

The financial statements also include notes that explain some of the information in the financial statements and provide more detailed data. The statements are followed by a section of required supplementary information that further explains and supports the information in the financial statements. In addition to these required elements, we have included additional supplementary information, including combining statements that provide details about our investment trust funds, each of which are added together and presented in single columns in the basic financial statements.

Fund Financial Statements

The fund financial statements provide detailed information about RIO's activities. Funds are accounting devices that RIO uses to keep track of specific sources of funding and spending for particular purposes.

RIO uses fiduciary funds as RIO is the trustee, or fiduciary, for TFFR (a pension plan) and SIB (investment trust funds). RIO is responsible for ensuring that the assets reported in these funds are used for their intended purposes. All of RIO's fiduciary activities are reported in a statement of net position and a statement of changes in net position.

Financial Analysis

RIO's fiduciary fund total assets as of June 30, 2022 and 2021, were \$18.22 billion and \$20.15 billion, respectively, and were comprised mainly of investments. Total assets decreased by \$1.94 billion (9.6%) in fiscal year 2022 primarily due to the required distribution from the Legacy Fund in July of 2021, as previously discussed, coupled with the weak financial markets. The increase of \$3.8 billion (23.0%) in fiscal year 2021 was primarily due to on-going deposits to the Legacy Fund and Budget Stabilization Fund as well as extremely strong financial markets in FY2021.

Total liabilities as of June 30, 2022 and 2021, were \$157.5 million and \$980.5 million. Nearly 89% of the liabilities (\$871.7 million) as of June 30, 2021, were the Legacy Fund's earnings that were due to be transferred to the State's general fund at the end of the biennium. Current year-end liabilities were comprised mainly of the securities lending collateral payable.

RIO's fiduciary fund total net position was \$18.1 billion and \$19.2 billion at the close of fiscal years 2022 and 2021, respectively.

North Dakota Retirement and Investment Office Net Position – Fiduciary Funds (In Millions)

	 2022	 2021	Total % Change
Assets			
Investments	\$ 17,948.5	\$ 19,948.0	-10.0%
Securities Lending Collateral	147.7	88.9	66.1%
Receivables	95.3	89.4	6.7%
Cash & Other	24.4	26.1	-9.0%
Total Assets	 18,215.9	 20,152.4	-9.6%
Deferred Outflows of Resources			
Deferred outflows related to pensions	 1.8	 2.7	-32.4%
Liabilities			
Obligations under Securities Lending	147.7	88.9	66.1%
Accounts Payable & Accrued Expenses	9.8	891.6	-98.9%
Total Liabilities	 157.5	 980.5	-83.9%
Deferred Inflows of Resources			
Deferred inflows related to pensions	 3.0	 0.8	285.3%
Total Net Position	\$ 18,057.2	\$ 19,173.8	-5.8%
	2021	2020	Total % Change
Assets	 	 	
Investments	\$ 19,948.0	\$ 16,220.7	23.0%
Sec Lending Collateral	88.9	58.8	51.2%
Receivables	89.4	85.3	4.7%
Cash & Other	26.1	21.4	21.9%
Total Assets	 20,152.4	 16,386.2	23.0%
Deferred Outflows of Resources			
Deferred outflows related to pensions	 2.7	 0.9	201.6%
Liabilities			
Obligations under Securities Lending	88.9	58.8	51.2%
Accounts Payable & Accrued Expenses	 891.6	 13.8	6344.4%
Total Liabilities	 980.5	 72.6	1250.1%
Deferred Inflows of Resources			
Deferred inflows related to pensions	 0.8	 0.9	-18.2%
Total Net Position	\$ 19,173.8	\$ 16,313.6	17.5%

	 2022	 2021	Total % Change	
Additions				
Contributions	\$ 194.8	\$ 191.5	1.7%	
Net Investment Income	(1,645.7)	3,545.0	-146.4%	
Net Securities Lending Income	0.8	1.0	-23.2%	
Purchase of Units	918.7	635.2	44.6%	
Total Additions	 (531.4)	 4,372.7	-112.2%	
Deductions				
Payments to TFFR members	251.8	241.1	4.4%	
Administrative Expenses	4.6	4.8	-5.4%	
Redemption of Units	328.7	1,266.6	-74.0%	
Total Deductions	 585.1	 1,512.5	-61.3%	
Total Change in Net Position	\$ (1,116.5)	\$ 2,860.2	-139.0%	
			Total %	
	 2021	 2020	Change	
Additions			/	
Contributions	\$ 191.5	\$ 181.1	5.7%	
Net Investment Income	3,545.0	622.9	469.2%	

1.0

635.2

4,372.7

241.1

1,266.6

1,512.5

2,860.2

\$

4.8

0.9

1,446.6

2,251.5

230.8

376.1

610.8

1,640.7

3.9

5.9%

-56.1%

94.2%

4.5%

24.8%

236.8%

147.6%

74.3%

North Dakota Retirement and Investment Office Changes in Net Position – Fiduciary Funds (In Millions)

Statement of Changes in Net Position – Additions

Total Change in Net Position

Net Securities Lending Income

Payments to TFFR members

Administrative Expenses

Redemption of Units

Total Deductions

Purchase of Units

Total Additions

Deductions

Contributions collected by the pension trust fund increased by \$3.3 million (1.74%) in FY2022 and \$10.4 million (5.7%) in FY2021 over the previous fiscal years due to both an increase in the number of active members contributing to the fund and an increase in the average salary of active members. Net investment income (including net securities lending income and net of investment expenses) decreased by \$5.2 billion (146.4%) in FY2022 and increased by \$2.9 billion (468.4%) in FY2021. The decrease in FY2022 was the result of weak financial markets during the fiscal year after markets had recovered substantially in FY2021 after the pull back in FY2020. Deposits of funds into the investment trust fund (purchase of units) increased by \$283.5 million in FY2022 but decreased

\$

by \$811.4 million in FY2021, mainly due to changes in amounts available for deposits to the Legacy Fund and Budget Stabilization Fund.



Additions to Net Position (in thousands)

Statement of Changes in Net Position – Deductions

Benefits paid to TFFR plan participants, including partial lump-sum distributions, increased by \$9.5 million (4.0%) and \$10.8 million (4.8%) in FY2022 and FY2021, respectively. The increases are due to an increase in the total number of retirees in the plan as well as an increased retirement salary on which the benefits are based. Refunds increased by \$1.2 million (20.6%) after decreasing by \$566,000 (8.7%) in FY2021.

Administrative expenses decreased by \$262,000 in FY2022 after increasing by \$960,000 in FY2021. The FY2022 change is due to two different factors. The first factor is an increase due to the continuation of the Pension Administration System (PAS) modernization project that began in FY2020. The total budget for this multi-year PAS project is \$9.3 million, with approximately \$1.6 expended through June 30, 2022. This project will continue through FY2023 and FY2024. The second factor which offset this increase was a large decrease in the agency's portion of the pension expense from the ND Public Employees Retirement System pension plan for the State of ND. This change was caused by the increase in the ND Public Employees Retirement System discount rate.

Approximately half of the increase in FY2021 was due mainly to an increase in the agency's portion of the pension expense from the ND Public Employees Retirement System pension plan for the State of ND. That increase was driven by a change in actuarial assumptions, specifically a decrease in the discount rate. An additional portion of that increase relates to the Pension Administration System (PAS) modernization project that began at the end of FY2020 and ramped up during FY2021.

The redemption of units in the investment trust funds decreased by \$937.8 million in FY2022 after increasing by \$890.5 million in FY2021. Biennial swings will continue in this line item due to the biennial earnings transfers

from the Legacy Fund required under the State Constitution.



Deductions from Net Position

Conclusion

The global economic and market conditions remain very challenging. Although US inflation has come off its high reached in June 2022, the inflation outlook remains very uncertain from a tight US labor market, a war in Ukraine, and Chinese supply chain concerns from a strict COVID policy. The Federal Reserve, signaling continued monetary tightening, has undertaken strong measures of raising rates and reducing its balance sheet, intending to bring inflation back to a normal targeted range. Tightening of US monetary conditions, a reduction of US post pandemic fiscal spending, and similar measures occurring globally, have led to a slowing of global economic growth. The result of the sharp increase in US interest rates, lower global growth expectations and a corresponding increase in the US dollar are lower global stock and bond market valuations. Although the markets have been extremely challenging throughout 2022, the lower valuations potentially provide a foundation for higher returns in the future.

For the fiscal year ended June 30, 2022, the pension investment pool (which includes the TFFR pension plan), the Legacy Fund, and the insurance investment pool experienced net time weighted investment returns of (6.51%), (10.12%), and (8.18%), respectively. Investment returns were below long-term expectations in FY2022 largely due to the challenges mentioned above. Public equity and fixed income were down significantly as opposed to prior years. Global public equities for pension, insurance, and legacy were down (12.59%), (15.71%), and (16.32%), respectively. Total fixed income was also down for pension, insurance, and legacy at (8.23%), (11.31%), and (9.8%), respectively. Alternatively, real asset and private equity performance was positive for FY2022. The pension pool's real asset allocation was up 18.52%, while the Legacy Fund and insurance pool's real asset portfolios were up 9.29% and 5.92%, respectively, driven by strong returns from infrastructure assets. Private equity in the pension pool returned 11.73% for the fiscal year, largely attributable to their ability to handle market news and smooth returns for investors.

For the fiscal year ended June 30, 2021, the pension investment pool (which includes the TFFR pension plan), the Legacy Fund and the insurance investment pool generated net time weighted investment returns of 26.74%, 22.68% and 9.74%, respectively, outperforming their corresponding policy benchmarks. Investment returns for global equities exceeded long-term expectations in fiscal year 2021 driven by the economic and financial asset recovery that followed global lockdowns. The MSCI World Index, S&P 500 Index and Russell 2000 index were

North Dakota Retirement and Investment Office Management's Discussion and Analysis June 30, 2022 and 2021

up 39.04%, 40.79% and 62.02% for fiscal year 2021. Positive performance in equity markets were driven by positive news on vaccine progress as well as a deluge of fiscal and monetary stimulus. In the second and third fiscal quarters, nearly \$3 trillion in COVID-relief funds were infused into the economy. Not surprisingly, equity returns for the pension pool, Legacy Fund and insurance pool were all strong. The pension pool's public equity allocations were up 42.35% and 43.06%, respectively. Fixed income returns across the pension pool's fixed income allocation was up 4.92%, while the Legacy Fund and insurance pool's fixed income allocation was up 4.92%, while the Legacy Fund and insurance pool's fixed income allocation was up 4.92%, while the Legacy Fund and insurance pool's fixed income allocation was up 4.92%, while the Legacy Fund and insurance pool's public fixed income allocations were up 3.29% and 2.88%, respectively. Real asset performance was solid, driven by strong returns from infrastructure assets. The pension pool's real asset allocation was up 9.98%, while the Legacy Fund and insurance pool's real asset portfolios were up 9.04% and 6.47%, respectively. Lastly, private equity in the pension pool returned 48.81% for the fiscal year.

The State Investment Board will continue to evaluate the ever-evolving markets and research investment strategies to prudently manage its investment portfolios.

TFFR's funding objective is to meet long-term pension benefit obligations through contributions and investment income. To address TFFR's funding shortfall, the ND State Legislature took action in 2011 and approved legislation to increase contributions (4% member and 4% employer) and modify certain benefits for non-grandfathered members. Increased contribution rates will be in effect until TFFR reaches 100% funding on an actuarial basis. This comprehensive funding recovery plan, along with solid investment performance in the future, is expected to improve TFFR's funding level over the long term. However, the Board is continuing to closely assess plan risks and monitor funding progress.

As reported by the valuation report provided by the plan's actuary Segal, TFFR's funding level increased from 68.6% to 69.9% on an actuarial basis from July 1, 2021 to July 1, 2022. Based on the fair value of assets rather than the actuarial value of assets, the funded ratio decreased to 67.5% compared to 75.7% last year. The Plan has a net investment loss of \$109.1 million from previous years that has not yet been recognized in the actuarial value of assets due to the five-year smoothing. This unrecognized asset loss is primarily due to the investment losses during FY 2022, 2020, and 2019, largely offset by the investment gain during FY 2021. As this loss is recognized over the next four years, the funded ratio is expected to increase despite the loss being recognized, the plan's funding level is expected to improve, if all actuarial assumptions are met in the future, including the 7.25% investment return assumption.

Protecting the long term solvency of the pension plan is the TFFR Board's fiduciary responsibility. The Board will continue to proactively address TFFR funding issues so the plan will be financially strong and sustainable for past, present, and future ND educators.

Contacting RIO Financial Management

This financial report is designed to provide our Boards, our membership, our clients and the general public with a general overview of RIO's finances and to demonstrate RIO's accountability for the money we receive. If you have any questions about this report or need additional information, contact the North Dakota Retirement and Investment Office, PO Box 7100, Bismarck, ND 58507-7100.

North Dakota Retirement and Investment Office

Statement of Net Position – Fiduciary Funds June 30, 2022 and 2021

June 30, 2022 and 20

	Pensio	n Trust	Investmer	nt Trust	Total			
	2022	2021	2022	2021	2022	2021		
Assets:	,							
Investments, at fair value								
		5 1,843,851,776 \$	6,377,122,880 \$	7,923,977,037 \$	7,961,272,532 \$	9,767,828,813		
Global fixed income	787,437,048	859,935,213	5,971,871,760	6,287,302,991	6,759,308,808	7,147,238,204		
Global real assets	557,108,366	480,647,867	2,524,055,925	2,261,103,560	3,081,164,291	2,741,751,427		
Cash equivalents	32,514,380	38,081,928	114,203,723	253,103,896	146,718,103	291,185,824		
Total investments	2,961,209,446	3,222,516,784	14,987,254,288	16,725,487,484	17,948,463,734	19,948,004,268		
Invested securities lending								
collateral	20,080,497	13,508,350	127,624,822	75,402,097	147,705,319	88,910,447		
Receivables:								
Investment income	11,279,712	11,296,690	52,010,441	50,014,693	63,290,153	61,311,383		
Contributions	31,982,043	28,014,669	-	-	31,982,043	28,014,669		
Miscellaneous	12,783	5,566	26,616	24,181	39,399	29,747		
Total receivables	43,274,538	39,316,925	52,037,057	50,038,874	95,311,595	89,355,799		
Due from other state agency	824	-	457	-	1,281	-		
Cash and cash equivalents	23,308,382	25,620,714	426,172	463,338	23,734,554	26,084,052		
Equipment (net of depreciation)	-	1,349	-	-	-	1,349		
Software (not in production)	680,999	-	-	-	680,999	-		
Total assets	3,048,554,686	3,300,964,122	15,167,342,796	16,851,391,793	18,215,897,482	20,152,355,915		
Deferred outflows of resources								
Related to pensions	1,113,188	1,547,047	726,471	1,172,782	1,839,659	2,719,829		
Liabilities:								
Accounts payable	840,496	151,625	245,515	269.770	1,086,011	421.395		
Investment expenses payable	1,318,222	2,537,244	4,862,595	11,428,225	6,180,817	13,965,469		
Securities lending collateral	20,080,497	13,508,350	127,624,822	75,402,097	147,705,319	88,910,447		
Accrued expenses	1,981,945	3,455,406	524,250	2,061,222	2,506,195	5,516,628		
Miscellaneous payable	-	-	32,737	28,999	32,737	28,999		
Due to other state funds	-	-	-	871,687,384	-	871,687,384		
Due to other state agencies	28,184	10,974	6,698	3,917	34,882	14,891		
Total liabilities	24,249,344	19,663,599	133,296,617	960,881,614	157,545,961	980,545,213		
Deferred inflows of resources								
Related to pensions	1,498,287	442,740	1,465,298	326,334	2,963,585	769,074		
Fiduciary net position:	2 022 020 242	2 202 404 020			2 022 020 242	2 202 404 020		
Restricted for pensions Held in trust for investment pool	3,023,920,243	3,282,404,830	-	-	3,023,920,243	3,282,404,830		
participants:								
Pension pool	_	_	3,945,900,809	4,293,189,642	3,945,900,809	4,293,189,642		
Insurance pool	_	_	2,902,957,219	3,206,265,290	2,902,957,219	3,206,265,290		
Held in trust for individual investment			2,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5,200,200,290	2,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0,200,200,290		
accounts	-	-	8,184,449,324	8,391,901,695	8,184,449,324	8,391,901,695		
Total fiduciary net position	3,023,920,243	3,282,404,830 \$	15,033,307,352 \$	15,891,356,627 \$	18,057,227,595 \$	19,173,761,457		
Each participant unit is valued at \$1.00			16.022.207.252	15 001 256 625				
Participant units outstanding			15,033,307,352	15,891,356,627				

The accompanying notes are an integral part of the financial statements. 13

North Dakota Retirement and Investment Office

Statement of Changes in Net Position – Fiduciary Funds Years Ending June 30, 2022 and 2021

	Pens	ion Trust	Investme	ent Trust	Total		
	2022	2021	2022	2021	2022	2021	
Additions:							
Contributions:							
1 5	\$ 100,331,347		\$ - \$	\$ - \$	5 100,331,347 \$	98,264,202	
Member contributions	92,462,223	90,557,210	-	-	92,462,223	90,557,210	
Purchased service credit	2,017,055	2,559,121	-	-	2,017,055	2,559,121	
Interest, penalties and other	25,166	126,112	-	-	25,166	126,112	
Total contributions	194,835,791	191,506,645	-	-	194,835,791	191,506,645	
Investment income:							
Net change in fair							
value of investments	(248,369,374)	640,469,814	(1,722,081,517)	2,618,257,668	(1,970,450,891)	3,258,727,482	
Interest, dividends and other income	56,305,952	51,912,318	307,545,995	282,043,704	363,851,947	333,956,022	
	(192,063,422)	692,382,132	(1,414,535,522)	2,900,301,372	(1,606,598,944)	3,592,683,504	
Less investment expenses	6,924,716	8,388,601	32,154,613	39,305,773	39,079,329	47,694,374	
Net investment income	(198,988,138)	683,993,531	(1,446,690,135)	2,860,995,599	(1,645,678,273)	3,544,989,130	
Securities lending activity:							
Securities lending income	134,425	223,739	806,990	1,002,370	941,415	1,226,109	
Less securities lending expenses	(26,870)	(44,740)	(161,310)	(200,426)	(188,180)	(245,166)	
Net securities lending income	107,555	178,999	645,680	801,944	753,235	980,943	
Purchase of units (\$1 per unit)			918,708,674	635,230,202	918,708,674	635,230,202	
Total additions	(4,044,792)	875,679,175	(527,335,781)	3,497,027,745	(531,380,573)	4,372,706,920	
Deductions:							
Benefits paid to participants	244,069,172	234,211,585	-	-	244,069,172	234,211,585	
Partial lump-sum distributions	635,924	993,499	-	-	635,924	993,499	
Refunds	7,142,359	5,923,187	-	-	7,142,359	5,923,187	
Administrative expenses	2,592,340	2,678,375	1,983,025	2,158,611	4,575,365	4,836,986	
Redemption of units (\$1 per unit)	-	-	328,730,469	1,266,579,693	328,730,469	1,266,579,693	
Total deductions	254,439,795	243,806,646	330,713,494	1,268,738,304	585,153,289	1,512,544,950	
Change in fiduciary net position	(258,484,587)	631,872,529	(858,049,275)	2,228,289,441	(1,116,533,862)	2,860,161,970	
Fiduciary net position: Beginning of year	\$_3,282,404,830	\$ 2,650,532,301	\$15,891,356,627	\$ <u>13,663,067,1</u> 86 \$	5 19,173,761,457 \$	16,313,599,487	
End of Year	\$ 3,023,920,243	\$ 3,282,404,830	\$ 15,033,307,352	\$ 15,891,356,627 \$	8 18,057,227,595 \$	19,173,761,457	

Note 1 - Summary of Significant Accounting Policies

RIO is an agency of the State of North Dakota operating through the legislative authority of North Dakota Century Code (NDCC) Chapter 54-52.5 and is considered part of the State of North Dakota financial reporting entity and included in the State of North Dakota's Annual Comprehensive Financial Report.

For financial reporting purposes, RIO has included all funds, and has considered all potential component units for which RIO is financially accountable, and other organizations for which the nature and significance of their relationship with RIO are such that exclusion would cause RIO's financial statements to be misleading or incomplete. The Governmental Accounting Standards Board has set forth criteria to be considered in determining financial accountability. These criteria include appointing a voting majority of an organization's governing body and (1) the ability of RIO to impose its will on that organization or (2) the potential for the organization to provide specific financial benefits to or impose specific financial burdens on RIO.

Based upon these criteria, there are no component units to be included within RIO as a reporting entity and RIO is part of the State of North Dakota as a reporting entity.

Fund Financial Statement

All activities of RIO are accounted for within the pension and investment trust funds and are shown, by fund, in the fiduciary fund financial statements.

Measurement Focus, Basis of Accounting and Financial Statement Presentation

The financial statements of RIO are reported using the economic resources measurement focus and the accrual basis of accounting.

This measurement focus includes all assets and liabilities associated with the operations of the fiduciary funds on the statements of net position. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows.

Fiduciary Fund

A pension trust fund and investment trust funds have been established to account for the assets held by RIO in a trustee capacity for TFFR and as an agent for other governmental units or funds which have placed certain investment assets under the management of the SIB. The SIB manages two external investment pools and four individual investment accounts. The two external investment pools consist of a pension pool and insurance pool. The SIB manages the investments of the North Dakota Public Employees Retirement System, Bismarck City Employees and Police, City of Grand Forks Employees and City of Grand Forks Park District Employees pension plans in the pension pool. The investments of Workforce Safety & Insurance, State Fire and Tornado, State Bonding, Petroleum Tank Release Compensation Fund, Insurance Regulatory Trust, North Dakota Association of Counties Fund, Risk Management, Risk Management Workers Comp, PERS Group Insurance, City of Bismarck Deferred Sick Leave, City of Fargo FargoDome Permanent Fund, Cultural Endowment Fund, ND State Board of Medicine, Lewis and Clark Interpretive Center Endowment Fund, Attorney General Settlement Fund, Veterans' Cemetery Trust Fund, ND University System Capital Building Fund and Budget Stabilization Fund are managed in the insurance pool. The Legacy Fund, Job Service of North Dakota, Tobacco Prevention and Control Fund (which was fully liquidated in FY22), and PERS Retiree Health investments are managed by the SIB in individual investment accounts.

RIO has no statutory authority over, nor responsibility for, these investment trust funds other than the investment responsibility provided for by statute or through contracts with the individual agencies. The funds that are required to participate according to statute are: Public Employees Retirement System, Workforce Safety & Insurance, State Fire and Tornado, State Bonding, Petroleum Tank Release Compensation Fund, Insurance Regulatory Trust, Risk Management, Risk Management Workers Comp, Cultural Endowment Fund, Legacy Fund and Budget Stabilization Fund.

RIO follows the pronouncements of the Governmental Accounting Standards Board (GASB), which is the nationally accepted standard setting body for establishing accounting principles generally accepted in the United States of America for governmental entities.

Pension and Investment Trust Funds are accounted for using the accrual basis of accounting. Member contributions are recognized in the period in which they are due. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the NDCC.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

RIO utilizes various investment instruments. Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such change could materially affect the amounts reported in the statements of net position.

Budgetary Process

RIO operates through a biennial appropriation, which represents appropriations recommended by the Governor and presented to the General Assembly (the Assembly) at the beginning of each legislative session. The Assembly enacts RIO's budget through passage of a specific appropriation bill. The State of North Dakota's budget is prepared principally on a modified accrual basis. The Governor has line-item veto power over all legislation, subject to legislative override.

Once passed and signed, the appropriation bill becomes RIO's financial plan for the next two years. Changes to the appropriation are limited to Emergency Commission authorization, initiative, or referendum action. The Emergency Commission can authorize receipt of federal or other moneys not appropriated by the Assembly if the Assembly did not indicate intent to reject the money. The Emergency Commission may authorize pass-through federal funds from one state agency to another. The Emergency Commission may authorize the transfer of expenditure authority between appropriated line items; however, RIO has specific authority as a special fund to transfer between the contingency line item and other line items. Unexpended appropriations lapse at the end of each biennium, except certain capital expenditures covered under NDCC section 54-44.1-11.

RIO does not use encumbrance accounting. The legal level of budgetary control is at the agency, appropriation and expenditure line-item level. RIO does not formally budget revenues and does not budget by fund. The statement of revenues, expenditures and changes in fund balances - budget and actual is not prepared because revenues are not budgeted.

Capital Assets and Depreciation

Capital asset expenditures greater than \$5,000 are capitalized at cost in accordance with Section 54-27-21 of the NDCC. Depreciation is computed using the straight-line method over the estimated useful lives of the assets. The estimated useful lives are as follows:

	Years
Office equipment	5
Furniture and fixtures	5

Investments

NDCC Section 21-10-07 states that the SIB shall apply the prudent investor rule when investing funds under its supervision. The prudent investor rule means that in making investments, 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 pension fund belonging to TFFR and investment trust funds attributable to the City of Bismarck Employee Pension Plan, the City of Bismarck Police Pension Plan, Job Service of North Dakota, City of Grand Forks Employee Pension Plan, City of Grand Forks Park District Pension Plan and the Public Employees Retirement System (PERS) must be invested exclusively for the benefit of their members. All investments are made in accordance with the respective fund's long-term investment objectives and performance goals.

Pooled Investments

Many funds whose investments are under the supervision of the SIB participate in pooled investments. The agencies transfer money into the investment pools and receive an appropriate percentage ownership of the pooled portfolio based upon fair value. All activities of the investment pools are allocated to the agencies based upon their respective ownership percentages. Each participant unit is valued at \$1.00 per unit.

Investment Valuation and Income Recognition

Investments are reported at fair value. Quoted market prices, when available, have been used to value investments. The fair values for securities that have no quoted market price represent estimated fair value. International securities are valued based upon quoted foreign market prices and translated into US dollars at the exchange rate in effect at June 30. In general, corporate debt securities have been valued at quoted market prices or, if not available, values are based on yields currently available on comparable securities of issuers with similar credit ratings. Mortgages have been valued on the basis of their future principal and interest payments discounted at prevailing interest rates for similar instruments. The fair value of real estate investments, including timberland, is based on appraisals plus fiscal year-to-date capital transactions. Publicly traded alternative investments are valued based on quoted market prices. When not readily available, alternative investment securities are valued using current estimates of fair value from the

investment manager. Such valuations consider variables such as financial performance of the issuer, comparison of comparable companies' earnings multiples, cash flow analysis, recent sales prices of investments, withdrawal restrictions, and other pertinent information. Because of the inherent uncertainty of the valuation for these other alternative investments, the estimated fair value may differ from the values that would have been used had a ready market existed.

The net change in fair value of investments consists of the realized gains or losses and the unrealized increase or decrease in fair value of investments during the year. Realized gains and losses on sales of investments are computed based on the difference between the sales price and the original cost of the investment sold. Realized gains and losses on investments that had been held in more than one fiscal year and sold in the current fiscal year were included as a change in the fair value of investments reported in the prior year(s) and the current year.

Unrealized gains and losses are computed based on changes in the fair value of investments between years. Security transactions are accounted for on a trade date basis. Interest income is recognized when earned. Dividend income is recorded on the ex-dividend date.

Pensions and Other Postemployment Benefits (OPEB)

For purposes of measuring the net pension and OPEB liabilities, deferred outflows of resources and deferred inflows of resources related to pensions and OPEB, and pension and OPEB expenses, information about the fiduciary net position of the ND Public Employees Retirement System (NDPERS) defined benefit pension and OPEB plans, and additions to/deductions from NDPERS' fiduciary net position have been determined on the same basis as they are reported by NDPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Note 2 - Cash and Cash Equivalents

Custodial Credit Risk

State law generally requires that all state funds be deposited in the Bank of North Dakota. NDCC 21-04-01 provides that public funds belonging to or in the custody of the state shall be deposited in the Bank of North Dakota. Also, NDCC 6-09-07 states, "[a]ll state funds ... must be deposited in the Bank of North Dakota" or must be deposited in accordance with constitutional and statutory provisions.

Pension Trust Fund

Deposits held by the Pension Trust Fund at June 30, 2022 were deposited in the Bank of North Dakota. At June 30, 2022 and 2021, the carrying amount of TFFR's deposits was \$23,308,382 and \$25,620,714, respectively, and the bank balance was \$23,347,141 and \$25,635,028, respectively. The difference results from checks outstanding or deposits not yet processed by the bank. These deposits are exposed to custodial credit risk as uninsured and uncollateralized. However, these deposits at the Bank of North Dakota are guaranteed by the State of North Dakota through NDCC Section 6-09-10.

Investment Trust Funds

Certificates of deposit, an insurance pool cash account, a pension pool cash account and a Legacy Fund cash account are recorded as investments and have a cost and carrying value of \$239,796,384 and \$88,921,637 at June 30, 2022 and 2021, respectively. In addition, these funds carry cash and cash

equivalents totaling \$426,172 and \$463,338 at June 30, 2022 and 2021, respectively. These deposits are exposed to custodial credit risk as uninsured and uncollateralized. However, these deposits held at the Bank of North Dakota are guaranteed by the State of North Dakota through NDCC Section 6-09-10.

Note 3 - Investments

The investment policy of the SIB is governed by NDCC 21-10. The SIB shall apply the prudent investor rule in investing for funds under its supervision. The "prudent investor rule" means that in making investments, 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 retirement funds belonging to the teachers' fund for retirement and the public employees' retirement system must be invested exclusively for the benefit of their members and in accordance with the respective funds' investment goals and objectives.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates of debt securities will adversely affect the fair value of an investment. The price of a debt security typically moves in the opposite direction of the change in interest rates. The SIB does not have a formal investment policy that limits investment maturities as a means of managing its exposure to potential fair value losses arising from future changes in interest rates.

At June 30, 2022 and 2021, the following tables show the investments by investment type and maturity (expressed in thousands).

2022	Total Fair Value		Less than 1 Year		1-6 Years		6-10 Years		ore than 10 Years
Asset Backed Securities	\$ 469,733	\$	183	\$	119,979	\$	189,285	\$	160,286
Bank Loans	15,007		17		13,470		1,520		-
Collateralized Bonds	2,446		-		-		2,446		-
Commercial Mortgage-Backed	362,729		176		5,125		12,587		344,841
Commercial Paper	27,977		27,977		-		-		-
Corporate Bonds	2,076,494		62,357		1,124,124		445,072		444,941
Corporate Convertible Bonds	19,220		-		9,084		-		10,136
Government Agencies	35,569		2,379		23,136		6,197		3,857
Government Bonds	735,584	3,232		309,087		70,159			353,106
Gov't Mortgage Backed	688,660		646		6,414		8,504		673,096
Gov't-issued CMB	13,960		1		3,398		9,465		1,096
Index Linked Government Bonds	650,572		25,351		358,250		142,972		123,999
Municipal/Provincial Bonds	26,577		1,709		5,036		3,397		16,435
Non-Government Backed CMOs	144,864		1,368		4,681		19,448		119,367
Repurchase Agreements	37,100		37,100		-		-		-
Short Term Bills and Notes	34,128		34,128		-		-		-
Sukuk	2,530		-		1,300		1,230		-
Funds/Pooled Investments	 1,576,573		-		1,015,783		288,608		272,182
Total Debt Securities	\$ 6,919,723	\$	196,624	\$	2,998,867	\$	1,200,890	\$	2,523,342

North Dakota Retirement and Investment Office

Notes to Financial Statements June 30, 2022 and 2021

2021	Total Fair Value		0	ne Year or Less	1+	to 6Years	6+ t	to 10Years	M	ore than 10 Years
Asset Backed Securities	\$	466,600	\$	507	\$	111,066	\$	132,450	\$	222,577
Bank Loans		16,123		-		13,652		2,471		-
Collateralized Bonds		2,930		-		-		2,930		
Commercial Mortgage-Backed		328,792		5		8,119		3,573		317,095
Commercial Paper		12,998		12,998		-		-		-
Corporate Bonds		2,426,220		83,417		1,237,811		584,494		520,498
Corporate Convertible Bonds		17,733		-		11,058		159		6,516
Government Agencies		41,889		1,306		24,488		6,734		9,361
Government Bonds		858,389		44,235		182,055		224,661		407,438
Gov't Mortgage Backed		599,911		3		5,230		26,101		568,577
Gov't-issued CMB		30,923		16		5,421		21,953		3,533
Index Linked Government Bonds		683,160		77,720		283,042		120,897		201,501
Municipal/Provincial Bonds		39,237		3,380		7,538		6,055		22,264
Non-Government Backed CMOs		159,803		10,844		9,798		21,006		118,155
Repurchase Agreements		25,300		25,300		-		-		-
Short Term Bills and Notes		73,606		73,606		-		-		-
Sukuk		2,787		-		1,442		1,345		-
Funds/Pooled Investments		1,726,778		28,585		928,703		414,962		354,528
Total Debt Securities	\$	7,513,179	\$	361,922	\$	2,829,423	\$	1,569,791	\$	2,752,043

In the tables above, the fair values of inflation indexed bonds are reflected in the columns based on their stated maturity dates. The principal balances of these bonds are adjusted every six months based on the inflation index for that period.

Some investments are more sensitive to interest rate changes than others. Variable and floating rate collateralized mortgage obligations (CMOs), asset-backed securities (ABS), interest-only and principal-only securities are examples of investments whose fair values may be highly sensitive to interest rate changes.

Interest-only (IO) and principal-only (PO) strips are transactions which involve the separation of the interest and principal components of a security. They are highly sensitive to prepayments by mortgagors, which may result from a decline in interest rates. The SIB held POs valued at \$4.9 million and \$6.5 million and IOs valued at \$21.4 million and \$26.4 million at June 30, 2022 and 2021, respectively. The SIB has no policy regarding IO or PO strips.

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The State Investment Board maintains a highly diversified portfolio of debt securities encompassing a wide range of credit ratings. Although the SIB has no overall policy regarding credit risk, each debt securities manager is given a specific set of guidelines to invest within based on the mandate for which it was hired. The guidelines specify in which range of credit the manager may invest. These ranges include investment grade and below investment grade categories. The following tables present the SIB's ratings as of June 30, 2022 and 2021, (expressed in thousands).

North Dakota Retirement and Investment Office Notes to Financial Statements

June	30,	2022	and 2021	
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		Credit Rating*										
2022	Total Fair Value	AAA	AA	А	BBB	BB	В	CCC	CC	С	D	NR
Asset Backed Securities	\$ 469,733	\$ 250,460	\$ 65,209	\$ 44,886	\$ 34,041	\$ 3,615	\$ 1,396	\$ 2,589	\$ 1,336 \$	- \$	690 \$	65,511
Bank Loans	15,007	-	-	-	120	3,840	8,268	2,762	-	-	-	17
Collateralized Bond	2,446	2,446	-	-	-	-	-	-	-	-	-	-
Commercial Mortgage Backed	362,729	265,816	14,871	10,267	7,395	12,384	4,054	1,727	86	11	-	46,118
Commercial Paper	27,977	-	-	-	-	-	-	-	-	-	-	27,977
Corporate Bonds	2,076,494	10,432	62,912	476,167	1,150,129	254,728	92,050	19,580	248	178	201	9,869
Corporate Convertible Bonds	19,220	-	-	-	2,441	4,583	5,773	2,584	-	-	-	3,839
Gov't Agencies	34,793	3,524	5,031	7,068	11,824	1,708	-	336	-	-	-	5,302
Gov't Bonds	668,660	604,042	5,187	2,496	34,422	14,473	2,120	2,700	-	-	-	3,220
Gov't Mortgage Backed	629,454	-	590,051	10,212	17,357	7,178	4,570	-	-	-	-	86
Gov't Issued CMB	13,865	1,762	11,252	-	851	-	-	-	-	-	-	-
Municipal/Provincial Bonds	26,577	2,440	12,963	6,404	3,486	868	-	416	-	-	-	-
Non-Gov't Backed CMOs	144,864	42,071	9,160	18,205	17,844	7,379	1,606	481	906	35	-	47,177
Repurchase Agreements	37,100	37,100	-	-	-	-	-	-	-	-	-	-
Short Term Bills & Notes	9,626	-	1,809	7,817	-	-	-	-	-	-	-	-
Sukuk	2,530	-	-	-	2,530	-	-	-	-	-	-	-
Funds/Pooled Investments	1,576,573	461,824	271,148	682,937	82,142	17,553	30,030	-	-	-	-	30,939
Total Credit Risk of Debt Securities	6,117,648	\$1,681,917	\$ 1,049,593	\$ 1,266,459	\$ 1,364,582	\$ 328,309	\$ 149,867	\$ 33,175	\$ 2,576 \$	224 \$	891 5	\$ 240,055
US Gov't & Agencies **	802,075											
Total Debt Securities	\$ 6,919,723											

		Credit Rating*										
2021	Total Fair Value	AAA	AA	А	BBB	BB	В	CCC	CC	С	D	NR
Asset Backed Securities	\$ 466,600	\$ 239,151	\$ 52,850	\$ 56,092	\$ 45,809	\$ 3,515	\$ 2,927	\$ 3,872	\$ 1,909 \$	- \$	889 \$	59,586
Bank Loans	16,123	-	-	-	296	4,237	9,990	1,002	-	-	-	598
Collateralized Bond	2,930	2,930	-	-	-	-	-	-	-	-	-	-
Commercial Mortgage Backed	328,792	245,667	10,311	14,175	7,286	5,090	4,316	1,885	160	27	-	39,875
Commercial Paper	12,998	-	-	-	-	-	-	-	-	-	-	12,998
Corporate Bonds	2,426,220	13,056	54,478	495,678	1,412,446	299,862	103,885	35,737	97	-	-	10,981
Corporate Convertible Bonds	17,733	-	-	-	2,608	4,515	1,712	3,139	-	-	-	5,759
Gov't Agencies	40,129	3,867	8,797	10,239	13,697	1,712	-	422	-	-	-	1,395
Gov't Bonds	110,973	-	9,351	4,605	47,664	33,811	9,234	2,026	-	-	-	4,282
Gov't Mortgage Backed	535,414	-	516,452	-	4,390	7,821	6,394	-	-	-	-	357
Gov't Issued CMB	30,698	1,813	27,945	-	940	-	-	-	-	-	-	-
Index Linked Government Bonds	19,224	19,224	-	-	-	-	-	-	-	-	-	-
Municipal/Provincial Bonds	39,237	2,412	20,081	9,321	4,366	1,583	-	-	218	-	800	456
Non-Gov't Backed CMOs	159,803	37,221	12,681	17,201	20,972	7,293	2,034	798	1,116	-	47	60,440
Repurchase Agreements	25,300	-	25,300	-	-	-	-	-	-	-	-	-
Short Term Bills & Notes	10,817	-	9,339	1,478	-	-	-	-	-	-	-	-
Sukuk	2,787	-	-	-	2,787	-	-	-	-	-	-	-
Funds/Pooled Investments	1,726,778	504,809	300,285	613,389	214,815	12,949	41,080		-	-	-	39,451
Total Credit Risk of Debt Securities	5,972,556	\$1,070,150	\$ 1,047,870	\$ 1,222,178	\$ 1,778,076	\$ 382,388	\$ 181,572	\$ 48,881	\$ 3,500 \$	27 \$	1,736 \$	236,178
US Gov't & Agencies **	1,540,623											
Total Debt Securities	\$ 7,513,179											

- Ratings are determined in the following order:
 - 1. S&P rating

*

- 2. Moody's rating
- 3. Fitch rating
- 4. Manager-determined rating (internal rating)
- If no ratings available using steps 1-4, then shown as not rated.

** US government agency securities explicitly guaranteed by the US government are categorized here. Credit ratings of US government agency securities that are only implicitly guaranteed by the US government are categorized accordingly in the main body of these tables. Implicitly guaranteed agency securities included in the *Gov't Agencies, Gov't Bonds, Gov't Mortgage Backed, Gov't Issued CMB, Index Linked Gov't Bonds, and Short Term Bills and Notes* categories are issued by FNMA, FHLB, FHLMC, and SLMA.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of an investment in a single issuer. As of June 30, 2022 and 2021, the SIB's portfolio has no single issuer exposure that comprises 5% or more of the overall portfolio, excluding investments issued or explicitly guaranteed by the US government and investments in mutual funds, external investment pools, and other pooled investments. Therefore, there is no concentration of credit risk.

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. Although the SIB does not have a formal investment policy governing foreign currency risk, the SIB manages its exposure to fair value loss by requiring their international securities investment managers to maintain diversified portfolios to limit foreign currency and security risk. The SIB's exposure to foreign currency risk is presented in the following tables as of June 30, 2022 and 2021 (expressed in thousands).

North Dakota Retirement and Investment Office Notes to Financial Statements

2022						·	
Currency	Sho	ort-Term	 Debt	Equity	Re	eal Estate	 Total
Argentine peso	\$	176	\$ 177	\$ -	\$	-	\$ 353
Australian dollar		(5,078)	-	49,149)	-	44,071
Brazilian real		204	524	8,083	3	-	8,811
British pound sterling		(43,460)	44,164	192,39	7	-	193,101
Canadian dollar		(283)	301	50,088	3	-	50,106
Chilean peso		(254)	-	-		-	(254)
Danish krone		(99)	379	52,240)	-	52,520
Euro		(5,557)	4,565	360,593	5	533	360,136
Hong Kong Off-Shore-Chinese yuan renminbi		(4,700)	-	-		-	(4,700)
Hong Kong dollar		1,369	-	43,948	3	-	45,317
Hungarian forint		(365)	-	2,16	l	-	1,796
Indonesian rupiah		50	-	1,370)	-	1,420
Japanese yen		18,329	(15,315)	169,453	3	-	172,467
Mexican peso		(682)	1,368	1,45	l	-	2,137
New Israeli shekel		391	-	2,803	5	-	3,196
New Taiwan dollar		177	-	8,398	3	-	8,575
New Zealand dollar		(145)	-	3,309)	-	3,164
Norwegian krone		184	-	11,402	2	-	11,586
Peruvian nuevo sol		(1,016)	793	-		-	(223)
Polish zloty		(439)	-	-		-	(439)
Singapore dollar		142	-	8,66	7	-	8,809
South African rand		(2)	-	78.	3	-	781
South Korean won		(59)	-	8,298	3	-	8,239
Swedish krona		175	-	53,613	5	-	53,790
Swiss franc		525	-	83,962	2	-	84,487
Thai baht		102	-	2,908	3	-	3,010
Turkish lira		20	-	1,143	3	-	1,163
International commingled							
funds (various currencies)		-	 -	1,433,22	7	33,273	 1,466,500
Total international investment securities	\$	(40,295)	\$ 36,956	\$ 2,549,452	2 \$	33,806	\$ 2,579,919

North Dakota Retirement and Investment Office Notes to Financial Statements

June 30,	2022 and	2021
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2021	Sha	Short-Term Debt				Equity	Real Estat			Total
Currency Argentine peso	<u>Sno</u>	<u>65</u>	\$	<u>364</u>	\$	Equily		II Estate	\$	<u>10ta1</u> 429
Australian dollar	Φ	1,305	Φ	133	Φ	85,215	Φ	-	φ	86,653
Brazilian real		(10,006)		13,514		4,080		-		7,588
British pound sterling		(45,730)		47,308		4,080 262,384		-		263,962
Canadian dollar		(43,730) (624)		47,508 561		36,173		-		36,110
Chilean peso		822		501		50,175		-		822
Colombian peso		(508)		-		-		-		(508)
Danish krone		(308)		-		- 87,460		-		88,035
Euro		(35,762)		- 37,980		609,331		- 651		612,200
Hong Kong Off-Shore-Chinese yuan renminbi		427		<i>37,9</i> 00		23,707		-		24,134
Hong Kong dollar		427 816		-		155,260		-		156,076
Hungarian forint		(335)		-		2,875		-		2,540
Indian rupee		(333)		- 427		2,075		-		2,340 427
Japanese yen		- 1,604		42/ -		- 294,524		-		296,128
Mexican peso		(825)		- 952		1,440		-		1,567
New Israeli shekel		(492)		932 491		1,440 3,605		-		3,604
New Taiwan dollar		(492)		-		3,003 7,660		-		5,004 7,994
New Zealand dollar		(245)		-		7,000 8,445		-		8,200
Norwegian krone		232		-		23,304		-		23,536
Peruvian nuevo sol		(2,183)		2,065		25,504		-		(118)
Polish zloty		(2,183)		2,005		-		-		(224)
Russian ruble		(224)		-		-		-		(224)
Singapore dollar		303		-		10,712		-		11,015
South African rand		638		-		1,168		-		1,806
South Korean won		058		-		12,253		-		12,253
Swedish krona		237		-		105,046		-		105,283
Swiss franc		4		-		179,514		-		179,518
Thai baht		-		-		3,296		-		3,296
Turkish lira		-		-		1,321		-		1,321
		-		-		1,521		-		1,521
International commingled						1 2 5 2 5 2 5		24 - 24		1 200 1 50
funds (various currencies)		-		-	·	1,353,624		34,534		1,388,158
Total international investment securities	\$	(89,565)	\$	103,795	6	3,272,397	\$	35,185		3,321,812

Negative amounts represent short positions.

Derivative Securities

Derivatives are financial arrangements between two parties whose payments are based on, or "derived" from, the performance of some agreed upon benchmark. The investment policies of the SIB's clients allow the use of derivative securities to hedge or replicate underlying exposures but not for speculation. All derivatives are considered investment derivative instruments. The fair value of all derivative securities is reported in the statement of net position. At June 30, 2022 and 2021, the SIB had four types of derivative securities: futures, options, swaps and currency forwards.

Futures

Futures represent commitments to purchase (asset) or sell (liability) securities at a future date and at a specific price. Futures contracts are traded on organized exchanges (exchange traded) thereby minimizing the SIB's counterparty risk. The net change in the futures contracts' value is settled daily in cash with the exchanges. Net gains or losses resulting from the daily settlements are included in net change in fair value of investments in the statement of changes in net position and totaled \$(68.4) and \$232.5 million for fiscal years 2022 and 2021, respectively. At June 30, 2022 and 2021, the SIB investment portfolio had the notional futures balances shown below (expressed in thousands).

<u>Futures</u>		Notiona	al Val	ue
	Jur	ne 30, 2022	Ju	ne 30, 2021
Cash & Cash Equivalent Derivative Futures Long Short	\$	590,720 (83,089)	\$	172,043 (653,875)
Commodity Derivative Futures Short		(12,092)		(31,463)
Equity Derivative Futures Long		501,730		662,160
Fixed Income Derivative Futures				
Long		1,050,219		771,100
Short		(915,728)		(1,213,556)
Total Futures	\$	1,131,760	\$	(293,591)

Options

Options represent or give buyers the right, but not the obligation, to buy (call) or sell (put) an asset at a preset price over a specified period. Options are traded on organized exchanges (exchange traded) thereby minimizing the SIB's counterparty credit risk. The option's price is usually a small percentage of the underlying asset's value. As a seller of a financial option, the SIB, through its investment manager, receives a premium at the beginning of the agreement and bears the risk of an unfavorable change in the price of the financial instrument underlying the option. As a buyer of a financial option, the SIB, through its investment manager, pays a premium at the beginning of the agreement and the counterparty bears the risk of an unfavorable change in the price of the financial instrument underlying the option. As an a buyer of a financial option, the SIB, through its investment manager, pays a premium at the beginning of the agreement and the counterparty bears the risk of an unfavorable change in the price of the financial instrument underlying the option. Gains and losses on options are determined based on fair values and recorded with the net change in fair value of investments in the statement of changes in net position and totaled \$0.6 million in both fiscal years 2022 and 2021, respectively. At June 30, 2022 and 2021, the SIB investment portfolio had the following option balances (expressed in thousands).

<u>Options</u>		Fair V	/alue	
-	June	30, 2022	June	30, 2021
Cash & Other Options				
Call	\$	(1,033)	\$	99
Put		(2,834)		767
Equity Options				
Call		1,074		-
Fixed Income Options				
Call		(325)		(220)
Put		(269)		(170)
Total Options	\$	(3,387)	\$	476

Swaps

A swap is a derivative in which counterparties exchange certain benefits of one party's financial instrument for those of the other party's financial instrument. Specifically, the two counterparties agree to exchange one stream of cash flows for another stream. The SIB, through its investment managers, has entered into various swap agreements in an attempt to manage its exposure to interest rate, inflation, credit and total return risk.

Gains and losses on swaps are determined based on fair values and are recorded with the net change in fair value of investments in the statement of changes in net position and totaled \$(19.5) and \$(3.0) million for fiscal years 2022 and 2021, respectively. The maximum loss that would be recognized at June 30, 2022 and 2021, if all counterparties failed to perform as contracted is \$3 million and \$2.3 million, respectively. Swap fair values are determined by a third-party pricing source. At June 30, 2022 and 2021, the SIB's investment portfolio had the swap fair value balances as shown below (expressed in thousands).

Credit Default Swaps

Credit risk represents the exposure to fair value losses arising from a credit event such as default, failure to pay, restructuring or bankruptcy. In a credit default swap (CDS) contract, the protection buyer of the CDS makes a series of payments to the protection seller and, in exchange, receives a payoff if the credit instrument experiences a credit event. CDS contracts are also used to establish exposure to a desired credit instrument.

North Dakota Retirement and Investment Office

Notes to Financial Statements June 30, 2022 and 2021

					Jun	$e_{50,20}$	122 and 2	021	
		Notional	Amou	int			Fair V	/alue	
Counterparty/Moody's Rating	June	e 30, 2022	June	e 30, 2021	Expiration Date Range	June 30, 2022		June	30, 2021
Bank of America/Aa2 (2 contracts)	\$	(1,105)	\$	-	2022	\$	2	\$	-
Bank of America/Aa2 (3 contracts)				(3,400)	2021				10
Barclays Capital Inc/A1 (2 contracts)		(10,659)			2027		(262)		
BNP Paribas Sa Paris/Aa3 (1 contract)		(100)			2027		(8)		
Citibank/Aa3 (24 contracts)		130			2023		(22)		
Citibank/Aa3 (27 contracts)				(3,000)	2023 - 2024				(12)
Citibank/A1 (2 contract)		(400)			2024 - 2027		(27)		
Citigroup Global Markets/A1 (15 contracts)		2,160			2022 - 2028		(143)		
Citigroup Global Markets/A1 (5 contracts)				(6,804)	2024 - 2026				623
Credit Suisse Intnl London/A1 (1 contracts)		(775)			2023		(24)		
Credit Suisse First Boston/A1 (12 contracts)				(18,361)	2022 - 2026				1,505
Credit Suisse New York/A1 (4 contracts)					2023				
Goldman Sachs/A2 (6 contracts)		(2,400)			2023 - 2027		(143)		
Goldman Sachs/A2 (4 contracts)				(1,700)	2023 - 2024				8
JP Morgan Chase/Aa2 (1 contract)				26,110	2026				(667)
Morgan Stanley/A1 (2 contracts)		(800)			2024 - 2027		(58)		1
Morgan Stanley/A1 (1 contract)				(100)	2024				
Wells Fargo Bank/Aa2 (13 contracts)		18,733			2022 - 2028		(14)		
Total Credit Default Swaps	\$	4,784	\$	(7,255)		\$	(699)	\$	1,468

The notional amount may be positive or negative, depending on whether the position is long or short, respectively.

Interest Rate Swaps

Interest rate risk represents the exposure to fair value losses arising from future changes in prevailing market interest rates. In the most common type of interest rate swap arrangement, one party agrees to pay fixed interest payments on designated dates to a counterparty, who in turn agrees to make return interest payments that float with some reference rate.

		Notional	Amo	unt			Fair V	/alue	
Counterparty/Moody's Rating	Jun	e 30, 2022	June 30, 2021		Expiration Date Range	June	30, 2022	June	30, 2021
Citigroup Global Markets/A1 (58 contracts)	\$	175,583	\$	-	2022 - 2052	\$	470	\$	-
Citigroup Global Markets/A1 (17 contracts)				55,438	2022 - 2051				(41)
Credit Suisse First Boston/A1 (4 contracts)		7,026			2027 - 2029				
Credit Suisse First Boston/A1 (13 contracts)				132,778	2023 - 2051				1,145
JP Morgan Chase/Aa2 (14 contracts)		13,445			2023 - 2034		794		
JP Morgan Chase/Aa2 (129 contracts)				160,807	2023 - 2034				(4,026)
Morgan Stanley/A1 (2 contracts)		82,500			2024 - 2025		(3,419)		
Wells Fargo Bank/ (23 contracts)		369,345			2023 - 2052		(414)		
Total Interest Rate Swaps	\$	647,899	\$	349,023		\$	(2,569)	\$	(2,922)

The notional amount may be positive or negative, depending on whether the position is long (fixed rate payer) or short (floating rate payer), respectively.

Inflation Swaps

Inflation risk represents the exposure to fair value losses arising from future changes in prevailing market inflation. In an inflation swap, one party pays a fixed rate on a notional principal amount, while the other party pays a floating rate linked to an inflation index, such as the Consumer Price Index (CPI).

	_	Notional	Amou	int			Fair	Value			
Counterparty/Moody's Rating	June 3	ne 30, 2022 June 30, 2021		Expiration Date Range	June 30, 2022		June	30, 2021			
Citigroup Global Markets/A1 (4 contracts) JP Morgan Chase/Aa2 (21 contracts)	\$	-	\$	13,240 17,220	2026 2026 - 2031	\$	-	\$	(402) (369)		
Total Inflation Swaps	\$	-	\$	30,460		\$	-	\$	(771)		

The notional amount may be positive or negative, depending on whether the position is long (fixed rate payer) or short (floating rate payer), respectively.

Total Return Swaps

A total return swap is an agreement in which one party makes payments based on a set rate, either fixed or variable, while the other party makes payments based on the return of an underlying asset (income and capital gains). The underlying asset, or reference asset, is owned by the party receiving the set rate payment.

	Notiona	l Amou	int		Fair Value					
Counterparty/Moody's Rating	June 30, 2022	June	e 30, 2021	Expiration Date Range	June 3	30, 2022	June 3	0, 2021		
Credit Suisse International/Aa3 (2 contracts)	\$-	\$	2,764	2041	\$	-	\$	7		
Total Total Return Swaps	\$-	\$	2,764		\$	-	\$	7		

The notional amount may be positive or negative, depending on whether the position is long (fixed rate payer) or short (floating rate payer), respectively.

Currency Forwards

Currency forwards represent forward exchange contracts that are entered into in order to manage the exposure to changes in currency exchange rates on the currency denominated portfolio holdings. A forward exchange contract is a commitment to purchase (positive) or sell (negative) a currency at a future date at a negotiated forward rate. The gain or loss arising from the difference between the original contracts and the closing of such contracts is included in the net change in fair value of investments in the statements of changes in net position and totaled \$17.9 million and \$(3.2) million for fiscal years 2022 and 2021, respectively. At June 30, 2022 and 2021, the SIB's investment portfolio included the currency forwards balances shown below (expressed in thousands).

North Dakota Retirement and Investment Office Notes to Financial Statements June 30, 2022 and 2021

				Fair V	/alue
Currency	Cost	Purchases	Sales	6/30/2022	6/30/2021
Australian dollar	\$ (5,270)	\$ 9,464	\$ (14,734)	\$ (5,364)	\$ (128)
Brazilian real	(66)	4,909	(4,975)	(165)	(9,541)
British pound sterling	(47,093)	39,399	(86,492)	(45,640)	(64,811)
Canadian dollar	(322)	-	(322)	(316)	(404)
Chilean peso	(285)	12	(297)	(253)	1,702
Chinese offshore	(9,047)	-	(9,047)	(9,050)	-
Danish Krone	(629)	318	(947)	(601)	-
Euro	(90,433)	91,483	(181,916)	(88,167)	(131,704)
Hungarian Forint	603	603	-	555	-
Japanese yen	(8,687)	1,053	(9,740)	(8,206)	(516)
Mexican peso	471	775	(304)	463	-
New Israeli shekel	(3,520)	-	(3,520)	(3,315)	(1,970)
New Zealand dollar	710	710	-	653	-
Norwegian Krone	631	9,973	(9,342)	399	-
Peruvian nuevo sol	(908)	1,095	(2,003)	(1,016)	(2,183)
Poland Zloty	689	689	-	665	-
Russian ruble	-	-	-	-	7
South African rand	(906)	-	(906)	(861)	(986)
South Korean won	(352)	-	(352)	(346)	-
United States dollar	164,414	324,897	(160,483)	164,414	214,023
Total forwards subject to	currency risk			\$ 3,849	\$ 3,489

Derivative Interest Rate Risk

Derivative interest rate risk is the risk that changes in interest rates will adversely affect the value of an interest rate-based derivative investment. The SIB does not have a formal investment policy regarding such derivative investments. At June 30, 2022 and 2021, the tables below show the SIB's derivative investments subject to interest rate risk (expressed in thousands).

2022	N	Total Notional Value	3 mor	nths or less	<u>3 t</u>	o 6 months	6 to	12 months	1-:	5 years	5-1	l0 years		ter than years
Futures-interest rate contracts	\$	642,122	\$	(681,760)	\$	1,065,168	\$	151,913	\$	106,801	\$	-	\$	-
Futures-commodity contracts		(12,092)		-		(12,092)		-		-		-		-
Total	\$	630,030	\$	(681,760)	\$	1,053,076	\$	151,913	\$	106,801	\$	-	\$	-
		otal Fair Value		nths or less	_	o 6 months		12 months		5 years	-	10 years	10	ter than years
Options - interest rate contracts	\$	(466)	\$	(357)	\$	-	\$	-	\$	(109)	\$	-	\$	-
Options on futures Options - Foreign Exchange Contracts		(3,853) (142)		(570) (142)		(2,687)		(295)		(301)		-		-
Swaps - interest rate contracts		(2,569)		-		-		13		(4,471)		(4,701)		6,590
Swaps - credit contracts		(699)		2		3		(52)		(483)		(169)		-
Total	\$	(7,729)	\$	(1,067)	\$	(2,684)	\$	(334)	\$	(5,364)	\$	(4,870)	\$	6,590

2021		Total												
	Ν	otional											Great	er than
		Value	3 mor	nths or less	3 to	6 months	6 to 1	12 months	1-5	years	5-10	0 years	10	years
Futures-interest rate contracts	\$	(924,288)	\$	(675,150)	\$	(403,466)	\$	(17,715)	\$ 1	72,043	\$	-	\$	-
Total	\$	(924,288)	\$	(675,150)	\$	(403,466)	\$	(17,715)	\$ 1	72,043	\$	-	\$	-
		otal Fair Value		nths or less		6 months		12 months	1-5	years	5-10	0 years	10	er than years
Options - interest rate contracts			<u>3 mon</u> \$	(20)	<u>3 to</u> \$	6 months -	<u>6 to 1</u> \$	-	<u>1-5</u> \$	years	<u>5-10</u> \$	0 years -		
Options - interest rate contracts Options on futures		Value				-			<u>1-5</u> \$	5	<u>5-10</u> \$	0 years - -	10	years
1		Value 818		(20)		-		-	<u>1-5</u> \$	-	<u>5-10</u> \$	0 years - - (3,095)	10	years
Options on futures		Value 818 (342)		(20) (371)		-		- 29	<u>1-5</u> \$	-	<u>5-10</u> \$	-	10	years 838 -

Fair Value Measurement

The SIB categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and give the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements).

- Level 1 Unadjusted quoted prices for identical instruments in active markets.
- Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.
- Level 3 Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy.

The following tables show the fair value leveling of the SIB's investment portfolio at June 30, 2022 and 2021 (expressed in thousands).

North Dakota Retirement and Investment Office Notes to Financial Statements

June 30, 2022 and 2021

	Dollars in (000)							
			Fair Value Measures Using					
2022		Fair Value 6/30/22		Quoted Prices in Active Markets for Indentical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		gnificant ervable Inputs Level 3)
Investments by Fair Value Level								
Short Term Securities								
Commercial Paper	\$	27,977	\$	-	\$	27,977	\$	-
Short Term Bills and Notes		34,128		-		34,128		-
Total Short Term Securities		62,105		-		62,105		-
Fixed Income Investments								
Asset Backed Securities		469,733		-		469,733		-
Bank Loans		15,007		-		15,007		-
Collateralized Bonds		2,446		-		2,446		-
Commercial Mortgage-Backed		362,729		-		362,729		-
Corporate Bonds		2,075,973		-		2,074,660		1,313
Corporate Convertible Bonds		19,220		-		19,220		-
Funds - Fixed Income ETF		16,829		16,829		-		-
Government Agencies		35,569		-		35,569		-
Government Bonds		735,584		-		735,584		-
Government Mortgage Backed Securities		688,660		-		688,660		-
Gov't-issued Commercial Mortgage-Backed		13,960		-		13,960		-
Index Linked Government Bonds		650,572		-		650,572		-
Municipal/Provincial Bonds		26,577		-		26,577		-
Non-Government Backed C.M.O.s		140,879		-		140,879		-
Sukuk		2,530		-		2,530		-
Total Fixed Income Investments		5,256,268		16,829		5,238,126		1,313
Equity Investments								
Common Stock		4,727,266		4,726,869		-		397
Convertible Equity		5,574		5,574		-		-
Funds - Equities ETF		122,419		122,419		-		-
Preferred Stock		5,431		3,130		2,301		-
Stapled Securities		1,311		1,311		-		-
Total Equity Investments		4,862,001		4,859,303		2,301		397
Derivative Investments								
Exchange Cleared Swaps		(2,988)		-		(2,988)		-
Options		(3,387)		(2,921)		(466)		-
Swaps		(280)				(280)		
Total Derivative Investments		(6,655)		(2,921)		(3,734)		-
Total Investments by Fair Value Level	\$ 1	0,173,719	\$	4,873,211	\$	5,298,798	\$	1,710

North Dakota Retirement and Investment Office Notes to Financial Statements June 30, 2022 and 2021

	Dollars in (000)				
Investments Measured at the Net Asset Value (NAV)			Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Commingled Funds-Debt	\$	1,559,743	\$ -	Daily, monthly	1-15 days
Commingled Funds-Equities		1,547,266	-	Daily, monthly	1-15 days
Distressed Debt		211,353	-	Quarterly, Not eligible	60 days
Long/Short		284,678	-	Monthly	15 days
Mezzanine Debt		169	8,499	Not eligible	Not eligible
Private Credit		567,890	130,700	Not eligible	Not eligible
Private Equity		761,808	768,744	Not eligible	Not eligible
Real Assets		2,408,855	662,888	Quarterly, Not eligible	30-90 days
Total Investments Measured at the NAV	\$	7,341,762	\$ 1,570,831		-
Investments at Other Than Fair Value					
Cash and adjustments to cash	\$	199,035			
Bank Certificates of Deposit		192,033			
Other miscellaneous securities		4,815			
Repurchase Agreements		37,100			
Total Investments at Other Than Fair Value	\$	432,983			
Total Investments	\$	17,948,464			

North Dakota Retirement and Investment Office Notes to Financial Statements

June 30, 2022 and 2021

	Dollars in (000)						
	Fair Value Measures Using						
2021		Fair Value 6/30/21		oted Prices in ve Markets for ntical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inpu (Level 3)	
Investments by Fair Value Level							
Short Term Securities							
Commercial Paper	\$	12,998	\$	-	\$ 12,998	\$	-
Short Term Bills and Notes		73,606		-	73,606		-
Total Short Term Securities		86,604		-	86,604		-
Fixed Income Investments							
Asset Backed Securities		464,720		-	464,720		-
Bank Loans		16,123		-	16,123		-
Collateralized Bonds		2,930		-	2,930		-
Commercial Mortgage-Backed		328,792		-	328,792		-
Corporate Bonds		2,425,355		-	2,424,932		423
Corporate Convertible Bonds		17,733		-	17,733		-
Funds - Fixed Income ETF		18,501		18,501	-		-
Government Agencies		36,772		-	36,772		-
Government Bonds		858,389		-	858,389		-
Government Mortgage Backed Securities		599,911		-	599,911		-
Gov't-issued Commercial Mortgage-Backed		30,923		-	30,923		-
Index Linked Government Bonds		683,160		-	683,160		-
Municipal/Provincial Bonds		39,237		-	34,000		5,237
Non-Government Backed C.M.O.s		157,823		-	156,720		1,103
Sukuk		2,787		-	2,787		-
Total Fixed Income Investments	:	5,683,156		18,501	5,657,892		6,763
Equity Investments							
Common Stock		6,297,043		6,296,895	148		-
Convertible Equity		11,586		11,586	-		-
Funds - Equities ETF		107,225		107,225	-		-
Preferred Stock		3,900		2,001	1,899		-
Rights/Warrants		87		87	-		-
Stapled Securities		3,360		3,360	-		-
Total Equity Investments		6,423,201		6,421,154	2,047		-
Derivative Investments							
Exchange Cleared Swaps		(1,441)		-	(1,441))	-
Options		476		(341)	817		-
Swaps		(777)			(777))	-
Total Derivative Investments		(1,742)		(341)	(1,401)		-
Total Investments by Fair Value Level	\$ 1	2,191,219	\$	6,439,314	\$ 5,745,142	\$	6,763

North Dakota Retirement and Investment Office Notes to Financial Statements June 30, 2022 and 2021

	Dolla	ırs i	in (000)		
Investments Measured at the Net Asset Value (NAV)			Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Commingled Funds-Debt	\$ 1,708,277	5	ş -	Daily, monthly	1-15 days
Commingled Funds-Equities	1,491,014		-	Daily, monthly	1-15 days
Distressed Debt	225,536		75,000	Quarterly, Not eligible	60 days
Long/Short	365,032		-	Monthly	15 days
Mezzanine Debt	205		8,499	Not eligible	Not eligible
Private Credit	476,410		181,200	Not eligible	Not eligible
Private Equity	551,014		861,976	Not eligible	Not eligible
Real Assets	2,036,389		430,427	Quarterly, Not eligible	30-90 days
Total Investments Measured at the NAV	\$ 6,853,877	9	\$ 1,557,102		
Investments at Other Than Fair Value					
Cash and adjustments to cash	\$ 824,404				
Bank Certificates of Deposit	42,900				
Other miscellaneous securities	10,304				
Repurchase Agreements	25,300				
Total Investments at Other Than Fair Value	\$ 902,908				
Total Investments	\$ 19,948,004				

Securities classified in Level 1 are valued using quoted prices in active markets for those securities. Securities classified in Level 2 and Level 3 are valued using methodologies such as various bid evaluations, market averages and other matrix pricing techniques as well as values derived from associated traded securities or last trade data. In instances where inputs used to measure fair value fall into different levels, the fair value is categorized based on the lowest level input that is significant to the valuation.

Investments valued at the net asset value (NAV) per share (or its equivalent) have been classified separately in the tables above and include investments considered to be *alternative investments* as defined by the AICPA. The definition includes investments for which a readily determinable fair value does not exist (that is, investments not listed on national exchanges or over-the-counter markets, or for which quoted market prices are not available from sources such as financial publications, the exchanges, or NASDAQ). These types of investments can be held within any of the asset classes used by the SIB based on underlying portfolio holdings and analysis of risk and return relationships. These investments can be structured in different ways, including limited partnerships, limited liability companies, common trusts and mutual funds. Some are closed-ended with a specific life and capital commitment while others are open-ended with opportunity for ad hoc contributions or withdrawals and termination upon proper notice.

Commingled/Mutual Funds — These types of funds are open-ended funds and may be utilized in equity or fixed income asset classes. They are funds made up of underlying securities that have readily available fair values (publicly traded stocks or bonds). The SIB owns units of these funds rather than the individual securities. Contributions or withdrawals from these funds can be made as needed, generally with daily or monthly liquidity, with a notice period of one to fifteen days. Because they are liquid funds, there are no unfunded commitments for these types of investments.

Distressed Debt — these include investments in the debt instruments of companies which may be publicly traded or privately held that are financially distressed and are either in bankruptcy or likely candidates for bankruptcy. Typical holdings are senior and subordinated debt instruments, mortgages and bank loans. The SIB is including these types of investments in its global fixed income allocations. As of June 30, 2022, all unfunded commitments in the SIB distressed debt portfolios had been released; but as of June 30, 2021, there remained an unfunded commitment in one fund totaling \$75.0 million. One of the funds in this category is not eligible for redemptions, while the other fund is eligible for

redemptions with quarterly liquidity and 60 days notice.

Equity Long/Short — This strategy is a combination of long and short positions, primarily in publicly traded equities. The SIB utilizes this strategy, through a limited partnership structure, within its global equity allocations. This is an open-ended fund with monthly liquidity with a notice period of 15 days. There was no unfunded commitment as of June 30, 2022 and 2021.

Mezzanine Debt — This strategy is a hybrid of debt and equity financing. It is essentially debt capital that gives the lender the rights to convert to an ownership or equity interest in the company if the loan is not paid back in time and in full. It is generally subordinated to senior debt. The SIB utilizes this strategy, through a limited partnership structure, in its global fixed income allocation. The two funds in this category are not eligible for redemptions, have remaining lives of 1-2 years, and unfunded commitments of \$8.5 million as of both June 30, 2022 and 2021.

Private Credit — These investments include loans to private companies, privately placed debt of public companies, or loans backed by real assets. Loan repayment can be derived from either cash flows from an operating company or cash flows generated by a physical or esoteric asset. Private debt is typically secured and has various protections/covenants in place. The debt is customized to the borrower's requirement, thus rendering it illiquid. The SIB includes these strategies within its global fixed income allocation through limited partnership-type structures. Private credit issuers may be investment grade but are typically below-investment grade and similar in some respect to the syndicated bank loan and high yield markets. The SIB participates in two senior private credit funds, commonly referred to as direct lenders, which are structured as custom managed accounts and are not eligible for redemptions during their investment lives. Due to the perpetual nature of the funds, the remaining investment lives fluctuate based on timing of new commitments, and the unfunded commitments totaled \$130.7 million and \$181.2 million as of June 30, 2022 and 2021, respectively.

Private Equity — Private Equity investments are typically private interests in corporations across different areas of the capital structure and in different stages of the corporations' development via limited partnership vehicles. Private Equity investments are illiquid and long term in nature (10-12 years), typically held until maturity. Private Equity portfolios generally have a "J-Curve Effect" whereby there are low to negative returns in the initial years due to the payment of investment management fees and initial funding of investments made by the General Partner during a period when investments are typically carried at cost and returns have not been realized. To diversify the program, Private Equity investments are made across business cycles, vintage years, and different strategies. The SIB has a dedicated sub-asset class for private equity investments within its global equity allocation in the pension pool and Legacy Fund. The SIB does not have the option to request redemptions from its private equity funds. The General Partner distributes earnings and proceeds from the sale of the underlying investments as transactions occur. The SIB has \$768.7 million and \$862.0 million in unfunded private equity commitments as of June 30, 2022 and 2021, respectively.

Venture Capital — these include investments in companies in a range of stages of development from start-up/seed stage, early stage, and later/expansion stage. Investments are typically made in years one through six and returns typically occur in years four through ten.

Buyouts — these include investments in funds that seek out and purchase underperforming or undervalued companies in order to improve them and sell them or take them public many years later. These funds are also often involved in management buyouts, which are buyouts conducted by the management of the company being purchased, and they often play key roles in leveraged buyouts, which are buyouts that are funded with borrowed money.

Real Assets — These investments are intended to provide allocations to tangible assets that are expected to be inflation protected and provide performance above the inflation rate as indicated by the CPI. Investments are generally structured as limited partnerships or limited liability companies. Investments in Real Assets include:

Real Estate — includes investments in private vehicles through limited partnerships or commingled vehicles that have an ownership interest in direct real estate properties. The investment strategies may include "value added" strategies, which derive their return from both income and appreciation, "opportunistic", which derive their return primarily through appreciation, and "alternative" which invest in less traditional types of property. Both domestic and international real estate funds are utilized. The SIB has a dedicated sub-asset class for these types of investments within global real assets. There are currently 11 real estate funds in the portfolio. Five of those funds are open-ended vehicles that accept redemption requests quarterly with a 30-90 day notification period. There were no unfunded commitments in the open-ended funds as of June 30, 2022 and 2021. The remaining six funds are closed-ended limited partnerships that are not eligible for redemptions. Those six funds have a combined unfunded commitment of \$250.5 million and \$263.3 million as of June 30, 2022 and 2021, respectively.

Timberland — includes investments in limited liability companies that have an ownership interest in properties where the value of the property is derived mainly from income-producing timber but also from the "higher and better use" value of the underlying land. The SIB includes these assets within its global real assets allocations. There are three funds in the portfolio, and they have no unfunded commitments. The funds are not eligible for redemption other than distributions of income and/or proceeds as determined by the investment manager. The funds have remaining lives of 1-4 years.

Infrastructure — includes investments in limited partnerships that have an ownership interest in transportation assets such as toll roads, tunnels and bridges; and regulated assets such as electricity transmission, gas and oil distribution and wastewater collection. Other possible investments would include communication assets and social infrastructure. The SIB includes these assets within its global real assets allocations. The infrastructure investments in the portfolio as of June 30, 2022 and 2021, include both open and closed-ended funds. The three open-ended funds have no unfunded commitments and are eligible for redemptions quarterly with 90 days notice. There may be a 3-12 month queue for receiving redemptions. The 17 closed-ended funds have unfunded commitments of \$412.4 million and \$167.1 million at June 30, 2022 and 2021, respectively, and are not eligible for redemptions.

Securities Lending

State statutes permit and the SIB has authorized the use of securities lending – loans of securities to brokerdealers and other entities for collateral with a simultaneous agreement to return the collateral for the same securities in the future. Northern Trust is the securities lending agent for the SIB. Securities are loaned versus collateral that may include cash, US government securities and irrevocable letters of credit. US securities are loaned versus collateral valued at 102% of the fair value of the securities plus any accrued interest. Non-US securities are loaned versus collateral valued at 105% of the fair value of the securities plus any accrued interest.

Non-cash collateral cannot be pledged or sold unless the borrower defaults. All securities loans can be terminated on demand by either the lender or the borrower, although the average term of SIB loans was approximately 70 and 130 days as of June 30, 2022 and 2021, respectively. Cash open collateral is invested

in a short-term investment pool, which had an interest sensitivity of 1 day as of both June 30, 2022 and 2021. This pool is valued based on amortized cost. There were no violations of legal or contractual provisions, no borrower or lending agent default losses known to the securities lending agent. There are no dividends or coupon payments owing on the securities lent. Securities lending earnings are credited to participating clients on approximately the fifteenth day of the following month.

Indemnification deals with the situation in which a client's securities are not returned due to the insolvency of a borrower and Northern Trust has failed to live up to its contractual responsibilities relating to the lending of those securities. Northern Trust's responsibilities include performing appropriate borrower and collateral investment credit analyses, demanding adequate types and levels of collateral, and complying with applicable Department of Labor and Federal Financial Institutions Examination Council regulations concerning securities lending.

For securities loaned at fiscal year end, the SIB has no credit risk exposure to borrowers because the amounts the SIB owes the borrowers exceeds the amounts the borrowers owe the SIB.

The following represents the balances relating to the securities lending transactions at June 30, 2022 and 2021 (expressed in thousands).

2022	Se	curities Lent	Co	on-Cash llateral Value	Inv	Cash Ollateral æstment Value
Lent for cash collateral:						
US agency securities	\$	996	\$	-	\$	1,037
US government securities		3,867		-		3,977
US corporate fixed income securities		82,501		-		85,182
Global agency securities		187		-		197
Global government securities		2,214		-		2,346
Global corporate fixed income securities		8,052		-		8,554
US equities		39,907		-		41,241
Global equities		4,547		-		5,171
Lent for non-cash collateral:						
US agency securities		777		804		-
US government securities		3,751		3,881		-
US corporate fixed income securities		85,783		88,643		-
US equities		53,980		55,731		-
Global equities		7,679		8,310		-
Total	\$	294,241	\$	157,369	\$	147,705

North Dakota Retirement and Investment Office

Notes to Financial Statements June 30, 2022 and 2021

2021	Securities Lent		Non-Cash Collateral Value		Inv	Cash bllateral westment Value
Lent for cash collateral:						
US agency securities	\$	937	\$	-	\$	957
US government securities		1,483		-		1,540
US corporate fixed income securities		32,989		-		33,846
Global government securities		1,137		-		1,207
Global corporate fixed income securities		3,551		-		3,781
US equities		29,346		-		30,361
Global equities		16,043		-		17,218
Lent for non-cash collateral:						
US agency securities		1,160		1,198		-
US government securities		2,186		2,242		-
US corporate fixed income securities		38,039		39,396		-
US equities		153,604		158,573		-
Global equities		14,377		15,433		-
Total	\$	294,852	\$	216,842	\$	88,910

Note 4 - Capital Assets

	June 30, 2020	Additions	Retirements	June 30, 2021	Additions	Retirements	June 30, 2022
Office equipment Less accumulated	\$16,879	\$-	\$-	\$16,879	\$-	\$-	\$16,879
depreciation on office equipment	(13,730)	(1,800)	-	(15,530)	(1,349)	-	(16,879)
Software Less accumulated	1,213,500	-	-	1,213,500	680,999	-	1,894,499
depreciation on software	(1,213,500)	-	-	(1,213,500)	-	-	(1,213,500)
	\$ 3,149	\$ (1,800)	\$-	\$ 1,349	\$ 679,650	\$-	\$ 680,999

Note 5 - State Agency Transactions

Due To/From Other State Agencies and Other State Funds

Amounts due from/to other state agencies and other state funds are as follows as of June 30, 2022 and 2021:

	2022		2021	
Due To Other State Agencies				
Information Technology Department	\$	33,736	\$	10,976
Health Department		225		-
Department of Transportation		78		-
Office of Attorney General		505		3,884
Office of Management and Budget		338		31
Total due to other state agencies	\$	34,882	\$	14,891
Due From Other State Agencies				
Public Employees Retirement System	\$	1,281	\$	-
Total due from other state agencies	\$	1,281	\$	_
Due To Other State Funds General Fund	S	-	\$8	71,687,384

Due to other state agencies balances are a result of a time lag between the dates that services are provided, the payments are made, and the transactions are entered into the accounting system. Due to other state funds represents the statutorily defined earnings of the Legacy Fund for the 2019-21 biennium that is required by the State Constitution to be transferred to the general fund at the end of the biennium.

Note 6 - Changes in Noncurrent Liabilities

Changes in noncurrent liabilities are included in accrued expenses in the statements of changes in net position. The changes for the years ended June 30, 2022 and 2021 are summarized as follows:

	Beginning Balance 7/1/2021	Additions	Reductions	Ending Balance 6/30/2022	Amounts Due Within One Year
Accrued Leave	\$211,403	\$126,018	(\$178,433)	\$158,988	\$149,765
	Beginning Balance 7/1/2020	Additions	Reductions	Ending Balance 6/30/2021	Amounts Due Within One Year
Accrued Leave	\$205,830	\$160,655	(\$155,082)	\$211,403	\$141,891

Pension and Investment Trust Funds liquidate the accrued annual leave.

Note 7 - North Dakota Teachers' Fund for Retirement

Administration

The following brief description of TFFR is provided for general information purposes only. Participants should refer to NDCC Chapter 15-39.1 for more complete information.

TFFR is a cost-sharing multiple-employer defined benefit pension plan covering all North Dakota public teachers and certain other teachers who meet various membership requirements. TFFR provides for pension, death and disability benefits. The cost to administer the TFFR plan is financed by investment income and contributions.

Responsibility for administration of the TFFR benefits program is assigned to a seven-member Board of Trustees (Board). The Board consists of the State Treasurer, the Superintendent of Public Instruction, and five members appointed by the Governor. The appointed members serve five-year terms which end on June 30 of alternate years. The appointed Board members must include two active teachers, one active school administrator, and two retired members. The TFFR Board submits any necessary or desirable changes in statutes relating to the administration of the fund, including benefit terms, to the Legislative Assembly for consideration. The Legislative Assembly has final authority for changes to benefit terms and contribution rates.

Membership

As of June 30, 2022 and 2021, the number of participating employer units was 207 and 210, respectively, consisting of the following:

	June 30, 2022	June 30, 2021
Public School Districts	171	173
County Superintendents	4	4
Special Education Units	19	20
Vocational Education Units	4	4
Other	9	9
Total	207	210

TFFR's membership consisted of the following:

TFFR Membership		
	2022	2021
Retirees and beneficiaries currently receiving benefits	9,438	9,262
Terminated employees - vested	1,827	1,754
Terminated employees - nonvested	1,423	1,213
Total	12,688	12,229
Current employees		
Vested	8,326	8,306
Nonvested	3,476	3,321
Total	11,802	11,627

Member and Employer Contributions

Member and employer contributions paid to TFFR are set by NDCC Section 15-39.1-09. Every eligible teacher in the State of North Dakota is required to be a member of TFFR and is assessed at a rate of 11.75% of salary as defined by NDCC Section 15-39.1-04. Every governmental body employing a teacher must also pay into TFFR a sum equal to 12.75% of the teacher's salary. Member and employer contributions will be reduced to 7.75% each when the fund reaches 100% funded ratio on an actuarial basis.

A vested member who terminates covered employment may elect a refund of contributions paid plus 6% interest or defer payment until eligible for pension benefits. A non-vested member who terminates covered employment must claim a refund of contributions paid before age 70½. Refunded members forfeit all service credits under TFFR. These service credits may be repurchased upon return to covered employment under certain circumstances, as defined by the NDCC.

Pension Benefits

For purposes of determining pension benefits, members are classified within one of three categories. Tier 1 grandfathered and Tier 1 non-grandfathered members are those with service credit on file as of July 1, 2008. Tier 2 members are those newly employed and returning refunded members on or after July 1, 2008.

Tier 1 Grandfathered

A Tier 1 grandfathered member is entitled to receive unreduced benefits when three or more years of credited service as a teacher in North Dakota have accumulated, the member is no longer employed as a teacher and the member has reached age 65, or the sum of age and years of service credit equals or exceeds 85. TFFR permits early retirement from ages 55 to 64, with benefits actuarially reduced by 6% per year for every year the member's retirement age is less than 65 years or the date as of which age plus service equal 85. In either case, benefits may not exceed the maximum benefits specified in Section 415 of the Internal Revenue Code.

Pension benefits paid by TFFR are determined by NDCC Section 15-39.1-10. Monthly benefits under TFFR are equal to the three highest annual salaries earned divided by 36 months and multiplied by 2.00% times the number of service credits earned. Retirees may elect payment of benefits in the form of a single life annuity, 100% or 50% joint and survivor annuity, ten or twenty-year term certain annuity, partial lump-sum option or level income with Social Security benefits. Members may also qualify for benefits calculated under other formulas.

Tier 1 Non-grandfathered

A Tier 1 non-grandfathered member is entitled to receive unreduced benefits when three or more years of credited service as a teacher in North Dakota have accumulated, the member is no longer employed as a teacher and the member has reached age 65, or has reached age 60 and the sum of age and years of service credit equals or exceeds 90. TFFR permits early retirement from ages 55 to 64, with benefits actuarially reduced by 8% per year from the earlier of age 60/Rule of 90 or age 65. In either case, benefits may not exceed the maximum benefits specified in Section 415 of the Internal Revenue Code.

Pension benefits paid by TFFR are determined by NDCC Section 15-39.1-10. Monthly benefits under TFFR are equal to the three highest annual salaries earned divided by 36 months and multiplied by 2.00% times the number of service credits earned. Retirees may elect payment of benefits in the form of a single life annuity, 100% or 50% joint and survivor annuity, ten or twenty-year term certain annuity, partial lump-sum option or level income with Social Security benefits. Members may also qualify for benefits calculated under other formulas.

Tier 2

A Tier 2 member is entitled to receive unreduced benefits when five or more years of credited service as a teacher in North Dakota have accumulated, the member is no longer employed as a teacher and the member has reached age 65, or has reached age 60 and the sum of age and years of service credit equals or exceeds 90. TFFR permits early retirement from ages 55 to 64, with benefits actuarially reduced by 8% per year from the earlier of age 60/Rule of 90 or age 65. In either case, benefits may not exceed the maximum benefits specified in Section 415 of the Internal Revenue Code.

Pension benefits paid by TFFR are determined by NDCC Section 15-39.1-10. Monthly benefits under TFFR are equal to the five highest annual salaries earned divided by 60 months and multiplied by 2.00% times the number of service credits earned. Retirees may elect payment of benefits in the form of a single life annuity, 100% or 50% joint and survivor annuity, ten or twenty-year term certain annuity, partial lump-sum option or level income with Social Security benefits. Members may also qualify for benefits calculated under other formulas.

Death and Disability Benefits

Death benefits may be paid to a member's designated beneficiary. If a member's death occurs before retirement, the benefit options available are determined by the member's vesting status prior to death. If a member's death occurs after retirement, the death benefit received by the beneficiary (if any) is based on the retirement plan the member selected at retirement.

An active member is eligible to receive disability benefits when: (a) a total disability lasting 12 months or more does not allow the continuation of teaching, (b) the member has accumulated five years of credited service in North Dakota, and (c) the Board of Trustees of TFFR has determined eligibility based upon medical evidence. The amount of the disability benefit is computed by the retirement formula in NDCC Section 15-39.1-10 without consideration of age and uses the member's actual years of credited service.
There is no actuarial reduction for reason of disability retirement.

Investment Rate of Return

The annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was -6.17% and 26.36% for the years ended June 30, 2022 and 2021, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Realized Gains and Losses

Realized gains and losses on sales of investments are components of net change in fair value of investments and are computed as described in Note 1. For the years ended June 30, 2022 and 2021, TFFR had net realized gains of \$127,985,911 and \$236,376,522, respectively.

Net Pension Liability

The components of the net pension liability of TFFR at June 30, 2022 and 2021 (expressed in thousands), were as follows:

	Ju	ne 30, 2022	Ju	ne 30, 2021
Total pension liability	\$	4,479,973	\$	4,336,060
Plan fiduciary net position		(3,023,920)		(3,282,405)
Net pension liability (NPL)	\$	1,456,053	\$	1,053,655
Plan fiduciary net position as a				
percentage of the total pension liability		67.5%		75.7%

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of July 1, 2022 and 2021, using the following actuarial assumptions:

Valuation date	July 1, 2022	July 1, 2021
Inflation	2.30%	2.30%
Salary increases	3.80% to 14.80%; varying by service,	3.80% to 14.80%; varying by service,
	including inflation and productivity	including inflation and productivity
Cost of living adjustments	None	None
Investment rate of return	7.25% net of investment expenses, including	7.25% net of investment expenses, including
	inflation	inflation

For the July 1, 2022 and 2021, valuations, the post-retirement healthy mortality table was 104% of the PubT-2010 Retiree table for retirees and to 95% of the PubT-2010 Contingent Survivor table for beneficiaries, both projected with generational improvement using Scale MP-2019. The disabled mortality table was the PubNS-2010 Non-Safety Disabled Mortality table projected with generational improvement using Scale MP-2019.

The pre-retirement mortality table was the Pub T-2010 Employee table projected with generational improvement using Scale MP-2019. The actuarial assumptions used were based on the results of an experience study dated March 19, 2020.

The TFFR Board is responsible for establishing investment policy for the fund assets under NDCC 15-39.1-05.2. Benefit payments are projected to occur over a long period of time. This allows TFFR to adopt a longterm 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.

The long-term expected rate of return on TFFR investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the TFFR target asset allocation as of July 1, 2022 and 2021 are summarized in the following tables:

2022		Long-Term
		Expected
	Target	Real Rate of
	Allocation	Return
Global Equity	55.0%	6.6%
Global Fixed Income	26.0%	0.4%
Global Real Assets	18.0%	4.6%
Cash Equivalents	1.0%	-1.1%
2021		Long-Term
		Expected
	Target	Real Rate of
	Allocation	Return
Global Equity	55.0%	6.9%
Global Fixed Income	26.0%	0.7%
Global Real Assets	18.0%	4.8%
	10.070	4.070

As part of the most recent asset/liability study, the total fund real rate of return was upwardly adjusted by 0.50% to reflect a longer investment time horizon than is assumed in the investment consultant's expected returns and to account for above benchmark returns achieved through active management. In order to estimate the nominal rate of return, the real rate of return was adjusted upward by 2.25% for expected inflation.

Discount Rate

The discount rate used to measure the total pension liability was 7.25% as of June 30, 2022 and 2021. The projection of cash flows used to determine the discount rate assumed that member and employer contributions will be made at rates equal to those based on the July 1, 2022 and 2021 Actuarial Valuation Report. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, TFFR's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members as of July 1, 2022 and 2021. Therefore, the long-term expected rate of return on TFFR investments was applied to all periods of projected benefit payments to determine the total pension liability as of June 30, 2022 and 2021.

Sensitivity of Net Pension Liability

The following presents the net pension liability of the TFFR employers calculated using the discount rate of 7.25% as of June 30, 2022 and 2021, as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate (expressed in thousands):

2022						
	1%	Decrease	Curre	ent Discount	1%	Increase
		(6.25%)	Ra	te (7.25%)	((8.25%)
Employers' net pension liability	\$	2,000,483	\$	1,456,053	\$	1,004,517
2021						
	1%	Decrease	Curre	ent Discount	1%	Increase
		(6.25%)	Ra	te (7.25%)	((8.25%)
Employers' net pension liability	\$	1,582,103	\$	1,053,655	\$	614,833

Note 8 - ND Public Employees Retirement System (NDPERS)

Permanent employees of RIO participate in the pension and other post-employment benefit (OPEB) plans of NDPERS, which is also an agency of the State of North Dakota financial reporting entity and is included in the State of North Dakota's Annual Comprehensive Financial Report. The following brief description of NDPERS is provided for general information purposes only. Participants should refer to NDCC Chapter 54-52 for more complete information.

NDPERS pension (Main System) and OPEB plans are cost-sharing multiple-employer defined benefit plans that cover employees/retirees of the State of North Dakota, its agencies and various participating political subdivisions. NDPERS pension plan provides for pension, death and disability benefits. NDPERS OPEB plan provides a credit toward the monthly health insurance premium of members receiving retirement benefits from the PERS, HPRS and Judges retirement under Chapter 27-17 of the North Dakota Century Code. Effective July 1, 2015, the credit is also available to apply towards monthly premiums under the state dental, vision and long-term care plan and any other health insurance plan. Effective August 1, 2019, the credit is expanded to also include any eligible health, prescription drug plan, dental, vision, and long-term care plan premium expense. The cost to administer the pension plan is financed through the contributions and investment earnings of the plan. The Retiree Health Insurance Credit Fund is advance-funded on an actuarially determined basis.

Responsibility for administration of the NDPERS defined benefit pension plan is assigned to a Board comprised of nine members. The Board consists of a Chairman, who is appointed by the Governor; one member appointed by the Attorney General; one member appointed by the State Health Officer; three members elected by the active membership of the NDPERS system, one member elected by the retired public employees and two members of the legislative assembly appointed by the chairman of the legislative management.

Pension Benefits

Benefits are set by statute. NDPERS has no provisions or policies with respect to automatic and ad hoc post-retirement benefit increases. Members of the Main System are entitled to unreduced monthly pension benefits beginning when the sum of age and years of credited service equal or exceed 85 (Rule of 85), or at normal retirement age (65). For members hired on or after January 1, 2016 the Rule of 85 is replaced with the Rule of 90 with a minimum age of 60. The monthly pension benefit is equal to 2.00% of their average monthly salary, using the highest 36 months out of the last 180 months of service, for each year of service. For members hired on or after January 1, 2020 the 2.00% multiplier was replaced with a 1.75% multiplier. The plan permits early retirement at ages 55-64 with three or more years of service.

Members may elect to receive the pension benefits in the form of a single life, joint and survivor, termcertain annuity, or partial lump sum with ongoing annuity. Members may elect to receive the value of their accumulated contributions, plus interest, as a lump sum distribution upon retirement or termination, or they may elect to receive their benefits in the form of an annuity. For each member electing an annuity, total payment will not be less than the members' accumulated contributions plus interest.

Death and Disability Benefits

Death and disability benefits are set by statute. If an active member dies with less than three years of service, a death benefit equal to the value of the member's accumulated contributions, plus interest, is paid to the member's beneficiary. If the member has earned more than three years of credited service, the surviving spouse will be entitled to a single payment refund, life-time monthly payment in an amount equal to 50% of the member's accrued normal retirement benefit, or monthly payments in an amount equal to the member's accrued 100% Joint and Survivor retirement benefit if the member had reached normal retirement age prior to date of death. If the surviving spouse dies before the member's accumulated pension benefits are paid, the balance will be payable to the surviving spouse's beneficiary.

Eligible members, who become totally disabled after a minimum of 180 days of service, receive monthly disability benefits equal to 25% of their final average salary with a minimum benefit of \$100. To qualify under this section, the member has to become disabled during the period of eligible employment and apply for benefits within one year of termination. The definition for disabled is set by the NDPERS in the North Dakota Administrative Code.

Refunds of Member Contributions

Upon termination, if a member is not vested (is not 65 or does not have three years of service credited for the NDPERS) they will receive the accumulated member contributions plus interest, or may elect to receive this amount at a later date. If a member has vested, they have the option of applying for a refund or can remain as a terminated vested participant. If a member terminated and withdrew their accumulated member contributions and is subsequently reemployed, they have the option of repurchasing their previous service. **Member and Employer Contributions**

Member and employer contributions paid to NDPERS are set by statute and are established as a percent of salaries and wages. During the 1983-1985 biennium the State of North Dakota implemented the employer pickup provision of the IRS code whereby a portion or all of the required member contributions are made by the employer. RIO, as the employer, is paying 4% of the member contribution. Employer contributions are set by statute.

Contribution rates are established as a percent of covered compensation as follows:

	Member	Employer
Members first enrolled prior to January 1, 2020	7.00%	7.12%
Members first enrolled after January 1, 2020	7.00%	8.26%
Members returning to the DB Plan as a result of Senate Bill 2015	9.00%	7.12%

The member's account balance includes the vested employer contributions equal to the member's contributions to an eligible deferred compensation plan. The minimum member contribution is \$25 and the maximum may not exceed the following:

1 to 12 months of service – Greater of one percent of monthly salary or \$25 13 to 24 months of service – Greater of two percent of monthly salary or \$25 25 to 36 months of service – Greater of three percent of monthly salary or \$25 Longer than 36 months of service – Greater of four percent of monthly salary or \$25

OPEB Benefits

The employer contribution is set by statute at 1.14% of covered compensation. Employees participating in the retirement plan as part-time/temporary members are required to contribute 1.14% of their covered compensation to the Retiree Health Insurance Credit Fund. Employees purchasing previous service credit are also required to make an employee contribution to the Fund. The benefit amount applied each year is shown as "prefunded credit applied" on the Statement of Changes in Plan Net Position for the OPEB trust funds. Beginning January 1, 2020 members first enrolled in the NDPERS main system and the Defined Contribution Plan on or after that date will not be eligible to participate in RHIC. Therefore, RHIC will become for the part a closed plan.

Retiree health insurance credit benefits and death and disability benefits are set by statute. There are no provisions or policies with respect to automatic and ad hoc post-retirement benefit increases. Employees who are receiving monthly retirement benefits, or the spouse of a deceased annuitant receiving a surviving spouse benefit or if the member selected a joint and survivor option are eligible to receive a credit toward their monthly health insurance premium under the state health plan.

The benefits are equal to \$5.00 for each of the employee's, or deceased employee's years of credited service not to exceed the premium in effect for selected coverage. The retiree health insurance credit is also available for early retirement with reduced benefits.

Pension & OPEB Liabilities, Pension & OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions & OPEB

At June 30, 2022 and 2021, RIO reported a liability of \$1,549,271 and \$4,531,009, respectively, for its proportionate share of the net pension and OPEB liability. These amounts are included in the accrued liabilities in the statements of net position. The net pension and OPEB liability were measured as of June 30, 2021 and 2020, and the total pension and OPEB liability used to calculate the net pension and OPEB liability was determined by an actuarial valuation as of that date. RIO's proportion of the net pension liability was based on RIO's share of covered payroll in the pension and OPEB plans relative to the covered payroll of all participating NDPERS Main System and OPEB employers. At June 30, 2021, RIO's pension plan proportion was 0.141582 percent and as of June 30, 2020, was 0.140747 percent. RIO's OPEB plan proportion was 0.132262 percent as of June 30, 2021 and was 0.122537 percent as of June 30, 2020.

RIO recognized pension and OPEB expense of \$92,402 and \$652,402 for the years ended June 30, 2022 and 2021, respectively. At June 30, 2022 and 2021, RIO reported deferred outflows of resources and deferred inflows of resources related to pensions and OPEB from the following sources:

	Deferred Outflows of			Deferred Inflows of				
	Resources			Resources			5	
		2022		2021		2022		2021
Differences between expected and actual	¢	20.704	¢	10.520	¢	152 (22	¢	226 229
experience	\$	29,704	\$	19,520	\$	152,633	\$	226,838
Changes in assumptions		1,644,715		2,387,471		2,129,514		392,424
Net differences between projected and actual earnings on plan investments Changes in proportion and differences		-		146,456		572,522		-
between employer contributions and proportionate share of contributions Employer contributions subsequent to the		32,684		14,114		108,916		149,812
measurement date		132,556		152,268		-		-
Total	\$	1,839,659	\$	2,719,829	\$	2,963,585	\$	769,074

Deferred outflows of resources related to pensions and OPEB resulting from employer contributions subsequent to the measurement date in the amount of \$132,556 will be recognized as a reduction of the net pension liability in the year ended June 30, 2023.

Other amounts reported as deferred outflows of resources and (deferred inflows of resources) related to pensions and OPEB will be recognized in pension expense as follows:

Year Ended June 30	
2023	\$ (199,839)
2024	(291,642)
2025	(233,080)
2026	(532,643)
2027	722
2028	-
	\$ (1,256,482)

Actuarial assumptions

The total pension and OPEB liabilities in the July 1, 2021 and 2020 actuarial valuation were determined using the following actuarial assumptions, applied to all periods included in the measurement:

2021 & 2020 – Pension Plan

Inflation	2.25%
Salary Increase (Payroll Growth)	3.5% to 17.75%, including inflation
Investment Rate of Return	7.00%, net of investment expense
Cost-of-living Adjustments	None
Mortality Rates	Sex-distinct Pub-2010 tables for General Employees, with scaling based on actual experience. Respective corresponding tables were used for healthy retirees, disabled retirees, and active members. Mortality rates are projected from 2010 using the MP-2019 scale.

The actuarial assumptions used in the actuarial valuation as of July 1, 2021 were based on an experience review for the period from July 1, 2014 to July 1, 2019, and were adopted for first use commencing with the actuarial valuation as of July 1, 2020.

2021 & 2020 – OPEB Plan

Inflation	2.25%
Salary Increase (Payroll Growth)	Not applicable.
Investment Rate of Return	6.50%, net of investment expense
Cost of Living Adjustments	None

North Dakota Retirement and Investment Office Notes to Financial Statements June 30, 2022 and 2021

	June 50, 2022 and 2021
Mortality Rates	Pub-2010 Healthy Retiree Mortality table (for General
	Employees), sex-distinct, with rates multiplied by 103% for males
	and 101% for females. Pub-2010 Disabled Retiree Mortality table
	(for General Employees), sex-distinct, with rates multiplied by
	117% for males and 112% for females. Pub-2010 Employee
	Mortality table (for General Employees), sex-distinct, with rates
	multiplied by 92% for both males and females. Mortality rates are
	projected from 2010 using the MP-2019 scale.

Beginning January 1, 2020, members first enrolled in the NDPERS Main System and the Defined Contribution Plan on or after that date are no longer eligible to participate in the OPEB Plan. Therefore, the OPEB Plan is, for the most part, a closed plan. There were no other benefit changes during 2020. The economic assumptions (excluding salary increases) and the asset smoothing method were updated beginning with the actuarial valuation as of July 1, 2017, based on a review performed by the actuary. The investment return assumption was decreased from 7.5% to 7.25% beginning with the actuarial valuation as of July 1, 2019, and further to 6.50% beginning with the actuarial valuation as of July 1, 2020. All other actuarial assumptions were adopted by the PERS Board based on an experience study covering the period July 1, 2009, through June 30, 2014. The employer rate to the System is the statutory contribution rate of 1.14% of payroll.

The long-term expected rate of return on pension and OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the plans' target asset allocations are summarized in the following table:

		Long-Term
		Expected
	Target	Real Rate of
Asset Class	Allocation	Return
Global Equity	58%	6.7%
Global Fixed Income	23%	0.7%
Global Real Assets	19%	4.8%

2021 - Pension Plan

2020 - Pension Plan		
		Long-Term
		Expected
	Target	Real Rate of
Asset Class	Allocation	Return
Global Equity	58%	6.9%
Global Fixed Income	23%	1.3%
Global Real Assets	19%	5.0%

2021 - OPEB Plan

		Long-Term
		Expected
	Target	Real Rate of
Asset Class	Allocation	Return
Large Cap Domestic Equity	33%	5.9%
Small Cap Domestic Equity	6%	6.8%
International Equity	26%	6.3%
Core-Plus Fixed Income	35%	0.5%

2020 - OPEB Plan

		Long-Term
		Expected
	Target	Real Rate of
Asset Class	Allocation	Return
Large Cap Domestic Equity	33%	6.1%
Small Cap Domestic Equity	6%	7.0%
International Equity	21%	6.5%
Core-Plus Fixed Income	40%	1.2%

Discount rate

For pension plans, GASB Statement No. 67 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total Pension Liability. This rate considers the ability of the System to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The current employer and employee fixed rate contributions are assumed to be made in each future year. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate (SDR) that reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) a tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For 2021, the expected rate of return on pension plan investments is 7.00%; the municipal bond rate is 1.92% (based on the most recent date available on or before the measurement date of the "20-year Municipal GO Index" from Fidelity); and the resulting Single Discount Rate is 7.00%.

For 2020, the expected rate of return on pension plan investments is 7.00%; the municipal bond rate is 2.45% (based on the most recent date available on or before the measurement date of the "20-year Municipal GO Index" from Fidelity); and the resulting Single Discount Rate is 4.64%.

The discount rate used to measure the total OPEB liability for 2021 was 6.50% and for 2020 was 6.50%. The projection of cash flows used to determine the discount rate assumed plan member and statutory/Board approved employer contributions will be made at rates equal to those based on the July 1, 2021 and 2020 OPEB actuarial valuation reports. For this purpose, only employer contributions that are intended to fund benefits of current OPEB members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries are not included. Based on those assumptions, the OPEB fiduciary net position was projected to be sufficient to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB investments was applied to all periods of projected benefit payments to determine the total OPEB liability for both years.

Sensitivity of the Employer's proportionate share of the net pension and OPEB liability to changes in the discount rate

The following presents RIO's proportionate share of the net pension and OPEB liability calculated using the current discount rate, as well as what the RIO's proportionate share of the net pension and OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

2022

	1% Decrease	Current Discount	1% Increase		
	(6.00%)	Rate (7.00%)	(8.00%)		
RIO's net pension liability	\$ 2,346,875	\$ 1,475,710	\$ 750,328		
	1% Decrease	Current Discount	1% Increase		
	(5.50%)	Rate (6.50%)	(7.50%)		
RIO's net OPEB liability	109,100	73,561	43,489		

2021					
	1% Decrease	1% Decrease Current Discount			
	(3.64%)	Rate (4.64%)	(5.64%)		
RIO's net pension liability	\$ 5,744,908	\$ 4,427,931	\$ 3,350,323		
	1% Decrease	Current Discount	1% Increase		
	(5.50%)	Rate (6.50%)	(7.50%)		
RIO's net OPEB liability	135,189	103,078	75,924		

Sensitivity for Healthcare Cost Trend Rates

The benefit provided by the North Dakota retiree health insurance credit fund is a fixed dollar subsidy and is not affected by the healthcare cost trend. Therefore, a sensitivity analysis was not performed.

Pension and OPEB plan fiduciary net position

Detailed information about the pension and OPEB plans' fiduciary net position is available in the separately issued NDPERS Annual Comprehensive Financial Report. This report can be accessed on the NDPERS website at https://www.ndpers.nd.gov/about/financial-actuarial-reports/annual-report-archive

Note 9 - Related Parties

As stated in Note 1, RIO is an agency of the State of North Dakota; as such, other agencies of the state are related parties.

Note 10 - Contingencies/Litigation

The State Investment Board was named as a defendant in a case arising out of the Tribune bankruptcy proceedings, relating to securities that were purchased by external investment managers in one or more portfolios held by the SIB on behalf of its investment client funds. Outside counsel was retained, in addition to assistance received from the ND Office of Attorney General. On July 15, 2019, the Litigation Trustee filed a Notice of Appeal to the Second Circuit, appealing the various judgments of the US District Court that dismissed his claims against defendants in the Action and denying leave to amend his complaint to add a constructive fraudulent transfer claim. The Second Circuit held oral argument on August 24, 2020, and on August 20, 2021, upheld the dismissal. The Litigation Trustee then filed a petition for an *en banc* rehearing by the full Second Circuit of the Court's August 20, 2021, decision which was denied on October 7, 2021. On February 22, 2022, the U.S. Supreme Court declined to review the Second Circuit's latest decision leaving all action dismissed in favor of the SIB and co-defendants. No further activity is expected in the case.

REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in Net Pension Liability and Related Ratios North Dakota Teachers' Fund for Retirement Last 10 Fiscal Years* (Dollars in thousands)

	2022	2021	2020		2019		2018		2017		2016		2015		2014
Total pension liability															
Service cost	\$ 92,336	\$ 87,088	\$ 80,591	\$	77,756	\$	78,041	\$	75,476	\$	68,239	\$	60,618	\$	56,752
Interest	311,929	300,698	306,791		296,876		287,375		276,412		265,440		249,064		237,821
Changes of benefit terms	-	-	-		-		-		-		-		-		-
Differences between expected and actual experience	(8,505)	8,366	(20,732)		(23,495)		(27,939)		(10,749)		(8,093)		2,209		9,347
Changes of assumptions	-	-	51,813		-		-		-		-		171,325		-
Benefit payments, including refunds of member contributions	 (251,847)	 (241,128)	 (230,851)	((221,228)		(207,979)		(196,516)		(185,969)		(172,239)		(162,259)
Net change in total pension liability	143,913	155,024	187,612		129,909		129,498		144,623		139,617		310,977		141,661
Total pension liability - beginning	 4,336,060	4,181,036	 3,993,424	3	,863,515	3	3,734,017	3	,589,394	3	3,449,777	3	3,138,800	2	2,997,139
Total pension liability - ending (a)	\$ 4,479,973	\$ 4,336,060	\$ 4,181,036	\$3	,993,424	\$3	3,863,515	\$3	,734,017	\$3	3,589,394	\$3	3,449,777	\$ 3	3,138,800
Plan fiduciary net position															
Contributions - employer	\$ 100,331	\$ 98,264	\$ 93,032	\$	89,445	\$	86,676	\$	86,059	\$	82,840	\$	78,422	\$	62,355
Contributions - member	92,462	90,557	85,735		82,429		79,878		79,309		76,343		72,268		56,555
Contributions - purchased service credit	2,017	2,559	2,175		1,917		2,181		2,553		2,768		1,601		2,034
Contributions - other	25	126	159		159		194		236		45		172		48
Net investment income	(198,881)	684,173	86,206		135,043		211,345		266,688		8,239		73,205		294,246
Benefit payments, including refunds of member contributions	(251,847)	(241,128)	(230,851)	((221,228)		(207,979)		(196,516)		(185,969)		(172,239)		(162,259)
Administrative expenses	 (2,592)	 (2,678)	(2,095)		(2,251)		(2,129)		(2,173)		(1,852)		(1,923)		(1,586)
Net change in plan fiduciary net position	(258,485)	631,873	34,361		85,514		170,166		236,156		(17,586)		51,506		251,393
Plan fiduciary net position - beginning **	 3,282,405	2,650,532	2,616,171	2	,530,657	2	2,360,491	2	,124,335	2	2,141,921	2	2,090,415		1,839,584
Plan fiduciary net position - ending (b)	\$ 3,023,920	\$ 3,282,405	\$ 2,650,532	\$2	,616,171	\$2	2,530,657	\$2	,360,491	\$2	2,124,335	\$ 2	2,141,921	\$ 2	2,090,977
Plan's net pension liability - ending (a) - (b)	\$ 1,456,053	\$ 1,053,655	\$ 1,530,504	\$1	,377,253	\$1	1,332,858	\$1	,373,526	\$1	1,465,059	\$ 1	,307,856	\$	1,047,823
Plan fiduciary net position as a percentage of the total pension liability	67.5%	75.7%	63.4%		65.5%		65.5%		63.2%		59.2%		62.1%		66.6%
Covered payroll	786,912	770,700	729,661		701,528		679,809		674,971		649,725		615,105		580,053
Plan's net pension liability as a percentage of covered payroll	185.0%	136.7%	209.8%		196.3%		196.1%		203.5%		225.5%		212.6%		180.6%

Notes to Schedule:

* Complete data for this schedule is not available prior to 2014.

** Restated in 2015 due to GASB 68 implementation.

Changes of assumptions:

In 2020, amounts reported as changes of assumptions resulted primarily from a decrease in the investment return assumption from 7.75% to 7.25%, the inflation assumption lowered from 2.75% to 2.30%, lower individual salary increases, and an updated mortality improvement scale.

In 2015, amounts reported as changes of assumptions resulted primarily from a decrease in the investment return assumption from 8% to 7.75% and an updated mortality improvement scale.

Schedule of Employer Contributions North Dakota Teachers' Fund for Retirement Last 10 Fiscal Years (Dollars in thousands)

Fiscal Year	Actuarially determined contribution	Contributions in relation to the actuarially determined contribution	Contribution deficiency (excess)	Covered payroll	Contributions as a percentage of covered payroll
2013	52,396	59.301	(6,905)	551,656	10.75%
	,	,	())	,	
2014	59,513	62,355	(2,842)	580,053	10.75%
2015	71,168	78,422	(7,254)	615,105	12.75%
2016	84,724	82,840	1,884	649,725	12.75%
2017	89,231	86,059	3,172	674,971	12.75%
2018	88,307	86,676	1,631	679,809	12.75%
2019	90,778	89,445	1,333	701,528	12.75%
2020	93,688	93,032	656	729,661	12.75%
2021	101,655	98,264	3,391	770,700	12.75%
2022	97,341	100,331	(2,990)	786,912	12.75%

Notes to Schedule

Valuation Date: Actuarially determined contributions for each fiscal year are based on the actuarial valuation as of the beginning of the year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age
Amortization method	Level percentage of payroll, closed
Remaining amortization period	22 years
Asset valuation method	5-year smoothed market
Inflation 7/1/2015.	2.30%; decreased from 2.75% prior to 7/1/2020 and from 3% prior to
Salary increases	3.80% - 14.80% including inflation and productivity; 4.25% - 14.5% prior to 7/1/2020; 4.5% - 14.75% prior to 7/1/2015.
Investment rate of return	7.25%, net of investment expenses, including inflation; rate was decreased from 7.75% beginning $7/1/2020$ and decreased from 8% beginning $7/1/2015$.
Retirement age	In the 2020 and 2015 valuations, rates of retirement were changed to better reflect anticipated future experience.
Mortality	In the 2020 valuation, the PubT-2010 pre-retirement, retiree and contingent survivor tables were adopted and for disabled members, PubNS-2010 tables were adopted; all with generational improvement.
	In the 2015 valuation, assumed life expectancies were adjusted as a result of adopting the RP-2014 mortality tables with generational improvement. In prior years, those assumptions were based on percentages of GRS post termination non-disabled tables and RP-2000 disabled-life tables.

Schedule of Investment Returns North Dakota Teachers' Fund for Retirement Last 10 Fiscal Years

ANNUAL MONEY-WEIGHTED RATE OF RETURN, NET OF INVESTMENT EXPENSES

2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
-6.17%	26.36%	3.37%	5.46%	9.15%	12.81%	0.39%	3.56%	16.35%	13.60%

Schedule of Employer's Share of Net Pension and OPEB Liability ND Public Employees Retirement System Last 10 Fiscal Years* (Dollars in thousands)

	2022	2021	2020	2019	2018	2017	2016	2015
RIO's proportion of NDPERS net pension liability (asset)	0.141582%	0.140747%	0.151523%	0.153507%	0.156317%	0.152969%	0.145546%	0.121849%
RIO's proportion of NDPERS net OPEB liability (asset)	0.132262%	0.122537%	0.141245%	0.144121%	0.147503%			
RIO's proportionate share of NDPERS net pension liability (asset)	\$ 1,476	\$ 4,428	\$ 1,776	\$ 2,591	\$ 2,513	\$ 1,491	\$ 990	\$ 773
RIO's proportionate share of NDPERS net OPEB liability (asset)	74	103	113	114	117			
RIO's covered payroll	\$ 1,843	\$ 1,631	\$ 1,584	\$ 1,567	\$ 1,596	\$ 1,507	\$ 1,377	\$ 1,026
RIO's proportionate share of NDPERS net pension liability (asset) as a percentage of its covered payroll	80.07%	271.49%	112.12%	165.35%	157.46%	98.94%	71.90%	75.34%
RIO's proportionate share of NDPERS net OPEB liability (asset) as a percentage of its covered payroll	3.99%	6.32%	7.16%	7.28%	7.31%			
NDPERS Plan fiduciary net position as a percentage of the total pension liability	78.26%	48.91%	71.66%	62.80%	61.98%	70.46%	77.15%	77.70%
NDPERS Plan fiduciary net position as a percentage of the total OPEB liability	76.63%	63.38%	63.13%	61.89%	59.78%			

*Complete data for this schedule is not available prior to 2015 for pension liability and prior to 2018 for OPEB liability. Amounts presented for each fiscal year have a measurement date of the previous fiscal year end.

Schedule of Employer Pension and OPEB Contributions ND Public Employees Retirement System Last 10 Years* (Dollars in thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014
RIO's Statutorily required pension contributions RIO's Statutorily required OPEB contributions	\$ 119 14	\$ 131 21	\$ 116 19	\$ 113 18	\$ 112 18	\$ 114 18	\$ 107	\$98	\$ 73
RIO's pension contributions in relation to the statutory required contribution	119	131	116	113	112	114	107	98	73
RIO's OPEB contributions in relation to the statutory required contribution	14	21	19	18	18	18			
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RIO's Covered payroll	\$1,605	\$1,843	\$1,631	\$1,584	\$1,567	\$1,596	\$1,507	\$1,377	\$1,026
RIO's pension contributions as a percentage of covered payroll	7.40%	7.12%	7.12%	7.12%	7.12%	7.12%	7.12%	7.12%	7.12%
RIO's OPEB contributions as a percentage of covered payroll	0.86%	1.14%	1.14%	1.14%	1.14%	1.14%			

*Complete data for this schedule is not available prior to 2014 for pension contributions and 2017 for OPEB contributions.

_	Pension Pool Part	icipants				Insurance PoolParticipants								
	Public	Bismarck	Bismarck	Cityof					P etro le um	Insurance			R is k	
	Employees	City	City	Grand Forks	Cityof	Wo rk fo rc e	State		Tank	Regulatory	Cultural		Mgmt	
	Retirement	Employee	P o lic e	Emplo yee	Grand Forks	Safety &	Fire &	State	Release	Trust	Endowment	R is k	Workers'	
_	S ys te m	P ens io n P lan	Pension Plan	Pension Plan	P ark District	Insurance	Tornado	Bonding	Comp.Fund	Fund	Fund	Mgmt	Comp	
Assets:														
Investments														
Globalequities	\$2,044,581,165	\$54,068,002	\$24,335,393	\$43,438,740	\$4,651,783	\$359,575,291	\$6,658,365	s -	s -	\$1,992,041	\$286,172	\$ 1,198,102	\$ 1,2 10,608	
Global fixed income	868,738,258	39,810,797	13,776,796	17,459,588	2,162,240	1,285,439,321	10,322,911	1,953,494	2,891,608	2,297,999	191,731	2,534,023	1,949,701	
Globalrealassets	757,923,432	24,126,885	9,808,915	11,125,247	1,759,010	382,377,020	-	-	-	-	27,252	-	-	
Cash equivalents	19,927,319	328,054	135,700	749,456	27,274	18,018,760	1,912,242	1,63 1,998	2,971,279	2,323,270	15,191	199,087	96,868	
Total investments	3,691,170,174	118,333,738	48,056,804	72,773,031	8,600,307	2,045,410,392	18,893,518	3,585,492	5,862,887	6,613,310	520,346	3,931,212	3,257,177	
Invested sec lending collateral	23,611,778	607,376	234,184	451,062	109,769	16,670,350	154,226	22,829	33,533	38,078	3,885	36,368	29,282	
Investment income receivable	8,576,476	249,978	97,275	105,566	16,084	9,954,019	138,890	24,060	52,847	7,983	2 18	48,718	4,490	
Operating Cash	103,993		-	-		69,575	1,5 13	1,231	1,290	914	306	1,269	1,196	
Miscellaneous receivable	6,957	-	-	-	-	3,790	38	7	11	6	1	8	6	
Due from other state agencies	120	-	-	-	-	65	-	-	-	-	-	-	-	
Totalassets	3,723,469,498	119,191,092	48,388,263	73,329,659	8,726,160	2,072,108,191	19,188,185	3,633,619	5,950,568	6,660,291	524,756	4,017,575	3,292,151	
Deferred outflows of resources														
Related to pensions	194,755	-	-	-	-	127,321	1,482	220	4 15	123	31	331	335	
Lia bilities :														
Investment expenses payable	1,642,440	54,744	20,882	27,377	4,013	701,857	5,170	1,114	1,675	1,038	52	834	536	
Securities lending collateral	23,611,778	607,376	234,184	451,062	109,769	16,670,350	154,226	22,829	33,533	38,078	3,885	36,368	29,282	
Accounts payable	64,182	-	-	-	-	34,959	343	59	96	52	9	69	56	
Accrued expenses	174,730	-	-	-	-	143,917	2,336	268	613	75	32	541	544	
Miscellaneous payable	-	6,442	2,627	3,969	477	-	-	-	-	-	-	-	-	
Due to other state funds	-	-	-	-	-	-	-	-	-	-	-	-	-	
Due to other state agencies	1,751	-	-	. <u> </u>		954	9	2	3	1	-	2	2	
To tal liabilities	25,494,881	668,562	257,693	482,408	114,259	17,552,037	162,084	24,272	35,920	39,244	3,978	37,814	30,420	
Deferred inflows of resources														
Related to pensions	\$ 380,815	s -	s -	\$ -	s -	\$220,986	\$2,248	\$385	\$639	\$278	\$ 55	\$461	\$416	
Fiduciary net position held in trust for external investment pool participants	\$ 3,697,788,557	\$ 118,522,530	\$ 48,130,570	\$ 72,847,251	\$ 8,611,901	\$ 2,054,462,489	\$ 19,025,335	\$ 3,609,182	\$ 5,914,424	\$ 6,620,892	\$ 520,754	\$ 3,979,631	\$ 3,261,650	
Fach participant unit is valued at \$100														

Each participant unit is valued at \$100 Participant units outstanding 3,697,788,557 118,522,530 48,130,570 72,847,251 8,611,901 2,054,462,489 19,025,335 3,609,182 5,914,424 6,620,892 520,754 3,979,631 3,261,650

North Dakota Retirement and Investment Office Combining Statement of Net Position – Investment Trust Funds – Fiduciary Funds June 30, 2022 (with Summarized Comparative Totals for 2021)

nsurance Pooll	1									Individual Investme	ent Accounts				
ND Veterans'	ND			Cityof	Cityof		Lewis &Clark	Atto rne y	ND University		Job		PERS		
Cemetery	Ass'n.of	PERS	Budget	Bismarck	Fargo	State	Interpretive	General	System		Service	Tobacco	Retiree		
Trust	Counties	Gro up	Stabilizatio n	De ferre d	Fargo Do me	Bo ard o f	Center	Settlement	Capital	Legacy	o f No rth	P revention and	Health	To	tals
Fund	Fund	Insurance	Fund	Sick Leave	Fund	Medicine	Endowment	Fund	Building Fund	Fund	Dakota	ControlFund	Credit Fund	2022	2021
\$210,764	\$2,385,056	s -	s -	\$223,841	\$20,061,206	\$742,835	\$279,262	s -	s -	\$3,697,184,218	\$ 17,152,361	s -	\$96,887,675	\$ 6,377,122,880	\$ 7,923,977,03
145,915	4,205,797	30,368,921	708,843,835	482,692	15,520,887	1,828,932	508,769	2,923,408	1,587,036	2,832,397,072	68,585,665	-	54,944,364	5,971,871,760	6,287,302,9
64,286	-	-	-	-	3,996,646	172,808	-		-	1,332,674,424	-	-	-	2,524,055,925	2,261,103,56
1,028	205,353	1,635,593	5,453,484	36,988	401,836	4,769	8,651	29,718	15,459	57,057,326	518,444	-	498,576	114,203,723	253,103,89
421,993	6,796,206	32,004,514	714,297,319	743,521	39,980,575	2,749,344	796,682	2,953,126	1,602,495	7,919,313,040	86,256,470		152,330,615	14,987,254,288	16,725,487,48
2,688	61,478	400,681	9,351,304	6,691	301,656	25,076	7,334	38,415	20,846	75,405,933	-		-	127,624,822	75,402,09
19 1	3,503	129,271	3,375,438	1,670	5 1,4 12	792	213	2,414	575	29,167,627	199		532	52,010,441	50,014,69
191	5,505	129,271		1,070	5 1,4 12	192	215	2,414	373		199	-	552		
-	-		23,482	-	-	-	-	-		221,403	-	-	-	426,172	463,33
-	-	-	1,2 5 4	-	-	-	-	-	-	14,538	-	-	-	26,616	24,1
-	-	-	22	-	-	-	-	-	-	250	-	-	-	457	
424,872	6,861,187	32,534,466	727,048,819	751,882	40,333,643	2,775,212	804,229	2,993,955	1,623,916	8,024,122,791	86,256,669	-	152,331,147	15,167,342,796	16,851,391,79
-	-	-	20,047	-		-	-	-		381,411	-	-	-	726,471	1,172,78
65	1,835	11,625	268,111	249	12,492	865	243	1,074	594	1,899,130	77,147	-	127,433	4,862,595	11,428,22
2,688	61,478	400,681	9,351,304	6,691	301,656	25,076	7,334	38,415	20,846	75,405,933	-	-	-	127,624,822	75,402,0
-	-	-	11,567	-	-		-	-	-	134,123	-	-	-	245,515	269,77
-	-	-	5,003	-	-	-	-	-	-	196,191	-	-	-	524,250	2,061,22
176	377	1,655	-	250	2,360	250	250	250	250	-	4,608	-	8,796	32,737	28,99
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	871,687,38
-		<u> </u>	3 16	-		-	-	-	-	3,658	-	-	-	6,698	3,9
2,929	63,690	413,961	9,636,301	7,190	316,508	26,191	7,827	39,739	21,690	77,639,035	81,755		136,229	133,296,617	960,881,6
s -	s -	s -	\$73,340	s -	s -	s -	\$ -	s -	s -	\$785,675	s -	s -	s -	1,465,298	326,33
·	•	-	015010		<u> </u>	Ŷ		-	Ŷ	\$100,015		Ŷ	-	1,103,2270	
421943	\$ 6797497	\$ 32 120 505	\$ 717 359 225	\$ 744.692	\$ 40.017 13.5	\$ 2 749 021	\$ 796.402	\$ 2 954 216	\$ 1602.226	\$ 7,946,079,492	\$ 86,174,914	\$	\$ 152,194,918	\$ 15,033,307,352	\$ 15 891356 6
, 124,713	÷ 0,771,777	÷ 52,120,205	لا عکوم د دو ۱ د ۱ پ	Ψ / Τ Τ,072	÷ +0,017,00	ψ 2,/ 1 /,021	÷ 770,402	÷ 2,757,210	÷ 1,002,220	ψ 1,740,017,472	\$ 00,1/ 1 ,7H		÷ 122,177,710	26 <u>لو ۱ 0 لو د د 0 و د م</u>	φ το <u>το</u> το <u>τ</u> ο σ το <u>τ</u> ο <u></u>

	Pension Pool Pa	rticipants				Insurance PoolPa	articipants						
	Public	Bismarck	Bismarck	Cityof	Cityof				P etro leum	Ins urance			R is k
	Employees	City	City	Grand Forks	Grand Forks	Wo rk fo rc e	State		Tank	R e gulato ry	Cultural		Mgmt
	Retirement	Emplo yee	P o lic e	Em plo ye e	P ark Dis trict	Safety &	Fire &	State	Release	Trust	Endo wm ent	R is k	Workers'
	System	P ension P lan	Pension Plan	Pension Plan	P ension P lan	Insurance	Tornado	Bonding	Comp.Fund	Fund	Fund	Mgmt	Comp
Additions:													
Investment income:													
Net change in fair value of investments	\$ (323,796,192)	\$ (9,403,637)	\$ (3,823,204)	\$ (6,972,005)	\$ (884,269)	\$ (248,699,445)	\$ (2,854,462)	\$ (288,730)	\$ (425,612)	\$ (412,257)	\$ (72,271)	\$ (537,354)	\$ (413,820)
Interest, dividends and other income	70,542,585	2,377,750	935,524	1,390,817	220,803	48,570,716	426,106	51,932	80,952	53,618	11,009	87,650	74,634
	(253,253,607)	(7,025,887)	(2,887,680)	(5,581,188)	(663,466)	(200,128,729)	(2,428,356)	(236,798)	(344,660)	(358,639)	(61,262)	(449,704)	(339,186)
Less investment expenses	9,133,872	300,443	122,917	178,403	24,857	3,887,300	34,285	3,022	4,479	4,252	1,165	6,118	5,277
Net investment income	(262,387,479)	(7,326,330)	(3,010,597)	(5,759,591)	(688,323)	(204,016,029)	(2,462,641)	(239,820)	(349,139)	(362,891)	(62,427)	(455,822)	(344,463)
Securities lending activity:													
Securities lending income	167,467	4,721	1,916	3,568	526	83,573	950	62	92	15 1	27	124	110
Less Securities lending expenses	(33,473)	(943)	(383)	(712)	(105)	(16,701)	(190)	(14)	(18)	(31)	(3)	(26)	(22)
Net securities lending income	133,994	3,778	1,533	2,856	421	66,872	760	48	74	120	24	98	88
Purchase of units (\$ 1 per unit)				4,530,940	419,156	4,000,000	5,560,313			5,891,765		500,000	1,000,000
To tal Additio ns	(262,253,485)	(7,322,552)	(3,009,064)	(1,225,795)	(268,746)	(199,949,157)	3,098,432	(239,772)	(349,065)	5,528,994	(62,403)	44,276	655,625
Deductions:													
Administrative Expenses	528,044	-	-	-	-	285,779	2,898	981	1,078	984	903	985	982
Redemption of units (\$1per unit)	61,305,000	2,500,000	750,000	7,640,482	485,665	55,000,000	6,870,000	-	-	6,040,098	28,000	450,000	1,700,000
To tal Deductions	61,833,044	2,500,000	750,000	7,640,482	485,665	55,285,779	6,872,898	981	1,078	6,041,082	28,903	450,985	1,700,982
Change in fiduciary net position	(324,086,529)	(9,822,552)	(3,759,064)	(8,866,277)	(754,411)	(255,234,936)	(3,774,466)	(240,753)	(350,143)	(512,088)	(91,306)	(406,709)	(1,045,357)
Fiduciary net position:													
Beginning of year	4,021,875,086	128,345,082	51,889,634	81,713,528	9,366,312	2,309,697,425	22,799,801	3,849,935	6,264,567	7,132,980	612,060	4,386,340	4,307,007
End of year	\$3,697,788,557	\$ 118,522,530	\$ 48,130,570	\$ 72,847,251	\$ 8,611,901	\$ 2,054,462,489	\$ 19,025,335	\$ 3,609,182	\$ 5,914,424	\$6,620,892	\$ 520,754	\$ 3,979,631	\$ 3,261,650

North Dakota Retirement and Investment Office Combining Statement of Changes in Net Position – Investment Trust Funds – Fiduciary Funds Year Ended June 30, 2022 (with Summarized Comparative Totals for 2021)

Insurance Poo	l Partic ipants									Individual Investm	ent Accounts				
ND Veterans'	ND			Cityof	Cityof		Lewis &Clark	Atto rne y	ND University				PERS	-	
Cemetery	Ass'n of	PERS	Budget	Bismarck	Fargo	State	Interpretive	General	System		Job Service	Tobacco	Retiree		
Trust	Counties	Group	Stabilization	De fe rre d	Fargo Do me	Board of	Center	Settlement	Capital	Legacy	o f No rth	P revention and	Health	To	als
Fund	Fund	Insurance	Fund	Sick Leave	Fund	Medicine	Endowment	Fund	Building Fund	Fund	Dakota	ControlFund	Credit Fund	2022	2021
\$ (64,213)	\$ (1077,670)	\$ (2,420,582)	\$ (58,320,756)	\$ (114,900)	\$ (6,685,193)	\$ (383,821)	\$ (132,758)	\$ (266,261)	\$ (196,129)	\$ (1,016,618,213)	\$ (7,105,726)	s -	\$ (30,112,037)	\$ (1,722,081,517)	\$ 2,618,257,668
8,106	147,667	765,365	17,633,373	17,212	895,252	59,680	17,079	69,492	32,740	157,328,175	1,862,254	-	3,885,504	307,545,995	282,043,704
(56,107)	(930,003)	(1,655,217)	(40,687,383)	(97,688)	(5,789,941)	(324,141)	(115,679)	(196,769)	(163,389)	(859,290,038)	(5,243,472)	-	(26,226,533)	(1,414,535,522)	2,900,301,372
1,569	13,148	42,310	907,591	2,312	104,325	6,339	2,488	4,950	2,539	16,515,006	308,015	-	537,631	32,154,613	39,305,773
(57,676)	(943,151)	(1,697,527)	(41,594,974)	(100,000)	(5,894,266)	(330,480)	(118,167)	(201,719)	(165,928)	(875,805,044)	(5,551,487)	-	(26,764,164)	(1,446,690,135)	2,860,995,599
26	343	1342	3 1.4 19	36	2,543	12.1	15	124	66	507.628				806,990	1002.370
26 (4)	(68)	(267)	(6,279)	(10)	2,543 (508)	131 (26)	45 (12)	(25)	(13)	(101,477)	-			(161,310)	(200,426
(.)		(==;)	(0,277)	()	(((() ())	(= 0)	()	(-+)	(4)	(,)		-		(10 40 10)	(= * * *, * = *
22	275	1,075	25,140	26	2,035	105	33	99	53	406,151	-	-	-	645,680	801,944
99,000	-	168,170,000	9,646,249	-	-	300,000	-	2,829,692	3,340,902	707,344,657	-	-	5,076,000	918,708,674	635,230,202
41,346	(942,876)	166,473,548	(31,923,585)	(99,974)	(5,892,231)	(30,375)	(118,134)	2,628,072	3,175,027	(168,054,236)	(5,551,487)	-	(21,688,164)	(527,335,781)	3,497,027,745
		-	91,938		-		-		-	1,068,453	-	-	-	1,983,025	2,158,61
-	-	168,900,000	-	-	3,800,000	-	-	598,392	1,572,801	-	4,864,873	15.8	6,225,000	328,730,469	1,266,579,693
-	-	168,900,000	91,938	-	3,800,000	-		598,392	1,572,801	1,068,453	4,864,873	158	6,225,000	330,713,494	1,268,738,304
41,346	(942,876)	(2,426,452)	(32,015,523)	(99,974)	(9,692,231)	(30,375)	(118,134)	2,029,680	1,602,226	(169,122,689)	(10,416,360)	(158)	(27,913,164)	(858,049,275)	2,228,289,44
380,597	7,740,373	34,546,957	749,374,748	844,666	49,709,366	2,779,396	914,536	924,536	-	8,115,202,181	96,591,274	158	180,108,082	15,891,356,627	13,663,067,186
\$ 421.943	\$ 6,797,497	\$ 32,120,505	\$ 717.359.225	\$ 744.692	\$ 40.017.135	\$ 2,749,021	\$ 796,402	\$ 2,954,216	\$ 1,602,226	\$ 7.946.079.492	6 07 174 014	s -	\$ 152,194,918	\$ 15.033.307.352	\$ 15.891356.627

North Dakota Retirement and Investment Office Pension and Investment Trust Funds – Schedule of Administrative Expenses Years Ended June 30, 2022 and 2021

	Pensio	n Trust	Investme	ent Trust
	2022	2021	2022	2021
Salaries and wages:				
Salaries and wages	\$ 715,193	\$ 853,912	\$ 1,029,330	\$ 1,039,581
Fringe benefits	266,732	705,235	345,578	619,462
Total salaries and wages	981,926	1,559,147	1,374,908	1,659,043
Operating expenses:				
Travel	11,262	2,096	33,400	4,096
Supplies	2,868	1,542	2,205	1,146
Postage and Mailing Services	23,141	28,162	2,684	17,341
Printing	7,278	7,633	377	3,201
Small Office Equipment and Furniture	411	9,853	229	7,356
Insurance	627	523	565	371
Rent/Lease of Building Space	60,273	52,129	48,998	36,236
Repairs	343	167	311	118
Information Technology and Communications	264,661	96,712	82,068	23,356
IT Contractual Services	467,134	142,172	524,942	521,165
Professional Development	14,024	10,294	6,683	5,219
Operating Fees and Services	21,318	16,260	36,827	21,904
Professional Fees and Services	23,456	8,498	82,485	13,042
Consultant Services	433,910	500,192	64,702	86,212
Total operating expenses	1,330,706	876,233	886,476	740,763
Pension trust portion of investment program expenses	278,358	241,195	(278,358)	(241,195)
Depreciation	1,350	1,800		
Total administrative expenses	2,592,340	2,678,375	1,983,025	2,158,611
Capital assets purchased	680,999			
Less - nonappropriated items:				
Consultant Services	235,531	203,496	64,702	86,212
Other operating fees paid under continuing appropriation	112,952	113,534	542,265	563,229
Depreciation	1,350	1,800	-	-
Retainage Payable	29,876	-	-	-
Accrual adjustments to employee benefits	6,799	365,693	33,727	292,285
Total nonappropriated items	386,508	684,523	640,694	941,726
Total appropriated administrative expenses	\$ 2,886,831	\$ 1,993,852	\$ 1,342,332	\$ 1,216,885

The accompanying notes are an integral part of these statements.

North Dakota Retirement and Investment Office Pension and Investment Trust Funds – Schedule of Consultant Expenses Years Ended June 30, 2022 and 2021

	Pensio	n Trust	Investment Trust		
	2022	2021	2022	2021	
Actuary fees: Segal Consulting	\$ 122,505	\$ 93,241	\$ -	\$-	
Auditing/Accounting fees: CliftonLarsonAllen LLP	84,999	77,659	22,460	13,855	
Project management fees: Segal Consulting	185,909	292,258	-	-	
Disability consulting fees: Sanford Health	150	-	-	-	
Legal fees:					
K&L Gates LLP	10,649	13,246	13,936	18,013	
Jackson Walker LLP	9,204	7,099	15,487	37,641	
ND Attorney General	20,494	16,689	12,819	16,703	
Total legal fees:	40,347	37,034	42,242	72,357	
Total consultant expenses	\$ 433,910	\$ 500,192	\$ 64,702	\$ 86,212	

North Dakota Retirement and Investment Office Pension and Investment Trust Funds – Schedule of Investment Expenses Years Ended June 30, 2022 and 2021

	Pensio	n Trust	Investm	ent Trust
	2022	2021	2022	2021
Investment managers' fees:				
Global equity managers	\$ 1,082,859	\$ 1,474,059	\$ 1,482,461	\$ 1,909,859
Domestic large cap equity managers	621,946	1,485,841	3,258,391	8,783,440
Domestic small cap equity managers	925,653	894,545	5,993,667	5,898,203
International equity managers	1,068,362	944,488	8,552,582	8,403,141
Emerging markets equity managers	485,198	883,349	810,411	1,453,717
Domestic fixed income managers	1,586,971	1,981,147	14,784,472	17,676,932
Below investment grade fixed income managers	3,376,915	4,089,829	4,759,365	5,641,515
Diversified real assets managers	-	-	17,487,844	15,015,782
Real estate managers	3,001,837	4,038,160	7,053,553	7,851,454
Infrastructure managers	5,365,053	5,179,679	7,152,670	6,891,614
Timber managers	296,841	334,301	360,769	406,296
Private equity managers	4,099,850	7,231,329	6,142,169	8,838,471
Short term fixed income managers	-	-	867,223	880,375
Cash & equivalents managers	29,166	25,059	172,683	177,118
Balanced account managers			1,173,541	1,129,687
Total investment managers' fees	\$21,940,651	\$28,561,786	\$80,051,801	\$ 90,957,604
Custodian fees	268,454	249,724	1,329,330	1,419,325
Investment consultant fees	109,610	169,820	460,346	725,789
SIB Service Fees			81,809	78,284
Total investment expenses	\$22,318,715	\$ 28,981,330	\$81,923,286	\$ 93,181,002
Reconciliation of investment expenses to financial stat	ements			
r r	2022	2021	2022	2021
Investment expenses as reflected in the financial statements	\$ 6,924,716	\$ 8,388,601	\$32,154,613	\$ 39,305,773

Plus investment management fees included in investment in	come	lus investment management fees included in investment income							
Domestic large cap equity managers	298,153	527,679	1,728,963	2,018,196					
Domestic small cap equity managers	-	-	-	-					
International equity managers	362,238	191,418	2,790,698	2,044,266					
Emerging markets equity managers	152,835	178,302	254,438	294,471					
Domestic fixed income managers	832,128	1,253,598	8,925,752	11,860,842					
Below investment grade fixed income managers	2,980,786	3,692,447	4,296,493	5,171,706					
Diversified real assets managers	-	-	15,829,379	12,818,627					
Real estate managers	1,342,660	2,622,180	2,199,487	3,834,000					
Infrastructure managers	5,028,508	4,561,475	6,703,285	6,071,866					
Timber managers	296,841	334,301	360,769	406,296					
Private equity managers	4,099,850	7,231,329	6,142,169	8,838,471					
Cash equivalents managers	-	-	155,167	152,877					
Balanced account managers			382,073	363,611					
Investment expenses per schedule	\$22,318,715	\$ 28,981,330	\$81,923,286	\$ 93,181,002					

	Approved 2021-2023 Appropriation	2021-2023 Appropriation Adjustment	Adjusted 2021-2023 Appropriation	Fiscal 2022 Expenses	Unexpended Appropriations
All Fund Types:					
Salaries and wages	\$ 5,053,977	\$ 1,781,862	\$ 6,835,839	\$2,316,308	\$ 4,519,531
Operating expenses	1,248,528	2,393,875	3,642,403	897,298	2,745,105
Capital Assets	-	6,300,000	6,300,000	934,913	5,365,088
Contingency	100,000		100,000	80,645	19,355
Total	\$ 6,402,505	\$ 10,475,737	\$ 16,878,242	\$4,229,163	\$ 12,649,079

NOTE: Only those expenses for which there are appropriations are included in this statement.

Reconciliation of Administrative Expenses to Appropriated Expenditures

	2022
Administrative expenses as reflected in the financial statements	\$4,575,365
Plus:	
Capitalized software purchases - appropriated	680,999
Less appropriated accrual expense	
Retainage Payable	(29,876)
Less expenses paid under continuing appropriation:	
Consulting Services*	(300,233)
Other operating fees paid under continuing appropriations*	(655,217)
Depreciation expense	(1,349)
Changes in benefit accrual amounts	(40,526)
Total appropriated expenses	\$4,229,164

* North Dakota Century Code 21-10-06.2 and 15-39.1-05.2 provide authorization for the continuing appropriation.

Special Comments Requested by the Legislative Audit and Fiscal Review Committee Year Ended June 30, 2022

The Legislative Audit and Fiscal Review Committee requires that certain items be addressed by auditors performing audits of state agencies. These items and our responses are as follows:

Audit Report Communications

1. What type of opinion was issued on the financial statements?

Unmodified

2. Was there compliance with statutes, laws, rules, regulations under which the agency was created and is functioning?

Yes

3. Was internal control adequate and functioning effectively?

Yes, we did not identify a control deficiency required to be reported by professional standards.

4. Were there any indications of lack of efficiency in financial operations and management of the agency?

No

5. Has action been taken on findings and recommendations included in prior year reports?

There were no prior year findings or recommendations.

6. Was a management letter issued? If so, provide a summary below, including any recommendations and the management response.

No

Audit Committee Communications

1. Identify any significant changes in accounting policies, any management conflicts of interest, any contingent liabilities, or any significant unusual transactions.

For the year ended June 30, 2022, no new accounting policies were adopted and the application of existing policies was not changed.

2. Identify any significant accounting estimates, the process used by management to formulate the accounting estimates, and the basis for the auditor's conclusions regarding the reasonableness of those estimates.

The valuation of alternative investments, including private equity and real asset investments, are a management estimate which is primarily based upon net asset values reported by the investment managers and comprise 18% of the total investment portfolio. The values for these investments are reported based upon the most recent financial data available and are adjusted for cash flows through June 30, 2022. Our audit procedures validated this approach through the use of confirmations sent directly to a sample of investment managers and the review of the most recent audited financial statements for these funds. Furthermore, we reviewed management's estimate and found it to be reasonable.

The actuarial valuation was based on the actuarial assumptions and methods adopted by the Board, including an actuarial expected investment rate of return of 7.25% per annum compounded annually. The valuation takes into account all of the promised benefits to which members are entitled as of July 1, 2022 as required by the North Dakota Century Code. The valuation provides certain information required by GASB to be disclosed in the financial statements. Additionally, the valuation is used to determine the adequacy of the current employer contribution rate. Our audit procedures included reviewing the actuarial valuation and related assumptions used therein and we believe the estimate to be reasonable.

3. Identify any significant audit adjustments.

None

4. Identify any disagreements with management, whether or not resolved to the auditor's satisfaction, relating to financial accounting, reporting, or auditing matters that could be significant to the financial statements.

None

5. Identify any significant difficulties encountered in performing the audit.

None

6. Identify any major issues discussed with management prior to retention.

None

7. Identify any management consultations with other accounts about auditing and accounting matters.

None

8. Identify any high-risk information technology systems critical to operations based on the auditor's overall assessment of the importance of the system to the agency and its mission or whether any exceptions identified in the six audit report questions addressed above are directly related to the operations of an information technology system.

Based on the audit procedures performed, the Retirement and Investment Office's critical information technology system is the CPAS system. There were no exceptions identified that were directly related to this application.

This report is intended solely for the information and use of the audit committee, management, the Legislative Audit and Fiscal Review Committee, and other state officials, and is not intended to be and should not be used by anyone other than these specified parties.

Clifton Larson Allen LLP

Baltimore, Maryland November 2, 2022



Retirement and Investment

MEMORANDUM

TO:SIB Audit CommitteeFROM:Sara Seiler, Supervisor of Internal AuditDATE:November 9, 2022RE:External Audit Finding

Part of the external audit that CLA does is reviewing documentation for retirements. It was discovered that there was a missing birth certificate on a retirement for a spouse where the 100% joint survivor option had been selected. While CLA did not feel it rose to the level of being a comment in the formal Management Letter, RIO management and Internal Audit staff worked together to address this issue.

The Retirement Services Member Specialist reviewed all of FY 2021 & FY 2022 deaths and retirements and documented any missing documentation. Retirement Services then sampled both deaths and retirements for another level of review of documentation. Finally, IA reviewed a sample of both deaths and retirements and found no missing documentation. Attached is the memo from the Deputy Executive Director/Chief Retirement Officer summarizing the results of the review Retirement Services completed.

Going forward on a quarterly basis, the TFFR Compliance Officer will complete a full review of deaths and retirements to ensure compliance. Internal Audit developed a checklist for each review for the TFFR Compliance Officer to complete for each review.

Processes are being developed in the Pioneer Project to help ensure all documentation is obtained with the new system.



To: Sara Sauter, Internal Audit Supervisor From: Chad Roberts, DED/CRO Date: October 28, 2022 Re: Results of FY2022 Deaths and Retirements Compliance Review

Over the course of the last approximately sixty (60) days, TFFR staff have conducted a compliance review of the death benefits and retirement benefits paid out in FY2021 and FY2022. During the review, two levels of review were conducted.

For the FY2022 deaths and retirements review, the first level of review was a full review of all death and retirements processed in FY2022. This review was done by a member specialist. The total number of deaths reviewed was two-hundred fifty. Of those, twenty-three were found to have possible missing forms. Upon further review and a check of FileNet, only four had a missing form. The total number of retirements reviewed was four-hundred thirty-six. Of those, sixteen were possibly missing forms. Upon further review, only three were found to be missing forms that did not have a valid explanation. The details of those two full reviews are attached to this memo in the form of e-mails.

The second level of compliance review occurred after this first level of review was complete. A statistically determined sample of both deaths and retirements was established. A randomized sample of files was then created. The death sample numbered twenty, and the retirement sample numbered thirty-two. A different TFFR staff member conducted this level of review, a member not associated with the first review. During this level of review, no missing forms were identified on the death sampling review. Two forms were found missing on the retirement sampling review. An excel spreadsheet with details of that level review are attached as well.

Going forward, a new compliance workplan has been established for the death and retirements benefits paid by TFFR. On a quarterly basis, the TFFR Compliance Specialist will conduct a full review of all deaths and retirements for the quarter. Annually, at year end, the TFFR Compliance Specialist will conduct testing on a statistically determined sample of all deaths and retirements for the fiscal year. The quarterly reviews will occur in October, January, April, and July. The statistical sampling review will occur in July of each year.

It is my belief that this new compliance procedure will lead to more accuracy and reduce error rates in these two very important areas of our operations. I invite any suggestions or modifications that Internal Audit may have to this operational change.

akota |

Be Legendary."

NORTH

Retirement and Investment

MEMORANDUM

TO:SIB Audit CommitteeFROM:Jan Murtha, Executive DirectorDATE:November 9, 2022RE:Executive Limitations/Staff Relations

Ms. Murtha will provide a verbal update at the meeting on agency efforts to address current and future organizational risk through strategic planning. Including updates on the following topics:

Employee Title	Status					
TFFR Compliance Officer- Retirement Accountant.	2 FTE's attributed to the retirement program were reorganized effective November 2022 and represent the final phase of a reorganization plan that had been initiated in September 2021. The existing Employer Services Coordinator position was reorganized into a TFFR Compliance Officer position (with the same employee remaining in that FTE), and the vacant full-time Member Specialist position is pending reclassification into a Retirement Accountant position – currently pending HRMS review. The duties of the Membership Specialist position are currently being performed by a temporary employee. This reorganization was prompted by system improvements resulting from the Pioneer Project.					
Chief Risk Officer	Interviews Scheduled.					
Sr. Investment Officer	Starting November 2022.					
Sr. Investment Officer	Offer Accepted, start date pending.					
Investment Officer	Starting November 2022.					
Risk Officer	Starting November 2022.					
Communications/Outreach Director	Started November 7, 2023.					
Accounting Intern	Offer pending.					

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

2. Current Project Activities/Initiatives:

- Legacy Fund Asset Allocation Study RVK continues its work on the Legacy Fund Asset Allocation Study and provided recommendations for changes to the Legacy Fund Investment Policy Statement (IPS) and recommendations regarding future program considerations at the October meeting. The Advisory Board will finalize it's requested changes to the IPS at its next meeting and those changes will be presented to the SIB thereafter.
- **TFFR PAS Project** (hereinafter TFFR "Pioneer Project")– The TFFR Pioneer Project continues with implementation consistent with the project plan. Currently the project is in an elaboration phase involving review of system components. The amount of time spent on the project by various staff members currently varies from 5 to 25 hours or more per week.
- Northern Trust Initiative In an effort to enhance the infrastructure for the investment program the Investment and Fiscal teams are leading an initiative to coordinate with Northern

Trust for additional functionality/capabilities.

• Audit Consultant RFP: In September staff issued an RFP for Audit consultant services to assist with the development of additional internal audit business practices to support program evolution consistent with the agencies strategic plan. A notice of award has been issued and the finalization of the contract is currently pending.

3. RIO Board & Committee Presentations – November 1 through November 30, 2022

Staff provided or is scheduled to provide the following presentations to Boards and Committees during the above referenced time period.

- SIB Investment Committee 11/10/22
- TFFR GPR Committee 11/10/22
- SIB Audit Committee 11/15/22
- SIB GPR Committee 11/16/22
- TFFR Board 11/17/22
- SIB meeting 11/18/22

BOARD ACTION REQUESTED: Board Acceptance.

RETIREMENT AND INVESTMENT OFFICE Internal Audit 2022-2023 1st Quarter Audit Activities Report July 1, 2022 – September 30, 2022

The audit objective of Internal Audit (IA) is twofold: first, to provide comprehensive, practical audit coverage of the Retirement and Investment Office (RIO) programs; second, to assist RIO management and the State Investment Board (SIB) by conducting special reviews or audits.

Audit coverage is based on the July 1, 2022 through June 30, 2023 work plan approved by the SIB Audit Committee. The audit activities undertaken are consistent with the Internal Audit charter and goals, and the goals of RIO. To the extent possible, our audits are being carried out in accordance with the International Standards for the Professional Practice of Internal Auditing. Audit effort is being directed to the needs of RIO and the concerns of management and the SIB Audit Committee.

Investment and Agency Audit Activities

• Executive Limitation Audit

Each year the SIB conducts a customer satisfaction survey. The purpose of this annual survey is to determine how well the SIB, through the staff of the RIO, is meeting the expectations of its clients. This survey is part of the SIB's ongoing effort to be more responsive to the needs of their clients and to continually improve the services that are provided. IA facilitated the survey in August and September 2022 and results were provided to the SIB at their October 28, 2022 meeting.

• External Audit Support

IA provided support to our external audit partners, CliftonLarsonAllen (CLA), during the GASB 68 Census Data Audit. In July 2022, IA sent out twelve employer confirmations as part of the financial statement audit. This task required more administrative time due to one employer not responding in a timely manner. CLA completed the GASB 68 Census Schedule Audit work in October and is working on finalizing the GASB 68 Schedule Audit. Is not clear-is it complete or not. The June 30, 2022 Financial Statement Audit was completed in November 2022.

Payroll Audit

IA was requested by management to do a payroll audit of January to August 2022. The payroll audit compared the payroll records, documentation, and the ND transparency website. The payroll audit encompassed new hires, temporary increases, promotions, legislative increases, any bonuses, and any other pay changes. The audit was issued in November 2022.

Administrative Policy Review

RIO is in the process of updating its administrative manual. Internal audit will work with the Deputy Executive Director/Chief Retirement Office, the Executive Assistant, and the Contracts/Records Administrative Assistant on reviewing existing policies and recommending additional policies. Eight policies were identified and assigned to members of the working team to lead meetings with other members of staff for feedback and input. The working group is still working through policies and will be forwarding them to the Executive Director who has final approval.

Internal Audit Business Process Review

The Supervisor of Internal Audit worked with the Executive Team on developing a request for proposal (RFP) to evaluate the internal audit division. This includes conducting a business process review, identifying future business needs, assist in developing a risk matrix, and reviewing the current audit charter. The RFP was issued on September 26, 2022. Weaver and Tidwell, LLP was selected in October 2022. Kick-off meeting is tentatively scheduled for the end of November 2022 with Weaver and Tidwell, LLP and RIO.

Retirement Program Audit Activities

• Model 2 Partial Salary Review

This salary review will be of only Model 2 Partial employers, selecting one participant from each to ensure model compliance. The review will also determine if the retirement salaries and contributions reported to TFFR by the participating employers are 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 are also verified. This review is currently in process.

• TFFR File Maintenance Audit

On an annual basis, IA 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, Direct Deposit Authorization Forms, and Obituary Searches are reviewed to verify that contact and demographic information has been updated correctly. A sample of purchases and refunds were reviewed as part of the of audit. The audit was issued in October 2022.

• TFFR Pioneer Project

Internal Audit staff is participating in the elaboration and design meetings for the Pioneer Project. The Internal Auditor is part of the core group attending almost all meetings. The Supervisor of Internal Audit attends weekly update meetings and elaboration meetings as needed.

Administrative Activities

The IA staff attends the biweekly RIO staff meetings, biweekly RIO manager's meetings, divisional meetings, one Audit Committee meeting, three SIB meetings, and two TFFR meetings.

Professional Development/CE/General Education

IA staff completed quarterly NDIT training on security. The Supervisor of IA attended training conducted by the Association of Public Pension Funds for Auditors (APPFA) on project management and leadership training conducted on Teams



Retirement & Investment

Internal Audit Report Payroll Audit November 14, 2022

Background

The Internal Audit Division was requested by the Executive Director to do a Payroll Audit for January 2022 through August 2022. In fiscal year 2022 there was several staffing changes, including temporary increases, legislative increases, overtime, promotions, new hires, and various bonuses.

<u>Scope</u>

The scope of the audit was from January 1, 2022 - August 1, 2022. The objective of this audit was to determine that operating procedures and internal controls provide adequate assurance that authorized transactions are processed completely and accurately. Including that gross pay appears accurately and reconciles to the payroll register and the ND transparency website. This audit also reviewed that all documentation was reviewed, approved, and processed correctly for any salary changes or bonuses received.

Observations

Internal Audit requested the documentation from the fiscal division on all documentation in relation to payroll (e.g., new hires, pay rate increases, bonuses), agency position number listing, and payroll register. All the documentation was reviewed and tied out. Finally, the information was compared to the ND Transparency website to ensure all information was reported correctly.

Documentation for any new hires, pay raises and bonuses were all tied out and appropriately documented. However, there was a finding of overtime that was given and not properly signed-off. While the direct supervisor did sign-off on the overtime neither the Executive Director or Deputy Executive Director signed-off the overtime authorization. This occurred in June and July for two employees. The documentation has since been signed-off on. This finding is low risk.

This finding has prompted the fiscal division to implement a new process to review and ensure that all proper documentation is on file for any payroll changes (e.g., overtime, salary increase). Since payroll is automated in Peoplesoft, a payroll report runs on the 10th of the following month. Fiscal staff will review the report and confirm all pertinent documentation and authorization is on file. The payroll report will then be signed-off on once everything has been reviewed and confirmed by the Chief Financial Officer/Chief Operating Officer.

Recommendations and Conclusions

IA has the following recommendations:

1. Annual training for managers and staff on the Overtime Policy and procedures.

Overall, there were no significant issues found in the Payroll Audit.

CUSTOMER SATISFACTION SURVEY NORTH DAKOTA STATE INVESTMENT BOARD 2022

Evaluation Forms Sent:18Evaluation Forms Returned:11

1. Availability/Responsiveness to Requests (via calls and/or emails)

Excellent	Above Average	Average	Poor	N/A
7	3	1	0	0

2. Clarity and Effectiveness of Communications, Reports, and Presentations

Excellent	Above Average	Average	Poor	N/A
5	5	1	0	0

3. Frequency of Communications/Reporting

Excellent Above Average		Average	Poor	N/A
5	5	1	0	0

4. Knowledge of Investments

Excellent	Excellent Above Average		Poor	N/A
7	3	1	0	0

5. Overall value of services provided

Excellent	Above Average	Average	Poor	N/A
7	7 3		0	0

2022 Summary of SIB Client Satisfaction Survey Ratings:

	Excellent	Above Average	Average	Poor	N/A
Totals	31	19	5	0	0
Weight	4	3	2	1	0
Percent	56%	35%	9%	0%	0%
Average	3.47				

2021 Summary of SIB Client Satisfaction Survey Ratings:

	Excellent	Above Average	Average	Poor	N/A
Totals	41	12	5	0	2
Weight	4	3	2	1	0
Percent	68%	20%	8%	0%	3%
Average	3.63				

2020 Summary of SIB Client Satisfaction Survey Ratings:

	Excellent	Above Average	Average	Poor	N/A
Totals	40	9	15	0	1
Weight	4	3	2	1	0
Percent	62%	14%	23%	0%	1%
Average	3.39				
Overall Customer Satisfaction Survey Comments and Impressions:

- We have no issues or concerns. We have been impressed by the knowledge, availability, and professionalism of the RIO staff.
- RIO staff does a great job communicating and presenting information! One area that might be a nice opportunity would be to invite board members to attend/sit in on larger outreach events that might be done by staff with beneficiaries so that we can see the boots on the ground perspective. Continue with existing initiatives and strategies, specifically board education that builds capacity of client boards. Despite

the staffing challenges throughout the year, staff was able to exceed expectations in these areas, which shows an effective organizational climate and culture and professional commitment. This did not go unnoticed and this professional commitment is greatly appreciated. Any work that can be done to recognize this outstanding work to ensure this culture and climate continues (and even improves) should be prioritized, to the degree possible. The staff of RIO have always been punctual and responsive to inquiries and are able to provide further documentation or information.

■ I think the leadership transition has gone well. I'm excited for Scott's vision for the future of RIO and the SIB.

TFFR File Maintenance

AUDIT FOR THE MONTHS MAY 2020 AND OCTOBER 2021

Audit Scope/Purpose

 On an annual basis, the Internal Audit Division (IA) reviews system generated CPAS audit tables to ensure transactions initiated by staff are expected and appropriate given a staff member's role within RIO.

 Member accounts are also reviewed to ensure contact and demographic information has been updated correctly for Member Action Forms, Obituary Searches, Change of Address Forms, and Direct Deposit changes

 Selected May 2020 - potential risks: staff turnover and changes to procedures due to COVID/working remote

 Selected October 2021- potential risks: staff turnover due to retirements and the agency reorganization

TFFR Activities

May 2020 Activities processed:

26 deaths, 3 installment purchase payments posted, 3 lump-sum purchases, 82 retirements, and 8 refunds, change of addresses, change of bank account numbers, and salary/service hours corrections to member accounts

October 2021 Activities processed:

21 deaths, 3 installment purchase payments posted, 22 retirements, 25 refunds, 119 MAF's processed, change of addresses, change of bank account numbers, mortality table update, updates to employer contacts, and salary/service hours corrections to member accounts

Phase I of Audit

May 2020

- •Reviewed CPAS Transaction responsibilities for Administrative Services, Fiscal Accounting Services, Information System Services, and Retirement Services staff
- Reviewed IT Security roles for Administrative Services, Fiscal Accounting Services, Information System Services, and Retirement Services.
- •Fiscal Services noted changes to Investment Accountant's responsibilities and the receipt of checks for purchase of services was updated-reviewed new policy.
- **IA Found**: IA concluded RIO staff followed documented responsibilities and met security roles. Division Supervisors also developed adequate procedures for staff to work remotely and protect confidential member information.

Phase I of Audit

October 2021

- •Reviewed IT Security roles for Fiscal Accounting Services, NDIT staff, and Retirement Services
- •Reviewed CPAS Transaction responsibilities for Fiscal Accounting Services, NDIT (formerly Information System Services), and Retirement Services staff
- •Due to retirements/resignations, RIO reorganized agency structure. Reviewed restructured job positions.
- •**IA Found**: RIO management reorganized the agency structure and job duties to better fit the current and future needs of the agency. The reorganization of staff duties met the current requirements and ensured deadlines continued to be met. The new positions had documented responsibilities and the security roles were met.

Agency Reorganization

During October 2021, the following reorganization of the agency had been instituted:

 Administrative Service was dissolved- Executive Administrative Assistant, Retirement Program Administrative Assistant and Contract Records Administrative Specialist were developed and moved to the Executive Staff, Fiscal Division and Retirement Division

Executive Director

Chief Investment Officer

Chief Financial Officer/Chief Operating Officer

 RIO contracted with NDIT under State IT Unification – two IT employees once part of RIO were transferred to NDIT

Phase II of the Audit

1) Reviewed CPAS table reports for all staff with TFFR transactions/responsibilities

2) Reviewed monthly Lump Sum Payment Registers – were all refund payments found on the table reports of staff

3) Reviewed monthly Reports for Installment Purchase payments – were all payment listed on the table reports of staff

4) Reviewed monthly reports for Deaths – were all deaths listed on the table reports of staff

5) Reviewed monthly reports for Retirements – were all retirements listed on the table reports of staff

6) Reviewed several purchase and refund transactions – were procedures followed

Phase II – Review CPAS table reports

• CPAS Table reports: list changes/adjustments made by RIO staff to member accounts

 Examples of audit triggers – changes to salary, service, address, beneficiaries, SSN, employer demographics, benefit suspensions, survivor set-up, canceling checks, deleting accounts, merging accounts, etc

Staff members with table reports –

Administrative Services - Office Assistant (May 2020 only)

Fiscal Accounting Services – Chief Financial/COO Officer, Senior Financial Accountant, and Investment Accountant (May and October)

NDIT (formerly Information Systems Services) – NDIT 1and NDIT 2 (May and October)

Retirement Services - two Retirement Program Specialist, Membership Specialist, Employer Service Coordinator, and the Retirement Program Manager (May and October)

Audit Results of Phase II Table Reports

Review of May 2020 and October 2021

- For Administrative Services (May 2020 only), Fiscal Accounting Services, and NDIT staff - all transactions were appropriate and related to the day to day activities.
- •For Retirement Services, the following errors were found see page 6 of the report
 - 1. Data input errors addresses, birthdates, email addresses, phone numbers, and SSN's of beneficiaries
 - 2. Missing documents death certificates and beneficiary forms
 - 3. Documents were scanned to the wrong accounts

Retirement Services Response

Response is found on page 6 of the report:

- The Membership Specialist in Retirement Services is verifying the information with the member for accuracy.
- Retirement Services is obtaining the missing documents. Uncertified Death Certificates were ordered from the ND Vital Statistics. For members/beneficiaries that died in another state, RS's is trying to obtain death certificates from the state or the family members.
- Retirement Service moved documents to the correct member accounts in FileNet.

Phase II IA Recommendation

IA recommends that Retirement Services (RS's) review the completed processes listed on the monthly system generated Death, Installment Purchase of Service Credit, Lump Sum Payment Register (refunds), and Retiree Reports. RS's should review the member FileNet account to ensure all required documents are found for these completed processes. IA developed a checklist for RS's to use in the review. Once complete the checklist should be scanned to the member's account. Currently, RS's is completing the review for fiscal year 2021/22 transactions. IA is recommending the process also be completed for the timeframe starting June 2020 to June 2021(due to the new procedures instituted during COVID/working remotely).

IA set -up an internal worksheet that list the errors and RS's response. IA is monitoring the responses until the action is complete,

Phase III – Reviewed Procedures for four processes

Reviewed address changes in October 2021:

- Staff members that made changes Retirement Program Manager, two Retirement Program Specialists, Membership Specialist
- IA reviewed six change of addresses
- **IA Found**: Procedures were followed and there were no errors

Reviewed Member Action Forms: Beneficiary forms are also required with new members

- IA reviewed six Member Action Forms
- Verified the Beneficiary Form was also on FileNet
- Verified procedures were followed

IA Found: Procedures were followed but, there were data input errors and missing beneficiary forms.

Phase III – Reviewed Procedures for the posting of Deaths to the Demographic page

Reviewed six changes to member demographic pages

 Remaining Retirement Services staff were completing the task due to a long-term staff member retiring

Reviewed procedures

IA Found: There were procedural errors: Beneficiary date of deaths were posted to closed accounts and Beneficiary deaths were posted without a death certificate. The other procedures were completed: sending correspondence to the family requesting a new point of contact and then following up if the family does not respond. RS's is obtaining copies of the Death certificates.

IA Recommendation: A long-term staff member that retired completed this responsibility. Remaining staff was temporarily completing this responsibility and was unaware of the procedures. Due to changes in staff, IA recommends that all staff review the procedures/policies for cross training purposes.

Phase III – Procedures for changing Bank Account Information

Reviewed Procedures

Reviewed six members that changed their bank accounts

IA Found: There were no input errors and procedures were followed.

IA Closing Statement

In conclusion, there were many challenges RIO faced during the timeframe of this audit. In May 2020, COVID occurred which forced staff to work remotely. Procedures were changed to allow staff to complete tasks remotely and still protect confidential member information. In October 2021, long-term staff members resigned or retired which resulted shortage of staff and reorganization of the agency structure and staff position.

The Results Summary is found on page 1 of the report. IA commends staff as they worked together as a team to meet the challenges from the procedure changes and staff shortages.

IA appreciated staff cooperation!

Questions?

Internal Audit – North Dakota Retirement and Investment Office TFFR File Maintenance Audit May 2020 and October 2021 Audit Report October 27, 2022

Background

On an annual basis, the Internal Audit Division of the Retirement and Investment Office (RIO) reviews system generated (CPAS) audit tables to ensure transactions initiated by staff are expected and appropriate given a staff member's role within the organization. Member accounts are also reviewed to ensure contact and demographic information has been updated correctly for Member Action Forms (MAF), Obituary searches, Direct Deposit Authorizations, and Change of Address Forms on file.

Results Summary

There are three phases in the TFFR File Maintenance Audit. For the recommendations and errors noted that require an action from RIO staff, Internal Audit (IA) set-up an internal worksheet that list the errors and RIO's response. IA is monitoring the responses until the action is complete. As of 10/27/2022, there are four member accounts with ongoing corrections in process.

For Phase I, Internal Audit (IA) determined that RIO staff followed documented responsibilities and met the security roles - See pages 3 through 4.

For Phase II, IA determined that the review of audit table transactions which occurred for May 2020 and October 2021 for all user IDs were expected and appropriate based on the organizational role held by the staff member who initiated the transaction. Month-end reports of lump sum payments (refunds), installment purchases of service credit, deaths, and retirements were found on the appropriate staff members audit table reports.

There were three classes of errors found: data input, missing documents, and documents scanned to the wrong FileNet accounts. IA recommended a new procedure to help ensure that the appropriate documents are found in the member's FileNet account at the close of a procedure - see pages 4 through 6 of the report. These errors are an elevated risk.

For Phase III, IA reviewed the procedures for processing information on Change of Address forms, Direct Deposit Authorization Forms, Member Action Forms (MAF's), and the posting of deaths to the demographic pages. Due to the shortage of staff in October, it was difficult for RS's to complete the procedures as written. Duties of the vacant Administrative Office Assistant and Membership Specialist were completed by other RS's staff as needed.

There were three classes of errors found: data input, missing documents, and posting deaths to closed accounts. IA also made a recommendation for all staff to review policies/procedures - see pages 6 through 9 of the report. These errors are an elevated risk.

<u>Scope</u>

The original scope of the audit was a review of the months of May and October of 2020. IA wanted to review two months where new procedures were instituted during the COVID timeframe. Audit fieldwork started June 2021 and was suspended August of 2021. IA completed Phase I and II of May 2020. Due to five retirements/resignations, a Succession Planning audit was made the priority.

The File Maintenance fieldwork was resumed in late January/February 2022. Instead of reviewing information from October 2020, IA reviewed information from October 2021. New staff would be included in the review, and IA could

observe how work was distributed within the RIO during the transition/reorganization of the agency. Phases I, II, and III was completed for October 2021.

Audit information was obtained for the months under review, May 2020 and October 2021. System generated audit table reports were run by IA staff. Staff roles/responsibilities and departmental procedures were verified by Division management. System generated reports of deaths, lump sum payments (refunds), installment purchases of service credit and retirements were provided monthly by the NDIT staff (formerly Information Systems Division) who also provided a listing of system User IDs, security roles, and any changes occurring on a yearly basis. NDIT also provided a change log which details transactions completed and who requested each transaction. Member Action Forms (MAF) were collected and scanned to IA's shared drive during the first quarter of the fiscal year with the assistance of the Office Assistant and Membership Specialist. Procedures for change of addresses, entering MAF's, changes to banking accounts, and changes on posting deaths to the demographic page of member accounts were reviewed.

In addition, IA also completed a more detailed review of several refund and purchase transactions for the month of October. Normally, the additional procedures would be completed in a separate audit. IA was unable to complete the scheduled Purchase/Refund audit in 2021/22 due to the Succession Planning audit.

TFFR Activities during the audit timeframe

During the month of May 2020, the following activities were processed: 26 deaths, 3 installment purchase payments were posted, 3 lump-sum purchases, 82 retirements, and 8 refunds. Other activities noted were the processing of change of addresses, change of bank account numbers, and salary/service hours corrections to member accounts.

During the month of October 2021, the following activities were processed: 21 deaths, 3 installment purchase payments, 22 retirements, 25 refunds, and 119 MAFs. Other activities noted were the processing of change of addresses, change of bank account numbers, mortality tables updates, updates to employer contacts, and salary/service hours corrections to member accounts.

The procedures for the File Maintenance Audit were as follows:

Phase I:

- Reviewed CPAS Transaction responsibilities for Administrative Services, Fiscal Accounting, Information Systems, and Retirement Services
- Reviewed IT Security Roles from Administrative Services, Fiscal Accounting, NDIT/Information Systems, and Retirement Services

Phase II:

- Reviewed CPAS Table reports for all staff with TFFR transactions/responsibilities
- Reviewed monthly Lump Sum Payment Register were all refund payments found on the table reports
- Reviewed monthly Reports for Installment Purchase payments were all purchase payments listed on the table reports
- Reviewed monthly Reports of Deaths- were all the deaths found on the table reports
- Reviewed monthly Reports of Retirements were all the retirements on the table reports

Phase III:

- Reviewed policy/procedures for address changes
- Reviewed a sample of six members who had address changes
- Reviewed procedures for obtaining/entering information from the MAF

- Reviewed a sample of six members for data entry accuracy from MAF
- Reviewed policy/procedures for posting deaths of beneficiaries that do not affect pay status
- Reviewed a sample of six deaths posted that do not affect pay status
- Reviewed policy on changing member bank account numbers
- Reviewed a sample of six member accounts that changed their bank accounts
- Reviewed a sample of purchases and refunds

Observations, Conclusions and Recommendations

For the review May 2020, there was the potential of increased risks of error due to staff shortages and changes to procedures that occurred during COVID. The Deputy Executive Director/Chief Retirement Officer and the Retirement Program Manager (RPM) at RIO retired which left a shortage of staff. The COVID epidemic also occurred. The State only allowed so many staff members to work onsite. All Divisions had one staff member in the Office, the rest of the staff worked remotely. At the start of the epidemic, RS's procedures were all paper driven, so new procedures were quickly developed for scanning paper documents that allowed staff members to electronically access needed documents to work remotely and still maintain the confidentiality and safety for member information.

For the review of October 2021, there was potential of increased risks of error due to staff shortages and an agency reorganization. In the Retirement Division, the Supervisor of Administrative Services, Office Assistant, and the Membership Specialist retired. The positions were instrumental in office management, preparing/sending correspondence, records retention, scanning of documents, organization of documents, and data input.

Observations, Conclusions and Recommendations Phase I

<u>May 2020</u>:

IA reviewed CPAS Transaction responsibilities and Security roles for Administrative Services, Fiscal Services, NDIT/Information Systems, and Retirement Services. For the month of May, Administrative Services, NDIT/Information Systems, and Retirement Services Supervisors reviewed and reported no changes to staff responsibilities and security roles.

For Fiscal Services, the Chief Financial Officer (CFO) noted some changes to responsibilities for the Investment Accountant (IAC). The duties for the position were expanded to process ACH reclaims of benefit payments and/or delete or add to ACH files. The IAC has the same Bank of North Dakota (BND) Authorization access as the CFO and the Senior Financial Accountant (SFA). The Procedure for the Receipt of Purchase of Service Checks was also updated.

October 2021:

IA reviewed CPAS Transaction responsibilities and security roles for RIO staff. Due to the retirements/resignations, there were changes to RIO's organization structure and staff responsibilities.

Administrative Services Division was dissolved. The responsibilities for the FTE's were moved to other Divisions.

- Executive Administrative Assistant handles all Board/Executive related duties and general agency support. Per NDIT, there were no changes to the security role. The role was the same as the TFFR Administrative Assistant.
- The Administrative Assistant's (temp) (OA) responsibilities are office reception, incoming/out-going mail, scanning of documents, administrative assistance, address changes, and records management. Per NDIT, the security role was the same as the prior Office Assistant. The position was filled in October 2021.

Fiscal Services was affected by the Office reorganization.

- Due to the resignations/retirement of the Executive Director/Chief Investment Officer, the Deputy Chief Investment Officer and the Supervisor of Administrative Services, the Chief Financial Officer was assigned additional duties. The position now is responsible for the oversight of responsibilities to centralize office operations. The new title for the position is Chief Financial Officer/Chief Operating Officer (CFO/COO). Per NDIT, there were no changes to the security role with CPAS.
- The Senior Financial Accountant and Investment Accountant were temporarily assigned additional duties to assist the CFO/COO. Per NDIT, there were no changes to the security roles with CPAS.
- Contract and Records Administrative Specialist The new position is responsible for many of the duties/responsibilities from the prior Supervisor of Administrative Services. The job duties associated with the position were administrative actions for the Fiscal/Investment Staff, procurement, records retention, maintenance of office supplies, and managing the Risk Management and Workforce Safety programs for RIO. Per NDIT, the position has the same security roles in CPAS as the CFO/COO. The position was vacant in October of 2021.

NDIT/Information Systems – As part of the State IT Unification, RIO contracted with the North Dakota IT Agency for IT services starting on 7/1/2021.

The Supervisor of Information Systems and the Data Processing Coordinator are now staff members of the NDIT as of July 2021. RIO contracts for their services. They provide the same CPAS related services to RIO: run payroll, provide reports to staff, provide necessary information to the actuary, external auditor, RIO Management, Fiscal and Retirement Services and IA. There were no changes to security roles on CPAS.

Retirement Services Division was affected by the office reorganization and temporary staff shortages.

- There were no official changes to duties for the Retirement Program Manager, two Retirement Program Specialists, and the Employer Services Coordinator. There were temporarily increased duties added due to the shortage of staff. Per NDIT, there were no changes to their security roles on CPAS.
- The Membership Specialist (temp) was hired in October 2021. There were no changes to the duties/responsibilities. Per NDIT, there were no changes to the security role on CPAS.
- The Retirement Program Administrative Assistant (TFFR Administrative Assistant) was vacant in October. There were no changes to the duties. Per NDIT, there were no changes to the security role. This position was moved to RS's after the elimination of the Administrative Services Division.

Conclusion:

For May of 2020, IA concluded RIO staff followed documented responsibilities and met security roles. Division Supervisors also developed adequate procedures for staff to work remotely and protect confidential member information.

During October 2021, RIO Management reorganized the agency structure and job duties to better fit the current and future needs of the agency. The reorganization of staff duties met the current requirements and ensured deadlines continued to be met. The new positions had documented responsibilities and the security roles were appropriate to the position.

No recommendation.

Observations, Conclusions and Recommendations Phase II

The NDRIO Lump Sum Payment Register lists all refunds, rollovers, and Partial Lump Sum Options paid to members or beneficiaries each month. The TFFR Installment Purchase of Credit report lists the status each month

for all installment purchases of service credit in progress. IA verified that the entries on these two systems generated reports corresponded to a transaction on the appropriate audit table based on the organizational role held by the staff member who initiated the transaction.

IA obtained a copy of the May 2020 and October 2021 NDRIO Lump Sum Payment Register reports from FileNet. There were 8 refunds on the May report and 25 refunds on the October report. Types of refunds processed were refunds of account value, refunds due to deaths, partial lump sum option payments, as checks or rollovers. All transactions listed on the monthly reports could be found on the table reports of appropriate RS's staff. Refund checks are processed five working days before the end of the month unless payroll falls on a Friday. Disbursement of the refund occurs on the first day of the next month.

IA obtained the copies of the May 2020 and October 2021 Installment Purchase of Credit reports from NDIT. On the May 2020 report, ten members were purchasing service by installment. There were three installment payments posted in May 2020 and three lump-sum purchases occurred. On the October 2021 report, five members were purchasing service, three installment payments were posted, and one lump-sum purchase occurred.

IA determined that information found on the NDRIO Lump Sum Payment Registers, and the Installment Purchase of Credit reports was found on the table reports of appropriate staff.

In addition, IA reviewed several purchase and refund transactions from the monthly reports on an individual basis. This review is normally a stand-alone audit that was scheduled to complete on the annual Audit Workplan. IA was unable to complete the audit due to the Succession Planning Audit. During the month of October 2021, IA reviewed several purchases and refunds from the monthly reports and a lump-sum purchase from a table report to verify that procedures were followed and that the required documents were found on FileNet.

Also, IA receives system generated monthly reports listing the retirements and deaths processed. IA verified that all the retirements and deaths listed on the reports was found on the table reports of appropriate staff.

Conclusion: All transactions listed on the monthly Death, Installment Purchase of Credit, Lump Sum Payment Register (refunds), and Retiree List were found on the appropriate staff member's table report. The purchase/refund procedures were followed with one exception. For one purchase, the cost calculation worksheet was not scanned to the member's FileNet Account.

RS's Response: Typically, we do send a Cost Statement, but RS's could not run purchase calculations (only actuarial) during the months of July-mid October due CPAS programming issues. The total amount of the purchased service was listed on the Rollover Form and the Purchase Agreement.

IA Response: IA has no recommendation.

The CPAS table reports with transactions reviewed for May 2020 and October 2021 were as follows - Phase II: IA reviewed the table reports for the following staff members who posted information or initiated procedures to member accounts.

Administrative Services (AS) – the Office Assistant (OA) – address changes – May 2020

Fiscal Accounting Services (FAS) – the Chief Financial Officer/Chief Operating Officer (CFO/COO), the Investment Accountant (IAC), and the Senior Financial Accountant (SFA) – May 2020 and October 2021.

NDIT/Information Systems Services (NDIT I and 2) – the Supervisor and the Data Processing Coordinator – May 2020 and October 2021.

Retirement Services (RS) – two Retirement Program Specialist (RPS), the Membership Specialist (MS), Employer Services Coordinator (ESC), and the Retirement Program Manager (RPM) – May 2020 and October 2021.

Conclusion:

All transactions found on the Administrative Services, Fiscal Services, and NDIT/Information Systems table reports were appropriate and related to their daily operations.

In Retirement Services, all transactions were found appropriate and related to the staff member's daily business operations. The following errors were found.

- 1) There were data input errors: addresses, birthdates, email addresses, phone numbers, and SSN's of beneficiaries.
- 2) There were missing documents death certificates and beneficiary forms.
- 3) Documents were scanned to the wrong accounts on FileNet.

Retirement Services response to the errors was as follows:

- 1) The Membership Specialist in Retirement Services is verifying the information with the member for accuracy and posting the correct information.
- Retirements Services is obtaining the missing documents. Uncertified Death Certificates were ordered from the ND Vital Statistics. For members/beneficiaries that died in another state, RS's is trying to obtain death certificates from the state or the family members.
- 3) Retirement Services moved documents to the correct accounts in FileNet.

IA Response/Recommendation: IA recommends that RS's review the completed member processes listed on the monthly system-generated Death, Purchase Installment Purchase of Credit, Lump Sum Payment Register (refunds), and Retiree list reports. RS's should review the member's FileNet account to ensure all required documents are found for these completed processes. IA developed a Checklist for RS's to use in the review. Once complete the checklist should be scanned to the member's account. Currently, RS's is completing this review for fiscal year 2021/22 transactions. IA is recommending the process also be completed for the timeframe starting June 2020 to June 2021 (due to new procedures instituted during COVID/working remotely).

IA has set-up an internal worksheet that list the errors and RS's response. IA is monitoring the responses until the action is complete.

Observations, Conclusions and Recommendations Phase III

IA reviewed the procedures for processing information on Change of Address forms, Member Action Forms (MAF's), changes to member accounts through Direct Deposit Authorization forms (DDA) and posting deaths of beneficiary's that do not affect pay status.

Procedures for processing Change of Address forms

Address changes forms are to be completed and mailed to RIO by the members. All fields on the forms must be completed and the forms must be signed by the member. The Administrative Assistant (OA) can enter the data from the address change forms to CPAS and then scan the form to the member's FileNet account. The Employer will sometimes email the Change of Address forms to the Membership Specialist (MS) who then will change the address. Members need to complete the forms. Then, the MS will sign-off the Change of Address form and forward to the OA to scan to FileNet. The change of address forms are scanned to the member's FileNet account with records retention of seventy-five years. When the Employer sends the address change, RS's sends the member a

change of address confirmation letter for verification. The CPAS table report started tracking address changes on March 20, 2019.

There were 31 address change transactions on OA's table report during the month of May 2020. IA did not test a sample of address changes.

The Administrative Assistant and the Membership Specialist were hired during the month of October 2021. The Administrative Assistant (Temp) replaced the Office Assistant who retired the end of August 2021 and the Membership Specialist (Temp) replaced the MS who retired the end of September 2021. During the time of the vacancies, the RPM and the two RPS's completed tasks not normal to their duties. They all processed address changes during October 2021.

Conclusion:

IA tested six address changes made to member accounts during the month of October. All the changes were processed following the procedures.

IA Recommendation: None

Procedures for processing Member Action forms (MAF)

MAF's are submitted to TFFR by members who are updating their status with the pension fund. For example, a member may be enrolling in TFFR, returning to covered employment after a period of inactivity, or changing/adding a participating employer. The employer must submit the MAF within thirty days of employment. A fine is assessed if the deadline is not met. The majority of MAF's are received during the months of July through October. Forms can be mailed to RIO or sent through email or the State Secure Site. The MS holds all forms securely in the office until processed. The MS processes the forms received.

The RPM stated that information from the MAF cannot be entered into CPAS until the member is reported from a payroll report received from the employer for the fiscal year. For most members, the first payroll reported is the month of September. The employer must report the September salary and contributions by October 15th. The employer report posting of payroll in CPAS automatically populates the name, SSN, DOB, gender, address, and triggers the MAF Needed Task for the MS. The MS then verifies the uploaded information with the actual MAF and completes any missing information such as the full name, maiden name, marital status, zip codes, and phone numbers. Information later entered into CPAS from the MAF are the email addresses and spouse information. The deadline for posting the rest of the information on the MAF to CPAS is March 31st. Once the information is entered into CPAS, the Administrative Assistant scans the form to FileNet.

The MS also verifies that the member is licensed with the Education Standards and Practices Board (ESPB). If the member checks past PERS membership, the MS verifies the dual status and request a PERS account copy if needed. Once dual membership is confirmed, the dual member flag in CPAS will change to Yes. New members to TFFR are also required to provide a Beneficiary Form with the MAF. Hundreds of MAF's are received annually to process.

The Administrative Assistant/OA and the Membership Specialist retired August/September of 2021. New staff was onboarded in October of 2021. These staff members are integral in processing the MAF's and Beneficiary forms. There were 119 MAF's processed in October 2021. Welcome letters generated by CPAS were sent to first time TFFR members. The 2021/22 MAF's received were input into CPAS by June 30, 2022.

IA then randomly selected six MAF's for review from the MS's table report.

Conclusion: Three of the accounts had errors in the input of birthdates and an address.

Retirement Service response: The information for the three accounts was forwarded to the Membership Specialist to correct.

IA recommendations: IA recommends the information be corrected.

Procedures for posting deaths on Demographic page of CPAS

The MS normally updates the beneficiary date of death to the demographic screen on CPAS for active members and retirees still in payment only if the current benefit is one not impacted by the beneficiary's death. The Death is being documented in CPAS for informational purposes only. Due to a retirement, the MS position was vacant for most of the month of October. The posting of deaths to the demographic page was found on the other RS's staff members table reports. They were temporarily completing tasks normally assigned to the MS.

As of December 31, 2022, the MS no longer manually reviews obituaries on a daily basis. This procedure will be used when members or the monthly ND Vital Statistics report notifies TFFR that a beneficiary on record has died.

Conclusion: IA reviewed the deaths posted on the table reports of the RS's staff and found that some of the procedures were not followed. Since this procedure is normally not their responsibility, the errors were understandable. For the accounts reviewed, IA found the following errors:

- Beneficiary date of deaths were posted to closed accounts (members were already deceased or refunded).
- Beneficiary deaths were posted to CPAS without the corresponding death certificate on FileNet.

When the beneficiary or point of contact passed away, RS's sent the appropriate correspondence with a blank Beneficiary form to be completed and mailed back to TFFR. If there is no response from the member, RS's follows up with the member by phone.

RS's response:

RS's staff was temporarily completing this duty because of the vacant MS position. They were unaware of the procedures in place for this task. RS's staff ordered death certificates from North Dakota Vital Statistics for the deaths posted. If the death was out-of-state, they requested a copy of the death certificate from the family or the State of residence at the time of death. RS's is monitoring the accounts to ensure the receipt of the beneficiary/point of contact form.

IA Response/Recommendation:

Due to long-term staff retiring, IA recommends that all RS's staff (new and old) review the policies/procedures for this process and others. Cross training of staff is important and a best practice.

Procedures to change a members Banking Information:

Members complete the Authorization for Direct Deposit form at the time of retirement. Later, if they wish to change their bank account number for automatic deposit of their benefit payment, they must complete a new form. For TFFR to accept the form the following is required:

- All designated fields on the form must be completed
- SSN or Person ID must be included
- A copy of a voided check must be attached
- The completed form must be notarized
- Mail or bring the form to the office (not excepted by email/fax)

Conclusion:

IA reviewed a sample of six members that changed their bank number for automatic deposit. The procedures were followed by RS's staff members.

IA Recommendation: None

In conclusion, there were many challenges RIO faced during the timeframe of this audit. In May of 2020, COVID occurred which forced staff to work remotely. Procedures were changed to allow staff to complete tasks remotely and still protect confidential member information. In October of 2021, long-term staff members resigned or retired which resulted in a shortage of staff and reorganization of the agency structure and staff positions.

The Results Summary for the Audit is found on page 1 of this report. IA commends RIO staff as they worked together as a team to meet the challenges resulting from procedure changes and staff shortages. They continued to provide excellent service to meet the needs of the TFFR members. IA appreciated staff cooperation.

cc: Jan Murtha, Executive Director Chad Roberts, Deputy Executive Director/Chief Retirement Officer Ryan Skor, Chief Financial Officer/Chief Operating Officer Rachel Kmetz – Accounting Manager Denise Weeks – Retirement Services Program Manager



Retirement and Investment

MEMORANDUM

TO:SIB Audit CommitteeFROM:Sara Seiler, Supervisor of Internal AuditDATE:November 15, 2022RE:Internal Audit Business Process Review

The Supervisor of IA and the Executive Team developed a RFP that was issued the end of September 2022. Due to the agency reorganization and expansion of the Investment staff, IA and Management was requesting consultants to evaluate the future needs for IA.

The full scope of the review will include:

- Review and recommend any changes to Audit Charter
- Conduct current business state needs analysis including:
 - Provide subject matter expertise in Internal Audit relating to public pensions and investments and business processes.
 - Conduct Internal Audit business process re-engineering study; document business processes; analyze deficiencies and efficiencies in current Internal Audit and business processes; provide recommendations to improve and streamline processes; and advise on timing of initiating new business processes.
 - Develop Internal Audit needs analysis and identify the technology solution, if applicable.
- Identify desired future business state of Internal Audit including:
 - Staff planning
 - Additional staffing needed
 - Outsourcing some audits and functions
 - Types of audits to conduct
 - Any audits/compliance needed for internal investing
 - Additional operational audits for agency and programs
 - Frequency of audits
 - Address program growth
 - Triggering points for infrastructure (e.g. software)
- Education that Internal Audit should be receiving
 - Certifications (e.g. CIA)
 - Professional development
- Assist in development of risk matrix of agency and programs
- Provide RIO staff with progress reports

The Supervisor of IA reviewed the RFP responses with the Executive Team and Weaver & Tidwell, LLP was selected. Kickoff is scheduled for November 2022 and IA staff along with other RIO staff will be working with Weaver & Tidwell, LLP over the next few months on gathering information and meeting with the consultant for them to analyze the needs of the Internal Audit division.

Q pension 9:45 AM Dictionary 100% pension grant investment allowance payment . premium . retirement . a reward social benefit ser an amount of money that a company or the government of longer wond an amount of money that a company or the governme of or sick and no longer won t-annuity subsidy

Technical Proposal for Internal Audit Business Process Review

State of North Dakota Retirement and Investment Office: RFP Number 110.7-022-072

October 11, 2022

Alyssa Martin | Partner, National Strategy Leader, Large Market and Public Entities Weaver and Tidwell, L.L.P. | 2300 N. Field Street, Suite 1000 | Dallas, TX 75201 972.448.6975 | alyssa.martin@weaver.com





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Section 1: Cover Letter





October 11, 2022

State of North Dakota ATTN: Retirement and Investment Office and Gabriel Hoggarth, Procurement Officer 1600 East Century Avenue, Suite 3, P.O. Box 7100, Bismarck, ND 58507

RE: Internal Audit Business Process Review for North Dakota Retirement and Investment Office RFP Number 110.7-022-072

To Whom It Concerns at the State of North Dakota:

As the State of North Dakota (ND) seeks an audit firm to conduct internal business process reviews for Internal Audit Business Processes for the ND State Investment Board – ND Retirement and Investment Office (ND RIO), you need professionals with **specific and proven experience auditing government entities**, **public pensions**, **and investment programs**. We've carried out such engagements for several state systems, and we are eager to do so for you. For this engagement, we are staffing at high levels of expertise and experience and offering the best value for these mission-critical services with the attention our firm can provide ND RIO.

That's where Weaver can help.

With more than 70 years of experience helping local, regional and state government entities, our clients know they can count on us to provide services that offer value beyond mere compliance. For this engagement, the hand-selected professionals are well versed in internal audit business process reviews for organizations of similar size and complexity as yours. Specifically, our experience will provide:



A comprehensive review of the audit charter against standards, alignment with organization structure and State Investment Board requirements



A current state business needs analysis that will review and document Internal Audit's approach to planning, execution, reporting, and administration



A roadmap to the future business state of Internal Audit including transformation steps, recommendations, staffing models, training needs, realistic timelines, and a technology needs analysis



An Investments internalization approach for Internal Audit that will advise on investment related risks, audit plans, training needs, and updated risks to the organization

PUBLIC FINANCIAL AGENCIES TRUST WEAVER



Retirement systems and major state fiduciaries like these know they can come to Weaver with their biggest challenges:

CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM

Co-sourced internal audit of investment stewardship and IT systems, and consulting services with enterprise compliance and third party risk management

EMPLOYEES RETIREMENT SYSTEM OF TEXAS

Co-sourced internal audits and assistance with both investments and IT systems

TEXAS PERMANENT SCHOOL FUND Consulting on risk management, best practices; training of in-house resources

TEXAS MUNICIPAL RETIREMENT SYSTEM Internal audits involving investment funds; IT post-implementation audit



An updated risk assessment and risk matrix including a comprehensive risk universe, methodologies for assessments, reporting, integration with audit planning, and ongoing monitoring for emerging risks

Weaver and Tidwell, L.L.P. 2300 North Field Street, Suite 1000 | Dallas, Texas 75201

Main: 972.490.1970

CPAs AND ADVISORS | WEAVER.COM



We're the Best Team for Your Team

Our firm has established, experienced internal audit national practices for financial services, government and public pensions, along with a specialized areas focusing on asset management. In short, we offer the highly sophisticated and specific mix that is required for this type of sophisticated engagement but at a fair cost.

Our Asset Management team has the deep knowledge of the challenges and risks associated with the internalization of the investing process and can help guide and shape the Internal Audit plan to develop institutional knowledge while conducting audits and advisory reviews of the key risks.

We'll provide a dedicated, experienced team, while leveraging the subject matter resources across our firm to provide a comprehensive evaluation of your Internal Audit business processes. Our government practice has a history of working with not just large state agencies, but some of the largest pension plans in the nation – meaning, we understand your custodial responsibilities and fiduciary and risk management challenges.

We Want to Work with You

Our success is built on relationships. We want to foster a lasting client relationship with you, with an ongoing commitment to responsiveness, communication and continuity. We continually look for ways to balance efficiency and innovation to bring you the best experience possible, ensuring our suggestions for improving the efficiency and effectiveness of your fiduciary responsibilities remain practical and relevant to your broader, long-term objectives.

Weaver would now like to put our proven experience to work for North Dakota Retirement and Investment and your members. We have exactly what it takes to make this engagement a success.

Name of Offeror: Weaver and Tidwell, L.L.P.

Name and contact information of who to contact regarding this proposal: Alyssa Martin | alyssa.martin@weaver.com | 972.448.6975 | 2300 N. Field Street, Ste. 1000 Dallas, TX 75201

Weaver legal counsel has reviewed the Conflict of Interest provisions in RFP Section 1, Instructions, and we hereby certify that Weaver has no actual or apparent conflict of interest, neither at the firm nor at the employee level. We will not work with subcontractors to conduct any or all parts of this proposed engagement. By signing this letter, I certify that Weaver will comply with all of the requirements, terms and conditions set forth in this RFP Number 110.7-022-72. As well, I certify that Weaver's proposal to the State of North Dakota accurately describes the goods and services being offered to the State and that the proposal will be held firm the period specified (sixty days from our submission date). This proposal was prepared independently, without collusion. And I confirm that all local, state, and federal laws, rules, code laws, code, regulation, and policies – including those relating to nondiscrimination, accessibility, civil rights, and equal employment – are, in fact, being complied with in full.

Thank you for the opportunity to submit our qualifications. Should you have any questions regarding our proposal or any other matter, please don't hesitate to contact me at any time.

Sincerely,

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Alyssa Martin, CPA | National Strategy Leader, Large Market and Public Entities

Weaver and Tidwell, L.L.P. 2300 North Field Street, Suite 1000 | Dallas, Texas 75201

Main: 972.490.1970

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Section 2: RFP Amendments





As of close of business October 5, 2022 and re-checked the morning of October 11, 2022, it appears that the State of North Dakota did not issue any solicitation amendment(s) relevant to this opportunity. As such, no amendments, signed or otherwise, are attached herein.



Section 3: Scope of Work Strategy





Our Methodology

The IIA defines the mission of internal audit is "to enhance and protect organizational value by providing risk-based and objective assurance, advice and insight."

A strong internal audit department contributes to the overall success of any organization, and helps leaders to understand risks and make better business decisions. To do this, Internal Audit departments and their staff must have an **efficient**, **effective structure to meet the constant demand to do more with less**. Internal Audit has to evolve, become more agile, and embrace new skills and analytics to be able to function as a trusted advisor to the organization. Conducting a business process review of the Internal Audit function is an important step.

Our Approach

The evaluation of Internal Audits processes and practices requires a strategic and methodological approach to be performed by knowledge parties. Weaver's resources and approach will assist Internal Audit with fulfilling its role as an efficient, value-added function that provides assurance that controls are operating effectively, and acts as a trusted adviser to senior management on key initiatives and emerging risks.

Our procedures are performed in the following key phases:





Planning

Upon contract execution, we'll reach out to the key stakeholders to introduce our team and schedule a meeting to discuss current initiatives, processes, timelines and expectations to determine a mutually agreeable plan for performing services, specifically the reporting requirement with upcoming deadlines. We'll also obtain detailed information regarding planned project, budget details and

initiatives.



Weaver will hold initial interviews key stakeholders to gain an understanding of existing processes, practices, and challenges to focus on as part of our discovery and information gathering phase. We'll also requests existing documentations and data, including the following.



- Charter, Policies and procedures
- Desk manuals
- Training materials and skills assessments
- Existing process flows or previously prepared internal control documentation
- Prior audit programs and risk assessments

Following our review and any follow-up meetings, we'll schedule a kick-off meeting with key stakeholders. Prior to the kick-off, interviews and walkthroughs with key stakeholders will be scheduled to ensure efficient and effective use of ND RIO resources.



Fieldwork

We'll evaluate the "as-is" processes along with any program current audit period. All significant inscope areas will be evaluated from a process design perspective and documented through a risk-

control matrix. We'll perform interviews and walkthroughs of the significant processes relating to each area in order to gain an understating of the existing control activities, as well as assess the adequacy of their design for addressing the risks. We'll evaluate existing policies and procedures for coverage and compare to processes and practices in place.



Subject Matter Expertise

Weaver's team brings many years of experience and subject matter expertise in providing internal audit guidance, best practice reviews, and conduction internal audits for similar state public pensions, including both investments and business processes. Our team includes specific

expertise on internal audits of public pensions including

- Compliance
- Operations
- Investment reporting
- Investment due diligence
- Receipts & disbursements
- Financial accounting & reporting
- Financial reporting
- Procurement
- Information services
- Cybersecurity
- Claims processing
- Member and employer services

Weaver can also provide subject matter expertise and guidance on the risks, controls and internal audit areas of focus for the potential internal investing being explored by the investment program. We also have extensive experience with Internal Audit's role in significant system migration projects including a health assessment of a multi-year pension system software upgrade that is currently in progress by a similar state pension program.


Engagement Review Steps

Weaver's team will utilize our proven approach methodology and subject matter expertise to provide Internal Audit the following:

Review of the Audit Charter

Establishing and periodically reviewing the Internal Audit charter is a critical element for any organization, as it establishes the framework for how Internal Audit operates. As organizations and Internal Audit departments evolve, the Charter should be updated to reflect the changes in organization, reporting, and responsibilities. To assist with this development, Weaver will:

- Review the Internal Audit Charter against the International Standards for the Professional Practice of Internal Auditing (IPPF) including its mandatory standards, definitions, core principles, and code of ethics
- Validate that the Charter:
 - Defines the mission, purpose, scope, authority, responsibilities and reporting relationships
 - Enables independence and objectivity of the chief audit executive of Internal Audit
 - o Provides for the right to access records and people necessary to carry out work
 - Addresses compliance with IIA standards and reporting
- Review the Audit Charter for alignment with the current organization structure, and the responsibilities and expectations of the State Investment Board (SIB) Audit Committee
- Provide recommendations and draft potential changes or updates to Internal Audit Charter

Conduct Current State Business Needs Analysis

To understand Internal Audit's current approach to conducting their business processes, Weaver would work with key Internal Audit personnel and leadership to review and assess the various activities being conducted. To achieve this, we would conduct interviews, review any existing policies and procedures, and conduct walkthroughs of various processes, review sample documentation and file structures. We would anticipate that review to focus on the following areas.



Internal Audit Annual Planning

- » Developing comprehensive universe of auditable entities
- » Conducting periodic risk assessments
- » Building annual or multi-year audit plans
- » Conducting resource assessments
- » Use of internal and external staff
- » Vetting of Plan with key
- stakeholders » Alignment with Compliance and Risk
- » Plan approval
- » Reporting on Plan progress
- Periodic assessments of evolving or emerging risks
- » Updates to the Plan

Audit Execution

- » Engagement planning
- » Resource needs and procurement
- » Subject matter expertise
- » Development and structure of audit program and testing lead sheets
- » Supporting documentation
- » Use of data analytics
- » Sample selection process
- » Client engagement, meetings, and status updates
- » Tracking audit progress
- » Documenting issues and exceptions
- » Drafting and finalizing Audit reports
 » Quality review
- » Retention of audit reports, testing, and supporting documentation

Reporting & Administration

- » Tracking of open and resolved issues
- » Progress against the Plan
- » Engagement of key stakeholders
- » Analysis of trends and patterns in issues, risks, and departments
- » Procurement of external staffing resources
- » Quality assessment reviews
- » Board and senior management reporting
- » Internal Audit training and certifications
- » Succession and staff development planning
- » Internal Audit software
- » Analytics and visualization tools

After conducting our analysis, Weaver's team will document any process flows and procedures followed using our established methodology, which would be provided to Internal Audit. Our documentation approach to workflows includes indicating where key control processes exist or where certain risks are not mitigated. Similar to our approach with the final deliverables, all workflows and procedures documented will be reviewed in draft format with the client, including controls and risks identified for review, discussion, and approval.

Re-engineering and Future Business State of Internal Audit

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A roadmap for Internal Audit transformation toward a future state that allows Internal Audit to efficiently use its resources to evaluate and improve the risk management, control structure, and overall governance of the ND Retirement Investment Office. Weaver's final deliverable will include:

- Recommended transformation steps, process changes, and anticipated challenges
- Probable implementation efforts by management and staff
- ► A future-state staffing model based on growth of the portfolio and potentially bringing investment functions in-house. As part of the staffing model, we would include internal audits where external resources can be leveraged to address staffing or expertise needs of the department. This would also include recommended approaches to facilitate knowledge transfer to internal staff to obtain the requisite knowledge and skill to perform investment and investment operations related audits.



- Realistic timelines based on Internal Audit's available resources and the future state staffing model
- A comprehensive needs analysis and recommendations on potential technology solutions for audit planning, audit documentation, risk assessments, training, and data analytics / visualization tools

Investment Internalization

Weaver's project team has extensive experience regarding Internal Audit's approach to internal investing controls. As ND RIO contemplates this process, ensuring that the correct governance and controls are in place at the onset are critical to managing the risk to the organization. Internal Audit, if properly positioned, can strengthen their role as a trusted adviser as ND RIO manages this process. Weaver's Asset Management consulting team can help. We have knowledge and experience conducting Internal Audit reviews across the investment lifecycle.

- Understanding Investment Risks Our team will review the investment internalization plan and advise Internal Audit on the risks likely to be encountered. Each asset class (equity, fixed income, private equity, real estate, etc.), investment operations, and compliance, come with unique risks that will be discussed and shared with Internal Audit.
- Preliminary Audit Plan Based on our understanding of ND RIO's plan, we will provide a list of audits that should be performed on a regular basis. . For each audit, we will include the likely risks, a summary of the recommended scope for a future review, and a preliminary schedule showing the frequency of reviews based on risk.



Updated Risk Assessment – As we assess and advise on Internal Audit's Risk Assessment (see below), we will include the inherent risks associated with the various stages of the investment lifecycle so that Internal Audit can easily incorporate into their risk assessment when the function is internalized.

Staff Training and Development

Training of internal audit staff is critical to the long-term success of the department and we will help develop a training needs analysis, skills assessment, and internal audit development path, including recommended certifications and training topics. In addition, Weaver will also provide training to the Internal Audit department on the likely risks and associated controls with internal investing.

Risk Assessment and Risk Matrix

A comprehensive risk matrix and risk assessment is an important tool in the Internal Audit planning process. Weaver will assist Internal Audit in the development of this across the agency and programs of ND RIO and a recommended path for meeting with key management to monitor current risks and identify emerging risks to the organization.



Weaver's risk assessment process is designed to gather candid input on organizational risks for the inscope areas. Through experience, we have developed a risk assessment forum model consisting of participants from all functional areas. Participants meet to work through the risk assessment, discuss risk considerations and establish a consensus.

Assessing Risk

During the internal audit lifecycle, the purpose of a risk assessment process is to receive candid input on organizational risks in the areas of finance, compliance and operations. Our risk assessment process consists of:

- Developing a universe of significant activities to ensure complete coverage of all operationally and financially (including fraud) significant activities
- Developing the risk assessment profiles of the key processes and functional areas and assign initial risk ratings for

						High: An overall average rating of 3.30 or higher is considered High. Moderate: An overall average rating from 2.51 to 3.2% is considered Law: An overall average rating of 2.50 or less is considered Low.									
	fisk factor Weight Factor			Financial and Fraud Risk 25%		Operations and Complexity Risk 20%		Information Technology Risk		Human and Organization al Risk 25%		ational isk 0%	Probability Sub Total	Impact Sub Total	Overall Average
	Process Area	r Process Group	P		P 1		P I		P	P I		176			
1	Human Resources	Operating and Administrative Activities	4	4	4	4	4	4	4	4	4	4	4.00	4.00	4.00
2	Payroll Process	Operating and Administrative Activities	4	4	4	4	4	4	4	4	4	4	4.00	4.00	4.00
	Accounts Payable and Cash Disbursements and Procurement	Financial Activities	4	4	4	4	3	2	4	4	4	4	3.90	3.80	3.85
4	Information Technology Security	Operating and Administrative Activities	4	4	4	4	4	4	3	3	4	4	3.75	3.75	3.75
5	Purchasing Cards	Financial Activities	4	4	4	4	2	2	3	3	4	4	3.55	3.55	3.55

each identified activity or process regarding its overall level of risk to the organization Meeting with management to gain consensus on the significant risks and risk rankings for the identified activities and to complete the comprehensive risk assessment based on the impact and likelihood of risk

From this, we develop a risk-rated internal audit universe worksheet, which depicts the high-to-low risk areas and provides a comprehensive view of the risk assessment results. See sample risk assessment results below.



Compiling Results

Next, our process will allow Internal Audit to evaluate risk scores for the risk activities and work with management to review the assessments in order to ensure risk scores are reasonable.

We will also provide the risk-rated audit universe we create risk maps based on the probability and impact scores for each risk activity.

Developing the Internal Audit Plan

From the risk-rated audit universe, Internal Audit can effectively develop a multi-year internal audit plan to strategically and thoughtfully plan



a strategy that best utilizes internal and external resources. See below for a sample internal audit plan that could be leveraged by Internal Audit.

Audit Area	Category	Risk Rating		Timing
			20XX-20XX Planned Internal Audits	
Procurement, Procurement Cards, Accounts Payable, Cash Disbursements, and Travel and Business Expense	financial	High	Internal Audit will include an evaluation of risks and internal controls in place related to the Company's Procurement. Procurement Cards, Accounts Payable, Cash Disbursements, and Travel and Business Expense processes. Key functions and sub-processes would include: Purchasing, vendor set-up, vendor invoice review and approval, payments, travel and expense reimbursement, petty cash and purchasing card administration, payment, review and approvals.	September/ October 20XX
Human Resources, Benefits Administration, Employee Development, and Payroll	Operating and Administrative	High	Internal Audit will include an evaluation of risks and internal controls in place related to the Company's Human Resources, Benefits Administration, Employee Development, and Payroll processes. Key functions and sub-processes would include: Human resources administration, performance and compensation review, onhourding, terminations, disciplinary actions, benefits administration, employee development, and payroll processes such as timekeeping and approval, payroll taxes and voluntary deductions.	January/ February 20XX
			20XX-20XX Annual Requirements	
Project Management	Project Management		Track overall internal audit procedures, coordinate internal audit activities, and reporting to management.	Ongoing
Risk Assessment	Policy Compliance		Perform the process level risk assessment for the Company	May - August 20XX
Annual and Quarterly Board Reports	Policy Compliance		Prepare and submit required annual and quarterly reports to the Committee of internal audit activities	Ongoing

Updating the Risk Assessment

We recommend reviewing risk assessments annually; however, this annual review can take many forms and is usually not as comprehensive in scope as the initial risk assessment. A full risk assessment is recommended to reoccur every 2-4 years, depending on the environment.



Weaver is committed to keeping Internal Audit's management and staff informed throughout the process.

Meetings

At the beginning of the engagement, we will conduct an entrance conference to kick off the initial planning process, then deliver a detailed work plan with milestones and a list of document requests. Throughout the engagement, we will present progress reports and proactively schedule weekly or biweekly status meetings, in addition to being available at any time for meetings requested by management. At the conclusion of fieldwork, we will conduct an exit conference to discuss our findings, observations and recommendations. We will also present reports and a summary of overall progress to senior management as needed.

Reporting

Prior to inclusion in any written reports, Weaver will review and confirm potential findings and observations with management and will work with management to provide feasible, actionable, accurate and timely recommendations to address any issues identified and the proposed future state roadmap for Internal Audit.

After performing complete quality control reviews of deliverables, our team will deliver the draft reports to management for review. We will review and consider any feedback and responses to findings received regarding the draft reports, and issue the final report within 10 business days.

Anticipated Schedule

To provide ND RIO with a visual of workflow, please refer to the simple chart below. We can adjust our engagement based on your preferences, as needed.





Section 4: Experience and Qualifications





Meet Weaver

Founded in 1950, Weaver has been providing advisory and assurance services to government entities for more than seven decades.

With 14 offices from coast to coast, including in New York, and more than 1,000 professionals – including 130+ partners – we're committed to helping our government clients meet regulatory requirements, but we also bring a long-term perspective to help them improve their operations and services. By helping clients build mature, strategic processes and governance, we position them to more effectively address problems, flag potential issues such as fraud or loss, and achieve compliance.

At Weaver, there are no "one-size-fits-all" solutions. We combine leading technical knowledge with specific industry experience to provide highly customized services tailored to each client's needs.

- Government S Not-for-profit ndustrie
 - Higher Education
 - Real Estate
 - Construction
 - Hospitality
 - Healthcare
 - **Professional Services**
 - Private Equity
 - Insurance
 - Technology
 - Alternative Investments
 - **Financial Services**
 - **Financial Institutions**
 - Manufacturing & Distribution
 - Oil & Gas
 - **Oilfield Services**
 - . Renewable Energy

Advisory & Consulting Services

Risk Advisory Services

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- ► IT Advisory Services
- Government Consulting Services
- Asset Management Consulting
- **Client Advisory Services**
- Transaction Advisory Services
- Forensic & Litigation Services

Assurance Services

- Audit, Review & Compilation
- Agreed-Upon Procedures
- Employee Benefit Plan Audit
- SOC Reporting
- Attestation Services
- **IERS Assessment & Conversion** •

Tax Services

- Federal Tax
- State & Local Tax
- International Tax
- **Private Client Services** •





Our goal is to balance both high development with high performance to meet the longterm goals of each individual, team and our firm, and every person plays a part. Our core values drive virtually everything we do here at Weaver — the way we work, the way we operate and the way we serve our clients.

SCAN ME

Our Core Values



Lead. Always

think about how

we can improve.



deeply proud of,

as if Weaver were

your business.



no matter what.



expectations, always.



Help each other succeed at work and in life.

Respect everyone for who they are

and what they

contribute, no matter

how different.



List of Weaver Partners: A full list of Weaver's 130+ partners can been found at weaver.com/our-people.



Certifications and Industry Involvement

This engagement will be staffed leveraging our highly experienced, full-time Advisory Services professionals that stay at the forefront of the industry through ongoing certifications. Some of the many certifications held by our professionals include:

- Certified Public Accountant (CPA)
- Certified Internal Auditors (CIA)
- Certification in Risk Management Assurance (CRMA)
- Certified Fraud Examiner (CFE)
- Chartered Global Management Accountant (CGMA)
- Certified Government Auditing Professional (CGAP)
- Certified in Risk and Information Systems Control (CRISC)
- Certified Information Systems Auditor (CISA)
- Certified Information Systems Manager (CISM)
- Certified Ethical Hacker (CEH)
- Cybersecurity Maturity Model Certification Registered Practitioner (CMMC RP)
- GIAC Certified Windows Security Administrator (GCWN)

- ► GIAC Forensic Examiner (GCFE)
- GIAC Penetration Tester (GPEN)
- GIAC Systems and Network Auditor (GSNA)
- Certificate of Cloud Security Knowledge (CCSK)
- Certified Data Privacy Solutions Engineer (CDPSE)
- Certified HITRUST CSF Practitioner (CCSFP)
- Certified Information Systems Security Professional (CISSP)
- Certified Cloud Security Professional (CCSP)
- Certified ISO 27001 Lead Auditor
- PCI Qualified Security Assessor (QSA)
- Payment Card Industry Professional (PCIP)
- AICPA Advanced SOC for Service Organizations Certificate

Our professionals also stay abreast of best practices, industry trends and compliance issues through active participation — including holding key leadership positions — in numerous professional and industry associations, such as:

- Member, Institute of Internal Auditors' (IIA's) North American Board, Board of Governors (Houston Chapter), American Center for Government Auditing, Chapter Relations Committee, Publications Advisory Committee and Academic Relations Committee
- Member, AICPA State and Local Government Expert Panel and Information Technology Executive Committee (ITEC)
- Member, Editorial Board of Internal Auditor magazine
- Member, Information Systems Audit and Control Association (ISACA)
- Member, International Information Systems Security Certification Consortium (ISC2)
- AICPA SOC for Service Organization School Graduate SOC Task Force
- Management and Technology Assurance (IMTA) and Chair of IMTA's Cybersecurity Task Force
- Member, Advancing Data Center and IT Infrastructure Professionals (AFCOM) and Board Member (Houston Chapter)
- Member, Information Systems Security Association (ISSA)
- Member, Tech Titans and Tri-Chair, Cybersecurity Forum of Tech Titans





Team Organizational Chart

Weaver takes a function-specific approach to engagement staffing: we focus on leveraging the right resources at the right times, ensuring that teams are assigned based on the specific tasks required during each of the audit phases, as well as the timing of those tasks.

The people depicted in the organization chart below have all been chosen specifically for their understanding of retirement systems, investments, and state government operational structures and financial reporting requirements.

Subcontractors: To keep this engagement and the terms of contract simple, we don't plan to utilize any subcontractors in the performance of this engagement.

Weaver's hands-on experience with pension plan and investments means we can approach your audit in the most efficient manner possible. We consistently look for ways to bring a valuable perspective to be sure that we're adjusting

to lessons learned, changes in your operations, industry trends and the evolution of best practices. **Throughout our service to you, we'll balance efficiency and innovation to bring North Dakota professionals the best experience possible for the benefit of your people and your funds' beneficiaries.**

Alyssa Martin, CPA Engagement Partner

Bruce Mills, CIA, CFE Engagement Lead

Marci Sundbeck, CIA, CISA, CCSA, CFE, CRMA Advisor, Public Pension Funds

> Holly Hart, CPA Engagement Manager

Risk Advisory Staff Member





Weaver Professionals to Serve the State of North Dakota





ND RIO Engagment Role: Engagement Partner

With more than 25 years of experience, Alyssa is widely recognized for her work collaborating with management teams on growth strategies and governance matters. She has focused throughout her career on enterprise risk management, internal audit, fraud prevention, IT audit, operational analysis, business management consulting, strategic planning and technology consulting for state and local government entities, as well as private and publicly held companies. She is Weaver's strategy leader for large markets and public entities and a partner in our Risk Advisory Services practice.

Alyssa is a Certified Public Accountant and a frequent speaker at national and regional events focused on organizational growth and risk management. Alyssa is highly active in the industry, having held numerous leadership positions, including serving as an American Institute of Certified Public Accountants (AICPA) Council Member, a member of the IIA Global Academic Committee, and on the editorial boards for the *la Magazine* and *Today's CPA*. She is also a member of TXCPA and the National Association of Corporate Directors (NACD). She earned both a bachelor's degree and a master's in business administration from the University of Texas at Dallas.

Alyssa has more than 25 years of experience in enterprise risk management, internal audit, fraud prevention, IT audit, operational analysis, business management consulting, strategic planning and technology consulting for billion-dollar state agencies and private and publicly held companies across a broad swath of industry and financial services.

Representative Client Experience

- Employees Retirement System of Texas
- Los Angeles County Employees Retirement Association
- Texas Municipal Retirement System
- Brandes Investment Partners
- Capital Southwest Corporation
- P10 Holdings
- Five Points Capital
- RCP Advisors
- Texas Department of Information Resources
- Cancer Prevention Research Institute of Texas
- Lower Colorado River Authority

Education and Certifications

- Certified Public Accountant, Texas and Oklahoma
- Master of Business Administration, University of Texas at Dallas
- Bachelor of Science in Accounting and Information Systems, University of Texas at Dallas









Bruce Mills, CIA, CFE | Managing Director, Asset Management Consulting Services ND RIO Engagment Role: Project Lead

Bruce has more than 30 years of experience building and developing teams for internal audit, compliance and operational risk within the asset management sector. Bruce has broad global asset management knowledge and an understanding of regulatory and compliance requirements globally. He built internal audit plans and risk assessments for a \$1.3 T asset manager for 10 years and has led internal audits, compliance reviews and risk assessments for pensions, public and private funds, ETFs, registered investment advisers, third-party risk management and ESG programs. He has built both Internal Audit and Compliance risk assessments, internal audit, and compliance monitoring plans for multiple clients since moving to his consulting practice

Bruce has also presented audit and compliance plans, issues and corrective actions to boards and senior management, conducted fraud/regulatory investigations, led process mapping and innovation projects, and conducted AML/BSA reviews.

As **Engagement Lead**, Bruce will leverage previous experience developing risk assessment methodologies, building internal audit plans and presenting recomendations and results – including providing these services for a global asset manager with over \$1.6 trillion in assets under management.

Representative Client Experience

- California State Teachers' Retirement System
- P10 Holdings, Inc.
- RCP Advisors, Inc.
- Five Points Capital
- Enhanced Capital Advisors
- Midland Fireman's Relief and Retirement Fund
- Anonymous Private Equity Firm \$48 billing in assets under management

Education and Certifications

- Certified Internal Auditor (CIA) and Certified Fraud Examiner (CFE)
- Bachelor of Arts, history, University of Texas at Austin













industry best practices and trends, and is actively involved in a wide array of professional and industry associations and organizations, including having served as a past president of the Association of Public Pension Fund Auditors (APPFA).

(CRMA) and Certification in Control Self-Assessment (CCSA). She stays at the forefront of

Marci Sundbeck has supported CaISTRS since 2021 and has obtained an indepth understanding of the organization. She built and led the ERM function for ERS before joining Weaver

Representative Client Experience

- California State Teachers' Retirement System
- Los Angeles County Employees Retirement Association
- Texas Department of Information Resources
- Cancer Prevention and Research Institute of Texas
- North Texas Tollway Authority
- Austin Community College
- Lower Colorado River Authority

Education and Certification

- Certified Internal Auditor (CIA)
- Certified Information Systems Auditor (CISA)
- Certification in Control Self-Assessment (CCSA)
- Certified Fraud Examiner (CFE)
- Certification in Risk Management Assurance (CRMA)
- Bachelor of Business Administration, Texas A&M University

Marci Sundbeck, CIA, CISA, CCSA, CFE, CRMA | Senior Director ND RIO Engagement Role: Advisor, Public Pension Funds

For more than 30 years, Marci has provided audit and advisory services to state

governments, including 25 years of experience with Employees Retirement System of Texas (ERS), a fiduciary fund of more than \$35 billion in net assets. Having served as both the Director of Enterprise Risk Management and the Director of Internal Audit at ERS, Marci has extensive experience developing and managing governance and enterprise risk management programs and processes in a state agency environment. A Certified Internal Auditor (CIA), Certified Information Systems Auditor (CISA) and Certified Fraud Examiner (CFE), Marci also holds a Certification in Risk Management Assurance







Holly Hart, CPA, CIA | Manager, Risk Advisory Services ND RIO Engagement Role: Engagement Manager

Holly has over 10 years of experience providing objective performance and internal audit services involving federal programs and compliance with regulations, effectiveness and efficiency of key municipal government operations, performance oversight and governance practices, and financial/ operational risk analysis internally and for not-for-profit business partners. Holly is also experience in driving process improvement efforts to enhance internal audit procedures, mentor new auditors, and develop training opportunities that strengthen auditor skills and impact for the benefit of the communities our clients serve.

Holly formerly served as an Assistant City Auditor for City of Dallas' Office of the City Auditor, as well as an Auditor for the U.S. Department of the Interior. She currently serves as Adjunct Instructor for Dallas College's Career and Technical Education/CPA program at the Mountain View Campus, with courses including Government & Not-For-Profit Accounting and Audit Theory.

Representative Client Experience

- Los Angeles County Employees Retirement Association
- Houston-Galveston Area Council
- City of Dallas
- City of Burleson
- City of Midland
- City of Lewisville
- Lower Colorado River Authority
- North Texas Municipal Water District

Education and Certifications

- CPA and Certified Internal Auditor (CIA)
- Bachelor and Master of Science in Accounting and Information Management, University of Texas at Dallas



Resources for Your Success

Weaver wants to furnish you with the information and support you need to master many different operational challenges. That is why we provide a constant stream of webinars, podcasts, toolkits and research on issues facing state government and pension plans.



Weaver's podcast, Weaver: Beyond the Numbers – The Business of Government, recently posted an episode entitled "The Future of Government," **featuring Porter Wilson, Executive Director of the Employees Retirement System of Texas**.



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Experience with Similar Entities

Weaver has more than 70 years of experience meeting the assurance and advisory needs of state government entities – including state pension systems such as the, **Texas Emergency Services Retirement System, Employees Retirement System of Texas, Texas Municipal Retirement System**, and the **California State Teachers' Retirement System**. We understand the complexities of your financial operations, the challenges and risks specific to DRS, and the nuanced compliance requirements you must meet.

Weaver has in-depth knowledge of state agencies' operations through years of experience performing engagements across numerous departments and over a variety of policies, processes and activities. We meet you where you are with customized services and flexible, scalable, multidisciplinary teams.



Weaver leaders participate in key standard-setting bodies, including the American Institute of Certified **Public Accountants' (AICPA's)** Council, State & Local Government Expert Panel and Government Audit Quality Center (GAQC), and the **Government Finance Officers Association (GFOA)** Special Review Committee.

"Weaver is extremely knowledgeable in government finance, bringing us comfort that our books have been adequately audited. In addition, we sometimes need special audits and reviews performed. The firm has such a wide breadth of knowledge and disciplines within their organization that they have been able to assist us in every situation.

- Weaver Municipal Client





Section 5: Contract Provisions





Per the RFP and its instructions around Section 5, Contract Provisions, Weaver herein states that we accept the State's contract as written, without modification.

MEMORANDUM

TO: State Investment Board (SIB) Audit Committee

FROM: Sara Seiler, Supervisor of Internal Audit

DATE: November 15, 2022

SUBJECT: Update on Current Internal Audit Activities – Second Quarter

Internal Audit (IA) typically has multiple audits going on at the same time in different stages. The following is the status of current audits in progress:

Phase 1 – Planning and Notification

Phase 2 – Fieldwork

Phase 3 – Communication with Staff

Phase 4 – Writing Report

Phase 5 – Final Report and Management Response

Internal Audit Activities In-Progress

- Executive Limitations Phase 1
- Model 2 Partial Salary Review Phase 2
- RIO Policy Manual update Phase 2
- Pioneer Pension Administration Software Stage 3
- Payroll Audit Phase 5
- TFFR File Maintenance Phase 5
- Administrative Audit Payroll Audit Phase 5

IA staff attended the following meetings: four Management, four Staff, one SIB, one SIB GPR, one Investment Committee, one TFFR GPR, and one Fiscal/Retirement Services Organization meetings.

The Internal Auditor attended the Fiscal/Retirement Services Organization meetings. The meetings are held monthly with the Deputy Executive Director/Chief Retirement Officer. The Chief Financial Officer/Chief Operating Officer, the Retirement Program Manager, and the Internal Auditor attend. Major discussion topics were evaluating processes and procedures for the external audit, the actuarial evaluation, and the discussion of moving processes from NDIT to Fiscal Operations.

For training, IA staff also attended quarterly NDIT training on security. The Supervisor of IA attended training conducted by the Association of Public Pension Funds for Auditors (APPFA) on project management and leadership training conducted on Teams

The Supervisor of IA worked with the External Auditors in collecting information for the GASB audit.

The Supervisor of IA and the Executive Team developed a RFP that was issued the end of September 2022. Due to the agency reorganization and expansion of the Investment staff, IA and management was requesting consultants to evaluate the future needs for IA. The Supervisor of IA reviewed the RFP responses with the Executive Team and awarded Weaver & Tidwell, LLP the contract. Kickoff is scheduled for November 2022 and IA staff along with other RIO staff will be working with Weaver & Tidwell, LLP over the next few months on gathering information and meeting with the consultant for them to analyze the needs of the Internal Audit division.

The Supervisor of IA is a committee member of the Administrative Policy Group. The group has been reviewing universal and non-universal policies in the RIO Administrative Manual. Eight policies were identified for a more extensive review: Social Media, Conflicts of Interest, Separation, Salary Administration, Electronic Communication Devices, Travel, Grievance, and Open Records/Media Inquiries. The Supervisor of IA will lead discussion for Conflicts of Interest, Separation, and Electronic Communication Devices. The Internal Auditor participated in discussions about Conflicts of Interest and Grievance.

During the month of October, the Internal Auditor attended twenty-one Pioneer meetings. Subject matter for the meetings was requirement reviews, demo of the applications, and elaboration meetings. The Supervisor participated in weekly Pioneer calls.

For the Model 2 Partial Salary Review, the Internal Auditor started to review the information received from the forty-one employers.

All staff training is scheduled for December 8, 2022 that IA staff will be attending.

Upcoming Audit:

On an annual basis, a review of the Executive Director/CIO's compliance with the State Investment Board (SIB) Governance Manual Executive Limitation Policies A-1 through A-11. The audit will review calendar year 2022.