NORTH Dakota Be Legendary.

Retirement & Investment

An Agency of the State of North Dakota

2022 ANNUAL COMPREHENSIVE FINANCIAL REPORT

FOR THE FISCAL YEARS ENDED JUNE 30, 2022 & 2021

Photo Credit: ND Tourism

North Dakota
Retirement & Investment Office

An Agency of the State of North Dakota

Annual Comprehensive Financial Report

Prepared by the North Dakota Retirement & Investment Office Staff
1600 E Century Avenue, Suite 3
P.O. Box 7100
Bismarck, ND 58507-7100
Phone: (701) 328-9885
www.rio.nd.gov

For the Fiscal Years Ended June 30, 2022 & 2021

All printed materials can be made available in alternate formats.
Contact the administrative office should this be necessary.

Table of Contents

Introductory Section

Financial Section

Investment Section

Actuarial Section

Statistical Section

Introductory Section

NORTH Dakota | Retirement & Investment
Be Legendary.

January 20, 2023

Members of the
North Dakota State Investment Board
North Dakota Teachers' Fund for Retirement Board

Dear Board Members:

We present to you the June 30, 2022, Annual Comprehensive Financial Report (ACFR) for the North Dakota Retirement and Investment Office (RIO). The report is a complete review of the financial, investment, and actuarial conditions of the two programs for which you are responsible. Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, rests with the management of RIO.

Generally accepted accounting principles (GAAP) require that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. RIO's MD&A can be found immediately following the report of the independent auditors in the Financial Section.

RIO is an agency of the State of North Dakota. The agency was created by the 1989 Legislative Assembly to capture administrative and investment cost savings in the management of two important long-standing state programs – the retirement program of the Teachers' Fund for Retirement (TFFR) and the investment program of the State Investment Board (SIB).

Established in 1913, TFFR is one of the oldest retirement plans in the nation. TFFR is a qualified defined benefit public pension plan covered under Section 401(a) of the Internal Revenue Code. North Dakota Century Code Chapter 15-39.1 contains the actual language governing the fund. The plan covers North Dakota public school educators. The TFFR plan is funded on an actuarial reserve basis. Benefit funding comes from member and employer contributions and investment earnings. TFFR serves 11,802 members from 207 employer groups and pays benefits to 9,438 retirees and beneficiaries. High quality member services and outreach programs are offered to members and employers as part of the continuing effort to keep them informed about the retirement program.

The SIB is responsible for setting policies and procedures guiding the investment of $18 billion in assets for seven pension funds and twenty non-pension funds as of June 30, 2022. Their investments are divided into two investment trust funds and three individual investment accounts. Individual investment guidelines for each fund can be found in the Investment Section. These guidelines include goals and objectives, risk tolerance, liquidity constraints, asset allocation and portfolio restrictions specific to each fund's unique circumstances. When creating investment pools to implement the asset allocations for each client fund, the SIB takes all these guidelines into consideration in order to best meet the objectives of each fund and safeguard fund assets. The following table details the participants in each trust fund as of June 30, 2022:

	Fair Value in millions	% Of Pool	FY2022 Return		Fair Value in millions	% Of Pool	FY2022 Return
PENSION POOL PARTICIPANTS				**INSURANCE POOL PARTICIPANTS**			
Teachers' Fund for Retirement	$2,972.49	43.0%	-6.31%	Workforce Safety & Insurance Fund	$2,055.36	70.8%	-9.04%
Public Employees Retirement System	3,699.75	53.5%	-6.66%	State Fire and Tornado Fund	19.03	0.7%	-11.36%
Bismarck City Employee Pension Fund	118.58	1.7%	-5.90%	State Bonding Fund	3.61	0.1%	-6.21%
Bismarck City Police Pension Fund	48.15	0.7%	-5.96%	Petroleum Tank Release Compensation Fund	5.92	0.2%	-5.56%
City of Grand Forks Pension Fund	72.88	1.1%	-7.63%	Insurance Regulatory Trust Fund	6.62	0.2%	-8.72%
Grand Forks Park District Pension Fund	8.62	0.1%	-7.39%	State Risk Management Fund	3.98	0.1%	-10.90%
Subtotal Pension Pool Participants	$6,920.47	100.0%		State Risk Management Workers Comp	3.26	0.1%	-11.17%
				Cultural Endowment Fund	0.52	0.0%	-10.96%
				Budget Stabilization Fund	717.67	24.7%	-5.51%
INDIVIDUAL INVESTMENT ACCOUNTS				ND Assoc. of Counties (NDACo) Fund	6.80	0.2%	-12.31%
Legacy Fund	$7,948.48		-10.12%	City of Bismarck Deferred Sick Leave	0.75	0.0%	-11.83%
Retiree Health Insurance Credit Fund	152.33		-14.95%	PERS Group Insurance	32.13	1.1%	-5.08%
Job Service of North Dakota	86.26		-6.01%	State Board of Medicine	2.75	0.1%	-10.58%
				City of Fargo FargoDome Permanent Fund	40.03	1.4%	-12.50%
				Lewis & Clark Interpretive Center Endowment	0.80	0.0%	-12.93%
				Attorney General Settlement Fund	2.96	0.1%	-5.53%
				Veterans' Cemetery Trust Fund	0.42	0.0%	-11.54%
				NDUS Capital Building Fund	1.60	0.0%	*
				Subtotal Insurance Pool Participants	2,904.22	100.0%	
TOTAL ASSETS UNDER MANAGEMENT					$18,011.75		

** This category does not have a year of history under SIB Management.*
Columns may not foot due to rounding.

The pension investment pool is made up of only qualified pension funds whose monies must be invested exclusively for the benefit of their participants. The insurance investment pool is made up of mainly insurance-type funds, but also includes other funds that do not qualify as pension funds and would like to benefit from the cost savings of being pooled with other funds' assets. All these funds are invested in accordance with the "Prudent Investor Rule."

An important aspect of the prudent investor rule is that individual investments are considered not in isolation but in the context of the trust portfolio as a whole. Some new opportunities may appear risky when viewed alone. However, when part of a diversified mix of investments in stocks, bonds, and other assets, they can increase returns often without increasing the overall portfolio risk and, in some cases, may help decrease the overall portfolio's risk.

The pension investment pool was created in July 1989 with the pooling of selected investments of TFFR and the Public Employees Retirement System (PERS). Assets from the City of Bismarck Employees and Police pension funds were added later that same fiscal year. In April 1994, Job Service of North Dakota made their initial contribution to the pool. Other additions to this pool have occurred as follows:

- The City of Fargo Employees pension plan joined the pension pool in December 2007.
- The City of Grand Forks Employees pension plan joined in May 2009.
- The City of Grand Forks Park District pension plan began participating in the pension pool in December 2009.

The assets for the Job Service plan were removed from the pension pool during fiscal year 2016 after a de-risking strategy was implemented by the PERS Board due to the plan being a closed plan with a diminishing number of participants and remaining life. The assets are now being managed within an individual investment account. Only one other fund (City of Fargo Employees Pension Plan) has been added and subsequently left the pool since its inception.

The insurance investment pool began in December 1993 with the pooling of the assets of the Workforce Safety & Insurance (WSI), Fire and Tornado, Bonding, Insurance Regulatory, and Petroleum Tank Release Compensation funds.

Other additions to this pool have occurred as follows:

- The Risk Management Fund was added in October 1996.
- Two North Dakota Association of Counties (NDACo) funds were added during fiscal year 1999, in January and March.
- The City of Bismarck Deferred Sick Leave and PERS Group Insurance funds were both added in July 1999.
- The City of Fargo FargoDome Permanent Fund was added in October 2002.
- The Risk Management Workers Compensation Fund was added in October 2003.

- The Cultural Endowment Fund was added by the 2005 legislature and funded in July 2005.
- The Budget Stabilization Fund joined the pool in September 2005 upon reaching statutorily designated levels.
- The State Board of Medical Examiners Fund (now called the State Board of Medicine) joined the pool in April 2014.
- The Lewis & Clark Interpretive Center Endowment Fund joined the pool in April 2018 originally owned by ND Parks and Recreation but was transferred to ND State Historical Society in 2022.
- The Attorney General Settlement Fund was added in September 2019.
- The Veterans' Cemetery Trust Fund rejoined the pool in March 2020. The fund had been a previous member of the pool from August 1997 until August 2007.
- The NDUS Capital Building Fund joined the pool in December 2021.

Eight funds have left the insurance investment pool after having been included in it at some point during its existence. Of those eight, one was a combination of the two NDACo funds in July 2010. The other departure from the insurance investment pool occurred when the Legacy Fund assets were removed from the insurance investment pool during fiscal year 2015 after being added to SIB management in September 2011. Pooling the assets during implementation allowed for a more efficient realization of the Legacy Fund's target asset allocation. However, after implementation, it was determined that better transparency would result and the investment objectives of this endowment-like fund could be more effectively achieved outside of the insurance pool structure.

The Tobacco Prevention and Control Trust Fund, an individual investment account, was liquidated in June 2021. Activity in FY22 was to clear out remaining balances.

MAJOR INITIATIVES & HIGHLIGHTS

RIO accomplishments during the 2021-2023 biennium have included:

- Creating and beginning implementation of a new agency strategic plan identifying core priorities and transformational initiatives.
- Reorganizing the agency to achieve greater economies of scale and support new strategic plan.
- Developing and implementing intra-agency communication and training plan to support organizational culture as a core agency priority.
- Posting, filling, and onboarding over ten new employees in the last fiscal year including two interns and three part time employees for an agency with twenty-five approved FTE.
- Assisting governing boards with the creation of three new standing committees to create governance that supports program growth: a Governance & Policy Review committee of the SIB; an Investment Committee of the SIB; and a Governance & Policy Review committee of the TFFR Board (previously an ad hoc committee; standing committee status pending second reading).
- Continuing to implement an in-state investment initiative with the creation of the ND Growth Fund, increasing funding of the BND match loan program, and supporting a Legacy Fund Asset Allocation Study project commissioned by the Legacy and Budget Stabilization Advisory Board.
- Completing two out of three phases of the TFFR Pension Administration System Modernization Project (TFFR "Pioneer" Project), with the third and final phase underway.
- Staffing Changes: Due to retirements and departures of staff in FY2021, as well as the Legislature approving 6 new FTE's for the agency during the November 2021 Special Legislative Session, RIO onboarded several new team members in FY22. New employees included (but were not limited to) three of the four members of RIO's executive team. Scott Anderson, Chief Investment Officer, joined RIO in January 2022; Chad Roberts, Deputy Executive Director/Chief Retirement Officer, joined RIO in July 2022; Ryan Skor, Chief Financial Officer/Chief Operating Officer, joined RIO in August 2022. Jan Murtha served as Interim executive Director from June 2021 through November 2021, at which time she was appointed to the permanent Executive Director position.

AWARDS

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to RIO for its annual comprehensive financial report for the fiscal year ended June 30, 2021. This was the twenty-fourth consecutive year that RIO has achieved this prestigious award. To be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized annual comprehensive financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current annual comprehensive financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

TFFR received the 2022 Public Pension Standards Award for Administration from the Public Pension Coordinating Council. To receive the award, the retirement system must certify that it meets specific professional standards for a comprehensive benefit program, actuarial valuations, financial reporting and audit, investments, and communications to members.

FINANCIAL INFORMATION

RIO is subject to very strict operational controls. Well-established internal controls are in place, segregation of duties is maintained, and an internal audit program is in effect. In addition, an annual external financial audit is performed, and the results are reported to the Legislative Audit and Fiscal Review Committee (LAFRC). Although internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives, and the cost of a control should not exceed the benefits to be derived, RIO believes the internal controls that are in place have been designed to reduce risks of material misstatements.

CliftonLarsonAllen LLP conducted the external financial audit under the direction of the North Dakota State Auditor. The auditor's opinion was unmodified for the agency for the year ended June 30, 2022.

The tables below summarize RIO's additions and deductions for the current and prior fiscal years:

Pension Trust Fund (TFFR)	6/30/2022 (in millions)	6/30/2021 (in millions)	Incr/(Decr) $ (in millions)	Incr/(Decr) %
Additions	$ (4)	$ 876	$ (880)	-100.5%
Deductions	254	244	11	4.4%
Net Change	$ (258)	$ 632	$ (890)	-140.9%

In the pension trust fund, additions decreased due to weak financial markets throughout the year. Deductions increased because the average benefit increased from the previous year, as did the number of retirees receiving benefits throughout the year.

Investment Trust Funds	6/30/2022 (in millions)	6/30/2021 (in millions)	(Decr) $ (in millions)	(Decr) %
Additions	$ (527)	$ 3,497	$ (4,024)	-115.1%
Deductions	331	1,269	$ (938)	-73.9%
Net Change	$ (858)	$ 2,228	$ (3,086)	-138.5%

In the investment trust funds, additions decreased due to weak financial markets throughout the year. Deductions decreased due to the biennial Legacy Fund earnings transfer to the State's General Fund at the end of fiscal year 2021. The transfer was just over $871 million.

FUNDING STATUS

The objective of the TFFR pension fund is to accumulate sufficient funds to meet all expected future obligations to participants. Member and employer contribution rates are established by statute and are currently 11.75% and 12.75%, respectively. The contribution rates will remain in effect until TFFR is 100% funded on an actuarial basis, currently projected to be achieved by 2044. At that point, the member and employer contribution rates will revert to 7.75%. The rates are intended to be sufficient to pay TFFR's normal cost and to amortize TFFR's unfunded actuarial accrued liability (UAAL) over a period of 21 years beginning July 1, 2022, although at any given time the statutory rates may be insufficient.

In order to determine the adequacy of the 12.75% statutory employer contribution rate, it is compared to the actuarially determined contribution (ADC). The ADC is equal to the sum of the employer normal cost rate, and the level percentage of pay required to amortize the UAAL over the 30-year closed period that began July 1, 2013 (21 years remaining as of July 1, 2022). For this calculation, payroll is assumed to increase 3.25% per year. As of July 1, 2022, the ADC is 12.12%, compared to 12.37% last year. This is less than the 12.75% rate currently required by law. The decrease in ADC is driven by favorable demographic experience.

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) increased from last year. The funded ratio as of July 1, 2022, was 69.9%, compared to 68.6% as of July 1, 2021. Based on the fair values rather than actuarial values 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 because of the five-year smoothing. This unrecognized asset loss is primarily due to investment losses during FY2022, 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, assuming the plan earns 7.25% in the future.

The following table summarizes the actuarial valuation of the TFFR plan. A detailed discussion of funding is provided in the Actuarial Section of this report.

	July 1, 2022 (in millions)	July 1, 2021 (in millions)
Actuarial Accrued Liability (AAL)	$ 4,480.0	$ 4,336.0
Actuarial value of assets (AVA)	3,133.0	2,973.7
Unfunded actuarial accrued liability (UAAL)	1,347.0	1,362.4
Funded ratio	69.9%	68.6%

FINANCIAL REPORTING FOR PENSIONS

Government Accounting Standards Board (GASB) Statement 67 for accounting and financial reporting of pension liabilities defines pension liability and expense for financial reporting purposes and does not apply to contribution amounts for actual pension funding purposes.

The following table summarizes the components of the net pension liability of TFFR. A detailed discussion is provided in the Financial Section of this report.

	July 1, 2022 (in millions)	July 1, 2021 (in millions)
Total pension liability (TPL)	$ 4,480.0	$ 4,336.1
Plan fiduciary net position (FNP)	3,023.9	3,282.4
Net pension liability (NPL)	1,456.1	1,053.7
Plan FNP as % of TPL	67.5%	75.7%

INVESTMENT ACTIVITIES

The investment policies and strategies for each of the funds under the SIB can be found in the Investment Section of this report. Each fund's policy is determined by the individual fund's governing body and presented to the SIB for acceptance. Once accepted, the policy is used as a guide to determine participation in the applicable pools. The policies are designed to provide safeguards on assets while optimizing return based on each fund's risk parameters. Additionally, each investment manager is given explicit guidelines identifying the types of investments that are acceptable within each portfolio, based on asset allocation expectations of the individual funds in the pools.

The return information presented in the Investment Section is calculated with the assistance of our consultant, Callan LLC, based on data supplied by our custodian, The Northern Trust Company, and the individual investment managers. The investment return calculations were prepared using a monthly time-weighted rate of return methodology based upon market values and are subject to independent review.

PROFESSIONAL SERVICES

Professional consultants are selected by the TFFR Board and the SIB to perform professional services that are essential to the effective and efficient operation of the retirement and investment programs. An opinion from the certified public accountant and the actuary are included in this report. The consultants chosen by the boards are listed in the Introductory Section of this report.

Respectfully yours,

Jan Murtha, J.D., MPAP
Executive Director

Ryan Skor, CPA, MBA
Chief Financial and Operating Officer

NORTH DAKOTA RETIREMENT AND INVESTMENT OFFICE
As of June 30, 2022

Mission

The North Dakota Retirement and Investment Office exists in order that:

- SIB clients receive investment returns, consistent with their written investment policies and market variables, in a cost-effective investment manner and under the Prudent Investor Rule.
- Potential SIB clients have access to information regarding the investment services provided by the SIB.
- TFFR benefit recipients receive their retirement benefits in a cost effective and timely manner.
- TFFR members have access to information which will allow them to become knowledgeable about the issues and process of retirement.
- SIB clients and TFFR benefit recipients receive satisfactory services from the boards and staff of the office.

Executive Team

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

Scott M. Anderson, CFA
Chief Investment Officer

Chad Roberts, MAcc
Deputy Executive Director / Chief Retirement Officer
Effective 7/11/2022

Ryan Skor, CPA, MBA
Chief Financial Officer / Chief Operating Officer
Effective 8/22/2022

Supervisory Staff

Eric Chin
Deputy Chief Investment Officer

Sara Seiler
Supervisor of Internal Audit

Denise Weeks
Retirement Programs Manager

NORTH DAKOTA STATE INVESTMENT BOARD
Board Members as of June 30, 2022

Investment Program

Investment Process

The ND State Investment Board believes that an investment program must be built and managed like any good business, with a clear statement of mission, overall objectives, roles and responsibilities, and policies and guidelines. Major issues include:

Asset allocation targets:

- Setting appropriate benchmarks.
- Finding the right managers.
- Monitoring the program.
- Searching for appropriate new opportunities.

To ensure rigorous attention to all aspects of the investment program, the SIB follows an established investment process. This process involves three phases:

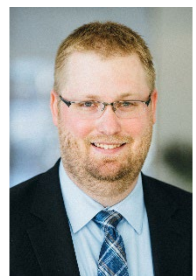
- Investment policy development/modification
- Implementation/monitoring
- Evaluation

Brent Sanford
Chair
Lt. Governor

Rob Lech
Vice Chair
TFFR Trustee

Vacant
PERS Trustee
Parliamentarian

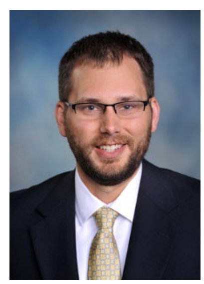
Thomas Beadle
State Treasurer



Jon Godfread
State Insurance Commissioner

Bryan Klipfel
Workforce Safety & Insurance Director

Joe Herringer
University and School Land Commissioner

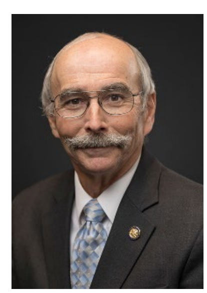


Adam Miller
PERS Trustee

Cody Mickelson
TFFR Trustee

Mel Olson
TFFR Trustee

Yvonne Smith
PERS Trustee



Jerry Klein
Legacy & Budget Stabilization Fund Advisory Board

NORTH DAKOTA TEACHERS' FUND FOR RETIREMENT
Board of Trustees as of June 30, 2022

Retirement Program

Our Mission

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

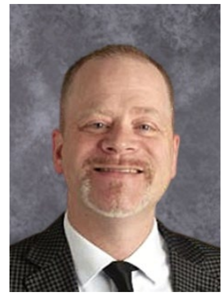
Our Vision

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

Our Core Values

Customer Satisfaction and **Commitment to Excellence** which is demonstrated by our trustworthiness, accountability and respectfulness.

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



Rob Lech
President
Active Administrator

Mike Burton
Vice President
Retired Member

Jordan Willgohs
Trustee
Active Teacher

Mel Olson
Trustee
Retired Member

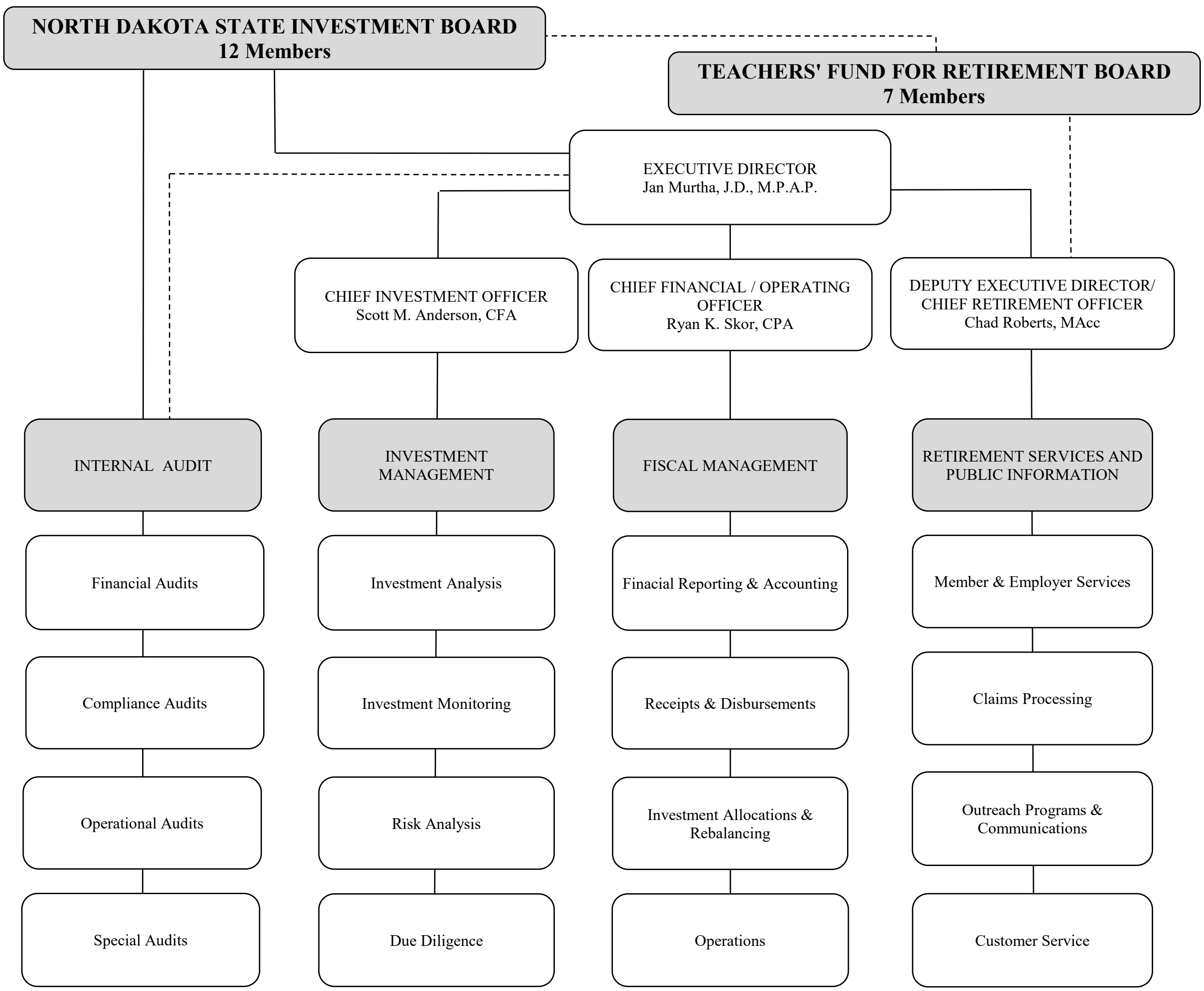
Cody Mickelson
Trustee
Active Teacher

Thomas Beadle
State Treasurer

Kirsten Baesler
State Superintendent
of Public Instruction

NORTH DAKOTA RETIREMENT AND INVESTMENT OFFICE

ADMINISTRATIVE ORGANIZATION
JUNE 30, 2022



See page 12 for a listing of professionals who provide services to the Retirement and Investment Office and pages 97-99 in the Investment Section for a summary of fees paid to investment professionals.

NORTH DAKOTA RETIREMENT AND INVESTMENT OFFICE

CONSULTING AND PROFESSIONAL SERVICES
AS OF JUNE 30, 2022

Actuary
Segal Consulting
Chicago, Illinois

Auditor
CliftonLarsonAllen LLP
Baltimore, Maryland

Legal Counsel
North Dakota Attorney General's Office
Bismarck, North Dakota

Grant & Eisenhofer P.A.
Wilmington, Delaware

Jackson Walker LLP
Dallas, Texas

Kessler Topaz Meltzer & Check, LLP
Radnor, Pennsylvania

K&L Gates
Boston, Massachusetts

Robbins Geller Rudman & Dowd LLP
San Diego, California

Information Technology
Blackrock Financial Management, Inc.
New York, New York

Bloomberg LP
New York, New York

CPAS Systems Inc.
Toronto, Ontario

eVestment
Atlanta, Georgia

PBI Research Services
San Rafael, CA

Sagitec Solutions LLC
Saint Paul, MN

SS&C Advent Software, Inc.
San Francisco, California

Master Custodian
The Northern Trust Company
Chicago, Illinois

Investment Consultant and Performance Measurement
Callan, LLC
San Francisco, California

Investment Consulting (PE Monitoring)
Adams Street Partners, LLC
Chicago, Illinois

Investment Consulting (Litigation Monitoring & Filing)
Financial Recovery Technologies, LLC
Medford, Massachusetts

Investment Managers
Adams Street Partners, LLC
Chicago, Illinois

Allspring Global Investments
Menomonee Falls, Wisconsin

Ares Management LLC
New York, New York

Arrowstreet Capital
Boston, MA

Atlanta Capital Investment Managers
Atlanta, Georgia

Axiom International Investors
Greenwich, Connecticut

Bank of North Dakota
Bismarck, North Dakota

Barings
Charlotte, North Carolina

Blackrock Private Equity Partners
New York, New York

Capital Group
Los Angeles, California

Cerberus Capital Management, LP
New York, New York

Corsair Capital
New York, New York

Dimensional Fund Advisors
Chicago, Illinois

EIG Energy Partners
Los Angeles, California

Epoch Investment Partners, Inc.
New York, New York

50 South Capital
Chicago, Illinois

Goldman Sachs Asset Management
New York, New York

Grosvenor Capital Management
New York, New York

Hearthstone Homebuilding Investors, LLC
Encino, California

I Squared Capital
New York, New York

INVESCO Realty Advisors
Dallas, Texas

InvestAmerica L&C, LLC
Cedar Rapids, Iowa

Investment Managers (cont.)
J.P. Morgan Invest. Management, Inc.
New York, New York

Loomis Sayles & Company
Boston, Massachusetts

Los Angeles Capital Management
Los Angeles, California

LSV Asset Management
Chicago, Illinois

Macquarie Infrastructure Partners
New York, New York

Manulife Asset Management, LLC
McLean, Virginia

Matlin Patterson Global Advisers LLC
New York, New York

Northern Trust Asset Management
Chicago, Illinois

Parametric Portfolio Associates
Minneapolis, Minnesota

PIMCO
Newport Beach, California

Prudential Global Investment Mgmt.
Newark, New Jersey

Riverbridge Partners, LLC
Minneapolis, Minnesota

The Rohatyn Group
New York, New York

SEI Investments Management Co.
Oaks, Pennsylvania

Sixth Street Advisers, LLC
Dallas, Texas

State Street Global Advisors
Boston, Massachusetts

Timberland Investment Resources, LLC
Atlanta, Georgia

The Vanguard Group
Valley Forge, Pennsylvania

Victory Capital Management Inc.
San Antonio, Texas

Wellington Trust Company, NA
Boston, Massachusetts

Western Asset Management Co.
Pasadena, California

William Blair Investment Management
Chicago, Illinois

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

North Dakota Retirement and Investment Office

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2021

Christopher P. Morrill

Executive Director/CEO

Public Pension Coordinating Council

Public Pension Standards Award
For Funding and Administration
2022

Presented to

North Dakota Teachers' Fund For Retirement

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

Financial Section

CliftonLarsonAllen LLP
CLAconnect.com

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 or to 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 Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory, investment, actuarial, and statistical sections, as listed in the table of contents, but does not include the basic financial statements and our auditors' report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the information exists, we are required to describe it in our report.

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.

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

Baltimore, Maryland
November 2, 2022

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

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 27 investment clients (noting that TFFR is one of the 27 investment clients) in two investment pools and three 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 FY2022 as the price of oil rose steeply throughout the year and a decrease 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%

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

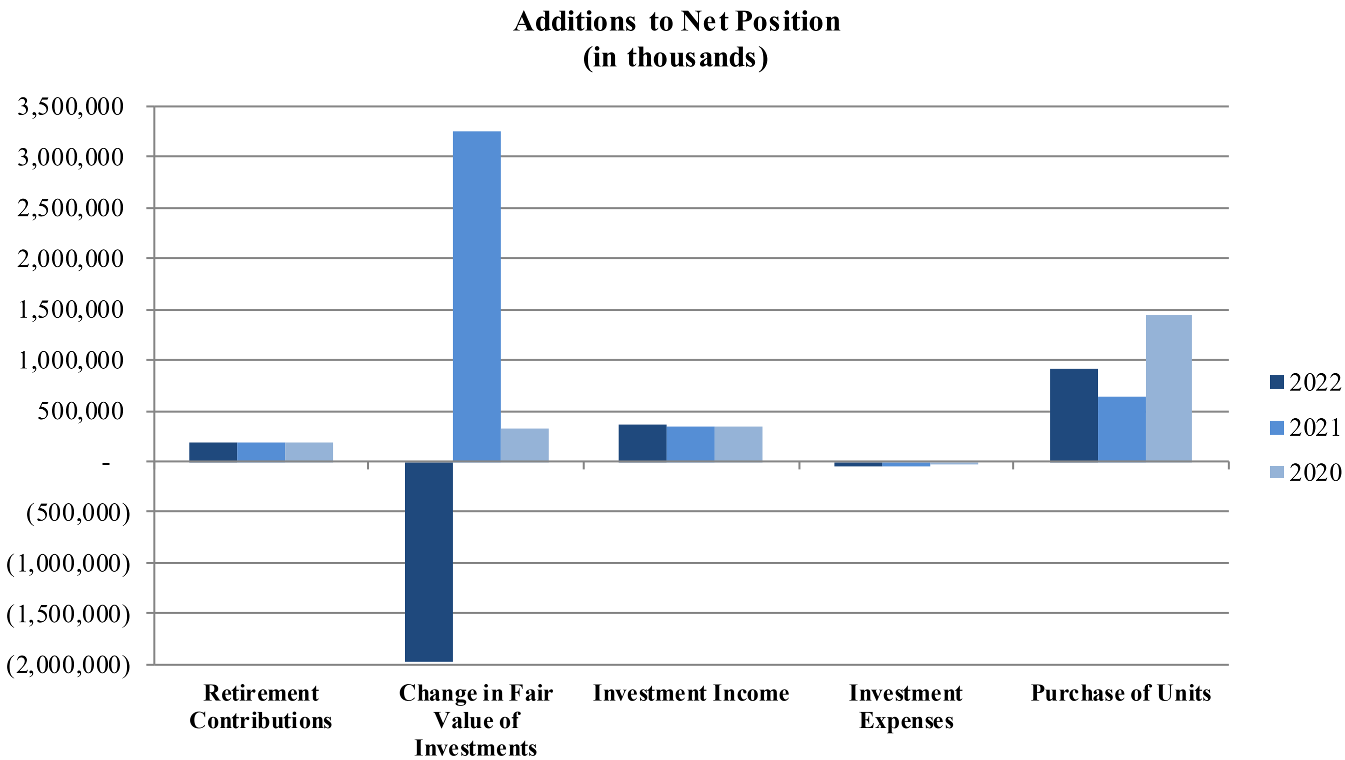
	2022	2021	Total % Change
Additions			
Contributions	$ 194.8	$ 191.5	1.7%
Net Investment Income (Loss)	(1,645.7)	3,545.0	-146.4%
Net Securities Lending Income	0.8	1.0	-23.2%
Purchase of Units	918.7	635.2	44.6%
Total Additions	(531.4)	4,372.7	-112.2%
Deductions			
Payments to TFFR members	251.8	241.1	4.4%
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%

	2021	2020	Total % Change
Additions			
Contributions	$ 191.5	$ 181.1	5.7%
Net Investment Income	3,545.0	622.9	469.2%
Net Securities Lending Income	1.0	0.9	5.9%
Purchase of Units	635.2	1,446.6	-56.1%
Total Additions	4,372.7	2,251.5	94.2%
Deductions			
Payments to TFFR members	241.1	230.8	4.5%
Administrative Expenses	4.8	3.9	24.8%
Redemption of Units	1,266.6	376.1	236.8%
Total Deductions	1,512.5	610.8	147.6%
Total Change in Net Position	$ 2,860.2	$ 1,640.7	74.3%

Statement of Changes in Net Position – Additions

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.

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



Statement of Changes in Net Position – Deductions

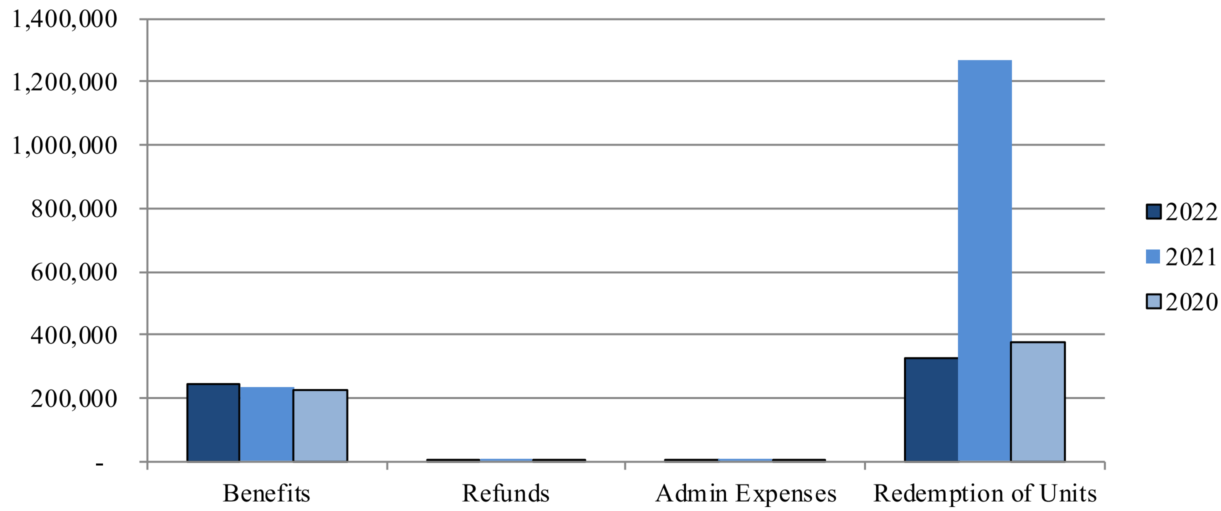
Benefits paid to TFFR plan participants, including partial lump-sum distributions, increased by $9.5 million (4.0%) and $10.8 million (4.8%) in FY2022 and FY2021, respectively. The increases are due to an increase in the total number of retirees in the plan as well as an increased retirement salary on 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
(in thousands)



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 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 allocation was up 41.79%, while the Legacy Fund and insurance pool's public equity allocations were up 42.35% and 43.06%, respectively. Fixed income returns across the pension pool, Legacy Fund and insurance pool were all positive despite rising interest rates in the U.S. The pension 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

	Pension Trust		Investment Trust		Total	
	2022	2021	2022	2021	2022	2021
Assets:						
Investments, at fair value						
Global equities	$ 1,584,149,652	$ 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:						
Restricted for pensions	3,023,920,243	3,282,404,830	-	-	3,023,920,243	3,282,404,830
Held in trust for investment pool 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 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						
Participant units outstanding			15,033,307,352	15,891,356,627		

The accompanying notes are an integral part of these financial statements.

North Dakota Retirement and Investment Office
Statement of Changes in Net Position – Fiduciary Funds
Year Ended June 30, 2022 and 2021

	Pension Trust		Investment Trust		Total	
	2022	2021	2022	2021	2022	2021
Additions:						
Contributions:						
Employer contributions	$ 100,331,347	$ 98,264,202	$ -	$ -	$ 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	$ 13,663,067,186	$ 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	$ 18,057,227,595	$ 19,173,761,457

The accompanying notes are an integral part of these financial statements.

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, Teachers Fund for Retirement, 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	More 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 Combined Financial Statements
June 30, 2022 and 2021

2021	Total Fair Value	One Year or Less	1+ to 6Years	6+ to 10Years	More 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).

2022	Total Fair Value	AAA	AA	A	BBB	BB	B	CCC	CC	C	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	$ 240,055
US Gov't & Agencies **	802,075											
Total Debt Securities	$ 6,919,723											

2021	Total Fair Value	AAA	AA	A	BBB	BB	B	CCC	CC	C	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)
5. 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 Asset Backed, Commercial Mortgage-Backed, Gov't Issued Commercial & Gov't Mortgage Backed, Gov't Agencies, Gov't Bonds, 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 Combined Financial Statements
June 30, 2022 and 2021

2022

Currency	Short-Term	Debt	Equity	Real Estate	Total
Argentine peso	$ 176	$ 177	$ -	$ -	$ 353
Australian dollar	(5,078)	-	49,149	-	44,071
Brazilian real	204	524	8,083	-	8,811
British pound sterling	(43,460)	44,164	192,397	-	193,101
Canadian dollar	(283)	301	50,088	-	50,106
Chilean peso	(254)	-	-	-	(254)
Danish krone	(99)	379	52,240	-	52,520
Euro	(5,557)	4,565	360,595	533	360,136
Hong Kong Off-Shore-Chinese yuan renminbi	(4,700)	-	-	-	(4,700)
Hong Kong dollar	1,369	-	43,948	-	45,317
Hungarian forint	(365)	-	2,161	-	1,796
Indonesian rupiah	50	-	1,370	-	1,420
Japanese yen	18,329	(15,315)	169,453	-	172,467
Mexican peso	(682)	1,368	1,451	-	2,137
New Israeli shekel	391	-	2,805	-	3,196
New Taiwan dollar	177	-	8,398	-	8,575
New Zealand dollar	(145)	-	3,309	-	3,164
Norwegian krone	184	-	11,402	-	11,586
Peruvian nuevo sol	(1,016)	793	-	-	(223)
Polish zloty	(439)	-	-	-	(439)
Singapore dollar	142	-	8,667	-	8,809
South African rand	(2)	-	783	-	781
South Korean won	(59)	-	8,298	-	8,239
Swedish krona	175	-	53,615	-	53,790
Swiss franc	525	-	83,962	-	84,487
Thai baht	102	-	2,908	-	3,010
Turkish lira	20	-	1,143	-	1,163
International commingled funds (various currencies)	-	-	1,433,227	33,273	1,466,500
Total international investment securities	$ (40,295)	$ 36,956	$ 2,549,452	$ 33,806	$ 2,579,919

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

2021

Currency	Short-Term	Debt	Equity	Real Estate	Total
Argentine peso	$ 65	$ 364	$ -	$ -	$ 429
Australian dollar	1,305	133	85,215	-	86,653
Brazilian real	(10,006)	13,514	4,080	-	7,588
British pound sterling	(45,730)	47,308	262,384	-	263,962
Canadian dollar	(624)	561	36,173	-	36,110
Chilean peso	822	-	-	-	822
Colombian peso	(508)	-	-	-	(508)
Danish krone	575	-	87,460	-	88,035
Euro	(35,762)	37,980	609,331	651	612,200
Hong Kong Off-Shore-Chinese yuan renminbi	427	-	23,707	-	24,134
Hong Kong dollar	816	-	155,260	-	156,076
Hungarian forint	(335)	-	2,875	-	2,540
Indian rupee	-	427	-	-	427
Japanese yen	1,604	-	294,524	-	296,128
Mexican peso	(825)	952	1,440	-	1,567
New Israeli shekel	(492)	491	3,605	-	3,604
New Taiwan dollar	334	-	7,660	-	7,994
New Zealand dollar	(245)	-	8,445	-	8,200
Norwegian krone	232	-	23,304	-	23,536
Peruvian nuevo sol	(2,183)	2,065	-	-	(118)
Polish zloty	(224)	-	-	-	(224)
Russian ruble	7	-	-	-	7
Singapore dollar	303	-	10,712	-	11,015
South African rand	638	-	1,168	-	1,806
South Korean won	-	-	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
International commingled funds (various currencies)	-	-	1,353,624	34,534	1,388,158
Total international investment securities	$ (89,565)	$ 103,795	$ 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).

Futures	Notional Value	
	June 30, 2022	June 30, 2021
Cash & Cash Equivalent Derivative Futures		
Long	$ 590,720	$ 172,043
Short	(83,089)	(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. 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).

Options	Fair Value	
	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 Combined Financial Statements
June 30, 2022 and 2021

Counterparty/Moody's Rating	Notional Amount June 30, 2022	Notional Amount June 30, 2021	Expiration Date Range	Fair Value June 30, 2022	Fair Value 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.

Counterparty/Moody's Rating	Notional Amount June 30, 2022	Notional Amount June 30, 2021	Expiration Date Range	Fair Value June 30, 2022	Fair Value 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 Amount			Fair Value	
Counterparty/Moody's Rating	June 30, 2022	June 30, 2021	Expiration Date Range	June 30, 2022	June 30, 2021
Citigroup Global Markets/A1 (4 contracts)	$ -	$ 13,240	2026	$ -	$ (402)
JP Morgan Chase/Aa2 (21 contracts)		17,220	2026 - 2031		(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.

	Notional Amount			Fair Value	
Counterparty/Moody's Rating	June 30, 2022	June 30, 2021	Expiration Date Range	June 30, 2022	June 30, 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 Combined Financial Statements
June 30, 2022 and 2021

					Fair Value	
	Currency	Cost	Purchases	Sales	6/30/2022	6/30/2021
AUD	Australian dollar	$ (5,270)	$ 9,464	$ (14,734)	$ (5,364)	$ (128)
BRL	Brazilian real	(66)	4,909	(4,975)	(165)	(9,541)
GBP	British pound sterling	(47,093)	39,399	(86,492)	(45,640)	(64,811)
CAD	Canadian dollar	(322)	-	(322)	(316)	(404)
CLP	Chilean peso	(285)	12	(297)	(253)	1,702
CNH	Chinese offshore	(9,047)	-	(9,047)	(9,050)	-
DKK	Danish Krone	(629)	318	(947)	(601)	-
EUR	Euro	(90,433)	91,483	(181,916)	(88,167)	(131,704)
HUF	Hungarian Forint	603	603	-	555	-
JPY	Japanese yen	(8,687)	1,053	(9,740)	(8,206)	(516)
MXN	Mexican peso	471	775	(304)	463	-
ILS	New Israeli shekel	(3,520)	-	(3,520)	(3,315)	(1,970)
NZD	New Zealand dollar	710	710	-	653	-
NOK	Norwegian Krone	631	9,973	(9,342)	399	-
PEN	Peruvian nuevo sol	(908)	1,095	(2,003)	(1,016)	(2,183)
PLN	Poland Zloty	689	689	-	665	-
RUB	Russian ruble	-	-	-	-	7
ZAR	South African rand	(906)	-	(906)	(861)	(986)
KRW	South Korean won	(352)	-	(352)	(346)	-
USD	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

	Total Notional Value	3 months or less	3 to 6 months	6 to 12 months	1-5 years	5-10 years	Greater than 10 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	$ -	$ -

	Total Fair Value	3 months or less	3 to 6 months	6 to 12 months	1-5 years	5-10 years	Greater than 10 years
Options - interest rate contracts	$ (466)	$ (357)	$ -	$ -	$ (109)	$ -	$ -
Options on futures	(3,853)	(570)	(2,687)	(295)	(301)	-	-
Options - Foreign Exchange Contracts	(142)	(142)					
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 Notional Value	3 months or less	3 to 6 months	6 to 12 months	1-5 years	5-10 years	Greater than 10 years
Futures-interest rate contracts	$ (924,288)	$ (675,150)	$ (403,466)	$ (17,715)	$ 172,043	$ -	$ -
Total	$ (924,288)	$ (675,150)	$ (403,466)	$ (17,715)	$ 172,043	$ -	$ -

	Total Fair Value	3 months or less	3 to 6 months	6 to 12 months	1-5 years	5-10 years	Greater than 10 years
Options - interest rate contracts	$ 818	$ (20)	$ -	$ -	$ -	$ -	$ 838
Options on futures	(342)	(371)	-	29	-	-	-
Swaps - interest rate contracts	(3,693)	-	-	-	(760)	(3,095)	162
Swaps - credit contracts	1,468	-	10	-	1,458	-	-
Total	$ (1,749)	$ (391)	$ 10	$ 29	$ 698	$ (3,095)	$ 1,000

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 Combined Financial Statements
June 30, 2022 and 2021

2022	Fair Value 6/30/22	Quoted Prices in Active Markets for Indentical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	Dollars in (000)	Fair Value Measures Using		
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	**$ 10,173,719**	**$ 4,873,211**	**$ 5,298,798**	**$ 1,710**

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

	Dollars in (000)	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Investments Measured at the Net Asset Value (NAV)				
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 Combined Financial Statements

June 30, 2022 and 2021

2021	Dollars in (000)			
		Fair Value Measures Using		
	Fair Value 6/30/21	Quoted Prices in Active Markets for Indentical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (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	**$ 12,191,219**	**$ 6,439,314**	**$ 5,745,142**	**$ 6,763**

North Dakota Retirement and Investment Office
Notes to Combined 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	$ 1,708,277	$ -	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**	**$ 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 broker-dealers 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	Securities Lent	Non-Cash Collateral Value	Cash Collateral Investment 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

2021	Securities Lent	Non-Cash Collateral Value	Cash Collateral Investment 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

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

Note 4 - Capital Assets

	June 30, 2020	Additions	Retirements	June 30, 2021	Additions	Retirements	June 30, 2022
Office equipment	$16,879	$ -	$ -	$16,879	$ -	$ -	$16,879
Less accumulated depreciation on office equipment	(13,730)	(1,800)	-	(15,530)	(1,349)	-	(16,879)
Software	1,213,500	-	-	1,213,500	680,999	-	1,894,499
Less accumulated 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	$ -	$ 871,687,384

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:

	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:

	June 30, 2022	June 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, including inflation and productivity	3.80% to 14.80%; varying by service, including inflation and productivity
Cost of living adjustments	None	None
Investment rate of return	7.25% net of investment expenses, including inflation	7.25% net of investment expenses, including 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 long-term investment horizon and asset allocation policy for the management of fund assets. Asset allocation policy is critical because it defines the basic risk and return characteristics of the investment portfolio. Asset allocation targets are established using an asset-liability analysis designed to assist the Board in determining an acceptable volatility target for the fund and an optimal asset allocation policy mix. This asset-liability analysis considers both sides of the plan balance sheet, utilizing both quantitative and qualitative inputs, in order to estimate the potential impact of various asset class mixes on key measures of total plan risk, including the resulting estimated impact of funded status and contribution rates.
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	Target Allocation	Long-Term Expected Real Rate of 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	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	55.0%	6.9%
Global Fixed Income	26.0%	0.7%
Global Real Assets	18.0%	4.8%
Cash Equivalents	1.0%	-1.0%

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 (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Employers' net pension liability	$ 2,000,483	$ 1,456,053	$ 1,004,517

2021	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (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, term-certain 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 Resources		Deferred Inflows of Resources	
	2022	2021	2022	2021
Differences between expected and actual 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	-	146,456	572,522	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	32,684	14,114	108,916	149,812
Employer contributions subsequent to the 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
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:

2021 - Pension Plan

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

2020 - Pension Plan

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

2021 - OPEB Plan

Asset Class	Target Allocation	Long-Term Expected Real Rate of 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

Asset Class	Target Allocation	Long-Term Expected Real Rate of 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 (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
RIO's net pension liability	$ 2,346,875	$ 1,475,710	$ 750,328

	1% Decrease (5.50%)	Current Discount Rate (6.50%)	1% Increase (7.50%)
RIO's net OPEB liability	109,100	73,561	43,489

2021

	1% Decrease (3.64%)	Current Discount Rate (4.64%)	1% Increase (5.64%)
RIO's net pension liability	$ 5,744,908	$ 4,427,931	$ 3,350,323

	1% Decrease (5.50%)	Current Discount Rate (6.50%)	1% Increase (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.

North Dakota Retirement and Investment Office
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	3,734,017	3,589,394	3,449,777	3,138,800	2,997,139
Total pension liability - ending (a)	$ 4,479,973	$ 4,336,060	$ 4,181,036	$3,993,424	$3,863,515	$3,734,017	$3,589,394	$ 3,449,777	$ 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	2,360,491	2,124,335	2,141,921	2,090,415	1,839,584
Plan fiduciary net position - ending (b)	$ 3,023,920	$ 3,282,405	$ 2,650,532	$2,616,171	$2,530,657	$2,360,491	$2,124,335	$ 2,141,921	$ 2,090,977
Plan's net pension liability - ending (a) - (b)	$ 1,456,053	$ 1,053,655	$ 1,530,504	$1,377,253	$1,332,858	$1,373,526	$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.

North Dakota Retirement and Investment Office
Required Supplementary Information

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	2.30%; decreased from 2.75% prior to 7/1/2020 and from 3% prior to 7/1/2015.
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%

North Dakota Retirement and Investment Office
Required Supplementary Information

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%			

Notes to schedule:

*Complete data for this schedule is not available prior to 2015 for pension liability and prior to 2018 for OBEP liability.

Amounts presented for each fiscal year have a measurement date of the previous fiscal year end.

North Dakota Retirement and Investment Office
Required Supplementary Information

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

	2022	2021	2020	2019	2018	2017	2016	2015	2014
RIO's Statutorily required pension contributions	$ 119	$ 131	$ 116	$ 113	$ 112	$ 114	$ 107	$ 98	$ 73
RIO's Statutorily required OPEB contributions	14	21	19	18	18	18			
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%			

Notes to schedule:

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

This page intentionally blank.

	Pension Pool Participants					Insurance Pool Participants							
	Public Employees Retirement System	Bismarck City Employee Pension Plan	Bismarck City Police Pension Plan	City of Grand Forks Employee Pension Plan	City of Grand Forks Park District	Workforce Safety & Insurance	State Fire & Tornado	State Bonding	Petroleum Tank Release Comp. Fund	Insurance Regulatory Trust Fund	Cultural Endowment Fund	Risk Mgmt	Risk Mgmt Workers' Comp
Assets:													
Investments													
Global equities	$2,044,581,165	$54,068,002	$24,335,393	$43,438,740	$4,651,783	$359,575,291	$6,658,365	$ -	$ -	$1,992,041	$286,172	$1,198,102	$1,210,608
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
Global real assets	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	1,631,998	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	218	48,718	4,490
Operating Cash	103,993	-	-	-	-	69,575	1,513	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	-	-	-	-	-	-	-
Total assets	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	415	123	31	331	335
Liabilities:													
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	-	-	-	-	954	9	2	3	1	-	2	2
Total 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	$ -	$ -	$ -	$ -	$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
Each participant unit is valued at $1.00													
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 Comparative Totals for 2021)

Insurance Pool Participants										Individual Investment Accounts				Totals	
ND Veterans' Cemetery Trust Fund	ND Ass'n. of Counties Fund	PERS Group Insurance	Budget Stabilization Fund	City of Bismarck Deferred Sick Leave	City of Fargo FargoDome Fund	State Board of Medicine	Lewis & Clark Interpretive Center Endowment	Attorney General Settlement Fund	ND University System Capital Building Fund	Legacy Fund	Job Service of North Dakota	Tobacco Prevention and Control Fund	PERS Retiree Health Credit Fund	2022	2021
$210,764	$2,385,056	$ -	$ -	$223,841	$20,061,206	$742,835	$279,262	$ -	$ -	$3,697,184,218	$17,152,361	$ -	$96,887,675	$ 6,377,122,880	$ 7,923,977,037
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	6,287,302,991
64,286	-	-	-	-	3,996,646	172,808	-	-	-	1,332,674,424	-	-	-	2,524,055,925	2,261,103,560
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	253,103,896
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	16,725,487,484
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	75,402,097
191	3,503	129,271	3,375,438	1,670	51,412	792	213	2,414	575	29,167,627	199	-	532	52,010,441	50,014,693
-	-	-	23,482	-	-	-	-	-	-	221,403	-	-	-	426,172	463,338
-	-	-	1,254	-	-	-	-	-	-	14,538	-	-	-	26,616	24,181
-	-	-	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	16,851,391,793
-	-	-	20,047	-	-	-	-	-	-	381,411	-	-	-	726,471	1,172,782
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	11,428,225
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	75,402,097
-	-	-	11,567	-	-	-	-	-	-	134,123	-	-	-	245,515	269,770
-	-	-	5,003	-	-	-	-	-	-	196,191	-	-	-	524,250	2,061,222
176	377	1,655	-	250	2,360	250	250	250	250	-	4,608	-	8,796	32,737	28,999
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	871,687,384
-	-	-	316	-	-	-	-	-	-	3,658	-	-	-	6,698	3,917
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	960,881,614
$ -	$ -	$ -	$73,340	$ -	$ -	$ -	$ -	$ -	$ -	$785,675	$ -	$ -	$ -	1,465,298	326,334
$ 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	$ 86,174,914	$ -	$ 152,194,918	$15,033,307,352	$ 15,891,356,627
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	86,174,914	-	152,194,918	15,033,307,352	15,891,356,627

	Pension Pool Participants					Insurance Pool Participants						
	Public Employees Retirement System	Bismarck City Employee Pension Plan	Bismarck City Police Pension Plan	City of Grand Forks Employee Pension Plan	City of Grand Forks Park District Pension Plan	Workforce Safety & Insurance	State Fire & Tornado	State Bonding	Petroleum Tank Release Comp. Fund	Insurance Regulatory Trust Fund	Cultural Endowment Fund	Risk Mgmt
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)
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
	(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)
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
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)
Securities lending activity:												
Securities lending income	167,467	4,721	1,916	3,568	526	83,573	950	62	92	151	27	124
Less Securities lending expenses	(33,473)	(943)	(383)	(712)	(105)	(16,701)	(190)	(14)	(18)	(31)	(3)	(26)
Net securities lending income	133,994	3,778	1,533	2,856	421	66,872	760	48	74	120	24	98
Purchase of units ($1 per unit)	-	-	-	4,530,940	419,156	4,000,000	5,560,313	-	-	5,891,765	-	500,000
Total Additions	(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
Deductions:												
Administrative Expenses	528,044	-	-	-	-	285,779	2,898	981	1,078	984	903	985
Redemption of units ($1 per 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
Total 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
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)
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
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

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

Insurance Pool Participants											Individual Investment Accounts					
Risk Mgmt Workers' Comp	ND Veterans' Cemetery Trust Fund	ND Ass'n of Counties Fund	PERS Group Insurance	Budget Stabilization Fund	City of Bismarck Deferred Sick Leave	City of Fargo FargoDome Fund	State Board of Medicine	Lewis & Clark Interpretive Center Endowment	Attorney General Settlement Fund	ND University System Capital Building Fund	Legacy Fund	Job Service of North Dakota	Tobacco Prevention and Control Fund	PERS Retiree Health Credit Fund	Totals 2022	Totals 2021
$ (413,820)	$ (64,213)	$ (1,077,670)	$ (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)	$ -	$ (30,112,037)	$ (1,722,081,517)	$ 2,618,257,668
74,634	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
(339,186)	(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
5,277	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
(344,463)	(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
110	26	343	1,342	31,419	36	2,543	131	45	124	66	507,628	-	-	-	806,990	1,002,370
(22)	(4)	(68)	(267)	(6,279)	(10)	(508)	(26)	(12)	(25)	(13)	(101,477)	-	-	-	(161,310)	(200,426)
88	22	275	1,075	25,140	26	2,035	105	33	99	53	406,151	-	-	-	645,680	801,944
1,000,000	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
655,625	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
982	-	-	-	91,938	-	-	-	-	-	-	1,068,453	-	-	-	1,983,025	2,158,611
1,700,000	-	-	168,900,000	-	-	3,800,000	-	-	598,392	1,572,801	-	4,864,873	158	6,225,000	328,730,469	1,266,579,693
1,700,982	-	-	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
(1,045,357)	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)	2,228,289,441
4,307,007	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
$ 3,261,650	$ 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	$ 86,174,914	$ -	$ 152,194,918	$ 15,033,307,352	$ 15,891,356,627

North Dakota Retirement and Investment Office

Pension and Investment Trust Funds – Schedule of Administrative Expenses

Years Ended June 30, 2022 and 2021

	Pension Trust		Investment 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	1,349	1,800	-	-
Total administrative expenses	2,592,339	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	1,349	1,800	-	-
Retainage Payable	29,876	-	-	-
Accrual adjustments to employee benefits	6,799	365,693	33,727	292,285
Total nonappropriated items	386,507	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
Schedule of Appropriations – Budget Basis – Fiduciary Funds
July 1, 2021 to June 30, 2023 Biennium

	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	$ 4,229,163

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

North Dakota Retirement and Investment Office

Pension and Investment Trust Funds – Schedule of Consultant Expenses

Years Ended June 30, 2022 and 2021

	Pension 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

	Pension Trust		Investment 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 statements

	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 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

This page intentionally blank.

Investment Section

NORTH Dakota | Retirement & Investment
Be Legendary.

January 12, 2022

Members of the
North Dakota State Investment Board
North Dakota Teachers' Fund for Retirement Board

Dear Board Members:

This report is a summary of the investment portfolios managed by the State Investment Board (SIB) and market environment for the fiscal year ended June 30, 2022.

Introduction

For the fiscal year ended June 30, 2022, the $6.9 billion North Dakota pension investment pool portfolio experienced a net total return of -6.51%. The insurance investment pool, valued at $2.9 billion on June 30, 2022, returned -8.18% (net), during the same time frame. The Legacy Fund valued at just under $8.0 billion the last day of the fiscal year returned -10.12% (net) over the same 12 months. The investment return calculations were prepared using a monthly time-weighted rate of return methodology based upon fair values and are subject to independent verification.

The pension and insurance investment pools are pooled investment funds. The pension pool was created in 1989 in an effort to realize cost savings through pooling of pension assets. The insurance pool was created in 1993 for similar reasons. A list of the participants and their ownership in each pool is provided in this section of the report. The pooled funds' strategies are a proportional reflection of the investment objectives of each of the participating funds. The returns experienced by the individual funds were consistent with their respective investment policies and related asset allocations.

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. The first transfer was received in September 2011. Transfers into the Legacy Fund totaled $707.3 million during the fiscal year ended June 30, 2022. The ND Constitution also requires that all earnings accrued after June 30, 2017, must be transferred to the state's general fund at the end of each biennium. The nearly $872 million earnings transfer for the 2019-21 biennium was accrued at the end of FY2021 and paid in July 2021.

Investment program details for the participating plans, including investment objectives and a listing of their external investment managers are presented in the Investment Section. The investment program's cost as measured by expense ratio is 71 basis points for the pension pool, 26 basis points for the insurance pool, and 53 basis points for the Legacy Fund and includes investment office administrative expenses, consultant fees, money manager fees and master custodian fees. The investment program costs decreased compared to recent years as a result of performance-based fees that were not paid due to poor markets and performance marks not being as successful as prior year.

Allocation of monthly income and expenses to the participants in the pools is based on a time-weighted beginning balance. A "time factor" and "time-weighted amount" are calculated for each plan based on individual plan-related activities. The time-weighted amounts are added up for all plan-related activities to compose the time-weighted beginning balance used to allocate the activity of the pool. Five-year annualized risk for the period ended June 30, 2022, as measured by standard deviation has been 11.77% for the pension pool, 6.71% for the insurance pool and 12.18% for the Legacy Fund. Risk exposure for each participating fund is also limited in accordance with the guidelines presented in the Investment Section.

Economic Overview as of June 30, 2022

The fiscal year ending June 30, 2022 was divided into two distinct market environments, delineated by the Federal Reserve's (Fed) mid-year "pivot" in monetary policy rhetoric. The first half of the fiscal year was characterized by the Goldilocks market conditions of the post-pandemic recovery and the transition to the inflationary environment that followed. Low interest rates, pent up demand, and healthy consumer balance sheets spurred economic activity in

1600 E Century Avenue, Suite 3 | P.O. Box 7100 | Bismarck ND 58507-7100
Phone: 701-328-9885 | Toll-Free:800-952-2970 | fax: 701-328-9897

the first half. However, expansionary fiscal and monetary policy implemented during the heart of the COVID-19 pandemic sparked an inflationary environment that gained momentum in the first half of the 2022 fiscal year.

At first, the Federal Reserve viewed rising inflation as “transitory,” primarily attributing the phenomenon to COVID-related supply chain issues. The Federal Funds rate remained suppressed at 0.00% – 0.25% throughout the first half of the fiscal year and the Fed continued quantitative easing. As the prices for goods and services escalated, it became gradually more apparent that inflation was more pervasive than initially expected. The Consumer Price Index (CPI) grew by 5.4% in the twelve months ending July 2021. That number climbed to 7.0% by December before peaking at 9.1% in June 2022. The Fed’s first action to combat inflation was to announce the wind down of quantitative easing or the purchase of fixed income securities. By March of 2022 the Fed implemented its first rate hike of 25 basis points (bps). May and June each witnessed escalating rate hikes from the Fed of 50bps and 75bps, respectively. By the end of the fiscal year, the Federal Funds Target Rate had risen to a range of 1.50% - 1.75%. Treasury yields also climbed during the year, which challenged fixed income market returns. The yield on the 10-year treasury more than doubled from 1.45% at the start of the fiscal year to 2.98% by June 30, 2022.

Risk assets generally performed well in the first half of the fiscal year before reversing fortunes in the second half. Financial markets were initially resilient to the threat of inflation, optimistically expecting it to abate without the intervention of more aggressive monetary policy. U.S. gross domestic product (GDP) expanded in each of the first two quarters of the fiscal year. A surge in private inventory investment drove real GDP 2.2% and 7.0% higher (annualized) in the first and second fiscal quarters, respectively. The housing market also remained strong, with low mortgage rates fueling demand. However, escalating inflation and the Fed’s pivot to more hawkish rhetoric quickly deflated financial asset prices. U.S. GDP fell in both the third and fourth fiscal quarters, satisfying a common but not technically sufficient definition of recession.

International markets underperformed the U.S. in the face of a rising dollar and a myriad of geopolitical issues. In the second fiscal quarter, parts of Northern Europe experienced a surge in COVID-related hospitalizations and subsequently reintroduced economic restrictions to curb the virus. The broader region also faced a natural gas shortage that was only exacerbated by the Russia/Ukraine conflict in the second half of the fiscal year. News out of China shook investor confidence, with concerns surfacing over the solvency of indebted property developer, China Evergrande. The company fell behind on payments to debt holders in the first fiscal quarter which sparked fears of broader market contagion. China’s zero-COVID policy also restricted the country’s growth as waves of infections surfaced throughout the year.

Commodities proved resilient, with the Bloomberg Commodity Price Index appreciating 23.8% in the fiscal year. Energy prices benefited from both strong demand and supply constraints. WTI crude oil prices climbed from roughly $75/bbl at the start of the year to over $120/bbl in June 2022. The prolonged conflict in Ukraine also contributed significantly to higher energy, food, and materials prices, in addition to further congesting global supply chains. The U.S. job market was an economic stalwart and source of stability throughout the year. Job openings remained elevated as employers struggled to fill vacancies. The unemployment rate trended consistently lower from 5.9% in June 2021 to end the year at 3.6% in June 2022.

Domestic Equity

The S&P 1500 Index, a broad market indicator for the U.S. stock market, gained 11.1% in the first half of the fiscal year, but lost 19.9% in the second. The Index ended the year with an 11.0% loss. U.S. equities were challenged by inflation, rising interest rates, and waning consumer sentiment in the second half. The Conference Board’s Consumer Confidence Index hit a 16-month low in June 2022 and the University of Michigan’s consumer sentiment survey indicated levels of pessimism nearing those reached during the Global Financial Crisis of 2008-2009.

The small cap index (S&P 600) declined by 16.8% during the year, trailing the S&P 500 large cap index (-10.6%). The Russell 3000 Value Index fell by 7.5%, but significantly outperformed the -19.8% return of the Russell 3000 Growth Index.

International Equity

International equities trailed their domestic counterparts. Developed market equities, as measured by the MSCI EAFE Index, declined 17.8% during the fiscal year. As in the U.S., value outperformed growth in international developed markets. The MSCI EAFE Value Index declined by 12.0%, while the MSCI EAFE Growth Index fell by 23.8% during the fiscal year. In the 2022 fiscal year the U.S. Dollar Index (DXY) rose by 14.0%, which contributed to the MSCI EM Index's 25.3% decline; emerging markets are generally more sensitive to a rising U.S. dollar. China was a significant laggard as a result of COVID lockdowns.

Private Equity
Private equity remained an attractive asset class in the 2022 fiscal year with institutional investors placing significant capital into new programs. According to Pitchbook, 3,369 new partnerships were formed, raising $ 957.8 billion in capital during the 12-month period. This was a larger number of new partnerships and a higher total dollar amount invested than in fiscal year 2021. Due to the nature of private equity performance measurement, benchmark comparisons of fund performance are inherently imprecise.

Domestic Fixed Income
After 10-year Treasury yields doubled in the 2021 fiscal year, they continued their ascent in 2022 to double again. The yield curve also flattened during the year, as shorter-dated yields increased more than those of longer-maturity Treasuries. Given the higher interest rate sensitivity of longer-dated bonds, the Bloomberg Government Long Index was particularly challenged in the 2022 fiscal year, falling 18.4%. Credit spreads widened, which led the Bloomberg Credit Index to fall by 13.6% and the Bloomberg Corporate High Yield Index (-12.8%) to underperform the Bloomberg Aggregate Index (-10.3%).

International Fixed Income
Developed international fixed income significantly underperformed domestic bonds on an unhedged basis in the 2022 fiscal year, with the FTSE Non-U.S. World Government Bond Index declining by 21.9%. The U.S. dollar appreciated notably during the fiscal year, which supported the FTSE Non-U.S. World Government Hedged Bond Index on a relative basis. The hedged index fell by a more moderate 9.3% during the year. As with U.S. markets, losses were largely concentrated in the second half of the year when global central banks took and/or signaled a less accommodative approach to monetary policy.

Emerging market debt trailed developed market sovereign bonds. The JP Morgan Emerging Markets Bond Index Plus, which tracks hard currency emerging market fixed and floating-rate debt instruments issued by sovereign entities, declined by 27.7% over the trailing 12-month period ended June 30, 2022. European markets also trailed the broad international index. The FTSE Euro Government Bond Index fell 23.0% during the period.

Real Estate
Private Real Estate was one of the few asset classes to generate positive results during the 2022 fiscal year. The NCREIF Property Index, a measure of the domestic direct private real estate market, appreciated 21.5% during the year. The Index produced positive results in all four quarters of the fiscal year. The FTSE NAREIT Equity Index, a measure of the publicly traded real estate, fell by 6.3% in the 2022 fiscal year after growing by 38.0% in the prior fiscal year. Being publicly-traded securities, Real Estate Investment Trusts (REITS) tend to demonstrate higher correlations to public equities over shorter time periods as compared to private real estate.

Timber
The NCREIF Timberland Property Index rose 12.0% in the 2022 fiscal year, with the appreciation component driving returns. The total acreage of the index declined, but the market value went up, leading to an increase in the market value per acre. The total value of the NCREIF Timberland Property Index's 13.0 million acres was $24.0 billion at the end of the fourth fiscal quarter. The largest regional component of the index remains the South by a significant margin. The South region represents 8.3 million acres valued at $15.7 billion. From a performance perspective, the Northeast produced the largest gain, while the South underperformed other regions.

Infrastructure
By definition, infrastructure assets are essential to the economic health and productivity of civilized society. They include the basic facilities, services, and installations needed for the functioning of a community, such as transit and communications systems; both potable and sewage water lines; and electricity access. They also include such public entities as schools, post offices, and airports. Most of these facilities have traditionally been owned and regulated by municipalities and states. Until recently, the private sector's participation has been limited, to varying degrees, to the areas of design, construction, and operation. Budget and fiscal pressures can limit the ability of public authorities to

maintain existing infrastructure, much less to build new facilities required by a growing population. In response to these problems, many municipalities and states have sold or are contemplating the sale of their infrastructure assets to private investors.

Private infrastructure is challenging to appropriately benchmark given the concentrated nature of the assets. NDSIB uses a custom benchmark to measure performance. From a public market perspective, the FTSE Global Core 50/50 Infrastructure Index is a market capitalization weighted index that represents publicly traded companies that operate and own infrastructure assets on a global basis. The FTSE Global Core 50/50 Infrastructure Index returned 2.9% over the 12-month period ended June 30, 2022.

Summary

The markets were very challenging during fiscal year 2022. Both the equity markets and the fixed income markets saw significant drawdowns of -16.4% and -11.0% respectively, represented by industry standard benchmarks. The large drawdown of both equities and fixed income in the same year is unusual. Fixed income tends to perform better than equities when equities draw down, providing diversification and lower risk for a fund. The increase of inflation and higher interest rates of the past year have negatively impacted asset class valuations creating the drawdowns. The good news is that over the past fiscal year real assets had a 19.5% return and private equity had a return of 11.7% helping to support overall fund returns. The pension pool, insurance pool and Legacy Fund one-year returns for the period ending June 30,2022, were off -6.5%, -8.2%, and -10.1%, respectively. All of the returns were greater than the drawdown of either equities or fixed income, supported by the diversification with private assets.

Over the five-year period ending June 30, 2022, the pension pool, insurance pool and Legacy Fund generated net investment returns of 7.1%, 3.5%, and 5.4%, respectively. The pension pool outperformed its policy benchmark by 31 basis points, the insurance pool outperformed its benchmark by 36 basis points, and the Legacy Fund outpaced its policy benchmark by 38 basis points. All in all, the SIB is pleased with longer term performance as returns continue to meet or exceed long-term expectations, and the portfolios continue to generate excess returns vs the passive policy benchmarks.

The global economic and market conditions will likely continue to be very challenging for the next year. Although US inflation has come off its high reached in June 2022, the inflation outlook remains very uncertain from a tight U.S. 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. The 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.

The State Investment Board and staff are focused on prudently managing the portfolios in our care. The funds in our care are invested with a long-term view in mind, expecting some years to have lower returns and other years to have higher returns. A diligent investment process is used to allocate the funds to balance the risks under an assumed range of return scenarios and to select, size and monitor manager mandates in a sound fiduciary manner.

Sincerely,

Scott M Anderson

SCOTT ANDERSON, CFA
Chief Investment Officer

INVESTMENT PERFORMANCE SUMMARY
JUNE 30, 2022

	Fair Value	Rates of Return (net of fees) For Fiscal Year Ended 6/30 2022	2021	2020	2019	2018	Annualized 3 Years	5 Years	10 Years	20 Years	30 Years
Total Assets Under Management	$18,011,753,887										
BENCHMARKS											
S&P 500		-10.62%	40.79%	7.51%	10.42%	14.37%	10.60%	11.31%	12.96%	9.08%	9.86%
Bloomberg Aggregate		-10.29%	-0.33%	8.74%	7.87%	-0.40%	-0.93%	0.88%	1.54%	3.57%	4.81%
90 Day T-Bills		0.17%	0.09%	1.63%	2.31%	1.36%	0.63%	1.11%	0.64%	1.25%	2.40%
Callan Public Plan Sponsors Database (Median-GROSS of Fees)**		-11.08%	42.45%	6.33%	9.25%	4.17%	10.52%	11.04%	13.04%	9.50%	10.55%

PENSION POOL PARTICIPANTS	Fair Value	% of Pool	Rates of Return (net of fees) For Fiscal Year Ended 6/30 2022	2021	2020	2019	2018	Annualized 3 Years	5 Years	10 Years	20 Years	30 Years
Teachers' Fund for Retirement	$2,972,489,158	43.0%	-6.31%	26.54%	3.45%	5.54%	9.11%	7.04%	7.15%	8.16%	7.06%	7.41%
Policy Benchmark			*-6.22%*	*26.26%*	*3.19%*	*6.35%*	*7.90%*	*6.91%*	*6.99%*	*7.62%*	*7.14%*	*7.57%*
Public Employees Retirement System	3,699,746,650	53.5%	-6.66%	27.15%	3.41%	5.52%	9.19%	7.07%	7.18%	8.16%	7.20%	7.73%
Policy Benchmark			*-7.04%*	*25.84%*	*3.21%*	*6.40%*	*7.82%*	*6.48%*	*6.74%*	*7.50%*	*7.09%*	*7.77%*
Bismarck City Employee Pension Fund	118,583,716	1.7%	-5.90%	21.89%	3.75%	5.94%	7.86%	5.97%	6.34%	7.40%	6.90%	7.53%
Policy Benchmark			*-6.75%*	*20.54%*	*3.73%*	*6.33%*	*6.64%*	*5.25%*	*5.74%*	*6.56%*	*6.41%*	
Bismarck City Police Pension Fund	48,154,079	0.7%	-5.96%	23.97%	3.41%	5.76%	8.36%	6.43%	6.68%	7.70%	6.98%	7.50%
Policy Benchmark			*-6.85%*	*22.80%*	*3.28%*	*6.14%*	*7.20%*	*5.72%*	*6.10%*	*6.91%*	*6.67%*	
City of Grand Forks Pension Fund	72,878,597	1.1%	-7.63%	27.55%	4.02%	6.17%	9.46%	7.02%	7.33%	8.25%	*	*
Policy Benchmark			*-8.56%*	*26.91%*	*3.61%*	*6.51%*	*8.38%*	*6.34%*	*6.78%*	*7.58%*		
Grand Forks Park District Pension Fund	8,616,391	0.1%	-7.39%	26.46%	3.78%	6.02%	9.33%	6.72%	7.10%	8.27%	*	*
Policy Benchmark			*-6.80%*	*24.54%*	*3.56%*	*6.65%*	*8.02%*	*6.33%*	*6.73%*	*7.63%*		
Subtotal Pension Pool Participants	$6,920,468,591	100.0%										

INDIVIDUAL INVESTMENT ACCOUNTS	Fair Value	Rates of Return (net of fees) For Fiscal Year Ended 6/30 2022	2021	2020	2019	2018	Annualized 3 Years	5 Years	10 Years	20 Years	30 Years
Legacy Fund	$7,948,480,667	-10.12%	22.68%	4.23%	4.98%	7.57%	4.75%	5.35%	5.06%	*	*
Policy Benchmark		*-10.45%*	*20.65%*	*4.38%*	*6.12%*	*6.50%*	*4.08%*	*4.97%*	*4.36%*		
Retiree Health Insurance Credit Fund	152,331,147	-14.95%	25.57%	4.98%	6.51%	7.15%	3.94%	5.08%	6.92%	6.18%	7.04%
Policy Benchmark		*-14.36%*	*24.19%*	*5.25%*	*6.89%*	*7.18%*	*3.78%*	*5.07%*	*6.93%*	*6.48%*	*7.36%*
Job Service of North Dakota Pension Fund	86,256,669	-6.01%	6.46%	2.82%	6.86%	3.15%	0.96%	2.55%	5.17%	5.88%	*
Policy Benchmark		*-7.91%*	*7.97%*	*5.04%*	*6.74%*	*4.16%*	*1.46%*	*3.04%*	*4.71%*	*5.36%*	

INVESTMENT PERFORMANCE SUMMARY
JUNE 30, 2022

INSURANCE POOL PARTICIPANTS	Fair Value	% of Pool	Rates of Return (net of fees) For Fiscal Year Ended 6/30					Annualized				
			2022	2021	2020	2019	2018	3 Years	5 Years	10 Years	20 Years	30 Years
Workforce Safety & Insurance Fund	$2,055,364,411	70.8%	-9.04%	11.57%	6.00%	6.87%	5.34%	2.46%	3.90%	5.43%	5.67%	6.62%
Policy Benchmark			*-8.68%*	*9.19%*	*6.62%*	*7.05%*	*3.77%*	2.06%	3.38%	4.19%	5.22%	
State Fire and Tornado Fund	19,032,408	0.7%	-11.36%	15.64%	4.97%	6.41%	5.32%	2.47%	3.82%	5.70%	5.78%	6.01%
Policy Benchmark			*-11.26%*	*13.71%*	*5.96%*	*6.76%*	*4.35%*	2.26%	3.56%	4.65%	5.16%	
State Bonding Fund	3,609,552	0.1%	-6.21%	1.64%	4.95%	5.83%	1.07%	0.01%	1.37%	2.09%	3.03%	4.17%
Policy Benchmark			*-5.69%*	*-0.13%*	*5.50%*	*5.35%*	*0.41%*	-0.21%	1.00%	1.15%	2.21%	
Petroleum Tank Release Compensation Fund	5,915,734	0.2%	-5.56%	1.56%	4.55%	5.47%	1.13%	0.09%	1.36%	1.94%	2.81%	*
Policy Benchmark			*-5.17%*	*-0.11%*	*5.15%*	*5.07%*	*0.50%*	-0.13%	1.01%	1.11%	2.12%	
Insurance Regulatory Trust Fund	6,621,293	0.2%	-8.72%	12.75%	6.11%	5.03%	4.53%	2.98%	3.70%	4.74%	4.96%	5.41%
Policy Benchmark			*-8.45%*	*11.59%*	*4.38%*	*5.37%*	*4.05%*	2.17%	3.18%	3.88%	4.27%	
State Risk Management Fund	3,979,930	0.1%	-10.90%	14.48%	5.88%	7.67%	5.14%	2.60%	4.10%	5.94%	5.98%	*
Policy Benchmark			*-11.40%*	*12.56%*	*7.55%*	*7.67%*	*4.27%*	2.36%	3.78%	4.78%	5.34%	
State Risk Management Workers Comp	3,261,667	0.1%	-11.17%	17.28%	5.73%	7.56%	6.03%	3.28%	4.67%	6.63%	*	*
Policy Benchmark			*-12.00%*	*15.74%*	*7.42%*	*7.75%*	*5.32%*	3.04%	4.42%	5.55%		
Cultural Endowment Fund	520,564	0.0%	-10.96%	24.21%	3.91%	6.02%	8.27%	4.75%	5.70%	8.01%	*	*
Policy Benchmark			*-11.76%*	*23.49%*	*5.28%*	*6.91%*	*7.75%*	4.69%	5.73%	7.23%		
Budget Stabilization Fund	717,672,757	24.7%	-5.51%	3.92%	2.35%	4.51%	0.32%	0.17%	1.05%	1.35%	*	*
Policy Benchmark			*-3.51%*	*0.44%*	*4.17%*	*4.23%*	*0.24%*	0.32%	1.07%	0.89%		
ND Assoc. of Counties (NDACo) Fund	6,799,709	0.2%	-12.31%	15.72%	5.67%	7.12%	4.48%	2.36%	3.72%	5.30%	5.32%	*
Policy Benchmark			*-11.79%*	*13.48%*	*6.63%*	*7.32%*	*3.71%*	2.20%	3.50%	4.28%	4.75%	
City of Bismarck Deferred Sick Leave	745,191	0.0%	-11.83%	13.80%	5.43%	6.90%	4.66%	1.89%	3.43%	5.39%	5.76%	*
Policy Benchmark			*-11.48%*	*11.44%*	*6.50%*	*7.06%*	*3.50%*	1.66%	3.09%	4.16%	5.00%	
PERS Group Insurance	32,133,785	1.1%	-5.08%	3.63%	2.35%	4.20%	0.41%	0.22%	1.04%	0.71%	1.37%	*
Policy Benchmark			*-3.26%*	*0.41%*	*4.02%*	*3.97%*	*0.33%*	0.34%	1.05%	0.74%	1.30%	
State Board of Medicine	2,750,136	0.1%	-10.58%	12.58%	5.54%	4.98%	3.12%	2.04%	2.84%	*	*	*
Policy Benchmark			*-10.17%*	*10.46%*	*5.64%*	*5.22%*	*2.80%*	1.58%	2.54%			
City of Fargo FargoDome Permanent Fund	40,031,987	1.4%	-12.50%	22.07%	3.78%	5.13%	7.64%	3.50%	4.64%	6.88%	*	*
Policy Benchmark			*-12.53%*	*21.23%*	*4.74%*	*6.07%*	*6.55%*	3.56%	4.65%	6.05%		
Lewis & Clark Interpretive Center Endowment	796,895	0.0%	-12.93%	15.45%	5.70%	6.99%	*	2.04%	*	*	*	*
Policy Benchmark			*-12.11%*	*13.24%*	*6.36%*	*7.15%*		1.92%				
Attorney General Settlement Fund	2,955,540	0.1%	-5.53%	3.92%	*	*	*	*	*	*	*	*
Policy Benchmark			*-3.53%*	*0.44%*								
Veterans' Cemetery Trust Fund	422,184	0.0%	-11.54%	21.96%	*	*	*	*	*	*	*	*
Policy Benchmark			*-11.46%*	*20.72%*								
NDUS Capital Building Fund	1,603,070	0.1%	*	*	*	*	*	*	*	*	*	*
Policy Benchmark												
Subtotal Insurance Pool Participants	$2,904,216,813	100.0%										

The investment return calculations were prepared using a monthly time-weighted rate of return methodology based upon fair values.

*These categories do not have the specified years of history under SIB management or data is not available.

** Callan median returns are gross of fees due to lack of reporting to the database on a net of fee basis. Please note that all actual fund returns are net of fees.

Note: Asset allocation largely drives investment performance. Each fund has a unique allocation that takes into consideration return objectives, risk tolerance, liquidity constraints and unique circumstances. Such considerations must be taken into account when comparing results.

Columns may not foot due to rounding.

SCHEDULE OF INVESTMENT CONSULTANTS AND RESULTS FOR PERIODS ENDED JUNE 30, 2022 PENSION INVESTMENT POOL

	Style	Date Initiated	Fair Value	Annualized Rates of Return Net of Fees 1 Year	3 Years	5 Years
TOTAL PENSION INVESTMENT POOL			$ 6,920,468,591	-6.51%	7.01%	7.14%
Policy Target (1)				*-6.70%*	*6.64%*	*6.83%*
TOTAL GLOBAL EQUITY			3,762,105,265	-12.59%	8.19%	8.25%
Composite Benchmark (1)				*-12.61%*	*8.52%*	*8.46%*
TOTAL PUBLIC EQUITY			3,108,490,340	-16.19%	6.35%	*
Composite Benchmark (1)				*-16.35%*	*6.18%*	*
TOTAL WORLD EQUITY			674,270,534	-13.20%	4.92%	5.64%
MSCI World Index				*-14.34%*	*7.00%*	*7.67%*
Epoch Investment Partners, Inc.	Core	01/2012	279,970,187	-16.14%	3.08%	5.95%
LSV Asset Management	Core Value	03/2013	394,300,347	-11.08%	6.18%	5.24%
TOTAL DOMESTIC EQUITY			1,506,168,084	-13.58%	10.21%	11.04%
Composite Benchmark (1)				*-15.55%*	*8.96%*	*9.76%*
TOTAL DOMESTIC LARGE CAP EQUITY			1,203,010,796	-12.72%	11.99%	12.40%
Russell 1000 Index				*-13.04%*	*10.17%*	*11.00%*
Parametric Portfolio Associates	Enhanced S&P 500	06/2011	246,497,436	-13.08%	10.04%	10.79%
Los Angeles Capital Management	Structured Growth	08/2003	443,639,731	-16.20%	13.65%	14.44%
Los Angeles Capital Management	Enhanced Russell 1000	08/2000	259,215,498	-10.88%	11.20%	11.36%
Northern Trust Asset Management	Enhanced S&P 500	08/2000	253,658,131	-7.73%	10.13%	10.23%
TOTAL DOMESTIC SMALL CAP EQUITY			303,157,288	-16.92%	3.74%	6.24%
Russell 2000 Index				*-25.20%*	*4.21%*	*5.17%*
Atlanta Capital Investment Managers	High Quality	04/2016	110,335,454	-7.60%	6.76%	9.48%
Riverbridge Partners, LLC	Small Cap Growth	10/2020	78,482,139	-35.06%	*	*
Victory Capital Management Inc.	Small Cap Value	10/2020	114,339,694	-8.25%	*	*
TOTAL INTERNATIONAL EQUITY			928,051,722	-22.02%	2.77%	3.53%
Composite Benchmark (1)				*-18.90%*	*1.45%*	*2.57%*
TOTAL DEVELOPED INTERNATIONAL EQUITY			722,947,250	-19.98%	3.00%	3.63%
MSCI World ex-US				*-16.76%*	*1.70%*	*2.66%*
William Blair Investment Management	Growth-oriented	06/2016	188,281,615	-28.52%	2.22%	5.34%
Arrowstreet	Growth-oriented	01/2022	269,715,814	*	*	*
Dimensional Fund Advisors	Small Cap Value	11/2007	78,210,719	-13.72%	3.00%	0.37%
Northern Trust Asset Management	Core	12/2013	112,160,444	-16.26%	2.14%	3.06%
Wellington Trust Company, NA	Small Cap Growth	03/2002	74,578,658	-27.77%	0.52%	0.34%
TOTAL EMERGING MARKETS EQUITY			205,104,472	-28.22%	2.16%	3.22%
MSCI Emerging Markets Index				*-25.28%*	*0.57%*	*2.18%*
Axiom International Investors	Core	07/2014	146,683,893	-31.58%	1.17%	2.98%
Dimensional Fund Advisors	Small Cap	10/2005	58,420,579	-18.29%	4.87%	3.72%

SCHEDULE OF INVESTMENT CONSULTANTS AND RESULTS FOR PERIODS ENDED JUNE 30, 2022 PENSION INVESTMENT POOL (CONTINUED)

				Annualized Rates of Return Net of Fees		
	Style	Date Initiated	Fair Value	1 Year	3 Years	5 Years
TOTAL PRIVATE EQUITY			653,614,925	11.73%	19.66%	14.39%
Adams St. Partners (1998-2003 Funds)	Diversified Private Equity	01/1998	397,371	-13.50%	-2.82%	0.18%
Adams St. Partners (2000-2004 Non-U.S. Funds)	Diversified Private Equity	01/2000	173,495	-11.26%	-2.02%	0.96%
Adams St. Partners (2008 Non-U.S. Fund)	Diversified Private Equity	01/2008	4,527,215	-15.96%	10.59%	13.18%
Adams St. Partners (2010 Global Funds)	Diversified Private Equity	04/2010	10,028,479	1.86%	23.63%	21.35%
Adams St. Partners (2015 Global Fund)	Diversified Private Equity	10/2015	42,679,041	11.91%	27.78%	23.59%
Adams St. Partners (2016 Global Fund)	Diversified Private Equity	12/2016	36,093,659	19.13%	25.05%	19.70%
Adams St. Partners (2017 Global Fund)	Diversified Private Equity	10/2017	75,742,884	28.72%	28.53%	*
Adams St. Partners (2018 Global Fund)	Diversified Private Equity	10/2018	60,452,088	21.47%	29.97%	*
Adams St. Partners (2019 Global Fund)	Diversified Private Equity	10/2019	46,648,072	28.10%	*	*
Adams St. Partners (2020 Global Fund)	Diversified Private Equity	10/2020	25,401,910	28.68%	*	*
Adams St. Partners (2021 Global Fund)	Diversified Private Equity	10/2021	4,521,423	*	*	*
Adams St. Partners (Direct Co-Investment)	Direct Private Equity	09/2006	15,730	-8.29%	-24.25%	-24.23%
Blackrock Private Equity Partners	Diversified Private Equity	01/2017	203,793,608	8.55%	20.54%	14.53%
Blackrock Private Equity Partners (2020 Series)	Diversified Private Equity	12/2020	45,296,914	7.00%	*	*
Sixth Street Advisers, LLC	Diversified Private Equity	08/2020	59,613,501	6.80%	*	*
Other Miscellaneous PE Funds	Varies	10/1999	38,229,535	-14.39%	-4.27%	-1.73%
TOTAL GLOBAL FIXED INCOME			1,736,303,742	-8.23%	1.07%	2.87%
Composite Benchmark (1)				*-11.03%*	*-0.51%*	*1.59%*
TOTAL INVESTMENT GRADE FIXED INCOME			1,242,582,314	-10.64%	-0.18%	1.79%
Bloomberg Aggregate Index				*-10.29%*	*-0.93%*	*0.88%*
Manulife Asset Management	Securitized	04/2012	148,672,147	-5.18%	1.50%	2.84%
PIMCO	Distressed Sr. Debt	10/2012	100,497,621	1.64%	4.33%	5.76%
PIMCO	Core Constrained	03/2012	430,759,906	-11.15%	-0.51%	1.58%
Prudential Global Investment Management	Core	03/2018	433,352,097	-11.51%	-0.80%	*
State Street Global Advisors	Passive Blm Long Treasury	06/2013	129,300,543	-18.47%	-2.90%	0.52%
TOTAL BELOW INVESTMENT GRADE FIXED INCOME			493,721,428	-1.20%	4.53%	5.14%
Bloomberg High Yield Corp 2% Issuer Cap				*-12.82%*	*0.18%*	*2.09%*
Ares Management	Private Credit	07/2017	156,115,483	8.95%	7.96%	*
Cerberus Capital Management	Private Credit	11/2017	167,585,199	7.08%	9.02%	*
Goldman Sachs	Mezzanine Debt-2006	04/2006	49,654	6.99%	6.44%	7.79%
Goldman Sachs	Mezzanine Debt-Fund V	11/2007	118,929	-12.02%	22.53%	23.92%
Loomis Sayles & Company	High Yield Bonds	04/2004	162,511,508	-15.52%	-0.93%	1.26%
PIMCO	Res. & Comm. Debt	10/2013	7,340,655	-1.13%	1.35%	2.62%

SCHEDULE OF INVESTMENT CONSULTANTS AND RESULTS
FOR PERIODS ENDED JUNE 30, 2022
PENSION INVESTMENT POOL (CONTINUED)

	Style	Date Initiated	Fair Value	Annualized Rates of Return Net of Fees 1 Year	3 Years	5 Years
TOTAL GLOBAL REAL ASSETS			1,368,352,145	18.52%	10.44%	8.58%
Composite Benchmark (1)				*19.51%*	*9.02%*	*7.55%*
TOTAL GLOBAL REAL ESTATE			882,219,638	24.96%	11.63%	9.70%
NCREIF Total Index				*21.45%*	*10.22%*	*8.86%*
INVESCO Realty Advisors	Core Commingled	08/1997	445,065,365	26.79%	11.22%	9.63%
INVESCO Realty Advisors	Core Plus LP (Fund IV)	04/2015	5,077,569	3.60%	6.86%	8.91%
INVESCO Realty Advisors	Core Plus LP (Fund V)	02/2019	72,589,900	18.37%	13.64%	*
INVESCO Realty Advisors	Asian LP (Fund III)	11/2015	17,400,021	-9.77%	5.07%	19.80%
J.P. Morgan Investment Management, Inc.	Core Commingled	10/1987	341,520,036	27.63%	11.71%	9.59%
J.P. Morgan Investment Management, Inc.	European LP	09/2009	566,747	-12.90%	-13.33%	-17.43%
TOTAL OTHER REAL ASSETS			486,132,507	8.14%	8.24%	*
Composite Benchmark (1)				*17.21%*	*7.56%*	*
TOTAL TIMBER			100,336,340	7.35%	6.16%	3.96%
NCREIF Timber Index				*12.01%*	*5.03%*	*4.32%*
Timberland Investment Resources - Teredo	Timberland	06/2001	20,272,958	15.73%	7.54%	5.13%
Timberland Investment Resources - Springbank	Timberland	09/2004	80,063,382	5.24%	5.93%	3.69%
TOTAL INFRASTRUCTURE			385,796,167	8.26%	8.99%	7.88%
Benchmark (3)				*18.33%*	*8.17%*	*6.28%*
Grosvenor CIS Fund I	Infrastructure	12/2011	11,187,728	6.18%	8.30%	7.10%
Grosvenor CIS Fund II	Infrastructure	03/2015	22,718,632	10.66%	13.37%	12.86%
Grosvenor CIS Fund III	Infrastructure	11/2021	16,693,451	*	*	*
The Rohatyn Group (2)	Asian Infrastructure	07/2008	15,872,694	1.33%	-7.02%	-9.18%
I Squared Capital II	Infrastructure	06/2018	68,940,528	12.90%	12.85%	*
I Squared Capital III	Infrastructure	12/2021	3,756,632	*	*	*
J.P. Morgan Investment Management, Inc.	Infrastructure	05/2007	124,576,611	1.23%	5.52%	6.65%
Macquarie Infrastructure Partners Inc.	Infrastructure (Fund IV)	11/2019	75,574,881	15.50%	14.97%	*
Macquarie Infrastructure Partners Inc.	Infrastructure (Fund V)	06/2020	46,475,010	18.12%	*	*
TOTAL CASH EQUIVALENTS			53,707,439	0.22%	0.60%	1.10%
90 Day T-Bills				*0.17%*	*0.63%*	*1.11%*
Bank of North Dakota	Money Market	09/2016	10,617,319	0.22%	0.60%	1.10%
Northern Trust Asset Management	STIF	07/1994	43,090,120	0.22%	0.60%	1.09%

SCHEDULE OF INVESTMENT CONSULTANTS AND RESULTS
FOR PERIODS ENDED JUNE 30, 2022
INSURANCE INVESTMENT POOL

	Style	Date Initiated	Fair Value	Annualized Rates of Return Net of Fees: 1 Year	3 Years	5 Years
TOTAL INSURANCE INVESTMENT POOL			$ 2,904,216,813	-8.18%	-1.90%	3.45%
Policy Target (1)				*-7.42%*	*1.74%*	*3.09%*
TOTAL GLOBAL EQUITY			395,849,825	-15.71%	6.84%	*
Composite Benchmark (1)				*-16.12%*	*6.36%*	*
TOTAL DOMESTIC EQUITY			239,381,181	-13.47%	9.07%	9.38%
Composite Benchmark (1)				*-15.82%*	*8.94%*	*
TOTAL DOMESTIC LARGE CAP EQUITY			195,774,777	-12.23%	10.99%	11.00%
Russell 1000 Index				*-13.04%*	*10.17%*	*11.00%*
Parametric Portfolio Associates	Enhanced S&P 500	11/2008	39,103,999	-13.17%	9.84%	10.71%
Los Angeles Capital Management	Structured Growth	08/2003	55,895,557	-16.32%	13.58%	14.32%
Los Angeles Capital Management	Enhanced Russell 1000	04/2004	39,545,945	-10.64%	11.45%	11.49%
LSV Asset Management	Structured Value	06/1998	61,229,276	-8.88%	7.10%	6.32%
TOTAL DOMESTIC SMALL CAP EQUITY			43,606,404	-17.43%	2.56%	3.66%
Russell 2000 Index				*-25.20%*	*4.21%*	*5.17%*
Atlanta Capital Investment Managers	High Quality	12/2019	15,454,530	-7.68%	*	*
Riverbridge Partners, LLC	Small Cap Growth	10/2020	13,324,154	-35.23%	*	*
Victory Capital Management Inc.	Small Cap Value	10/2020	14,827,720	-7.72%	*	*
TOTAL INTERNATIONAL EQUITY			156,468,644	-19.92%	2.75%	3.07%
MSCI World ex-US				*-16.76%*	*1.70%*	*2.66%*
Arrowstreet	Growth-oriented	01/2022	44,698,345	*	*	*
William Blair Investment Management	Growth-oriented	06/2016	34,194,189	-28.75%	2.05%	5.21%
Dimensional Fund Advisors	Small Cap Value	11/2007	16,823,118	-13.72%	3.00%	0.37%
LSV Asset Management	Core	11/2004	47,068,835	-13.52%	1.09%	0.60%
The Vanguard Group	Small Cap Growth	06/2003	13,684,157	-30.39%	-1.60%	-1.28%
TOTAL GLOBAL FIXED INCOME			1,337,042,216	-11.31%	-0.52%	1.68%
Bloomberg Aggregate Index				*-10.29%*	*-0.93%*	*0.88%*
Manulife Asset Management	Securitized	12/2013	109,786,215	-5.18%	1.50%	2.85%
PIMCO	Distressed Sr. Debt	10/2012	41,705,500	1.64%	4.36%	5.78%
PIMCO	Res. & Comm. Debt	10/2013	3,730,038	-1.66%	1.17%	2.50%
PIMCO	Core Constrained	05/2019	187,350,956	-11.29%	-0.58%	*
Prudential Global Investment Management	Core-Plus	08/2006	351,438,639	-12.38%	-0.85%	1.37%
State Street Global Advisors	Passive Blmbg Gov't/Credit	06/2013	189,103,032	-10.84%	-0.70%	1.10%
Allspring Global Investments	Baa Average Bonds	04/2002	104,555,822	-15.06%	0.26%	2.35%
Western Asset Management Co.	Core Bonds	07/1990	349,372,014	-12.72%	-1.43%	0.95%

SCHEDULE OF INVESTMENT CONSULTANTS AND RESULTS
FOR PERIODS ENDED JUNE 30, 2022
INSURANCE INVESTMENT POOL (CONTINUED)

	Style	Date Initiated	Fair Value	Annualized Rates of Return Net of Fees 1 Year	3 Years	5 Years
TOTAL GLOBAL REAL ASSETS			389,119,108	5.92%	5.47%	*
Composite Benchmark (1)				*6.57%*	*5.76%*	*
TOTAL DIVERSIFIED REAL ASSETS			261,618,977	-2.50%	3.10%	4.11%
Composite Benchmark (1)				*0.94%*	*3.96%*	*3.96%*
Grosvenor CIS Fund I	Infrastructure	12/2011	5,593,865	6.18%	8.30%	7.10%
J.P. Morgan Investment Management, Inc.	Infrastructure	11/2008	38,225,745	1.38%	5.38%	6.58%
Timberland Investment Resources	Timberland	10/2008	33,399,754	8.75%	3.21%	4.52%
Western Asset Management Co.	TIPS	05/2004	169,642,982	-6.59%	2.67%	2.81%
Grosvenor CIS Fund III	Infrastructure	11/2021	3,130,022	*	*	*
Macquarie V	Infrastructure	08/2021	11,626,609	*	*	*
TOTAL REAL ESTATE			127,500,131	29.28%	11.37%	9.28%
NCREIF Total Index				*21.45%*	*10.22%*	*8.86%*
INVESCO Realty Advisors	Core Commingled	10/2012	67,135,563	26.80%	11.23%	9.64%
J.P. Morgan Investment Management, Inc.	Core Commingled	11/2005	60,364,568	32.12%	11.54%	8.91%
TOTAL CASH EQUIVALENTS			34,977,061	0.16%	0.52%	0.98%
90 Day T-Bills				*0.17%*	*0.63%*	*1.11%*
Bank of North Dakota	Money Market	09/2016	20,324,931	0.22%	0.60%	1.10%
Northern Trust Asset Management	STIF	07/2013	14,652,130	0.12%	0.46%	0.91%
TOTAL SHORT-TERM FIXED INCOME			747,228,603	-5.59%	0.16%	1.05%
Benchmark (4)				*-3.56%*	*0.31%*	*1.07%*
Barings	Active Short Duration	08/2019	367,557,485	-7.74%	*	*
J.P. Morgan Investment Management, Inc.	Short Term Bonds	09/2011	379,671,118	-3.42%	0.89%	1.49%

SCHEDULE OF INVESTMENT CONSULTANTS AND RESULTS FOR PERIODS ENDED JUNE 30, 2022 LEGACY FUND

				Annualized Rates of Return Net of Fees		
	Style	Date Initiated	Fair Value	1 Year	3 Years	5 Years
TOTAL LEGACY FUND			$ 7,948,480,667	-10.12%	4.75%	5.35%
Policy Target (1)				*-10.45%*	*4.09%*	*4.97%*
TOTAL GLOBAL EQUITY			3,705,627,842	-16.32%	6.25%	*
Composite Benchmark (1)				*-16.33%*	*5.96%*	*
TOTAL DOMESTIC EQUITY			2,261,152,774	-13.72%	8.65%	9.04%
Composite Benchmark (1)				*-16.40%*	*8.67%*	*6.42%*
TOTAL DOMESTIC LARGE CAP EQUITY			1,674,224,781	-12.23%	10.83%	10.94%
Russell 1000 Index				*-13.04%*	*10.17%*	*11.00%*
Parametric Portfolio Associates	Enhanced S&P 500	08/2013	336,329,951	-12.61%	10.07%	10.92%
Los Angeles Capital Management	Structured Growth	08/2013	507,573,864	-16.39%	13.37%	14.12%
Los Angeles Capital Management	Enhanced Russell 1000	08/2013	347,930,108	-11.15%	11.24%	11.36%
LSV Asset Management	Structured Value	08/2013	482,390,858	-8.52%	7.29%	6.71%
TOTAL DOMESTIC SMALL CAP EQUITY			586,927,993	-17.68%	2.64%	3.80%
Russell 2000 Index				*-25.20%*	*4.21%*	*5.17%*
Atlanta Capital Investment Managers	High Quality	12/2019	206,114,308	-7.54%	*	*
Riverbridge Partners, LLC	Small Cap Growth	10/2020	179,764,130	-35.02%	*	*
Victory Capital Management Inc.	Small Cap Value	10/2020	201,049,555	-8.49%	*	*
TOTAL INTERNATIONAL EQUITY			1,399,965,469	-20.81%	2.39%	2.92%
MSCI World ex-US				*-16.76%*	*1.70%*	*2.66%*
William Blair Investment Management	Core	08/2013	373,726,718	-28.82%	2.07%	5.24%
Dimensional Fund Advisors	Small Cap Value	08/2013	150,890,061	-13.72%	3.00%	0.37%
LSV Asset Management	Core	08/2013	407,988,449	-12.93%	1.32%	0.80%
The Vanguard Group	Small Cap Growth	08/2013	120,479,633	-30.39%	-1.60%	-1.28%
Arrowstreet	Growth-oriented	01/2022	346,880,608	*	*	*
TOTAL PRIVATE EQUITY			44,509,599	*1.69%*	*	*
50 South Capital Advisors, LLC	Diversified Private Equity	06/2021	4,768,557	6.80%	*	*
Sixth Street Advisers, LLC	Diversified Private Equity	08/2020	39,741,042	-32.51%	*	*
TOTAL GLOBAL FIXED INCOME			2,845,788,930	-9.80%	0.13%	2.04%
Bloomberg Aggregate Index				*-10.29%*	*-0.93%*	*0.88%*
Ares Management	Private Credit	07/2017	109,568,248	8.90%	7.94%	*
Bank of North Dakota - Match Loan CD Program	In-State Investment Prgm	various	193,008,728	2.68%	2.72%	2.91%
Cerberus Capital Management	Private Credit	11/2017	134,621,143	7.23%	9.20%	*
Manulife Asset Management	Securitized	12/2013	216,828,376	-5.18%	1.50%	2.84%
PIMCO	Distressed Sr. Debt	12/2013	54,468,911	1.64%	4.29%	5.74%
PIMCO	Res. & Comm. Debt	12/2013	3,610,617	-0.57%	1.54%	2.73%
Prudential Global Investment Management	Core-Plus	12/2013	772,306,240	-12.41%	-0.80%	1.47%
State Street Global Advisors	Passive Blmbg Gov't/Credit	12/2013	383,827,577	-10.81%	-0.68%	1.11%
Allspring Global Investments	Baa Average Bonds	12/2013	208,666,590	-15.05%	0.27%	2.32%
Western Asset Management Co.	Core Bonds	12/2013	768,882,500	-12.61%	-1.35%	1.00%

SCHEDULE OF INVESTMENT CONSULTANTS AND RESULTS
FOR PERIODS ENDED JUNE 30, 2022
LEGACY FUND (CONTINUED)

	Style	Date Initiated	Fair Value	Annualized Rates of Return Net of Fees 1 Year	3 Years	5 Years
TOTAL GLOBAL REAL ASSETS			1,339,985,522	9.29%	7.94%	*
***Composite Benchmark* [(1)]**				*9.83%*	*7.02%*	*
TOTAL DIVERSIFIED REAL ASSETS			868,498,406	0.79%	6.26%	5.66%
***Composite Benchmark* [(1)]**				*4.39%*	*5.43%*	*4.77%*
Grosvenor CIS Fund II	Infrastructure	03/2015	56,796,580	10.66%	13.37%	12.86%
Grosvenor CIS Fund III	Infrastructure	11/2021	21,910,155	*	*	*
I Squared Capital II	Infrastructure	06/2018	79,546,760	12.90%	12.85%	*
I Squared Capital III	Infrastructure	12/2021	5,634,947	*	*	*
J.P. Morgan Investment Management, Inc.	Infrastructure	03/2015	102,351,847	1.23%	5.29%	6.51%
Macquarie Infrastructure Partners Inc.	Infrastructure (Fund IV)	11/2019	87,201,785	15.50%	14.97%	*
Macquarie Infrastructure Partners Inc.	Infrastructure (Fund V)	06/2020	69,712,515	18.12%	*	*
Western Asset Management Co.	TIPS	02/2014	445,343,817	-6.50%	2.75%	2.87%
TOTAL REAL ESTATE			471,487,116	29.41%	11.38%	9.25%
NCREIF Total Index				*21.45%*	*10.22%*	*8.86%*
INVESCO Realty Advisors	Core Commingled	08/2013	235,261,113	26.79%	11.22%	9.63%
J.P. Morgan Investment Management, Inc.	Core Commingled	08/2013	236,226,003	32.12%	11.54%	8.90%
TOTAL CASH EQUIVALENTS			57,078,373	0.16%	0.51%	0.98%
90 Day T-Bills				*0.17%*	*0.63%*	*1.11%*
Bank of North Dakota	Money Market	09/2016	22,279,177	0.23%	0.60%	1.10%
Northern Trust Asset Management	STIF	07/2013	34,799,196	0.13%	0.45%	0.91%

OTHER INDIVIDUAL INVESTMENT ACCOUNTS

	Style	Date Initiated	Fair Value	Annualized Rates of Return Net of Fees 1 Year	3 Years	5 Years
NDPERS RETIREE HEALTH INSURANCE CREDIT FUND						
SEI Investments Management	Balanced Account	07/2009	$ 152,331,147	-14.95%	3.94%	5.08%
***Policy Target* [(1)]**				*-14.36%*	*3.78%*	*5.07%*
JOB SERVICE ND PENSION FUND						
SEI Investments Management	Balanced Account	12/2015	$ 86,256,669	-6.01%	1.46%	2.55%
***Policy Target* [(1)]**				*-7.91%*	*1.46%*	*3.04%*

* This manager/category has less than the indicated years under management due to addition of asset class or replacement of investment managers during the period.

(1) Policy targets and composite benchmarks consist of target weights of the underlying index returns within each category.
(2) Management of this fund was transferred from JP Morgan to The Rohatyn Group in May 2018.
(3) CPI-W through 6/30/18 then 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net Index thereafter.
(4) Bloomberg Government 1-3 Year Index through 3/31/17 and Bloomberg Government/Credit 1-3 Year Index thereafter.

The investment return calculations were prepared using a monthly time-weighted rate of return methodology based upon fair values and are subject to independent calculation. Returns are shown after the effect of investment management fees (net of fees).

Columns may not foot due to rounding.

LARGEST HOLDINGS (By Fair Value)
JUNE 30, 2022

PENSION INVESTMENT POOL

Shares	Stocks	Fair Value
590,344	Apple Incorporated	$ 80,711,832
310,705	Microsoft Corporation	79,798,365
12,956	Alphabet Incorporated (Class C)	28,234,493
257,030	Amazon Company Incorporated	27,299,156
12,313	Alphabet Incorporated (Class A)	26,934,072
119,524	Abbvie Inc Com	18,306,296
37,527	Broadcom Inc Com	18,230,992
141,594	Qualcomm Inc Com	18,087,218
34,998	United Health Group Inc Com	17,976,023
127,766	T-Mobile US Incorporated	17,189,638

Par	Bonds	Fair Value
109,000,000	FNMA Single Family Mortgages 2% 30 Years Settles August	$ 103,910,622
19,545,000	US Treasury Bonds 1.375% Due 11-15-2040	14,076,217
12,660,000	US Treasury Bonds 2.5% Due 05-15-2046	10,730,339
10,501,896	FNMA Pool 2.5% Due 06-01-2041	9,665,698
9,578,393	FHLMC Multiclass 2.5% Due 04-15-2043	8,943,702
8,300,000	US Treasury Bonds 2.25% Due 08-15-2027	7,972,215
9,070,000	US Treasury Bonds 2.25% Due 05-15-2041	7,568,490
8,945,000	US Treasury Bonds 2% Due 11-15-2041	7,104,287
4,500,000	US Treasury Bonds Index 2% Due 01-15-2026	6,941,980
13,125,000	US Treasury Sec Stripped Int Pmt 05-15-2041	6,774,428

INSURANCE INVESTMENT POOL

Shares	Stocks	Fair Value
24,791	Microsoft Corporation	$ 6,367,073
46,079	Apple Incorporated	6,299,921
14,107	Abbvie Inc Com	2,160,628
19,530	Amazon Company Incorporated	2,074,281
39,329	Pfizer Inc Com	2,062,019
909	Alphabet Incorporated (Class A)	1,980,947
15,048	Qualcomm Inc Com	1,922,232
878	Alphabet Incorporated (Class C)	1,920,581
19,217	Merck & Co Inc Com	1,752,014
6,718	Amgen Inc Com	1,634,489

Par	Bonds	Fair Value
52,100,000	FNMA Single Family Mortgage 0% 30 Years Settles August	$ 49,685,336
32,795,000	US Tresury Notes 2.75% Due 05-15-2025	32,543,913
26,990,000	US Treasury Notes 0.625% Due 11-15-2024	25,592,002
19,200,000	US Treasury Inflation Linked Bonds 0.75% Due 02-15-2045	21,103,930
15,600,000	US Treasury Notes 0.5% Due 04-15-2024	18,129,716
19,570,000	US Treasury Bonds 2.25% Due 05-15-2041	16,330,248
12,230,000	US Treasury Notes Inflation Linked 0.625% Due 01-15-2026	15,047,240
14,620,000	US Treasury Notes 2.625% Due 04-15-2025	14,461,236
12,395,000	US Tresury Notes 2.875% Due 06-15-2025	12,345,614
11,500,000	US Treasury Inflation Linked N/B Due 10-15-2026	12,056,217

LARGEST HOLDINGS (By Fair Value)
JUNE 30, 2022

LEGACY FUND

Shares	Stocks	Fair Value
452,855	Apple Incorporated	$ 61,914,336
240,886	Microsoft Corporation	61,866,751
9,119	Alphabet Incorporated (Class A)	19,872,672
127,450	Abbvie Inc Com	19,520,242
8,754	Alphabet Incorporated (Class C)	19,148,937
177,660	Amazon Company Incorporated	18,869,269
144,299	Qualcomm Inc Com	18,432,754
344,374	Pfizer Inc Com	18,055,529
178,497	Merck & Co Inc Com	16,273,571
277,875	Jabil Inc Com	14,229,979

Par	Bonds	Fair Value
44,400,000	US Treasury Inflation Linked Bonds 0.75% Due 02-15-2045	$ 48,802,838
37,500,000	US Treasury Notes Inflation Linked 0.625% Due 01-15-2026	46,138,307
38,100,000	US Treasury Notes 0.5% Due 04-15-2024	44,278,346
34,700,000	US Treasury Notes 0.125% Due 04-15-2026	37,895,841
27,300,000	US Treasury Bonds TIPS 0.75% Due 02-15-2042	31,911,401
15,000,000	US Treasury Bonds Inflation Linked 3.875% Due 04-15-2029	31,848,902
31,400,000	FNMA Single Family Mortgage 0% 30 Years Settles July	30,189,627
28,700,000	US Treasury Inflation Linked N/B Due 10-15-2026	30,088,124
25,800,000	US Treasury Inflation Linked N/B TII 0-1/8% Due 04-15-2027	26,010,290
27,000,000	US Treasury Notes WIT 1 1/8 1.25% Due 11-30-2026	25,001,367

The individual investment accounts for PERS Retiree Health Credit Fund and Job Service Pension Fund are invested in various commingled/mutual funds, and therefore have no individual stock or bond holdings.

A complete list of all holdings is available upon request.

SCHEDULE OF INVESTMENT FEES
FOR THE FISCAL YEAR ENDED JUNE 30, 2022
INVESTMENT POOLS

	Pension Investment Pool			Insurance Investment Pool		
	Assets under management (Average)	Fees	Basis points	Assets under management (Average)	Fees	Basis points
Investment manager fees:						
Global equity managers	$ 778,055,038	$ 2,565,320	33			
Domestic large cap equity managers	1,433,255,080	1,535,942	11	$ 256,249,588	$ 262,810	10
Domestic small cap equity managers	350,052,491	2,269,215	65	66,709,539	433,977	65
Developed international equity managers	850,344,134	2,691,985	32	182,033,285	722,309	40
Emerging markets equity managers	243,976,660	1,295,609	53			
Private equity managers	631,031,618	8,549,791	135			
Investment grade fixed income managers	1,379,721,384	3,387,793	25	1,400,603,163	2,845,836	20
Diversified real asset managers				280,531,009	1,530,846	55
Below investment grade fixed income managers	501,540,098	8,136,280	162			
Real estate managers	803,532,247	7,555,625	94	112,202,634	492,756	44
Timber managers	109,534,227	657,610	60			
Infrastructure managers	354,356,225	12,517,723	353			
Cash & equivalents managers	32,576,328	45,691	14	37,044,882	46,229	12
Short term fixed income managers				765,934,121	867,223	11
Total investment manager fees	$ 7,467,975,530	51,208,584	69	$ 3,101,308,221	7,201,986	23
Custodian fees		622,476	1		285,792	1
Investment consultant fees		250,821	0		85,240	0
SIB Service Fees		33,000	0		16,106	0
Total investment expenses		$ 52,114,881	70		$ 7,589,124	24

	Pension Investment Pool	Insurance Investment Pool
Reconciliation of Investment Expenses to Financial Statements		
Investment expenses as reflected in the financial statements	$ 16,685,208	$ 5,033,469
Plus investment management fees included in investment income (net income)		
Domestic large cap equity managers	736,635	167,264
Developed international equity managers	921,009	248,241
Emerging markets equity managers	407,273	
Private equity managers	8,549,791	
Investment grade fixed income managers	1,777,345	1,029,321
Diversified real assets managers		1,064,600
Below investment grade fixed income managers	7,277,279	
Real estate managers	3,370,938	
Timber managers	657,610	
Infrastructure managers	11,731,793	
Cash & equivalents managers		46,229
Investment expenses per schedule	$ 52,114,881	$ 7,589,124

Total basis points of individual plans participating in the pools vary depending upon their asset allocation.

Columns may not foot due to rounding.

SCHEDULE OF INVESTMENT FEES
FOR THE FISCAL YEAR ENDED JUNE 30, 2022
INDIVIDUAL INVESTMENT ACCOUNTS

	Legacy Fund			PERS Retiree Health Credit Fund Job Service of ND Pension Fund		
	Assets under management (Average)	Fees	Basis points	Assets under management (Average)	Fees	Basis points
Investment manager fees:						
Domestic large cap equity managers	$ 1,818,792,139	$ 2,081,585	11			
Domestic small cap equity managers	649,742,510	4,216,128	65			
Developed international equity managers	1,583,129,495	6,206,650	39			
Private equity managers	35,614,220	1,692,228	475			
Investment grade fixed income managers	2,924,420,809	10,137,814	35			
Diversified real asset managers	872,646,555	15,956,998	183			
Real estate managers	412,448,853	2,007,009	49			
Cash & equivalents managers	62,406,961	108,937	17	$ 803,232	$ 992	12
Short term fixed income managers						
Balanced account manager - PERS Retiree Health				172,430,225	755,635	44
Balanced account manager - Job Service Pension				91,631,813	417,906	46
Total investment manager fees	$ 8,359,201,542	42,407,349	51	$ 264,865,270	1,174,533	44
Custodian fees		669,033	1		20,483	1
Investment consultant fees		233,895	0		-	0
SIB Service Fees		-	0		32,703	1
Total investment expenses		$ 43,310,277	52		$ 1,227,719	46

Reconciliation of Investment Expenses to Financial Statements

	Legacy Fund	PERS Retiree Health Credit Fund Job Service of ND Pension Fund
Investment expenses as reflected in the financial statements	$ 16,515,006	$ 845,646
Plus investment management fees included in investment income (net income)		
Domestic large cap equity managers	1,123,217	
Developed international equity managers	1,983,686	
Private equity managers	1,692,228	
Investment grade fixed income managers	6,951,214	
Diversified real assets managers	14,764,779	
Real estate managers	171,209	
Cash & equivalents managers	108,938	
Balanced account managers		382,073
Investment expenses per schedule	$ 43,310,277	$ 1,227,719

Columns may not foot due to rounding.

SCHEDULE OF COMMISSIONS
FOR THE FISCAL YEAR ENDED JUNE 30, 2022

Brokers	Number of shares traded	Total commissions	Commissions per share
Morgan Stanley	19,527,782	$ 161,294	$ 0.008
UBS	17,167,053	89,299	0.005
Credit Suisse	14,797,320	70,627	0.005
Jefferies	6,985,826	76,638	0.011
J.P. Morgan	6,397,404	116,425	0.018
Merrill Lynch	5,837,557	37,194	0.006
Liquidnet	4,997,383	91,637	0.018
Sanford C. Bernstein	4,695,251	89,646	0.019
Barclays	4,621,155	49,512	0.011
Citigroup	3,322,774	16,767	0.005
Other 64 Brokers *	28,292,243	543,024	0.019
Total commissions	116,641,748	$ 1,342,063	$ 0.012

* A complete listing of investment brokers utilized is available upon request.

Note: This schedule includes only brokerage costs for agency trades of common and preferred stock.

TEACHERS' FUND FOR RETIREMENT

Investment Objectives and Policy Guidelines

Plan Characteristics and Fund Constraints

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

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

	7/1/2011	7/1/2012	7/1/2014
Employee	7.75%	9.75%	11.75%
Employer	8.75%	10.75%	12.75%

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

The TFFR Board has an actuarial valuation performed annually and an Experience Study and Asset Liability Study performed every five years. The actuarial assumed rate of return on assets was reduced to 7.25% from 7.75% as of July 1, 2020 after being reduced from 8.0% as of July 1, 2015. Key plan and financial statistics are recorded in the most recent valuation report on file at the North Dakota Retirement and Investment Office (RIO).

Fund Goals

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

As a result, the Fund goals are to:

1) Improve the Plan's funding status to protect and sustain current and future benefits.
2) Minimize the employee and employer contributions needed to fund the Plan over the long term.
3) Avoid substantial volatility in required contribution rates and fluctuations in the Plan's funding status.
4) Accumulate a funding surplus to provide increases in retiree annuity payments to preserve the purchasing power of their retirement benefit.

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

Responsibilities and Discretion of the State Investment Board (SIB)

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

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

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

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

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

Risk Tolerance

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

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

Investment Objectives

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

1) The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
2) The Fund's risk, measured by the standard deviation of net returns, should not exceed 115% of the policy benchmark over a minimum evaluation period of five years.
3) The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

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

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

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

Restrictions

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

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

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

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

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

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

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

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

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

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

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

Internal Controls

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

Evaluation and Review

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

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

- A list of the advisory services managing investments for the board.
- A list of investments at market value, compared to previous reporting period, of each fund managed by each advisory service.
- Earnings, percentage earned, and change in market value of each fund's investments.
- Comparison of the performance of each fund managed by each advisory service to other funds under the board's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 1,587,529,348**	**53.4%**	**-11.77%**
Public Equity	1,246,888,951	41.9%	-16.08%
World Equity	285,126,121	9.6%	-13.19%
Domestic Equity	605,782,917	20.4%	-13.59%
Domestic Large Cap Equity	481,798,873	16.2%	-12.72%
Domestic Small Cap Equity	123,984,044	4.2%	-16.92%
International Equity	355,979,913	12.0%	-21.87%
Developed International Equity	278,845,029	9.4%	-20.00%
Emerging Markets Equity	77,134,884	2.6%	-28.23%
Private Equity	340,640,397	11.5%	11.73%
Global Fixed Income	**792,420,864**	**26.7%**	**-8.54%**
Investment Grade Fixed Income	581,405,317	19.6%	-10.66%
Non-Investment Grade Fixed Income	211,015,547	7.1%	-1.88%
Global Real Assets	**560,039,205**	**18.8%**	**18.20%**
Global Real Estate	348,309,646	11.7%	24.96%
Other	211,729,559	7.1%	8.14%
Timber	45,291,207	1.5%	7.37%
Infrastructure	166,438,352	5.6%	8.26%
Cash Equivalents	**32,499,741**	**1.1%**	**0.22%**
Total Fund	**$ 2,972,489,158**		**-6.31%**
Policy Benchmark			**-6.22%**

Columns may not foot due to rounding.

PUBLIC EMPLOYEES RETIREMENT SYSTEM

Investment Objectives and Policy Guidelines

Plan Characteristics and Fund Constraints

The North Dakota Public Employees Retirement System (NDPERS) and the Highway Patrol Retirement System (HPRS) are pension benefit plans established to provide retirement income to state employees and employees of participating political subdivisions. The plans are administered by a nine-member Board of Trustees (the Board). The Chair is appointed by the governor, three members are elected by the active members of the plans, one member is elected by the retired members, one is appointed by the Attorney General, one member is the State Health Officer or their designee and two are legislative appointees.

The NDPERS plan is a multi-employer hybrid benefit public pension plan that provides retirement benefits, disability retirement benefits, and survivor benefits, in accordance with Chapter 54-52 of the North Dakota Century Code (NDCC). Monthly retirement benefits for the Main and Public Safety Plans are based on the formula: number of Years of Service times 2.0% times the final average salary. For the NDPERS Judges Plan the retirement formula is: for the first ten years of service of the formula is final average salary times 3.5%, for the second ten years of service the formula is final average salary times 2.80% and for all remaining years of service the formula is final average salary times 1.25%.

The Highway Patrol plan is a single employer plan that provides retirement benefits, disability benefits, and survivor benefits in accordance with Chapter 39-03.1 of the North Dakota Century Code. Monthly retirement benefits are based upon on the formula: first 25 years of credit service times 3.25% and all remaining years of service times 1.75%.

Funding for the NDPERS plan is provided by monthly employee contributions and employer contributions with the amount varying based upon which NDPERS plan the member participates in. For the Main NDPERS plan the employee contribution is 7% and the employer contribution is 7.12%, for the Judges Plan the employee contribution is 8% and employer contribution is 17.52%, for the State Law Enforcement (BCI) employee contribution is 6.0% and employer contribution is 9.81%, for the Public Safety Plan with prior service the employee contribution is 5.5% and the employer contribution is 9.81% and for the Public Safety Plan without prior service the employee contribution rate is 5.5% and the employer rate is 7.93%.

Funding for the Highway Patrol plan is provided by a monthly employee contribution of 13.3% and an employer contribution of 19.7%

Each year the Board has an actuarial valuation performed. The current actuarial assumed rate of return on assets for all plans is 7.0%.

Responsibilities and Discretion of the State Investment Board (SIB)

Aggregate plan contributions plus earnings, minus allowable expenses constitute the Fund. The Board is charged by NDCC chapters 54-52, 21-10-01, and 39-03.1 to establish policies for the investment goals and asset allocation of the Fund. The State Investment Board (SIB) is charged with implementing the asset allocation as promptly and prudently as possible in accordance with the Board's policies by investing the assets of the Fund in the manner provided in the prudent investor rule, which provides:

Fund 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 employee's retirement system must be invested exclusively for the benefit of their members and in accordance with the respective funds' investment goals and objectives. (NDCC 21-10-07)

The SIB may delegate investment responsibility of the Fund or any portion of the Fund to professional money managers. Where a money manager has been retained, the SIB's role in determining investment strategy is supervisory not advisory.

The SIB may at its discretion, pool the assets of the Fund with another fund or funds having similar investment objectives and time horizons in order to maximize returns and minimize costs. In pooling fund assets, the SIB will establish asset class pools it deems necessary to achieve the specific quality, diversification, restrictions, and performance objectives subject to the prudent investor rule and the objectives of the funds participating in the pools.

The SIB is responsible for establishing the selection criteria, determining the performance measures, and retaining all fund money managers. SIB is also responsible for the selection and retention of any investment consultants that may be employed in the investment of the Fund assets.

Delegation of Authority

Management responsibility for NDPERS funds not assigned to the North Dakota State Investment Board (SIB) in Chapter 21-10 of the North Dakota Century Code (NDCC) is hereby delegated to the SIB, which must establish written policies and procedures for the operation of the NDPERS funds, consistent with this investment policy.

Such procedures must provide for:

1. The definition and assignment of duties and responsibilities to advisory services and persons employed by the SIB pursuant to NDCC 21-10-02.1(1) (a).

2. Investment diversification, investment quality, qualification of money managers, and amounts to be invested by money managers pursuant to NDCC 21-10-02.1(1)(e). In developing these policies, it is understood:

   a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
   b. The use of derivatives will be monitored to ensure that undue risks are not taken by the money managers.
   c. All assets must be held in custody by the SIB's master custodian or such other custodians as are selected by the SIB.

3. Guidelines for selection and redemption of investments will be in accordance with NDCC 21-10-02.1(1) (d).

4. The criteria for making decisions with respect to hiring, retention, and termination of money managers will be clearly defined. This also includes selecting performance measurement standards, consultants, report formats, and frequency of meetings with money managers.

All participants in the investment process must seek to act responsibly as custodians of the public trust.

Investment Goals

The investment goals of the Fund have been established by the NDPERS Board based upon consideration of the Board's strategic objectives and a comprehensive review of the current and projected financial requirements. These goals are to be viewed over the long term.

Goal # 1 Accumulate sufficient wealth through a diversified portfolio of investments which will enable the State of North Dakota to pay all current and future retirement benefits and expense obligations of the Fund.

Goal # 2 To obtain an investment return in excess of that needed to allow for increases in a retiree's annuity to maintain the purchasing power of their retirement benefit.

The Board acknowledges the material impact that funding the pension plan has on the State’s financial performance. To enable the State to continue offering secure pension benefits to plan participants, the Board believes that the Fund should pursue the following secondary goals:

1. Stabilize the employee and employer contributions needed to fund the Plan over the long term.
2. Avoid both substantial volatility in contributions and sizable fluctuations in the funding status of the Plan.

These two secondary goals affect the Fund’s investment strategies and often represent conflicting goals. That is, minimizing the long-term funding costs implies a less conservative investment program, whereas dampening the volatility of contributions and avoiding large swings in the funding status implies a more conservative investment program. The Board places greater emphasis on the strategy of stabilizing the employee and employer contribution needed to fund the plan over the long term as it assists our participating employers by having a predictable contribution for budgeting.

Investment Performance Objective

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

1. The Fund’s rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
2. The Fund’s risk, measured by the standard deviation of net returns, should not exceed 115% of the policy benchmark over a minimum evaluation period of five years.
3. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Asset Allocation

In recognition of the plan's performance objectives, benefit projections, and capital market expectations, the NDPERS Board has established the following asset allocation:

Asset Class	Policy Target %	Rebalancing Range %
Global Equity	**58**	**46-66**
Public Equity	51	42-57
Private Equity	7	4-9
Global Fixed Income	**23**	**16-30**
Investment Grade	16	11-21
Non-investment Grade	7	5-9
Global Real Assets	**19**	**10-25**
Global Real Estate	11	5-15
Other (Infrastructure/Timber)	8	5-10
Global Alternatives		**0-10**
Cash		**0-2**

The Board does not endorse tactical asset allocation, therefore, it is anticipated the portfolio be managed as close to the policy target as is prudent and practicable. Any allocation to Global Alternatives shall not increase the expected volatility of the portfolio as measured in Section #5, and all other targets will be adjusted pro-rata.

PERS requires that in implementing this asset allocation that the State Investment Board seek to maximize return within the scope of these policies while limiting investment costs.

Restrictions

A. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
B. Use of derivatives will be monitored to ensure that undue risks are not taken by the money managers.
C. No transaction may be made which threatens the tax exempt status of the Fund.
D. No unhedged short sales or speculative margin purchases may be made.
E. Social investing is prohibited unless it meets the Exclusive Benefit Rule and it can be substantiated that the investment must provide an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

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

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

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

   The Exclusive Benefit Rule is met if the following four conditions are satisfied:

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation

Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards.

An annual performance report must be provided to the Board by the State Investment Officer at a regularly scheduled NDPERS Board meeting. The annual performance report must include asset returns and allocation data as well as information regarding all significant or material matters and changes pertaining to the investment of the Fund, including:

- Changes in asset class portfolio structures, tactical approaches and market values;
- All pertinent legal or legislative proceedings affecting the SIB;
- Compliance with these investment goals, objectives and policies;
- A general market overview and market expectations;
- A review of fund progress and its asset allocation strategy;
- A report on investment fees and the SIB's effort relating to Section 6. To measure investment cost PERS requires as part of the annual review information from CEM or other acceptable source showing the value added versus the cost;
- Changes/additions to benchmarks utilized to monitor the funds.

In addition, the State Investment Officer shall review with the Board the procedures and policies established by the SIB relating to this statement of investment goals, objectives and policies.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 2,047,924,457**	**55.4%**	**-13.13%**
Public Equity	1,747,641,837	47.2%	-16.24%
World Equity	364,348,571	9.8%	-13.21%
Domestic Equity	847,750,945	22.9%	-13.57%
Domestic Large Cap Equity	677,219,950	18.3%	-12.72%
Domestic Small Cap Equity	170,530,995	4.6%	-16.93%
International Equity	535,542,321	14.5%	-22.05%
Developed International Equity	414,526,444	11.2%	-20.00%
Emerging Markets Equity	121,015,877	3.3%	-28.22%
Private Equity	300,282,620	8.1%	11.73%
Global Fixed Income	**870,557,392**	**23.5%**	**-7.95%**
Investment Grade Fixed Income	605,334,861	16.4%	-10.66%
Non-Investment Grade Fixed Income	265,222,531	7.2%	-0.78%
Global Real Assets	**761,300,534**	**20.6%**	**18.84%**
Global Real Estate	507,289,369	13.7%	24.96%
Other	254,011,165	6.9%	8.15%
Timber	50,739,138	1.4%	7.37%
Infrastructure	203,272,027	5.5%	8.26%
Cash Equivalents	**19,964,267**	**0.5%**	**0.22%**
Total Fund	**$ 3,699,746,650**		**-6.66%**
Policy Benchmark			**-7.04%**

Columns may not foot due to rounding.

BISMARCK CITY EMPLOYEE PENSION PLAN

Investment Objectives and Policy Guidelines

Plan Characteristics and Fund Constraints

The Bismarck, North Dakota City Employee Pension Plan (BCEPP) is the pension benefit plan (Fund) established for the city of Bismarck public employees. The Fund is administered by the Bismarck City Employee Pension Plan Board of Trustees. The Fund is a defined benefit pension plan maintained to provide retirement benefits, and/or death benefits as may be the case, to the participants in accordance with Chapter 9-07 of the city of Bismarck Code of Ordinance (1986 revised). The Fund is administered in accordance with IRS and Treasury Regulations. The Fund was established to provide benefits to members eligible to receive them in accordance with the provisions of the Fund.

Fund Goals

The plan benefits are financed through both employer and employee contributions and the investment earnings on assets held in the Fund. The BCEPP Board recognizes that a sound investment program is essential to meet the pension obligations.

As a result, the Fund goals are to:

- Improve the Plan's funding status to protect and sustain current and future benefits.
- Minimize the employee and employer contributions needed to fund the Plan over the long term.
- Avoid substantial volatility in required contribution rates and fluctuations in the Plan's funding status.
- Accumulate a funding surplus to provide increases in retiree annuity payments to preserve the purchasing power of their retirement benefit.

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

Responsibilities and Discretion of the State Investment Board (SIB)

The BCEPP Board has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. The BCEPP Board is responsible for establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and investing the assets of the Fund in the manner provided in NDCC 21-10-07, the prudent investor rule. Under this rule, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income. The Fund must be invested exclusively for the benefit of the members and their beneficiaries in accordance with this investment policy.

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

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

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

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

Risk Tolerance

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

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

Investment Objectives

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

1. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
2. The Fund's risk, measured by the standard deviation of net returns, should not exceed 115% of the policy benchmark over a minimum evaluation period of five years.
3. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

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

Asset Class	Policy Target %
Global Equity	**46**
Public Equity	42
Private Equity	4
Global Fixed Income	**34**
Investment Grade	27
Non-investment Grade	7
Global Real Assets	**20**
Global Real Estate	12
Other	8

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

Restrictions

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

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

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

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

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

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

- A list of advisory services managing investments for the SIB.
- A list of investments at market value, compared to previous reporting period, of each account managed by each advisory service.
- Earnings, percentage earned, and change in market value of each account's investments.
- Comparison of the performance of each account managed by each advisory service to other accounts under the SIB's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 54,135,936**	**45.7%**	**-13.87%**
Public Equity	48,890,234	41.2%	-16.13%
World Equity	11,836,781	10.0%	-13.20%
Domestic Equity	21,915,268	18.5%	-13.53%
Domestic Large Cap Equity	18,362,121	15.5%	-12.72%
Domestic Small Cap Equity	3,553,147	3.0%	-16.92%
International Equity	15,138,185	12.8%	-22.10%
Developed International Equity	12,488,480	10.5%	-19.98%
Emerging Markets Equity	2,649,705	2.2%	-28.22%
Private Equity	5,245,702	4.4%	11.73%
Global Fixed Income	**39,887,052**	**33.6%**	**-8.16%**
Investment Grade Fixed Income	31,552,436	26.6%	-10.64%
Non-Investment Grade Fixed Income	8,334,616	7.0%	1.89%
Global Real Assets	**24,230,606**	**20.4%**	**18.13%**
Global Real Estate	14,579,008	12.3%	24.96%
Other	9,651,598	8.1%	8.17%
Timber	1,942,779	1.6%	7.35%
Infrastructure	7,708,819	6.5%	8.26%
Cash Equivalents	**330,122**	**0.3%**	**0.22%**
Total Fund	**$ 118,583,716**		**-5.90%**
Policy Benchmark			**-6.75%**

Columns may not foot due to rounding.

BISMARCK CITY POLICE PENSION PLAN

Investment Objectives and Policy Guidelines

Plan Characteristics and Fund Constraints

The Bismarck, North Dakota City Police Pension Plan (BCPPP) is the pension benefit plan (Fund) established for the city of Bismarck police. The Fund is administered by the Bismarck City Police Pension Plan Board of Trustees. The Fund is a defined benefit pension plan maintained to provide retirement benefits, and/or death benefits as may be the case, to the participants in accordance with Chapter 9-08 of the city of Bismarck Code of Ordinance (1986 revised). The Fund is administered in accordance with IRS and Treasury Regulations. The Fund was established to provide benefits to members eligible to receive them in accordance with the provisions of the Fund.

Fund Goals

The plan benefits are financed through both employer and employee contributions and the investment earnings on assets held in the Fund. The BCPPP Board recognizes that a sound investment program is essential to meet the pension obligations.

As a result, the Fund goals are to:

- Improve the Plan's funding status to protect and sustain current and future benefits.
- Minimize the employee and employer contributions needed to fund the Plan over the long term.
- Avoid substantial volatility in required contribution rates and fluctuations in the Plan's funding status.
- Accumulate a funding surplus to provide increases in retiree annuity payments to preserve the purchasing power of their retirement benefit.

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

Responsibilities and Discretion of the State Investment Board (SIB)

The BCPPP Board has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. The BCPPP Board is responsible for establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and investing the assets of the Fund in the manner provided in NDCC 21-10-07, the prudent investor rule. Under this rule, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income. The Fund must be invested exclusively for the benefit of the members and their beneficiaries in accordance with this investment policy.

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

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

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

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

Risk Tolerance

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

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

Investment Objectives

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

1. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
2. The Fund's risk, measured by the standard deviation of net returns, should not exceed 115% of the policy benchmark over a minimum evaluation period of five years.
3. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

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

Asset Class	Policy Target %
Global Equity	**51**
Public Equity	46
Private Equity	5
Global Fixed Income	**29**
Investment Grade	22
Non-investment Grade	7
Global Real Assets	**20**
Global Real Estate	12
Other	8

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

Restrictions

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

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

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

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

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

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

- A list of advisory services managing investments for the SIB.
- A list of investments at market value, compared to previous reporting period, of each account managed by each advisory service.
- Earnings, percentage earned, and change in market value of each account's investments.
- Comparison of the performance of each account managed by each advisory service to other accounts under the SIB's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 24,365,950**	**50.6%**	**-13.69%**
Public Equity	21,697,672	45.1%	-16.26%
World Equity	4,809,141	10.0%	-13.20%
Domestic Equity	9,968,258	20.7%	-13.53%
Domestic Large Cap Equity	8,344,754	17.3%	-12.72%
Domestic Small Cap Equity	1,623,504	3.4%	-16.92%
International Equity	6,920,273	14.4%	-22.10%
Developed International Equity	5,708,869	11.9%	-19.98%
Emerging Markets Equity	1,211,404	2.5%	-28.22%
Private Equity	2,668,278	5.5%	11.73%
Global Fixed Income	**13,806,374**	**28.7%**	**-7.65%**
Investment Grade Fixed Income	10,419,949	21.6%	-10.64%
Non-Investment Grade Fixed Income	3,386,425	7.0%	2.12%
Global Real Assets	**9,845,143**	**20.4%**	**18.11%**
Global Real Estate	5,923,532	12.3%	24.96%
Other	3,921,611	8.1%	8.15%
Timber	868,034	1.8%	7.35%
Infrastructure	3,053,577	6.3%	8.26%
Cash Equivalents	**136,612**	**0.3%**	**0.22%**
Total Fund	**$ 48,154,079**		**-5.96%**
Policy Benchmark			**-6.85%**

Columns may not foot due to rounding.

CITY OF GRAND FORKS PENSION PLAN

Investment Objectives and Policy Guidelines

Plan Characteristics and Fund Constraints

The City of Grand Forks Pension Fund (the "Fund") is operated by the Grand Forks City Council pursuant to the authority granted in the Grand Forks City Code Chapter 7.

The City of Grand Forks, North Dakota Pension Plan (the "Plan") is a cost-sharing multiple employer public employee pension plan. All classified employees who earned at least one hour of service prior to January 1, 1996 are eligible to participate in the Plan. Some participants have elected to cease benefit accruals under the Plan as of June 30, 2008 and to participate in the North Dakota Public Employees Retirement System.

Benefit provisions are established by the City Council. The employers contribute such amounts as necessary to provide the promised benefits. The contribution amounts are determined by the annual valuation report and approved by the City Council.

Fund Goals

The plan benefits are financed through both employer and employee contributions and the investment earnings on assets held in the Fund. The City Council recognizes that a sound investment program is essential to meet the pension obligations.

As a result, the Fund goals are to:

- Improve the Plan's funding status to protect and sustain current and future benefits.
- Minimize the employee and employer contributions needed to fund the Plan over the long term.
- Avoid substantial volatility in required contribution rates and fluctuations in the Plan's funding status.
- Accumulate a funding surplus to provide increases in retiree annuity payments to preserve the purchasing power of their retirement benefit.

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

Responsibilities and Discretion of the State Investment Board (SIB)

The City Council has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. The City Council is responsible for establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and investing the assets of the Fund in the manner provided in NDCC 21-10-07, the prudent investor rule. Under this rule, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income. The Fund must be invested exclusively for the benefit of the members and their beneficiaries in accordance with this investment policy.

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

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

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

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

Risk Tolerance

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

Investment Objectives

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

1. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
2. The Fund's risk, measured by the standard deviation of net returns, should not exceed 115% of the policy benchmark over a minimum evaluation period of five years.
3. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

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

Asset Class	Policy Target %
Global Equity	**60**
Public Equity	55
Private Equity	5
Global Fixed Income	**24**
Investment Grade	17
Non-investment Grade	7
Global Real Assets	**15**
Global Real Estate	7
Other	8
Cash	**1**

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

Restrictions

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

a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
b. Use of derivatives will be monitored to ensure that undue risks are not taken by the money managers.
c. No transaction may be made which threatens the tax exempt status of the Fund.
d. No unhedged short sales or speculative margin purchases may be made.
e. Social investing is prohibited unless it meets the Exclusive Benefit Rule and it can be substantiated that the investment must provide an equivalent or superior rate of return for a similar time horizon and similar risk.

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

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

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

   The Exclusive Benefit Rule is met if the following four conditions are satisfied:

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the Plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

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

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

- A list of the advisory services managing investments for the SIB.
- A list of investments at market value, compared to previous reporting period, of each account managed by each advisory service.
- Earnings, percentage earned, and change in market value of each account's investments.
- Comparison of the performance of each account managed by each advisory service to other accounts under the SIB's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 43,491,284**	**59.7%**	**-13.28%**
Public Equity	39,439,926	54.1%	-15.40%
World Equity	7,286,752	10.0%	-13.20%
Domestic Equity	19,061,278	26.2%	-13.53%
Domestic Large Cap Equity	15,960,418	21.9%	-12.72%
Domestic Small Cap Equity	3,100,860	4.3%	-16.92%
International Equity	13,091,896	18.0%	-22.10%
Developed International Equity	10,800,232	14.8%	-19.98%
Emerging Markets Equity	2,291,664	3.1%	-28.22%
Private Equity	4,051,358	5.6%	11.73%
Global Fixed Income	**17,467,803**	**24.0%**	**-7.79%**
Investment Grade Fixed Income	12,346,955	16.9%	-10.64%
Non-Investment Grade Fixed Income	5,120,848	7.0%	-0.58%
Global Real Assets	**11,170,052**	**15.3%**	**15.79%**
Global Real Estate	5,231,916	7.2%	24.96%
Other	5,938,136	8.1%	8.14%
Timber	1,380,170	1.9%	7.35%
Infrastructure	4,557,966	6.3%	8.26%
Cash Equivalents	**749,458**	**1.0%**	**0.22%**
Total Fund	**$ 72,878,597**		**-7.63%**
Policy Benchmark			**-8.56%**

Columns may not foot due to rounding.

PARK DISTRICT OF THE CITY OF GRAND FORKS PENSION PLAN

Investment Objectives and Policy Guidelines

Plan Characteristics and Fund Constraints

The Park District of the City of Grand Forks, North Dakota Pension Plan (the "Plan") is a cost-sharing public employee pension plan operated by The Park District of the City of Grand Forks, North Dakota (the "District") which serves as the Plan Administrator ("Administrator") and Plan Sponsor ("Sponsor"). All employees are required to participate in the Plan. Some participants have elected to cease benefit accruals under the Plan as of January 1, 2010 and to participate in the North Dakota Public Employees Retirement System ("NDPERS") pension plan. All future hires after December 31, 2009, will be required to participate in the NDPERS plan. The investment assets of the Plan are held within the Plan Fund ("Fund").

Benefit provisions are established by the Park Board ("Board") of the Sponsor. The employers contribute such amounts as necessary to provide the promised benefits. The contribution amounts are determined by the annual actuarial valuation report and approved by the Board.

Fund Goals

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

As a result, the Fund goals are to:

- Improve the Plan's funding status to protect and sustain current and future benefits.
- Minimize the employee and employer contributions needed to fund the Plan over the long term.
- Avoid substantial volatility in required contribution rates and fluctuations in the Plan's funding status.
- Accumulate a funding surplus to provide increases in retiree annuity payments to preserve the purchasing power of their retirement benefit.

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

Responsibilities and Discretion of the State Investment Board (SIB)

The Board has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. The Board is responsible for establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and investing the assets of the Fund in the manner provided in NDCC 21-10-07, the prudent investor rule. Under this rule, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income. The Fund must be invested exclusively for the benefit of the members and their beneficiaries in accordance with this investment policy.

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

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

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

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

Risk Tolerance

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

Investment Objectives

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

1. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
2. The Fund's risk, measured by the standard deviation of net returns, should not exceed 115% of the policy benchmark over a minimum evaluation period of five years.
3. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

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

Asset Class	Policy Target %
Global Equity	**54.5**
Public Equity	47
Domestic Equity	27
Large	22
Small	5
International Equity	20
Developed	10
Emerging	10
Private Equity	7.5
Global Fixed Income	**25.5**
Investment Grade	18
Non-Investment Grade	7.5
Global Real Assets	**20**
Global Real Estate	10
Other	10

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

Restrictions

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

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

   For the purpose of this document, social investing is defined as the consideration of socially responsible criteria in the investment or commitment of public fund money for the purpose of obtaining an effect other than a maximized return of the Fund.

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the Plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

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

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

- A list of the advisory services managing investments for the SIB.
- A list of investments at market value, compared to previous reporting period, of each account managed by each advisory service.
- Earnings, percentage earned, and change in market value of each account's investments.
- Comparison of the performance of each account managed by each advisory service to other accounts under the SIB's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 4,658,289**	**54.1%**	**-13.38%**
Public Equity	3,931,721	45.6%	-17.08%
World Equity	863,170	10.0%	-13.20%
Domestic Equity	1,689,419	19.6%	-13.46%
Domestic Large Cap Equity	1,324,680	15.4%	-12.72%
Domestic Small Cap Equity	364,739	4.2%	-16.92%
International Equity	1,379,132	16.0%	-24.18%
Developed International Equity	578,194	6.7%	-19.98%
Emerging Markets Equity	800,938	9.3%	-28.22%
Private Equity	726,568	8.4%	11.73%
Global Fixed Income	**2,164,256**	**25.1%**	**-11.83%**
Investment Grade Fixed Income	1,522,795	17.7%	-10.64%
Non-Investment Grade Fixed Income	641,461	7.4%	-14.69%
Global Real Assets	**1,766,605**	**20.5%**	**16.42%**
Global Real Estate	886,167	10.3%	24.96%
Other	880,438	10.2%	8.20%
Timber	115,011	1.3%	7.35%
Infrastructure	765,427	8.9%	8.26%
Cash Equivalents	**27,241**	**0.3%**	**0.22%**
Total Fund	**$ 8,616,391**		**-7.39%**
Policy Benchmark			**-6.80%**

Columns may not foot due to rounding.

WORKFORCE SAFETY & INSURANCE FUND

Investment Objectives and Policy Guidelines

Introduction

North Dakota Workforce Safety & Insurance (WSI) is an exclusive state workers' compensation fund (Fund), which exists for the mutual benefit of North Dakota employers and employees. The assets of the Fund are utilized to pay benefits to injured workers or their survivors.

Section 65-04-01 of the North Dakota Century Code requires WSI to establish premium rates for funding sufficiently high to provide for:

1. The payment of the expenses of administration of the organization,
2. The payment of compensation according to the provisions and schedules contained in this title, and
3. The maintenance by the Fund of adequate reserves and surplus to the end that it may be kept at all times in an entirely solvent condition.

Responsibilities of the North Dakota State Investment Board (SIB)

The governing body of WSI is charged by law under NDCC 21-10-02.1 with the responsibility of establishing policies on investment goals and asset allocation of the Fund. WSI fulfills this responsibility through its Board of Directors, under the oversight and approval of the Governor. The SIB is charged with implementing these policies and asset allocation and investing the assets of the Fund in a manner consistent with the prudent investor rule as provided in NDCC 21-10-07. The Fund must be invested exclusively for the benefit of the members and their beneficiaries in accordance with this investment policy.

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

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

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

Investment Objectives

The investment goal of WSI is to supplement premiums, through various investments, to accomplish its statutory obligations.

The following investment objectives are established as of the date adopted and are in keeping with the fiduciary requirements as set forth in federal and state law and as expected by the members. WSI expects to receive results from the SIB that are consistent with the policies included herein. These objectives and guidelines will provide a basis for evaluating the effectiveness of the investment program over time. It is clearly understood these objectives and standards are to be viewed over the long term and have been established after full consideration of all factors set out in the Statement of Investment Policy.

The operating and liquidity needs of WSI are generally to be met by the cash equivalents allocation. Funds in excess of those required for operating and liquidity needs will be invested in domestic equity, international equity, real estate and fixed income securities. The objective of these assets is to obtain the maximum total return on investments consistent with safety of principal on funds in excess of those required for operating and liquidity needs.

Standards of Investment Performance

The Fund's investment objectives and characteristics give rise to an asset allocation that is considered to have greater than a 50% probability of achieving the results desired. For evaluation purposes, the following performance targets will apply:

a. The rate of return, net of fees and expenses, should at least match that of the policy portfolio, over a minimum evaluation period of five years.
b. Risk, as measured by the annual standard deviation of net returns for the Fund, should not exceed that of the policy portfolio by more than 100 basis points over a minimum evaluation period of five years.
c. Risk adjusted excess returns of the Fund, net of fees and expenses, should match or exceed the policy benchmark over a minimum evaluation period of five years.

Policy and Guidelines

The asset allocation policy developed herein is based on an evaluation of WSI's ability and willingness to assume investment risk in light of WSI's financial goals and objectives. In recognition of these goals and objectives, coupled with a liability-sensitive asset allocation study conducted by Callan Associates in February of 2022, the following asset allocation is deemed appropriate for WSI. The portfolio mix shall be in accordance with the following asset allocation and periodically reviewed by WSI.

Asset Class	Target Allocation
Global Equity	**20%**
Large Cap Equity	10%
Small Cap Equity	2%
International Equity	8%
Global Fixed Income	**62%**
Domestic Fixed Income	62%
Global Real Assets	**17%**
Diversified Real Assets	12%
TIPS	*8%*
Infrastructure/Timber	*4%*
Real Estate	5%
Cash Equivalents	**1%**

Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

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

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

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

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

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

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

(1) The cost does not exceed the fair market value at the time of investment.
(2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
(3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
(4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Evaluation and Review

Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards. Evaluation will be conducted quarterly by the SIB through its review of funds participating in the Insurance Trust.

Money managers will be evaluated by the SIB quarterly. In-state meetings will be held with the money managers at least annually.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 360,553,046**	**17.5%**	**-15.76%**
Domestic Large Cap Equity	178,043,498	8.7%	-12.21%
Domestic Small Cap Equity	35,934,808	1.7%	-17.44%
International Equity	146,574,740	7.1%	-19.85%
Global Fixed Income	**1,291,931,681**	**62.9%**	**-11.32%**
Global Real Assets	**384,835,476**	**18.7%**	**6.09%**
Diversified Real Assets	257,558,837	12.5%	-2.41%
Real Estate	127,276,639	6.2%	29.28%
Cash Equivalents	**18,044,208**	**0.9%**	**0.16%**
Total Fund	**$ 2,055,364,411**		**-9.04%**
Policy Benchmark			**-8.68%**

Columns may not foot due to rounding.

STATE FIRE AND TORNADO FUND

Investment Objectives and Policy Guidelines

Fund Characteristics and Constraints

The State Fire and Tornado Fund (the Fund) was established in 1919 to insure the various state industries and political subdivisions against direct physical loss to public buildings, fixtures, and permanent contents due to the perils named in 26.1-22-02 of the North Dakota Century Code (NDCC). All state buildings and universities must be covered by the Fund. School districts and counties may participate at their option. Funding is primarily provided by annual premiums charged to policy holders in accordance with NDCC 26.1-22.

Effective August 1993, the state's boiler inspection program was placed under the direction of the Insurance Department. The costs of this program are appropriated from the Fund. Fees collected for boiler inspections and licensing will be the primary source of funding for the program. The 1995 Legislature added anhydrous ammonia storage facilities to the Fund's inspection responsibilities.

A minimum balance of $12.0 million must be maintained at all times. If reserves drop below this statutory minimum, additional premiums, as specified under NDCC 26.1-22, would be assessed. This situation must be avoided.

The Fund retains liability for the first $1 million on each and every loss. Any loss over this amount, up to a maximum of $100 million, is covered by reinsurance through a commercial reinsurance carrier. Reinsurance coverage is bid by the Insurance Department at least once every two years.

Claims paid from the Fund are highly unpredictable. Weather damage accounts for the majority of claims. Fires generally result in the most extensive damage. Generally, there is a two week lead time to prepare for a claim payment. Large claim payments have a longer lead time and are spread out in multiple payments whenever possible.

Operating expenses are paid from the Fund as incurred. These include Fund administration, boiler inspection program, anhydrous ammonia storage facility inspections, State Fire Marshall's Office, and North Dakota Firefighter's Association.

Fund Mission

The primary mission of the Fund is to maintain an adequate balance in the Fund to avoid the necessity of assessing additional premiums to policy holders.

Responsibilities and Discretion of the State Investment Board (SIB)

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

Management responsibility for the investment program not assigned to the SIB in NDCC Chapter 21-10 is hereby delegated to the SIB, which must establish written policies for the operation of the investment program consistent with this investment policy.

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

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

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

The SIB shall notify the Fund within 30 days of any substantial or notable changes in money managers, performance measurement services, and consultants, including hiring or terminating a money manager, performance measurement service, or consultant. The SIB will implement changes to this policy as promptly as is prudent.

Risk Tolerance

The investment objectives of the Fund reflect the long-term nature of the Fund, but also the low risk tolerance and shorter-term liquidity needs.

Investment Objectives

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

a. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
b. The Fund's risk, as measured by the standard deviation of net returns, should not exceed 115 percent of the policy benchmark over a minimum evaluation period of five years.
c. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

After consideration of all the inputs and discussion of its own risk tolerance, the Fund has chosen the following asset allocation:

Large Cap Domestic Equity	18.75%
Small Cap Domestic Equity	6.25%
International Equity	10.00%
Fixed Income	55.00%
Cash Equivalents	10.00%

Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

Restrictions

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

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

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

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

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

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

(1) The cost does not exceed the fair market value at the time of investment.
(2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
(3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
(4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards. Emphasis will be placed on five year results. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the appropriateness of the Investment Policy Statement for achieving those objectives. Performance reports will be provided to the Insurance Department periodically, but not less than annually. Such reports will include asset returns and allocation data as well as information regarding all significant and/or material matters and changes pertaining to the investment of the Fund, including but not limited to:

- A list of advisory services managing investments for the Board.
- A list of investments at market value, compared to the previous reporting period, of each fund managed by each advisory service.
- Earnings, percentage earned, and change in market value of each fund's investments.
- Comparison of the performance of each fund managed by each advisory service to other funds under the Board's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 6,683,433**	**35.1%**	**-15.39%**
Domestic Large Cap Equity	3,550,223	18.7%	-12.23%
Domestic Small Cap Equity	1,221,969	6.4%	-17.43%
International Equity	1,911,241	10.0%	-19.92%
Global Fixed Income	**10,438,687**	**54.8%**	**-11.04%**
Cash Equivalents	**1,910,288**	**10.0%**	**0.16%**
Total Fund	**$ 19,032,408**		**-11.36%**
Policy Benchmark			**-11.26%**

Columns may not foot due to rounding.

STATE BONDING FUND

Investment Objectives and Policy Guidelines

Fund Characteristics and Constraints

The State Bonding Fund (the Fund) was established for bonding public employees and public officials in accordance with Chapter 26.1-21 of the North Dakota Century Code (NDCC). Annual collections to the Fund are in the form of fees and restitution. However, the primary funding source for the Fund is investment return.

A minimum balance of $2.0 million must be maintained at all times. If reserves drop below this statuary minimum, premiums will be assessed against all bond holders in accordance with NDCC 26.1-21-09. Such premiums will continue to be charged until the Fund balance reaches $3.0 million. This situation must be avoided.

Claims paid from the Fund are on an as-needed basis and are highly unpredictable. A judgment against the guilty party is required prior to the Fund making a claim payment. Generally, there is a 60-90 day lead time to prepare for a claim payment. Appropriations from the Fund are exclusively for administrative costs.

Fund Mission

The primary mission of the Fund is to maintain an adequate balance in the Fund to avoid the necessity of assessing premiums to policy holders.

Responsibilities and Discretion of the State Investment Board (SIB)

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

Management responsibility for the investment program not assigned to the SIB in NDCC Chapter 21-10 is hereby delegated to the SIB, which must establish written policies for the operation of the investment program consistent with this investment policy.

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

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

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

The SIB shall notify the Fund within 30 days of any substantial or notable changes in money managers, performance measurement services, and consultants, including hiring or terminating a money manager, performance measurement service, or consultant. The SIB will implement changes to this policy as promptly as is prudent.

Risk Tolerance

The investment objectives of the Fund reflect the long-term nature of the Fund, but also the low risk tolerance and shorter-term liquidity needs.

Investment Objectives

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

a. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
b. The Fund's risk, as measured by the standard deviation of net returns, should not exceed 115 percent of the policy benchmark over a minimum evaluation period of five years.
c. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

After consideration of all the inputs and discussion of its own risk tolerance, the Fund has chosen the following asset allocation:

Fixed Income	55.0%
Cash Equivalents	45.0%

Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

Restrictions

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

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

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

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

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

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

- A list of advisory services managing investments for the Board.
- A list of investments at market value, compared to the previous reporting period, of each fund managed by each advisory service.
- Earnings, percentage earned, and change in market value of each fund's investments.
- Comparison of the performance of each fund managed by each advisory service to other funds under the Board's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Fixed Income	$ 1,979,980	54.9%	-11.21%
Cash Equivalents	1,629,572	45.1%	0.16%
Total Fund	**$ 3,609,552**		**-6.21%**
Policy Benchmark			**-5.69%**

Columns may not foot due to rounding.

PETROLEUM TANK RELEASE COMPENSATION FUND

Investment Objectives and Policy Guidelines

Fund Characteristics and Constraints

The Petroleum Tank Release Compensation Fund (the Fund) was established in 1989 in response to the Environmental Protection Agency's (EPA) requirement that all underground storage tank owners have proof of financial responsibility. Operation of the Fund is in accordance with NDCC 23.1-12. The Fund's "sunset clause" date of June 30, 2011 has been extended and the time horizon for this Fund is uncertain at this time.

Funding is provided by annual premiums collected for aboveground and underground petroleum storage tanks. Registration of tanks with the Fund is mandatory, although certain types of tanks are excluded.

A statutory minimum balance of $6.0 million must be maintained in the Fund. Also, a minimum balance of $2.0 million is required by EPA. In the event reserves drop below this minimum, EPA would evaluate the Fund's ability to pay claims and would in all likelihood disapprove the Fund as a financial responsibility mechanism for North Dakota petroleum tank owners.

If a petroleum release occurs or petroleum contamination is discovered, an eligible tank owner is reimbursed 90% of necessary and reasonable costs between $5,000 and $155,000 for cleanup of contamination or third-party liability. The Fund reimburses 100% of costs between $155,000 and $1,000,000. Operating expenses are paid from the Fund as incurred.

Fund Mission

The primary mission of the Fund is to maintain the statutory minimum balance in the fund.

Responsibilities and Discretion of the State Investment Board (SIB)

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

Management responsibility for the investment program not assigned to the SIB in NDCC Chapter 21-10 is hereby delegated to the SIB, which must establish written policies for the operation of the investment program consistent with this investment policy.

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

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

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

The SIB shall notify the Fund within 30 days of any substantial or notable changes in money managers, performance measurement services, and consultants, including hiring and terminating a money manager, performance measurement service, or consultant. The SIB will implement changes to this policy as promptly as is prudent.

Risk Tolerance

The investment objectives of the Fund reflect the long-term nature of the Fund, but also the low risk tolerance and shorter-term liquidity needs.

Investment Objectives

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

a. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
b. The Fund's risk, as measured by the standard deviation of net returns, should not exceed 115 percent of the policy benchmark over a minimum evaluation period of five years.
c. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

After consideration of all the inputs and discussion of its own risk tolerance, the Fund has chosen the following asset allocation:

Global Fixed Income	50.0%
Cash Equivalents	50.0%

Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

Restrictions

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

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

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

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

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

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

- A list of advisory services managing investments for the Board.
- A list of investments at market value, compared to the previous reporting period, of each fund managed by each advisory service.
- Earnings, percentage earned, and change in market value of each fund's investments.
- Comparison of the performance of each fund managed by each advisory service to other funds under the Board's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Fixed Income	$ 2,948,408	49.8%	-11.04%
Cash Equivalents	2,967,326	50.2%	0.16%
Total Fund	**$ 5,915,734**		**-5.56%**
Policy Benchmark			**-5.17%**

Columns may not foot due to rounding.

INSURANCE REGULATORY TRUST FUND

Investment Objectives and Policy Guidelines

Fund Characteristics and Constraints

The Insurance Regulatory Trust Fund (the Fund) was established for use by the Insurance Department to defray the expenses incurred in discharging its duties as described in NDCC 26.1.

Funding is provided primarily through the collection of fees and fines as specified in NDCC 26.1-01-07.1. Fees and other collections as well as earnings from investments are funding sources.

There is no statutory minimum balance for this Fund. However, the Insurance Department relies entirely on the Fund to meet all operating expenses. Therefore, sufficient liquidity and risk control must be maintained at all times to ensure the solvency of the Insurance Department.

In accordance with NDCC 26.1-01-07.1, any cash balance in the Fund after all current biennium expenditures are met must be carried forward for the succeeding biennium. However, when the balance at the end of the biennium exceeds $1.0 million, any excess will be transferred to the general fund in the state treasury. Such transfers are generally made at the end of September or during the first two weeks of October. Operating expenses are paid from the Fund as incurred.

Fund Mission

The primary mission of the Fund is to maintain an adequate balance in the Fund to avoid the necessity of assessing premiums to policy holders.

Responsibilities and Discretion of the State Investment Board (SIB)

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

Management responsibility for the investment program not assigned to the SIB in NDCC Chapter 21-10 is hereby delegated to the SIB, which must establish written policies for the operation of the investment program consistent with this investment policy.

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

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

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

The SIB shall notify the Fund within 30 days of any substantial or notable changes in money managers, performance measurement services, and consultants, including hiring or terminating money managers, performance measurement services, or consultants. The SIB will implement changes to this policy as promptly as is prudent.

Risk Tolerance

The investment objectives of the Fund reflect the long-term nature of the Fund, but also the low risk tolerance and shorter-term liquidity needs.

Investment Objectives

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

a. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
b. The Fund's risk, as measured by the standard deviation of net returns, should not exceed 115 percent of the policy benchmark over a minimum evaluation period of five years.
c. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

After consideration of all the inputs and discussion of its own risk tolerance, the Fund has chosen the following asset allocation:

Large Cap Domestic Equity	15%
Small Cap Domestic Equity	5%
International Equity	10%
Fixed Income	35%
Cash Equivalents	35%

Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

Restrictions

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

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

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

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

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

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

- A list of advisory services managing investments for the Board.
- A list of investments at market value, compared to the previous reporting period, of each fund managed by each advisory service.
- Earnings, percentage earned, and change in market value of each fund's investments.
- Comparison of the performance of each fund managed by each advisory service to other funds under the Board's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 1,989,861**	**30.1%**	**-15.67%**
Domestic Large Cap Equity	987,214	14.9%	-12.23%
Domestic Small Cap Equity	339,385	5.1%	-17.43%
International Equity	663,262	10.0%	-19.92%
Global Fixed Income	**2,309,728**	**34.9%**	**-11.54%**
Cash Equivalents	**2,321,704**	**35.1%**	**0.16%**
Total Fund	**$ 6,621,293**		**-8.72%**
Policy Benchmark			**-8.45%**

Columns may not foot due to rounding.

STATE RISK MANAGEMENT FUND

Investment Objectives and Policy Guidelines

Plan Characteristics and Fund Constraints

To address the State's loss of sovereign immunity, the 1995 North Dakota Legislature created a new chapter of the North Dakota Century Code (NDCC), 32-12.2. That Chapter established the Risk Management Fund (the Fund) to administer claims against the State and state employees for personal injury, death, or property damage caused by the State or a state employee acting within the scope of the employee's employment. The Fund is directed by the Office of Management and Budget (OMB).

Each entity of the State is required to participate in the Fund. Contributions to the Fund are determined by the Director of OMB based on an actuarial review of the financial status of the Fund. This results in a fluctuation of contributions made to the Fund from one biennium to another.

The amount of money damages the Fund may pay is limited for state court actions to a total of $250,000 per person and $1,000,000 per occurrence. These liability caps may not be recognized in Federal Court actions or in actions filed in other states. The Fund's excess carrier provides coverage up to $10,000,000 for those exposures not covered by the Tort Claims Act.

Significant claims paid from the Fund are usually somewhat predictable and take a period of time to resolve. A person bringing a claim or lawsuit against the State or a state employee must give notice to the OMB Director within 180 days after the alleged injury is discovered or reasonably should have been discovered. If the claim is one for death, the notice must be provided within one year after the alleged injury resulting in the death.

The Risk Management Division's operating expenses including loss control activities are paid from the Fund as incurred.

Responsibilities of the State Investment Board (SIB)

The Fund is charged by law under NDCC 21-10-02.1 with the responsibility of establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and asset allocation and investing the assets of the Fund in a manner consistent with the prudent investor rule as provided in NDCC 21-10-07.

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

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

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

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

Investment Objectives

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

1) The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
2) The Fund's risk, measured by the standard deviation of net returns, should not exceed the risk of the policy benchmark by more than 1% over a minimum evaluation period of five years. For example, if the risk of the policy benchmark is 4%, the Fund's risk should not exceed 5% over a five-year period.
3) The risk adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

The asset allocation of the Fund is established by the SIB, with input from the OMB. Asset allocation is based upon the appraisal of projected liquidity and income requirements, and estimates of the investment returns likely to be achieved by the various asset classes over the next five years.

In recognition of these factors, the following allocation is deemed appropriate for the Fund:

Large Cap Domestic Equity	22.5%
Small Cap Domestic Equity	7.5%
Fixed Income	65.0%
Cash Equivalents	5.0%

While the Fund recognizes fluctuations in market values will lead to short-term deviations from policy targets, the Fund does not intend to engage in tactical asset allocation. Rebalancing of the Fund to this allocation will be done in accordance with the SIB's rebalancing policy.

Restrictions

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

a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
b. Derivative use will be monitored to ensure that undue risks are not taken by the money managers.
c. All assets will be held in custody by the SIB's master custodian or such other custodians as are acceptable to the SIB.
d. No funds shall be borrowed.
e. No unhedged short sales or speculative margin purchases shall be made.
f. Social investing is prohibited unless it meets the Exclusive Benefit Rule and it can be substantiated that the investment must provide an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

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

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

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

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

- A list of the advisory services managing investments for the board.
- A list of investments at market value, compared to previous reporting period, of each fund managed by each advisory service.
- Earnings, percentage earned, and change in market value of each fund's investments.
- Comparison of the performance of each fund managed by each advisory service to other funds under the board's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 1,198,762**	**30.1%**	**-13.54%**
Domestic Large Cap Equity	891,639	22.4%	-12.23%
Domestic Small Cap Equity	307,123	7.7%	-17.43%
Global Fixed Income	**2,581,557**	**64.9%**	**-10.73%**
Cash Equivalents	**199,611**	**5.0%**	**0.16%**
Total Fund	**$ 3,979,930**		**-10.90%**
Policy Benchmark			**-11.40%**

Columns may not foot due to rounding.

STATE RISK MANAGEMENT WORKERS COMPENSATION FUND

Investment Objectives and Policy Guidelines

Plan Characteristics and Fund Constraints

The 2001 North Dakota Legislature established a single workers' compensation account for state entities, N.D.C.C. § 65-04-03.1. N.D.C.C. § 65-04-03.1(2) directs that workers' compensation premiums from state entities must be deposited in the Risk Management Workers Compensation Fund (Fund) and the State Investment Board is directed to invest the Fund in accordance with chapter 21-10.

The Risk Management Division of the Office of Management and Budget is responsible for administering the Fund to include promulgating rules, collecting and dispersing funds, and establishing an internal workers' compensation return-to-work program. Each entity of the State is required to participate in the program unless exempted by the director of the Office of Management and Budget. Contributions to the Fund are determined by Workforce Safety & Insurance (WSI) based on an actuarial review of combined payroll, premium, and loss history of agencies to determine experience rates, assessments, and premiums. The actuarial assumed rate of return is 3%.

The Risk Management Workers Compensation Program charges the entity the first $250 ($0 if a designated medical provider is used for treatment) of each accepted claim and pays disability and medical benefits of up to $100,000 dollars per claim. Dollar amounts for claims in excess of $100,000 are paid for by WSI. In turn the Program pays WSI approximately $1.7 million per year in premiums.

Responsibilities of the State Investment Board (SIB)

The Fund is charged by law under NDCC 21-10-02.1 with the responsibility of establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and asset allocation and investing the assets of the Fund in a manner consistent with the prudent investor rule as provided in NDCC 21-10-07.

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

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

The SIB is responsible for establishing criteria and procedures and making decisions with respect to hiring, maintaining, and terminating money managers. This responsibility includes selecting performance measurement services, consultants, and report formats and determining the frequency of meetings with managers. The SIB will implement changes to this policy as promptly as is prudent.

Investment Objectives

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

1) The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
2) The Fund's risk, measured by the standard deviation of net returns, should not exceed the risk of the policy benchmark by more than 1% over a minimum evaluation period of five years. For example, if the risk of the policy benchmark is 4%, the Fund's risk should not exceed 5% over a five-year period.
3) The risk adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

The asset allocation of the Fund is established by the SIB, with input from the OMB. Asset allocation is based upon the appraisal of projected liquidity and income requirements, and estimates of the investment returns likely to be achieved by the various asset classes over the next five years.

In recognition of these factors, the following allocation is deemed appropriate for the Fund:

Large Cap Domestic Equity	27.75%
Small Cap Domestic Equity	9.25%
Fixed Income	60.00%
Cash Equivalents	3.00%

While the Fund recognizes fluctuations in market values will lead to short-term deviations from policy targets, the Fund does not intend to engage in tactical asset allocation. Rebalancing of the Fund to this allocation will be done in accordance with the SIB's rebalancing policy.

Restrictions

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

a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
b. Derivative use will be monitored to ensure that undue risks are not taken by the money managers.
c. All assets will be held in custody by the State Investment Board's master custodian or such other custodians as are acceptable to the State Investment Board.
d. No funds shall be borrowed.
e. No unhedged short sales or speculative margin purchases shall be made.
f. Social investing is prohibited unless it meets the Exclusive Benefit Rule and it can be substantiated that the investment must provide an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

   For the purpose of this document, Social Investing is defined as "The investment or commitment of public fund money for the purpose of obtaining an effect other than a maximized return to the intended beneficiaries."
g. Economically targeted investing is prohibited unless the investment meets the Exclusive Benefit Rule.

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

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

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

- A list of the advisory services managing investments for the board.
- A list of investments at market value, compared to previous reporting period, of each fund managed by each advisory service.
- Earnings, percentage earned, and change in market value of each fund's investments.
- Comparison of the performance of each fund managed by each advisory service to other funds under the board's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation		Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$**	**1,212,104**	**37.2%**	**-13.54%**
Domestic Large Cap Equity		901,556	27.6%	-12.23%
Domestic Small Cap Equity		310,548	9.5%	-17.43%
Global Fixed Income		**1,953,029**	**59.9%**	**-10.53%**
Cash Equivalents		**96,534**	**3.0%**	**0.16%**
Total Fund	**$**	**3,261,667**		**-11.17%**
Policy Benchmark				**-12.00%**

Columns may not foot due to rounding.

NORTH DAKOTA CULTURAL ENDOWMENT FUND

Investment Objectives and Policy Guidelines

Fund Characteristics and Constraints

The North Dakota Cultural Endowment Fund (Fund) was created by the State Legislature in 1979 and is governed by NDCC 54-54-08.2. The Fund was established "to improve the intrinsic quality of the lives of the state's citizens now and in the future through programs approved by the council on the arts." Such programs must:

1. Increase cultural awareness by the state's citizens through programs in arts, crafts, theater, ethnic and folk arts, literature, journalism, public media, historic preservation and interpretation, visual arts, and architecture.
2. Make the items named in #1 above more available to the state's citizens.
3. Encourage the development of talent in the areas named in #1 above within the state.
4. Preserve and increase understanding of North Dakota's heritage and future.

The goals of the Fund are:

- To create a vehicle through which the North Dakota Council on the Arts can secure private and public funds to enhance existing programs;
- And to provide a stable funding source for the Council.

Sources of funding for the Fund are private donations and periodic General Fund appropriations. The current principal balance that must be maintained in the Fund is $150,000. Disbursements from the Fund will amount to approximately $5,000 per year for fellowship grants.

Responsibilities and Discretion of the State Investment Board (SIB)

The Fund is charged by law under NDCC 21-10-02.1 with the responsibility of establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and asset allocation and investing the assets of the Fund in a manner consistent with the prudent investor rule as provided in NDCC 21-10-07.

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

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

The SIB is responsible for establishing criteria and procedures and making decisions with respect to hiring, maintaining, and terminating money managers. This responsibility includes selecting performance measurement services, consultants, and report formats and determining the frequency of meetings with managers. The SIB will implement changes to this policy as promptly as is prudent.

Investment Objectives

The investment objectives of the Fund reflect the long-term nature of the Fund, but also the low risk tolerance and shorter-term liquidity needs. Operating and statutory considerations shape the Funds policies and priorities as outlined below:

Objective #1: Investment income is needed to provide balance in investment return sources. This will be achieved through a diversified portfolio of high quality fixed income and equity assets.

Objective #2: Growth of capital is needed to provide an inflationary hedge. Capital growth will be sought through investment in equities.

Objective #3: Sufficient liquidity is to be maintained to meet known or anticipated financial obligations. Cash equivalent investments will be used to achieve this objective.

Objective #4: The risk of violating the mandated minimum balance requirement of $150,000 is to be minimized. This will be achieved by an asset allocation consistent with this objective.

Standards of Investment Performance

The Fund's investment objectives and liquidity constraints give rise to an asset allocation that is considered the most likely to achieve the results desired. For evaluation purposes, the following performance targets will apply:

a. The Fund should produce a rate of return that meets or exceeds the portfolio policy index defined as 33.75% S&P 500 domestic stock index, 11.25% Russell 2000 domestic small cap index, 10% MSCI EAFE international stock index, 37% Barclays Capital Aggregate domestic bond index, 5% NCREIF Total real estate index, and 3% 90-day Treasury bills.
b. The annual standard deviation of total returns for the Fund should not exceed that of the policy portfolio.
c. Over 10 year and longer time periods the Fund should match or exceed the expected 7.26% rate of return based on Callan Associates' 2005 market projections. Expected risk for the period, measured by standard deviation, is 10.44%.

Policy and Guidelines

The asset allocation of the Cultural Endowment Fund is established by the North Dakota Council on the Arts, with input from the SIB. Asset allocation is based upon the appraisal of projected liquidity and income requirements, and estimates of the investment returns likely to be achieved by the various asset classes over the next five years.

In recognition of these factors, the following allocation is deemed appropriate for the fund:

Large Cap Domestic Equities	33.75%
Small Cap Domestic Equities	11.25%
International Equities	10.00%
Domestic Fixed Income	37.00%
Real Estate	5.00%
Cash Equivalents	3.00%

Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy.

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

a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
b. Derivative use will be monitored to ensure that undue risks are not taken by the money managers.
c. All assets will be held in custody by the State Investment Board's master custodian or such other custodians as are acceptable to the State Investment Board.
d. No funds shall be borrowed.
e. No unhedged short sales or speculative margin purchases shall be made.
f. Social investing is prohibited unless it meets the Exclusive Benefit Rule and it can be substantiated that the investment must provide an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

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

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Evaluation and Review

Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards. Evaluation will be conducted quarterly by the SIB through its review of funds participating in the Insurance Trust.

Money managers will be evaluated by the SIB quarterly. In-state meetings will be held with the money managers at least annually.

Actual Asset Allocation – June 30, 2022

Asset Allocation		Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$**	**286,390**	**55.0%**	**-14.72%**
Domestic Large Cap Equity		174,283	33.5%	-12.23%
Domestic Small Cap Equity		59,974	11.5%	-17.43%
International Equity		52,133	10.0%	-19.92%
Global Fixed Income		**191,602**	**36.8%**	**-11.35%**
Global Real Assets		**27,404**	**5.3%**	**29.28%**
Real Estate		27,404	5.3%	29.28%
Cash Equivalents		**15,168**	**2.9%**	**0.16%**
Total Fund	**$**	**520,564**		**-10.96%**
Policy Benchmark				**-11.76%**

Columns may not foot due to rounding.

NORTH DAKOTA BUDGET STABILIZATION FUND

Investment Objectives and Policy Guidelines

Fund Characteristics and Constraints

The Budget Stabilization Fund (Fund) is a special fund created in 1987 under Chapter 54-27.2 of the North Dakota Century Code used to deposit general fund moneys in excess of appropriations. The Fund serves as a "rainy day fund" for the State of North Dakota General Fund. The statutory cap for the 2021-23 biennium is $751,568,600. The state investment board shall supervise investment of the budget stabilization fund in accordance with chapter 21-10.

Any interest or other budget stabilization fund earnings must be deposited in the fund. Any amounts provided by law for deposit in the fund and any interest or earnings of the fund which would bring the balance in the fund to an amount greater than that fifteen percent of the current biennial state general fund budget, as finally approved by the most recently adjourned special or regular session of the legislative assembly, may not be deposited or retained in the fund but must be deposited instead in the state general fund. In the event of a budget shortfall, additional transfers may be made from the Fund only in accordance with NDCC 54-27.2-03.

Responsibilities and Discretion of the State Investment Board (SIB)

The Fund is charged by law under NDCC 21-10-02.1 with the responsibility of establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and asset allocation and investing the assets of the Fund in a manner consistent with the prudent investor rule as provided in NDCC 21-10-07.

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

The SIB may delegate investment responsibility to professional money managers. When a money manager has been retained, the SIB's role in determining investment strategy and security selection is supervisory, not advisory. In accordance with this Investment Policy Statement, the Fund's assets may be invested directly or through collective investment vehicles.

The SIB is responsible for establishing criteria and procedures and making decisions with respect to hiring, maintaining, and terminating money managers. This responsibility includes selecting performance measurement services, consultants, and report formats and determining the frequency of meetings with managers. The SIB will implement changes to this policy as promptly as is prudent.

Investment Objectives

The investment objectives of the Fund reflect the relatively unknown life-span and the moderate risk tolerance of the Fund. Operating and statutory considerations shape the Fund's policies and priorities as outlined below:

Objective: Sufficient liquidity is to be maintained to meet known or anticipated financial obligations and preserve the value of the surplus. Cash equivalent investments will be used to achieve this objective.

Standards of Investment Performance

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

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

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

Policy and Guidelines

The asset allocation of the Fund is established by the SIB, with input from the Legacy and Budget Stabilization Advisory Board. Asset allocation is based upon the appraisal of projected liquidity and income requirements, and estimates of the investment returns likely to be achieved by the various asset classes over the next five years.

In recognition of these factors, the following allocation is deemed appropriate for the fund:

Short-term Fixed Income	Minimum of 90%
Bank Loans w/floating yield	Maximum of 5%
Absolute Return Strategies	Maximum of 5%

On June 17, 2017, the Advisory Board acknowledged the Bank of North Dakota Match Loan Certificates of Deposit Program (BND CD) was transferred to the Legacy Fund in early-2017.

Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy.

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

a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
b. Derivative use will be monitored to ensure that undue risks are not taken by the money managers.
c. All assets will be held in custody by the State Investment Board's master custodian or such other custodians as are acceptable to the State Investment Board.
d. No funds shall be borrowed.
e. No unhedged short sales or speculative margin purchases shall be made.
f. Social investing is prohibited unless it meets the Exclusive Benefit Rule and it can be substantiated that the investment must provide an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

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

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Evaluation and Review

Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards. Evaluation will be conducted quarterly by the SIB through its review of funds participating in the Insurance Trust.

Money managers will be evaluated by the SIB quarterly. In-state meetings will be held with the money managers at least annually.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Short-term Fixed Income	$ 712,199,191	99.2%	-5.59%
Cash Equivalents	5,473,566	0.8%	0.16%
Total Fund	**$ 717,672,757**		**-5.51%**
Policy Benchmark			**-3.51%**

Columns may not foot due to rounding.

NORTH DAKOTA ASSOCIATION OF COUNTIES

Investment Objectives and Policy Guidelines

Introduction

The North Dakota Association of Counties (NDACo) (Fund) was established to aid in the administration of county government by providing a medium for exchange of information, ideas, and experience of county officials; promote training; facilitate cooperation with all levels of government; and be a legislative advocate for counties. NDACo and the benefits provided there under are funded by dues from member counties and special programs and projects of NDACo.

Responsibilities and Discretion of the State Investment Board (SIB)

NDACo has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. It is the responsibility of NDACo to establish policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and asset allocation and investing the assets of the Fund in a manner consistent with the prudent investor rule as provided in NDCC 21-10-07.

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

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

The SIB is responsible for establishing criteria and procedures and making decisions with respect to hiring, maintaining, and terminating money managers. This responsibility includes selecting performance measurement services, consultants and report formats and determining the frequency of meetings with managers. The SIB will implement changes to this policy as promptly as is prudent.

Risk Tolerance

Funds in excess of those required for operating and claims payment needs will be invested to obtain the maximum total return on investments consistent with safety of principal on funds in excess of those required for operating and claims payment needs. The investment funds may be comprised of fixed income securities and equity securities. Individual investments may be either actively or passively managed.

Investment Objective

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

1. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years
2. Risk, as measured by the annual standard deviation of net returns for the Fund, should not exceed that of the policy portfolio by more than 100 basis points over a minimum evaluation period of five years.
3. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

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 allocation analysis designed to assist the Fund in determining an acceptable volatility target for the Fund and an optimal asset allocation policy mix. This analysis estimates the potential impact of various asset class mixes on key measures of total fund risk.

After consideration of all the inputs and a discussion concerning risk tolerance, the Fund approves the appropriate policy mix for the Fund.

Large Cap Equity	20%
Small Cap Equity	5%
International Equity	10%
Domestic Fixed Income	62%
Cash Equivalents	3%

While the Fund recognizes fluctuations in market values will lead to short-term deviations from policy targets, the Fund does not intend to engage in tactical asset allocations. Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

Restrictions

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

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

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

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

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

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

- A list of advisory services managing investments for the Board.
- A list of investments at market value, compared to the previous reporting period, of each fund managed by each advisory service.
- Earnings, percentage earned, and change in market value of each fund's investments.
- Comparison of the performance of each fund managed by each advisory service to other funds under the Board's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 2,386,210**	**35.1%**	**-15.20%**
Domestic Large Cap Equity	1,353,594	19.9%	-12.23%
Domestic Small Cap Equity	349,429	5.1%	-17.43%
International Equity	683,187	10.0%	-19.92%
Global Fixed Income	**4,208,192**	**61.9%**	**-11.47%**
Cash Equivalents	**205,307**	**3.0%**	**0.16%**
Total Fund	**$ 6,799,709**		**-12.31%**
Policy Benchmark			**-11.79%**

Columns may not foot due to rounding.

CITY OF BISMARCK DEFERRED SICK LEAVE ACCOUNT

Investment Objectives and Policy Guidelines

Fund Characteristics and Constraints

The City of Bismarck Deferred Sick Leave Account (the Fund) represents money set aside to cover the City's unfunded liability of employees' accrued sick leave. People who terminate employment with the City shall be compensated for unused sick leave from this Fund. In time, it is expected that the Fund will become depleted.

Responsibilities and Discretion of the State Investment Board (SIB)

The City of Bismarck (Client) has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. It is the responsibility of the Client to establish policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and asset allocation and investing the assets of the Fund in a manner consistent with the prudent investor rule as provided in NDCC 21-10-07.

At the discretion of the SIB, the Fund's assets may be pooled with other funds. In pooling funds, the SIB may establish appropriate asset class pools designed to provide specific quality and diversification guidelines, restrictions, and performance objectives consistent with the goals of the funds participating in the pools.

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

The SIB is responsible for establishing criteria and procedures and making decisions with respect to hiring, maintaining, and terminating money managers. This responsibility includes selecting performance measurement services, consultants and report formats and determining the frequency of meetings with managers. The SIB will implement changes to this policy as promptly as is prudent.

Investment Objectives

The investment objectives are to obtain a reasonable rate of return on the Fund while maintaining sufficient liquidity to meet known or anticipated financial obligations. Operating considerations shape the Fund's policies and priorities as outlined below:

Objective #1: Investment income is needed as a funding source. This will be achieved through a diversified portfolio of high quality fixed income and equity assets.

Objective #2: Growth of capital is needed to provide an inflationary hedge and add to the growth of the Fund. Capital growth is sought through investment in equities and/or equity substitutes.

Standards of Investment Performance

The Fund's investment objectives and liquidity constraints give rise to an asset allocation that is considered the most likely to achieve the results desired. For evaluation purposes, the following performance targets will apply:

a. The Fund should produce a rate of return that meets or exceeds the portfolio policy index defined as 15% S&P 500 domestic stock index, 5% Russell 2000 domestic small cap index, 10% MSCI EAFE international stock index, 65% Barclays Capital Aggregate domestic bond index, and 5% 90-day Treasury Bills.
b. The annual standard deviation of total returns for the Fund should be consistent with that of the policy portfolio.
c. Over 10 year and longer time periods the Fund should match or exceed the expected 6.00% rate of return based on Callan Associates' 2005 market projections. Expected risk for the period, measured by standard deviation, is 6.50%.

Policy and Guidelines

The asset allocation of the Fund is established by the City of Bismarck. Asset allocation is based upon the appraisal of projected liquidity requirements and sick leave payment demand, and estimates of the investment returns likely to be achieved by the various asset classes over the next five years.

In recognition of these factors, the following allocation is deemed appropriate for the Fund:

Large Cap Domestic Equity	15%
Small Cap Domestic Equity	5%
International Equity	10%
Fixed Income	65%
Cash Equivalents	5%

Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy.

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

a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
b. Derivative use will be monitored to ensure that undue risks are not taken by the money managers.
c. All assets will be held in custody by the SIB's master custodian or such other custodians as are acceptable to the SIB.
d. No funds shall be borrowed.
e. No unhedged short sales or speculative margin purchases shall be made.
f. Social investing is prohibited unless it meets the Exclusive Benefit Rule and it can be substantiated that the investment must provide an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

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

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

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

   Also, for the purpose of this document, the Exclusive Benefit Rule is met if the following four conditions are satisfied:
   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Evaluation and Review

Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards. Evaluation will be conducted quarterly by the SIB through its review of funds participating in the Insurance Trust. Money managers will be evaluated by the SIB quarterly. In-state meetings will be held with the money managers at least annually.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 224,568**	**30.1%**	**-15.69%**
Domestic Large Cap Equity	111,313	14.9%	-12.23%
Domestic Small Cap Equity	38,324	5.1%	-17.43%
International Equity	74,931	10.1%	-19.92%
Global Fixed Income	**483,695**	**64.9%**	**-11.10%**
Cash Equivalents	**36,928**	**5.0%**	**0.16%**
Total Fund	**$ 745,191**		**-11.83%**
Policy Benchmark			**-11.48%**

Columns may not foot due to rounding.

NDPERS GROUP INSURANCE ACCOUNT

Investment Objectives and Policy Guidelines

Introduction

The ND Public Employees Retirement System (PERS) Group Insurance Account (the Fund) was established to hold insurance premiums collected from employers until paid to the insurance carrier.

Responsibilities and Discretion of the State Investment Board (SIB)

PERS has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. It is the responsibility of PERS to establish policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and asset allocation and investing the assets in a manner consistent with the prudent investor rule as provided in NDCC 21-10-07.

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

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

The SIB is responsible for establishing criteria and procedures and making decisions with respect to hiring, maintaining, and terminating money managers. This responsibility includes selecting performance measurement services, consultants and report formats and determining the frequency of meetings with managers. The SIB will implement changes to this policy as promptly as is prudent.

Investment Objectives

Premiums are collected throughout the month at PERS and will be forwarded to the Fund investment account on the 1st and 15th of each month. The premiums transferred into the investment account will be transferred back to PERS on approximately the 22nd of each month so they may be remitted to the insurance carrier. The investment objective of the Fund is to maximize the return on the deposits within the short-term time-frame involved.

Standards of Investment Performance

The Fund's investment objectives and liquidity constraints give rise to an asset allocation that is considered the most likely to achieve the results desired. For evaluation purposes, the following performance targets will apply:

a. The Fund should produce a rate of return that meets or exceeds the portfolio policy index defined as the 90-day Treasury bill.

b. The annual standard deviation of total returns for the Fund should not materially exceed that of the policy portfolio.

Policy and Guidelines

The asset allocation of the Fund is established by PERS, with input from the SIB. Asset allocation is based upon the appraisal of projected liquidity and income requirements, and estimates of the investment returns likely to be achieved by the various asset classes over the next five years. In recognition of this factor, the following allocation is deemed appropriate for the Fund:

Short Term Fixed Income	95% (not to exceed $36m)
Cash Equivalents	5%

This cash will be held in an enhanced money market account at the Fund's custodian.

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

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

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

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Evaluation and Review

Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards. Evaluation will be conducted quarterly by the SIB through its review of funds participating in the Insurance Trust. Money managers will be evaluated by the SIB quarterly. In-state meetings will be held with the money managers at least annually.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Short Term Fixed Income	$ 30,516,041	95.0%	-5.59%
Cash Equivalents	1,617,744	5.0%	0.16%
Total Fund	**$ 32,133,785**		**-5.08%**
Policy Benchmark			**-3.26%**

Columns may not foot due to rounding.

CITY OF FARGO FARGODOME PERMANENT FUND

Investment Objectives and Policy Guidelines

Fund Characteristics and Constraints

The City of Fargo has set aside excess sales tax collections intended for the administration of the FargoDome in the FargoDome Permanent Fund (Fund). This fund is intended to provide financial resources necessary for the ongoing upkeep of this large City owned facility over a long term time horizon.

Responsibilities of the State Investment Board (SIB)

The City of Fargo (Client) has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. It is the responsibility of the Client to establish policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and asset allocation and investing the Fund in a manner consistent with the prudent investor rule as provided in NDCC 21-10-07.

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

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

The SIB is responsible for establishing criteria and procedures and making decisions with respect to hiring, maintaining, and terminating money managers. This responsibility includes selecting performance measurement services, consultants, and report formats and determining the frequency of meetings with managers. The SIB will implement changes to this policy as promptly as is prudent.

Investment Objectives

The investment objectives are to obtain a reasonable rate of return on the Fund while maintaining sufficient liquidity to meet known or anticipated financial obligations. Operating considerations shape the Fund's policies and priorities as outlined below:

Objective #1: Investment income is needed as a funding source. This will be achieved through a diversified portfolio of high quality fixed income and equity assets.

Objective #2: Growth of capital is needed to provide an inflationary hedge and add to the growth of the Fund. Capital growth is sought through investment in equities and/or equity substitutes.

Standards of Investment Performance

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

1. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
2. The Fund's risk, measured by the standard deviation of the net returns, should not exceed 115% of the policy benchmark over a minimum evaluation period of five years.
3. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy and Guidelines

The asset allocation of the Fund is established by the City of Fargo Finance Committee, with input from RIO staff. Asset allocation is based upon the appraisal of projected liquidity and income requirements, and estimates of the investment returns likely to be achieved by the various asset classes over the next five years.

In recognition of these factors, the following allocation is deemed appropriate for the Fund:

Large Cap Domestic Equity	23%
Small Cap Domestic Equity	12%
International Equity	15%
Fixed Income	39%
Inflation Protected Assets	10%
Cash Equivalents	1%

Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy.

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

a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
b. Derivative use will be monitored to ensure that undue risks are not taken by the money managers.
c. All assets will be held in custody by the State Investment Board's master custodian or such other custodians as are acceptable to the State Investment Board.
d. No funds shall be borrowed.
e. No unhedged short sales or speculative margin purchases shall be made.
f. Social investing is prohibited unless it meets the Exclusive Benefit Rule and it can be substantiated that the investment must provide an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

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

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards. Evaluation will be conducted quarterly by the SIB through its review of funds participating in the Insurance Trust. Money managers will be evaluated by the SIB quarterly. In-state meetings will be held with the money managers at least annually.

Actual Asset Allocation – June 30, 2022

Asset Allocation		Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$**	**20,082,857**	**50.2%**	**-15.82%**
Domestic Large Cap Equity		9,137,668	22.8%	-12.23%
Domestic Small Cap Equity		4,929,732	12.3%	-17.43%
International Equity		6,015,457	15.0%	-19.92%
Global Fixed Income		**15,531,699**	**38.8%**	**-11.21%**
Global Real Assets		**4,017,967**	**10.0%**	**-3.06%**
Diversified Real Assets		4,017,967	10.0%	-3.06%
Cash Equivalents		**399,464**	**1.0%**	**0.16%**
Total Fund	**$**	**40,031,987**		**-12.50%**
Policy Benchmark				**-12.53%**

Columns may not foot due to rounding.

ND STATE BOARD OF MEDICINE FUND

Investment Objectives and Policy Guidelines

Plan Characteristics and Fund Constraints

The North Dakota State Board of Medicine (the Board) was established in 1890 to protect the citizens of the state by regulating the practice of medicine. The Board licenses physicians, physician assistants, genetic counselors and fluoroscopy technicians and disciplines them if they violate the state's medical practice act. The North Dakota State Board of Medicine is governed by NDCC Chapter 43-17.

The North Dakota State Board of Medicine Fund (the Fund) is an unrestricted operating reserve set aside to provide a margin of safety and stability in the Board's operating activities, and provide flexibility to pursue capital projects as needed.

Fund Goals

The investment objectives of the Fund reflect a low risk tolerance and short-term liquidity needs. Operating considerations shape the Fund's policies and priorities as outlined below:

Objective #1: Investment income is needed as a funding source. This will be achieved through a diversified portfolio of high quality fixed income, equities and real estate.

Objective #2: Growth of capital is needed to preserve the real purchasing power of Fund assets. Capital growth is sought through investment in equities and/or equity substitutes.

Objective #3: Sufficient liquidity will be maintained to meet known or anticipated financial obligations. Cash equivalent investments shall be used to achieve this objective.

Responsibilities and Discretion of the State Investment Board (SIB)

The Board has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. The Board is responsible for establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and investing the assets of the Fund in the manner provided in NDCC 21-10-07, the prudent investor rule. Under this rule, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income. The Fund must be invested exclusively for the benefit of the members and their beneficiaries in accordance with this investment policy.

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

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

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

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

Risk Tolerance

The Board's risk tolerance with respect to the management of the Fund's asset is low. The Board is unwilling to undertake investment strategies that might jeopardize the ability of the Fund to maintain principal value over time.

Investment Objectives

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

1. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
2. The Fund's risk, measured by the standard deviation of net returns, should not exceed 115% of the policy benchmark over a minimum evaluation period of five years.
3. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

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 allocation analysis designed to assist the Board in determining an acceptable volatility target for the Fund and an optimal asset allocation policy mix. This analysis estimates the potential impact of various asset class mixes on key measures of total Fund risk.

After consideration of all the inputs and a discussion concerning risk tolerance, the Board approves the appropriate policy asset mix for the Fund.

US Equity	16%
Global ex US Equity	11%
Fixed Income	67%
Real Estate	6%

While the Board recognizes fluctuations in market values will lead to short-term deviations from policy targets, the Board does not intend to engage in tactical asset allocation. Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

Restrictions

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

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

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

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

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

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

(1) The cost does not exceed the fair market value at the time of investment.
(2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
(3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
(4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

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

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

- A list of the advisory services managing investments for the SIB.
- A list of investments at market value, compared to previous reporting period, of each account managed by each advisory service.
- Earnings, percentage earned, and change in market value of each account's investments.
- Comparison of the performance of each account managed by each advisory service to other accounts under the SIB's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 742,574**	**27.0%**	**-16.17%**
Domestic Large Cap Equity	375,594	13.7%	-12.23%
Domestic Small Cap Equity	69,385	2.5%	-17.43%
International Equity	297,595	10.8%	-19.92%
Global Fixed Income	**1,829,015**	**66.5%**	**-11.64%**
Global Real Assets	**173,811**	**6.3%**	**29.28%**
Real Estate	173,811	6.3%	29.28%
Cash Equivalents	**4,736**	**0.2%**	**0.16%**
Total Fund	**$ 2,750,136**		**-10.58%**
Policy Benchmark			**-10.17%**

Columns may not foot due to rounding.

LEWIS & CLARK INTERPRETIVE CENTER ENDOWMENT FUND

Investment Objectives and Policy Guidelines

Fund Characteristics and Constraints

The Lewis & Clark Interpretive Center Endowment Fund (Fund) was created in 2003 exclusively for the maintenance, repair and upkeep of the ND Lewis & Clark Interpretive Center/Rest Area, for programming and facility improvements. The original principal was endowed to the North Dakota Lewis & Clark Bicentennial Foundation who transferred the funds to the North Dakota Parks and Recreation Department (Parks and Rec) in 2017. In 2022 the Fund was transferred from the North Dakota Parks and Recreation Department to the State Historical Society of North Dakota.

Fund Goals

It is the intention of the State Historical Society to utilize the earnings of the Fund to supplement its biennial appropriation for the maintenance of the Lewis & Clark Interpretive Center.

Responsibilities and Discretion of the State Investment Board (SIB)

State Historical Society has entered into a contract with the SIB for investment services as allowed under 21-10-06. State Historical Society is responsible for establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and asset allocation and investing the assets of the Fund in a manner provided in NDCC 21-10-07, the prudent investor rule. Under this rule, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income.

Management responsibility for the investment program not assigned to the SIB in NDCC Chapter 21-10 is hereby delegated to the SIB, which must establish written policies for the operation of the investment program consistent with this investment policy.

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

The SIB is responsible for establishing criteria and procedures and making decisions with respect to hiring, maintaining, and terminating money managers. SIB investment responsibility includes selecting performance measurement services, consultants, report formats and frequency of meetings with managers. The SIB will implement changes to this policy as promptly as is prudent.

Risk Tolerance

State Historical Society is unwilling to undertake investment strategies that might jeopardize the ability of the Fund to maintain principal value over the long-term.

Investment Objectives

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

a. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
b. Risk, as measured by annual standard deviation of net returns for the Fund, should not exceed that of the policy benchmark by more than 100 basis points over a minimum evaluation period of five years.
c. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

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 State Historical Society in determining an acceptable volatility target for the Fund and an optimal asset allocation policy mix. This analysis estimates the potential impact of various asset class mixes on key measures of total fund risk.

After consideration of all the inputs and discussion of its own collective risk tolerance, State Historical Society approves the appropriate policy asset mix for the Fund.

Global Equity	35%
Global Fixed Income	64%
Cash Equivalents	1%

While State Historical Society recognizes fluctuations in market values will lead to short-term deviations from policy targets, State Historical Society does not intend to engage in tactical asset allocation. Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

Restrictions

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

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

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

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

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

Performance reports will be provided to State Historical Soceity quarterly and investment performance presentations will be provided to State Historical Society upon request, but not less than annually. Such reports will include asset returns and allocation data as well as information regarding all significant and/or material matters and changes pertaining to the investment of the Fund, including but not limited to:

- A list of advisory services managing investments for State Historical Society.
- A list of investments at market value, compared to the previous reporting period, of each fund managed by each advisory service.
- Earnings, percentage earned, and change in market value of each fund's investments.
- Comparison of the performance of each fund managed by each advisory service to other funds under the Board's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 279,282**	**35.0%**	**-15.87%**
Domestic Large Cap Equity	141,405	17.7%	-12.23%
Domestic Small Cap Equity	26,259	3.3%	-17.43%
International Equity	111,618	14.0%	-19.92%
Global Fixed Income	**508,971**	**63.9%**	**-11.72%**
Cash Equivalents	**8,642**	**1.1%**	**0.16%**
Total Fund	**$ 796,895**		**-12.93%**
Policy Benchmark			**-12.11%**

Columns may not foot due to rounding.

ATTORNEY GENERAL SETTLEMENT FUND

Investment Objectives and Policy Guidelines

Fund Characteristics and Constraints

The ND Office of the Attorney General (Trustee) has established the AG Settlement Fund to support attorney related compensation needs and educational initiatives.

The AG Settlement Fund (Fund) was established with an initial investment contribution on September 30, 2019, and expects to make semi-annual withdrawals that will likely result in the entire balance being depleted by approximately June 30, 2025. Additional contributions may occur in future years which could extend the expected investment horizon of the Fund and/or potentially alter its investment risk, return and liquidity profile.

Fund Goals

The investment objectives of the Fund reflect a low risk tolerance and short-term liquidity needs. Operating considerations shape the Fund's policies and priorities as outlined below:

Objective #1: Investment income is needed as a funding source. This will be achieved through a diversified portfolio of high quality, short-term fixed income and cash.

Objective #2: The need for growth of capital to preserve the real purchasing power of Fund assets is minimal as the investment term is not expected to be more than a few years.

Objective #3: Sufficient liquidity must be maintained as the Fund will be liquidated in semi-annual distributions over the next few years. Short-term fixed income and cash equivalent investments shall be used to achieve this objective.

Responsibilities and Discretion of the State Investment Board (SIB)

The ND Office of the Attorney General (Trustee) has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. The Trustee is responsible for establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and investing the assets of the Fund in the manner provided in NDCC 21-10-07, the prudent investor rule. Under this rule, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income. The Fund must be invested exclusively for the benefit of the members and their beneficiaries in accordance with this investment policy.

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

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

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

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

Risk Tolerance

The Trustee's risk tolerance with respect to the management of the Fund's asset is low. The Trustee is unwilling to undertake investment strategies that might jeopardize the ability of the Fund to maintain principal value over time.

Investment Objectives

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

1. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over the investment period of approximately three years.
2. The Fund's risk, measured by the standard deviation of net returns, should not exceed 1% of the policy benchmark over a minimum evaluation period of three years.
3. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of three years.

Policy Asset Mix

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 allocation analysis designed to assist the Trustee in determining an acceptable volatility target for the Fund and an optimal asset allocation policy mix. This analysis estimates the potential impact of various asset class mixes on key measures of total Fund risk.

After consideration of all the inputs and a discussion concerning risk tolerance, the Trustee approves the appropriate policy asset mix for the Fund.

Short-Term Fixed Income & Cash	100%

While the Trustee recognizes fluctuations in market values will lead to short-term deviations from policy targets, the Trustee does not intend to engage in tactical asset allocation. Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

Restrictions

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

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

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

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

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

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

- A list of advisory services managing investments for the Fund.
- A list of investments at market value, compared to the previous reporting period, of each fund managed by each advisory service.
- Earnings, percentage earned, and change in market value of each fund's investments.
- Comparison of the performance of each fund managed by each advisory service to other funds under the Board's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Short Term Fixed Income	$ 2,925,721	99.0%	-5.59%
Cash Equivalents	29,819	1.0%	0.16%
Total Fund	**$ 2,955,540**		**-5.53%**
Policy Benchmark			**-3.53%**

Columns may not foot due to rounding.

ND VETERANS' CEMETERY TRUST FUND

Investment Objectives and Policy Guidelines

Fund Characteristics and Constraints

The ND Veterans' Cemetery Trust Fund (Fund) was established in 1997 as a permanent fund to be used to support the veterans' cemetery. As spelled out in NDCC 39-04-10.10, the Fund receives a portion of the annual surcharge assessed on the issuance of North Dakota veterans' number plates. The North Dakota State Treasurer has full authority to invest the fund in the same manner as the State Investment Board is authorized to make investments. Upon request of the Adjutant General, the interest in the Fund must be deposited into the Veterans' Cemetery Maintenance Fund for the purpose of funding salaries and maintenance of the veterans' cemetery.

Responsibilities and Discretion of the State Investment Board (SIB)

The ND State Treasurer (Client) has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. It is the responsibility of the Client to establish policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and asset allocation and investing the Fund in the manner provided in Section 21-10-07-the prudent institutional investor rule. The fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income.

Management responsibility for the investment program not assigned to the SIB in Chapter 21-10 is hereby delegated to the SIB, which must establish written policies for the operation of the investment program consistent with this investment policy.

The SIB may delegate investment responsibility to professional money managers, which are also required to employ investment strategies consistent with the investment policy. Where a money manager has been retained, the SIB's role in determining investment strategy and security selection is supervisory not advisory.

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

The SIB is responsible for establishing criteria, procedures, and making decisions with respect to hiring, retaining, and terminating money managers. The SIB investment responsibility also includes selecting performance measurement services, consultants, report formats, and frequency of meetings with managers. The SIB will implement changes to this policy as promptly as is prudent.

Policy Asset Mix

After consideration of all the liquidity needs, spending policy and time horizon of the Fund and a discussion of its risk tolerance, the Client approves the following policy asset mix for the Fund:
.

Global Equities	50%
Global Fixed Income	35%
Global Real Assets	15%

Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

Investment Objectives

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

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

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

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

Restrictions

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

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

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

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards. Emphasis will be placed on 5-year and 10-year results. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the appropriateness of the investment policy statement for achieving those objectives.

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

- A list of advisory services managing investments for the Fund.
- A list of investments at market value, compared to the previous reporting period, of each fund managed by each advisory service.
- Earnings, percentage earned, and change in market value of each fund's investments.
- Comparison of the performance of each fund managed by each advisory service to other funds under the Board's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 210,740**	**49.9%**	**-16.17%**
Domestic Large Cap Equity	106,793	25.3%	-12.23%
Domestic Small Cap Equity	19,467	4.6%	-17.43%
International Equity	84,480	20.0%	-19.92%
Global Fixed Income	**145,972**	**34.6%**	**-11.72%**
Global Real Assets	**64,450**	**15.3%**	**4.38%**
Diversified Real Assets	42,173	10.0%	-6.59%
Real Estate	22,277	5.3%	29.28%
Cash Equivalents	**1,022**	**0.2%**	**0.16%**
Total Fund	**$ 422,184**		**-11.54%**
Policy Benchmark			**-11.46%**

Columns may not foot due to rounding.

ND UNIVERSITY SYSTEM CAPITAL BUILDING INVESTMENT FUND

Investment Objectives and Policy Guidelines

Plan Characteristics and Constraints

The North Dakota University System (Trustee) has established the Capital Building Fund to support Capital Building projects on a continuing basis for allocations to the institutions under the control of the state board of higher education as directed by the legislative assembly in the accordance of chapter 15-54.1. Any interest or earnings of the fund must be allocated to the capital building fund pool within the university system capital building fund.

The North Dakota University System Capital Building Fund (Fund) was established with an initial contribution on December 30, 2021, and expects to withdraw as needed within the biennium. Additional contributions may occur in future years and may potentially alter its investment risk, return and liquidity profile.

Fund Goals

The investment objectives of the Fund reflect a low risk tolerance and short-term liquidity needs. Operating considerations shape the Fund's policies and priorities as outlined below:

Objective #1: Investment income is needed as a funding source. This will be achieved through a diversified portfolio of high quality, short-term fixed income and cash.

Objective #2: Growth of capital is minimal to preserve the real purchasing power of Fund assets as the investment term is not expected to be more than a few years.

Objective #3: Sufficient liquidity must be maintained as the Fund will be drawn down over the next few years. Short-term fixed income and cash equivalent investments shall be used to achieve this objective.

Responsibilities and Discretion of the State Investment Board (SIB)

The ND University System (Trustee) has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. The Trustee is responsible for establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and investing the assets of the Fund in the manner provided in NDCC 21-10-07, the prudent investor rule. Under this rule, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income. The Fund must be invested exclusively for the benefit of the members and their beneficiaries in accordance with this investment policy.

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

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

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

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

Risk Tolerance

The Trustee's risk tolerance with respect to the management of the Fund's asset is low. The Trustee is unwilling to undertake investment strategies that might jeopardize the ability of the Fund to maintain principal value over time.

Investment Objectives

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

1. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over the investment period of approximately three years.
2. The Fund's risk, measured by the standard deviation of net returns, should not exceed 1% of the policy benchmark over a minimum evaluation period of three years.
3. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of three years.

Policy Asset Mix

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 allocation analysis designed to assist the Trustee in determining an acceptable volatility target for the Fund and an optimal asset allocation policy mix. This analysis estimates the potential impact of various asset class mixes on key measures of total Fund risk.

After consideration of all the inputs and a discussion concerning risk tolerance, the Trustee approves the appropriate policy asset mix for the Fund.

Asset Class	Policy Target
Short-Term Fixed Income and Cash	100%

While the Trustee recognizes fluctuations in market values will lead to short-term deviations from policy targets, the Trustee does not intend to engage in tactical asset allocation. Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

Restrictions

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

a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
b. Derivatives use will be monitored to ensure that undue risks are not taken by the money managers.
c. No transaction shall be made which threatens the tax exempt status of the Fund.
d. All assets will be held in custody by the SIB's master custodian or such other custodians as are acceptable to the SIB.
e. No unhedged short sales or speculative margin purchases shall be made.
f. Social investing is prohibited unless it meets the exclusive benefit rule, and it can be substantiated that the investment provides an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

   For the purpose of this document, social investing is defined as the consideration of socially responsible criteria in the investment or commitment of public fund money for the purpose of obtaining an effect other than a maximized return to the Fund.

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

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

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

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation and Review

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

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

- A list of the advisory services managing investments for the SIB.
- A list of investments at market value, compared to previous reporting period, of each account managed by each advisory service.
- Earnings, percentage earned, and change in market value of each account's investments.
- Comparison of the performance of each account managed by each advisory service to other accounts under the SIB's control and to generally accepted market indicators.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Short Term Fixed Income	$ 1,587,650	99.0%	*
Cash Equivalents	15,420	1.0%	*
Total Fund	**$ 1,603,070**		*
Policy Benchmark			*

Columns may not foot due to rounding.

* This category does not have the specified years of history under SIB management or data is not available.

NORTH DAKOTA LEGACY FUND

Investment Objectives and Policy Guidelines

Plan Characteristics and Fund Constraints

The North Dakota Legacy Fund was created in 2010 when the voters of North Dakota approved a constitutional amendment-now Article X, Section 26, of the Constitution of North Dakota-to provide that 30 percent of oil and gas gross production and oil extraction taxes on oil and gas produced after June 30, 2011, be transferred to the Legacy Fund. The principal and earnings of the Legacy Fund may not be spent until after June 30, 2017, and any expenditure of principal after that date requires a vote of at least two-thirds of the members elected to each house of the Legislative Assembly. Not more than 15 percent of the principal of the Legacy Fund may be spent during a biennium. The Legislative Assembly may transfer funds from any source to the Legacy Fund and such transfers become part of the principal of the Fund. The State Investment Board (SIB) is responsible for investment of the principal of the Legacy Fund. Interest earnings accruing after June 30, 2017, are transferred to the general fund at the end of each biennium. Section 21-10-11 provides that the goal of investment for the Legacy Fund is principal preservation while maximizing total return.

Fund Mission

The Legacy Fund (Fund) was created, in part, due to the recognition that state revenue from the oil and gas industry will be derived over a finite timeframe. The Legacy Fund defers the recognition of 30 percent of this revenue for the benefit of future generations. The primary mission of the Legacy Fund is to preserve the real, inflation-adjusted purchasing power of the monies deposited into the Fund while maximizing total return.

Responsibilities and Discretion of the State Investment Board (SIB)

The Legacy and Budget Stabilization Fund Advisory Board (Advisory Board) is charged by law under NDCC 21-10-11 with the responsibility of recommending policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and asset allocation and investing the assets of the Fund in the manner provided in NDCC 21-10-07, the prudent institutional investor rule. The fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income.

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

The SIB may delegate investment responsibility to professional money managers, which are also required to employ investment strategies consistent with the investment policy. Where a money manager has been retained, the SIB's role in determining investment strategy and security selection is supervisory not advisory.

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

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

The SIB shall notify the Advisory Board within 30 days of any substantial or notable changes in money managers; performance measurement services; and consultants, including hiring or terminating a money manager, performance measurement service, or a consultant. The SIB, after consultation with the Advisory Board, will implement necessary changes to this policy in an efficient and prudent manner.

Risk Tolerance

The Advisory Board's risk tolerance with respect to the primary aspect of the Fund's mission is low. The Board is unwilling to undertake investment strategies that might jeopardize the ability of the Fund to maintain principal value over time. The Board recognizes that the plan will evolve as the Legacy Fund matures and economic conditions and opportunities change.

Investment Objectives

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

a. The Legacy Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
b. The Legacy Fund's risk, measured by the standard deviation of net returns, should not exceed 115% of the policy benchmark over a minimum evaluation period of five years.
c. The risk-adjusted performance of the Legacy Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

Policy Asset Mix

After consideration of all the inputs and a discussion of its own collective risk tolerance, the Advisory Board approved the following policy asset mix for the Legacy Fund as of April 2, 2013. The Advisory Board and SIB re- affirmed this same asset allocation policy in May of 2018. In late-2020, the Advisory Board and SIB approved a $100 million increase in the Bank of North Dakota in-state investment program raising the total commitment up to $400 million (with a 5% target allocation within Fixed Income). On Feb. 16, 2021, the Advisory Board approved a new Private Capital target of 3% including a preference for in-state investments at a competitive rate of return with a recommended range of+/- 3%. The Legacy Fund's revised asset allocation policy, as approved by the SIB on Feb. 26, 2021, is below:

Asset Class	Policy Target Percentage
Broad US Equity	28%
Broad International Equity	19%
Private Capital	3%
Fixed Income and BND	35%
Core Real Estate	5%
Diversified Real Assets	10%

Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

Restrictions

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

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

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

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

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

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

(1) The cost does not exceed the fair market value at the time of investment.
(2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
(3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
(4) The safeguards and diversity that a prudent investor would adhere to are present.

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

<u>Internal Controls</u>

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

<u>Evaluation and Review</u>

Investment management of the Legacy Fund will be evaluated against the Fund's investment objectives and investment performance standards. Emphasis will be placed on 5-year and 10-year results. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the appropriateness of the investment policy statement for achieving those objectives.

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

- Changes in asset class portfolio structures, tactical approaches, and market values.
- Loss of principal, if any.
- Management costs associated with various types of investments.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.
- An evaluation of the national economic climate.
- A forecast of the expected economic opportunities and dangers.
- Management of risk by the SIB.

In addition to the quarterly evaluation and review process, the SIB shall notify the Board within 30 days of any substantial or notable deviation from the normal management of the Legacy Fund, including any anomalies, notable losses, gains, or liquidation of assets affecting the fund.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Global Equity	**$ 3,705,627,842**	**46.6%**	**-16.32%**
Broad US Equity	2,261,152,774	28.4%	-13.72%
Domestic Large Cap Equity	1,674,224,781	21.1%	-12.23%
Domestic Small Cap Equity	586,927,993	7.4%	-17.68%
Broad International Equity	1,399,965,469	17.6%	-20.81%
Private Equity	44,509,599	0.6%	1.69%
Global Fixed Income	**2,845,788,930**	**35.8%**	**-9.80%**
Global Real Assets	**1,339,985,522**	**16.9%**	**9.29%**
Real Estate	471,487,116	5.9%	29.41%
Diversified Real Assets	868,498,406	10.9%	0.79%
Cash Equivalents	**57,078,373**	**0.7%**	**0.16%**
Total Fund	**$ 7,948,480,667**		**-10.12%**
Policy Benchmark			**-10.45%**

Columns may not foot due to rounding.

RETIREMENT PLAN FOR EMPLOYEES OF JOB SERVICE NORTH DAKOTA

Investment Objectives and Policy Guidelines

Plan Characteristics and Fund Constraints

The Retirement Plan for the Employees of Job Service North Dakota (Plan) is a defined benefit retirement plan for the eligible employees hired before October 1, 1980. There have been no new entrants to the plan since October 1, 1980. The plan provides retirement benefits, disability benefits and survivor benefits consistent with the written Plan document. Until October 1, 1993, annuities were purchased from the Travelers for retirees, since that date retiree benefits are paid from Plan assets. Annual cost of living adjustments for all Plan pensioners including annuitants with the Travelers are paid from Plan assets. The NDPERS Board (the Board) is the Plan Administrator and administers the Plan in accord with Chapter 52-11 of the North Dakota Century Code.

Job Service North Dakota as the employer contributes 4% of the active participant's salary as a contribution 'on behalf of the employee' and the active participants pay 3% of their salary into Plan assets.

Each year the Plan has an actuarial valuation performed. The current actuarial assumed rate of return on assets is 4.25%.

Responsibilities and Discretion of the State Investment Board

Aggregate plan contributions plus earnings, minus allowable expenses constitute the Fund. The Board is charged by NDCC chapters 54-52, 21-10-01, and 39-03.1 to establish policies for the investment goals and asset allocation of the Fund. The State Investment Board (SIB) is charged with implementing the asset allocation as promptly and prudently as possible in accordance with the Board's policies by investing the assets of the Fund in the manner provided in the prudent investor rule, which provides:

Fund 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. (NDCC 21-10-07)

The SIB may delegate investment responsibility of the Fund or any portion of the Fund to professional money managers. Where a money manager has been retained, the SIB's role in determining investment strategy is supervisory not advisory.

The SIB may at its discretion, pool the assets of the Fund with another fund or funds having similar investment objectives and time horizons in order to maximize returns and minimize costs. In pooling fund assets, the SIB will establish asset class pools it deems necessary to achieve the specific quality, diversification, restrictions, and performance objectives subject to the prudent investor rule and the objectives of the funds participating in the pools.

The SIB is responsible for establishing the selection criteria, determining the performance measures, and retaining all fund money managers. SIB is also responsible for the selection and retention of any investment consultants that may be employed in the investment of the Fund assets.

Delegation of Authority

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

Such procedures must provide for:

1. The definition and assignment of duties and responsibilities to advisory services and persons employed by the SIB pursuant to NDCC 21-10-02.1(1)(a).
2. Investment diversification, investment quality, qualification of money managers, and amounts to be invested by money managers pursuant to NDCC 21-10-02.1(1)(e). In developing these policies, it is understood:

a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
b. The use of derivatives will be monitored to ensure that undue risks are not taken by the money managers.
c. All assets must be held in custody by the SIB's master custodian or such other custodians as are selected by the SIB.

3. Guidelines for the selection and redemption of investments will be in accordance with NDCC 21-10-02.1(1)(d).
4. The criteria for making decisions with respect to hiring, retention, and termination of money managers will be clearly defined. This also includes selecting performance measurement standards, consultants, report formats, and frequency of meetings with money managers.

All participants in the investment process must seek to act responsibly as custodians of the public trust.

Investment Goals

The investment objectives of the Plan have been established by the Plan's Administrator upon consideration of its strategic objectives and a comprehensive review of current and projected financial requirements.

Objective #1: To maintain a level of surplus sufficient to eliminate the need for future contributions;
Objective #2: To achieve a rate of return which exceeds the rate of inflation, as measured by the Consumer Price Index (CPI), by 3.0 percentage points per year (based on current actuarial assumptions of 4.75% return and 2.5% inflation), over a complete market cycle; and
Objective #3: As a secondary objective, to maximize the Plan's surplus to increase future benefit payments.

Investment Performance Objective

The NDPERS Board will seek to make investments that generate sufficient return to meet the goals outlined in this policy. The objectives established in this section are in accordance with the fiduciary requirement in federal and state law.

It is in the best interest of NDPERS and its beneficiaries that performance objectives be established for the total Fund. It is clearly understood these objectives are to be viewed over the long term and have been established after full consideration of all factors set forth in this Statement of Investment Goals, Objectives and Policies.

a. The Fund’s rate of return, over the long term should equal that of the policy portfolio which is comprised of policy weights of appropriate asset class benchmarks as set by the SIB.
b. The annual standard deviation of total returns for the Fund should not exceed that of the policy portfolio by more than 15%.
c. Over 5-year and longer periods the Fund should match or exceed the expected rate of return projected in the most recent asset/liability study without exceeding the expected risk for the period as measured by standard deviation by more than 15%.

Asset Allocation

The NDPERS Board as plan Administrator establishes the asset allocation of the Fund, with input from consultants and SIB staff. The current asset allocation is based upon the asset/liability study completed by SEI Consultants in 2017. That study provided an appraisal of current cash flow projections and estimates of the investment returns likely to be achieved by the various asset classes.

In recognition of the Plan's objectives, projected financial status, and capital market expectations, the following asset allocation options were deemed appropriate for the Fund:

Domestic Equity	2%
Global Equity	18%
US High Yield Bonds	3%
Emerging Markets Debt	3%
Core Fixed Income	34%
Limited Duration Fixed Income	10%
Diversified Short Term Fixed Income	5%
Short Term Corporate Fixed Income	25%

Rebalancing of the Fund to this target allocation will be done in accordance with the SIB's rebalancing policy, but not less than annually.

Restrictions

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

a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
b. Derivatives use will be monitored to ensure that undue risks are not taken by the money managers.
c. All assets will be held in custody by the SIB's master custodian or such other custodians as are acceptable to the SIB.
d. Social investing is prohibited unless it meets the Exclusive Benefit Rule and it can be substantiated that the investment must provide an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

   Social investing is defined as *"The investment or commitment of public pension fund money for the purpose of obtaining an effect other than a maximized return to the intended beneficiaries."*

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

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

   The Exclusive Benefit Rule is met if the following four conditions are satisfied:

   (1) The cost does not exceed the fair market value at the time of investment.
   (2) The investment provides the Plan with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
   (3) Sufficient liquidity is maintained in the Plan to permit distributions in accordance with the terms of the plan.
   (4) The safeguards and diversity that a prudent investor would adhere to are present.

Internal Controls

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

Evaluation

Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards.

An annual performance report must be provided to the Board by the State Investment Officer at a regularly scheduled NDPERS Board meeting. The annual performance report must include asset returns and allocation data as well as information regarding all significant or material matters and changes pertaining to the investment of the Fund, including:

- Changes in asset class portfolio structures, tactical approaches and market values;
- All pertinent legal or legislative proceedings affecting the SIB.
- Compliance with these investment goals, objectives and policies.
- A general market overview and market expectations.
- A review of fund progress and its asset allocation strategy.

In addition, the State Investment Officer shall review with the Board the procedures and policies established by the SIB relating to this statement of investment goals, objectives, and policies.

Actual Asset Allocation – June 30, 2022

Asset Allocation		Fair Value	Percent of Total	One Year Return (net)
Domestic Equity	$	1,724,019	2.0%	-0.27%
Global Equity		15,428,342	17.9%	-0.82%
U.S. High Yield Bonds		2,477,016	2.9%	-10.27%
Emerging Markets Debt		2,269,992	2.6%	-20.90%
Core Fixed Income		28,571,532	33.1%	-11.25%
Limited Duration Fixed Income		8,815,922	10.2%	-3.70%
Diversified Short Term Fixed Income		4,368,057	5.1%	-2.36%
Short Term Corporate Fixed Income		22,083,146	25.6%	-1.93%
Cash Equivalents		518,643	0.6%	0.22%
Total Fund	**$**	**86,256,669**		**-6.01%**
Policy Benchmark				**-7.91%**

Columns may not foot due to rounding.

RETIREE HEALTH INSURANCE CREDIT FUND

Investment Objectives and Policy Guidelines

Plan Characteristics and Constraints

The North Dakota Public Employees Retirement System (NDPERS) Retiree Health Insurance Credit Fund was established in 1989 to provide for prefunding of premiums for medical coverage to state employees and employees of participating political subdivisions in accordance with Chapter 54-52.1 of the North Dakota Century Code. The plan is administered by a seven-member Board of Trustees (the Board). The Chair is appointed by the governor, three members are elected by the active members of the plans, one member is elected by the retired members, one is appointed by the Attorney General and the seventh member is the State Health Officer or their designee.

The NDPERS plan is a defined benefit program that provides for a partial payment of a retiree's medical insurance premium based on the number of years of service.

Funding for the NDPERS plan is provided by a monthly employer contribution of 1.14 percent of payroll. On a monthly basis, benefit payments are netted out against contributions and the balance forwarded to the trust's custodian for investment.

Each year the NDPERS Board has an actuarial valuation performed. The current actuarial assumed rate of return on assets for the plan is 6.5%.

Responsibilities and Discretion of the State Investment Board (SIB)

Aggregate plan contributions plus earnings, minus allowable expenses constitute the Fund. The Board is charged by NDCC chapters 54-52, 21-10-02 and 39-03.1 to establish policies for the investment goals and asset allocation of the Fund. The State Investment Board (SIB) is charged with implementing the asset allocation as promptly and prudently as possible in accordance with Board's policies by investing the assets of the Fund in the manner provided in the prudent investor rule, which provides:

Fund 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. (NDCC 21-10-07)

The SIB may delegate investment responsibility of the Fund or any portion of the Fund to professional money managers. Where a money manager has been retained, the SIB's role in determining investment strategy is supervisory not advisory.

The SIB may at its discretion, pool the assets of the Fund with another fund or funds having similar investment objectives and time horizons in order to maximize returns and minimize costs. In pooling fund assets, the SIB will establish asset class pools it deems necessary to achieve the specific quality, diversification, restrictions, and performance objectives subject to the prudent investor rule and the objectives of the funds participating in the pools.

The SIB is responsible for establishing the selection criteria, determining the performance measures, and retaining all fund money managers. SIB is also responsible for the selection and retention of any investment consultants that may be employed in the investment of the Fund assets.

Delegation of Authority

Management responsibility for NDPERS funds not assigned to the North Dakota State Investment Board (SIB) in Chapter 21-10 of the North Dakota Century Code (NDCC) is hereby delegated to the SIB, which must establish written policies and procedures for the operation of the NDPERS funds, consistent with this investment policy.

Such procedures must provide for:

1. The definition and assignment of duties and responsibilities to advisory services and persons employed by the SIB pursuant to NDCC 21-10-02.1(1) (a).

2. Investment diversification, investment quality, qualification of money managers, and amounts to be invested by money managers pursuant to NDCC 21-10-02.1(1)(e). In developing these policies, it is understood:

   a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
   b. The use of derivatives will be monitored to ensure that undue risks are not taken by the money managers.
   c. All assets must be held in custody by the SIB's master custodian or such other custodians as are selected by the SIB.

3. Guidelines for the selection and redemption of investments will be in accordance with NDCC 21-10-02.1(1) (d).
4. The criteria for making decisions with respect to hiring, retention, and termination of money managers will be clearly defined. This also includes selecting performance measurement standards, consultants, report formats, and frequency of meetings with money managers.

All participants in the investment process must seek to act responsibly as custodians of the public trust.

Investment Goals

The investment goals of the Fund have been established by the NDPERS Board based upon consideration of the Board's strategic objectives and a comprehensive review of the current and projected financial requirements. These goals are to be viewed over the long term.

Goal #1 Accumulate sufficient wealth through a diversified portfolio of investments which will enable the State of North Dakota to pay all current and future retirement benefits and expense obligations of the Fund.

Goal #2 To obtain an investment return in excess of that needed to allow for increases in a retiree's credit to maintain the purchasing power of their benefit.

Investment Performance Objective

The NDPERS Board will seek to make investments that generate sufficient return to meet the goals outlined in this policy. The objectives established in this section are in accordance with the fiduciary requirement in federal and state law.

It is in the best interest of NDPERS and its beneficiaries that performance objectives be established for the total Fund. It is clearly understood these objectives are to be viewed over the long term and have been established after full consideration of all factors set forth in this Statement of Investment Goals, Objectives and Policies.

a. The Fund's rate of return, over the long term, should equal that of the policy portfolio which is comprised of policy weights of appropriate asset class benchmarks as set by the SIB.
b. The annual standard deviation of total returns for the Fund should not materially exceed that of the policy portfolio.
c. Over 5-year and longer periods the Fund should match or exceed the expected rate of return projected in the most recent asset/liability study without exceeding the expected risk for the period as measured by standard deviation.

Asset Allocation

In recognition of the plan's performance objectives, benefit projections, and capital market expectations, the NDPERS Board has established the following asset allocation:

Date of Last Asset Allocation Study: NDPERS Board Approved December 2020 – Callan Corporation

Broad US Equity	39%
Global ex-US Equity	26%
Fixed Income	35%

Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

PERS requires that in implementing this asset allocation that the State Investment Board seek to maximize return within the scope of these policies while limiting investment costs.

Restrictions

A. No transaction may be made which threatens the tax exempt status of the Fund.
B. Social investing is prohibited unless it meets the Exclusive Benefit Rule and it can be substantiated that the investment must provide an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

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

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

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

The Exclusive Benefit Rule is met if the following four conditions are satisfied:

(1) The cost does not exceed the fair market value at the time of investment.
(2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
(3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
(4) The safeguards and diversity that a prudent investor would adhere to are present.

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

Internal Controls

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

Evaluation

Investment management of the Fund will be evaluated against the Fund’s investment objectives and investment performance standards. An annual performance report must be provided to the Board by the State Investment Officer at a regularly scheduled NDPERS Board meeting. The annual performance report must include asset returns and allocation data as well as information regarding all significant or material matters and changes pertaining to the investment of the Fund, including:

- Changes in asset class portfolio structures, tactical approaches and market values;
- All pertinent legal or legislative proceedings affecting the SIB;
- Compliance with these investment goals, objectives and policies;
- A general market overview and market expectations;
- A review of fund progress and its asset allocation strategy;
- A report on investment fees and the SIB’s effort relating to Section 6. To measure investment cost PERS requires as part of the annual review information from CEM or other acceptable source showing the value added versus the cost.

Actual Asset Allocation – June 30, 2022

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Domestic Large Cap Equity	$ 49,020,248	32.2%	-13.36%
Domestic Small Cap Equity	9,034,816	5.9%	-17.10%
International Equity	38,832,610	25.5%	-20.27%
Core Plus Fixed Income	54,944,364	36.1%	-12.27%
Cash Equivalents	499,109	0.3%	0.12%
Total Fund	**$ 152,331,147**		**-14.95%**
Policy Benchmark			**-14.36%**

Columns may not foot due to rounding.

Actuarial Section

Segal

101 North Wacker Drive, Suite 500
Chicago, IL 60606-1724
segalco.com
T 12.984.8500

October 20, 2022

Board of Trustees
North Dakota Teachers' Fund for Retirement
3442 East Century Avenue
Bismarck, ND 58507-7100

Dear Trustees:

We certify that the information contained in this report is accurate and fairly presents the actuarial position of the North Dakota Teachers' Fund for Retirement (TFFR) as of July 1, 2022.

All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion the results presented also comply with the State Code, and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board (GASB). The undersigned are independent actuaries. All are Fellows of the Society of Actuaries, Enrolled Actuaries, and Members of the American Academy of Actuaries, and are experienced in performing valuations for large public retirement systems. They meet the Qualification Standards of the American Academy of Actuaries.

ACTUARIAL VALUATION

The primary purposes of the valuation report are to determine the adequacy of the current employer contribution rate, to describe the current financial condition of TFFR, and to analyze changes in TFFR's financial condition. In addition, the report provides information required by TFFR in connection with Governmental Accounting Standards Board Statement No. 67 (GASB 67) and it provides various summaries of the data. Valuations are prepared annually, as of July 1 of each year, the first day of TFFR's plan and fiscal year.

FINANCING OBJECTIVES

The member and employer contribution rates are established by statute. Member and employer rates are 11.75% and 12.75%, respectively. The 11.75% member contribution rate and 12.75% employer contribution rate will remain in effect until TFFR is 100% funded on an actuarial basis. At that point, the employer and member contribution rates will revert to 7.75%. The rates are intended to be sufficient to pay TFFR's normal cost and to amortize TFFR's unfunded actuarial liability (UAAL) over a period of 21 years beginning July 1, 2022, although at any given time, the statutory rates may be insufficient or result in the UAAL being amortized at an earlier date.

PROGRESS TOWARD REALIZATION OF FINANCING OBJECTIVES

In order to determine the adequacy of the 12.75% statutory employer contribution rate, it is compared to the actuarially determined contribution (ADC). The ADC is equal to the sum of (a) the employer normal cost rate and (b) the level percentage of pay required to amortize the UAAL over the 30-year closed period that began July 1, 2013 (21 years remaining as of July 1, 2022). For this

Board of Trustees
North Dakota Teachers' Fund for Retirement
October 20, 2022
Page 2

calculation, payroll is assumed to increase 3.25% per year. As of July 1, 2022, the ADC is 12.12% compared to 12.37% last year. This is less than the 12.75% rate currently required by law. The decrease in ADC is driven by favorable demographic experience.

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) increased from last year. The funded ratio as of July 1, 2022, is 69.9%, compared to 68.6% as of July 1, 2021. 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, assuming the plan earns 7.25% in the future.

REPORTING CONSEQUENCES

TFFR is required to disclose certain annual information in its Annual Comprehensive Financial Report, including the Net Pension Liability (NPL), the sensitivity of the NPL to changes in the discount rate, a schedule of changes in NPL, and a comparison of actual contributions to the ADC. The State and the school districts need to comply with GASB 68, which also requires disclosure of certain actuarial information in their financial statements. This information will be provided in a separate report.

BENEFIT PROVISIONS

The actuarial valuation reflects the benefit and contribution provisions set forth in the North Dakota Century Code. These have not changed from the prior valuation.

ASSUMPTIONS AND METHODS

Actuarial assumptions and methods are set by the Board of Trustees, based upon recommendations made by the Plan's actuary. In March 2020, the Board adopted new assumptions, effective for the July 1, 2020, valuation. In our opinion, the actuarial assumptions as approved by the Board are reasonable and take into account the experience of the Plan and reasonable expectations. The actuarial assumptions and methods used for funding purposes meet the parameters set by Actuarial Standards of Practice.

Effective with the July 1, 2013, actuarial valuation, the Trustees adopted an Actuarial Funding Policy, which provides direction on how to calculate an actuarially determined contribution. The actuarially determined contribution is compared to statutory contribution rates as a measure of funding adequacy.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates, and funding periods.

Segal

Board of Trustees
North Dakota Teachers' Fund for Retirement
October 20, 2022
Page 3

DATA

Member data for retired, active, and inactive participants was supplied as of July 1, 2022, by the staff of the Retirement Office. Asset information was also supplied by the staff. That assistance is gratefully acknowledged.

Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results.

ANNUAL COMPREHENSIVE FINANCIAL REPORT SCHEDULES

The undersigned provided the following supporting schedules and exhibits included in the Financial, Actuarial and Statistical Sections of the ND Retirement and Investment Office Annual Comprehensive Financial Report:

- Financial / Required Supplementary Information
  - Net Pension Liability
  - Sensitivity of Net Pension Liability
  - Schedules of Changes in Net Pension Liability and Related Ratios
  - Schedule of Employer Contributions
- Actuarial
  - Schedule of Active Members
  - Analysis of Change in Actuarially Determined Contribution
  - Development of Unfunded Actuarial Accrued Liability
  - Solvency Test
  - Schedule of Funding Progress
- Statistical
  - Schedule of Retirees by Benefit Amount
  - Schedule of Retirees by Benefit Type

Sincerely,

Segal

By:

Matthew A. Strom, FSA, MAAA, EA
Senior Vice President and Actuary

Tatsiana Dybal, FSA, MAAA, EA
Vice President and Actuary

Segal

SUMMARY OF ACTUARIAL VALUATION RESULTS

	2022	2021
Demographic Data for Plan Year Beginning July 1:		
• Number of		
- Retirees and Beneficiaries	9,438	9,262
- Inactive, Vested	1,827	1,754
- Inactive, Nonvested (due a refund of employee contributions)	1,423	1,213
- Active Members	11,802	11,627
• Payroll (annualized)	$766.1 million	$749.4 million
Statutory Contributions (% of Payroll) for Plan Year Beginning July 1:		
• Employer	12.75%	12.75%
• Member	11.75%	11.75%
• Actuarially determined contribution rate for year beginning July 1	12.12%	12.37%
• Margin/(Deficit)	0.63%	0.38%
Assets:		
• Fair value	$3,023.9 million	$3,282.4 million
• Actuarial value	3,133.0 million	2,973.7 million
• Return on fair value (per actuary)	-6.1%	26.1%
• Return on actuarial value	7.4%	10.3%
• Ratio - actuarial value to fair value	103.6%	90.6%
• Net cash flow % relative to fair value	-2.0%	-1.6%
Actuarial Information:		
• Normal cost %	12.19%	12.41%
• Normal cost	$98.8 million	$98.4 million
• Actuarial accrued liability	$4,480.0 million	$4,336.1 million
• Unfunded actuarial accrued liability (UAAL)	$1,347.0 million	$1,362.4 million
• Funded ratio	69.9%	68.6%
• Effective amortization period	19 years	21 years
GASB Information:		
• Discount rate	7.25%	7.25%
• Total pension liability	$4,480.0 million	$4,336.1 million
• Plan fiduciary net position	$3,023.9 million	$3,282.4 million
• Net pension liability	$1,456.1 million	$1,053.7 million
• Plan fiduciary net position as % of total pension liability	67.5%	75.7%
Gains/(Losses):		
• Asset experience	$ 5.5 million	$ 83.8 million
• Liability experience	9.2 million	(7.7) million
• Administrative Expenses	0.1 million	(0.5) million
• Benefit changes	0.0 million	0.0 million
• Assumption/method changes	0.0 million	0.0 million
• Total Gain/(Loss)	$ 14.8 million	$ 75.6 million

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

The following actuarial assumptions and methods have been set by the TFFR Board, based upon recommendations made by the Plan's actuary, for both funding and financial reporting purposes. However, the investment return rate used for funding is net of investment expenses and administrative expenses, whereas the rate used for financial reporting is net of investment expenses only (per GASB Statement 67). These actuarial assumptions and methods are based on the results of an experience study dated March 19, 2020.

ACTUARIAL ASSUMPTIONS

Investment Return Rate

7.25% per annum, compounded annually, equal to an assumed 2.30% inflation rate plus a 5.18% real rate of return, less 0.23% for adverse deviation. (Adopted effective July 1, 2020.)

Mortality Rates

The mortality rates were based on historical and current demographic data, as used in the experience study dated March 19, 2020. The underlying tables reasonably reflect the mortality experience of the Fund as of the measurement date.

Post-Retirement Non-Disabled: 104% of the Pub T-2010 Retiree Table and 95% of the Pub T-2010 Contingent Survivor Table with generational mortality improvement using Scale MP-2019. (Adopted effective July 1, 2020.) Sample 2010 rates are as follows:

	Retiree Rates		Survivor Rates	
Age	Male	Female	Male	Female
55	0.23%	0.20%	0.78%	0.42%
60	0.37%	0.30%	0.96%	0.59%
65	0.62%	0.46%	1.31%	0.85%
70	1.11%	0.80%	2.02%	1.29%
75	2.11%	1.52%	3.21%	2.04%
80	4.00%	2.93%	5.09%	3.39%
85	7.53%	5.60%	8.31%	6.00%
90	13.79%	10.49%	13.70%	10.76%
95	23.21%	18.75%	21.66%	17.66%
100	33.91%	29.29%	30.98%	26.75%

The mortality tables are adjusted forward from 2010 using a generational projection to reflect future mortality improvement.

Post-Retirement Disabled: PubNS-2010 Non-Safety Disabled Mortality Table with generational mortality improvement using Scale MP-2019. (Adopted effective July 1, 2020.)

Pre-Retirement Non-Disabled: Pub T-2010 Employee Table with generational mortality improvement using Scale MP-2019. (Adopted effective July 1, 2020.)

Summary of Actuarial Assumptions and Methods (continued)

Retirement Rates

The following rates of retirement are assumed for members eligible to retire. (Adopted effective July 1, 2020.)

	Unreduced Retirement*		Reduced Retirement
Age	Male	Female	Unisex
50-54	15.0%	15.0%	2.0%
55-56	15.0%	15.0%	2.0%
57	15.0%	15.0%	3.0%
58	15.0%	15.0%	3.5%
59	15.0%	15.0%	4.0%
60	15.0%	15.0%	5.0%
61	30.0%	25.0%	9.0%
62	30.0%	30.0%	10.0%
63	25.0%	30.0%	11.0%
64	35.0%	40.0%	12.0%
65	30.0%	35.0%	
66	25.0%	30.0%	
67	25.0%	20.0%	
68-74	20.0%	20.0%	
75	100.0%	100.0%	

** If a member reaches eligibility for unreduced retirement before age 65 under the rule of 85 (Grandfathered Tier 1) or the Rule of 90/Age 60 (Non-grandfathered Tier 1 and Tier 2), 12.5% is added to the rate at the age (and only this age) the member becomes first eligible for an unreduced retirement benefit.*

Disability Rates

Shown below for selected ages. (Adopted effective July 1, 2020.)

Age	**Unisex**
20	0.0088%
25	0.0088%
30	0.0088%
35	0.0088%
40	0.0264%
45	0.0440%
50	0.0704%
55	0.1232%
60	0.2376%

Summary of Actuarial Assumptions and Methods (continued)

Termination Rates

Termination rates based on service, for causes other than death, disability, or retirement. (Adopted effective July 1, 2020.)

Years from Hire	Male	Female	Years from Hire	Male	Female
0	15.00%	15.00%	10	2.50%	2.75%
1	13.00%	11.00%	11-12	2.00%	2.50%
2	11.00%	9.50%	13	2.00%	2.25%
3	8.00%	7.50%	14	1.50%	2.25%
4	6.00%	6.00%	15-16	1.50%	1.75%
5	5.25%	5.50%	17-18	1.50%	1.50%
6	4.00%	4.50%	19-22	0.75%	1.25%
7	3.75%	4.00%	23-24	0.75%	1.00%
8	3.00%	2.75%	24+	0.75%	0.75%
9	2.50%	2.75%			

Termination rates eliminated at first retirement eligibility.

Salary Increase Rates

Inflation rate of 2.30% plus productivity increase rate of 1.50%, plus step-rate/promotional increase as shown below. (Adopted effective July 1, 2020.)

Years from Hire	Annual Step-Rate Promotional Component	Annual Total Salary Increase
0	11.00%	14.80%
1	3.00%	6.80%
2	2.75%	6.55%
3-4	2.50%	6.30%
5-6	2.00%	5.80%
7-8	1.75%	5.55%
9-11	1.50%	5.30%
12-13	1.25%	5.05%
14-15	1.00%	4.80%
16-18	0.75%	4.55%
19-22	0.50%	4.30%
23-29	0.25%	4.05%
30+	0.00%	3.80%

Summary of Actuarial Assumptions and Methods (continued)

Payroll Growth Rate	3.25% per annum. This assumption does not include any allowance for future increase in the number of members. (Adopted effective July 1, 2010.)
Percent Married	For valuation purposes, 75% of members are assumed to be married. Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses. (Adopted effective July 1, 1992.)
Percent Electing a Deferred Termination Benefit	Terminating members are assumed to elect the most valuable benefit at the time of termination. Termination benefits are assumed to commence at the first age at which unreduced benefits are available. (Adopted effective July 1, 1990.)
Loading Factor for New Retirees	The liability includes a 3% load for members who retired during the year ended June 30, 2022, to reflect that their benefits are not finalized as of the valuation date.
Annual Administrative Expenses	Administrative expenses of $2,651,964 (actual expenses for the previous year, increased with inflation) are expected to be paid for the year beginning July 1, 2022.
Asset Valuation Method	The actuarial value of assets is based on the fair value of assets with a five-year phase-in of actual investment return in excess of (or less than) expected investment income. Expected investment income is determined using the assumed investment return rate and the fair value of assets (adjusted for receipts and disbursements during the year). The actual investment return for this purpose is determined net of all investment expenses. The actuarial value is further adjusted, if necessary, to be within 20% of the fair value.
Actuarial Cost Method	Normal cost and actuarial accrued liability are calculated on an individual basis and are allocated by salary. Entry age is determined as the age at member's enrollment in TFFR. The actuarial accrued liability is the difference between the total present value of future benefits and the actuarial present value of future normal costs. The unfunded actuarial accrued liability (UAAL) is the excess of the actuarial accrued liability over the actuarial value of assets. The actuarial cost method used is the same for funding and financial reporting.
Amortization Period and Method	The actuarially determined contribution (ADC) is determined as the sum of (a) the employer normal cost rate, and (b) a level percentage of payroll required to amortize the unfunded actuarial accrued liability over the 30-year closed period that began July 1, 2013.

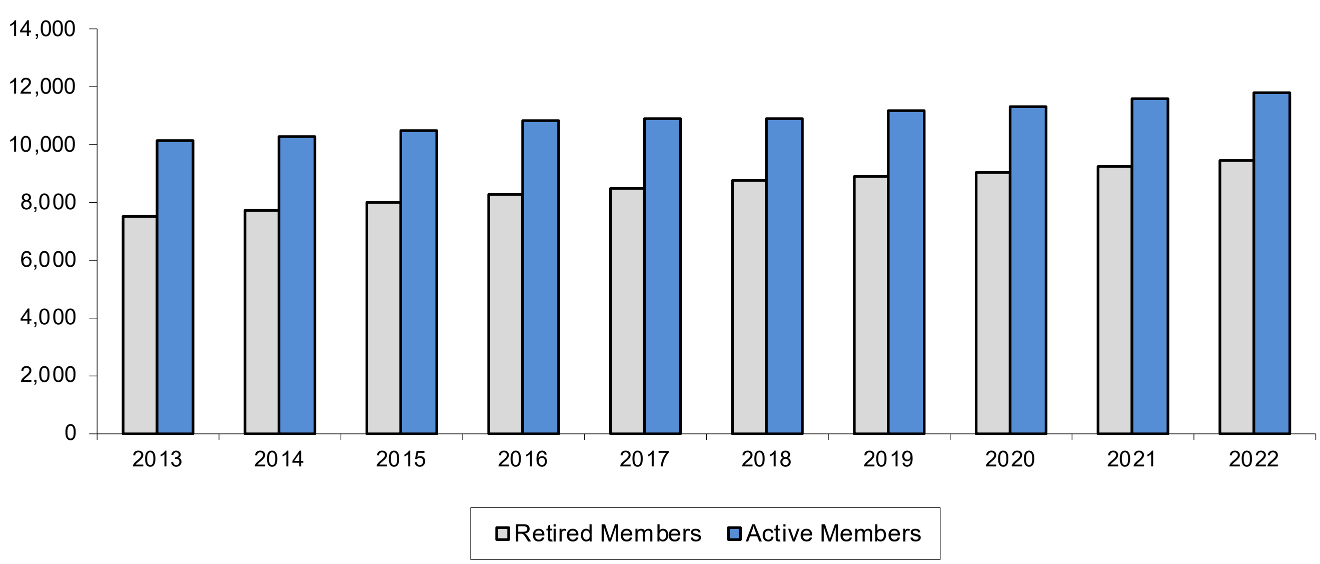
SCHEDULE OF ACTIVE MEMBERS

	Active Members		Covered Payroll (annualized)		Average Salary			
Valuation Year	Number	Percent Increase	Amount in $ Millions	Percent Increase	$ Amount	Percent Increase	Average Age	Average Service
2013	10,138	1.2%	$ 526.7	4.2%	$ 51,953	3.0%	43.2	13.2
2014	10,305	1.6%	557.2	5.8%	54,073	4.1%	42.9	12.8
2015	10,514	2.0%	589.8	5.8%	56,095	3.7%	42.5	12.4
2016	10,813	2.8%	627.0	6.3%	57,986	3.4%	42.3	12.1
2017	10,874	0.6%	650.1	3.7%	59,780	3.1%	42.1	11.9
2018	10,881	0.1%	653.5	0.5%	60,055	0.5%	41.9	11.8
2019	11,175	2.7%	680.5	4.1%	60,893	1.4%	41.8	11.7
2020	11,347	1.5%	711.0	4.5%	62,663	2.9%	41.8	11.7
2021	11,627	2.5%	749.4	5.4%	64,455	2.9%	41.4	11.4
2022	11,802	1.5%	766.1	2.2%	64,916	0.7%	41.3	11.3

SCHEDULE OF RETIREES AND BENEFICIARIES

Valuation Year	Number Added During Year	Annual Benefits Added (in mils)	Number Removed During Year	Annual Benefits Removed (in mils)	Number Receiving End of Year	Average Annual Benefit	Annual Pension Benefits (in mils)	Percent Increase In Annual Benefits
2013	480	$ 13.7	142	$ 1.9	7,489	$ 20,664	$ 145.9	7.8%
2014	461	14.3	203	2.5	7,747	21,396	158.4	8.5%
2015	463	13.7	185	2.5	8,025	22,104	168.3	6.3%
2016	427	12.6	203	3.1	8,249	22,692	180.6	7.3%
2017	447	14.3	195	2.9	8,501	23,399	191.1	5.8%
2018	458	15.3	216	3.3	8,743	24,180	202.4	5.9%
2019	400	12.9	225	3.5	8,918	24,804	215.3	6.0%
2020	362	11.8	244	4.2	9,036	25,392	224.4	4.2%
2021	481	16.2	255	4.6	9,262	26,064	235.2	4.8%
2022	417	14.5	241	4.6	9,438	26,688	244.7	4.0%

ACTIVE MEMBERS VS RETIRED MEMBERS
10-YEAR SUMMARY



ANALYSIS OF CHANGE IN ACTUARIALLY DETERMINED CONTRIBUTION (ADC)

	7/1/2022	7/1/2021
Prior valuation	12.37 %	13.19 %
Increases/(decreases) due to:		
Effect of change in remaining amortization period	0.00 %	0.00 %
Effect of change in covered payroll and normal cost	(0.08)%	(0.29)%
Effect of contributions (more)/less than actuarially determined contribution	(0.03)%	0.03 %
Effect of gains and losses on accrued liability and administrative expenses	(0.09)%	0.15 %
Effect of investment (gain)/loss	(0.05)%	(0.72)%
Effect of legislative changes	0.00 %	0.00 %
Effect of change in actuarial assumptions	0.00 %	0.00 %
Net effect of other changes	0.00 %	0.01 %
Total change	(0.25)%	(0.82)%
Current valuation	12.12 %	12.37 %
Statutory employer contribution rate	12.75 %	12.75 %
Margin available [contribution sufficiency/(deficiency)]	0.63 %	0.38 %

DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)

	($ in millions)	
	7/1/2022	7/1/2021
UAAL at beginning of year	$ 1,362.4	$ 1,436.0
Normal cost	95.0	89.2
Total contributions	(194.9)	(191.5)
Interest on:		
UAAL and normal cost	105.7	110.6
Total contributions	(6.4)	(6.3)
Expected UAAL	$ 1,361.8	$ 1,438.0
Changes due to (gain)/loss from:		
Investments	$ (5.5)	$ (83.8)
Demographics	(9.3)	8.2
Change in actuarial assumptions	-	-
UAAL at end of year	$ 1,347.0	$ 1,362.4

SOLVENCY TEST

	Actuarial Accrued Liability (AAL) (in millions)				Portion of AAL Covered by Valuation Assets		
Valuation Year	Active Member Contributions	Retirees and Beneficiaries	Active/Inactive Members (Employer Financed)	Actuarial Value of Assets ($ in millions)	Active Member Contributions	Retirees and Beneficiaries	Active/Inactive Members (Employer Financed)
2013	$ 671.1	$ 1,551.7	$ 774.3	$ 1,762.3	100.0%	77.6%	0.0%
2014	698.2	1,661.6	779.0	1,940.5	100.0%	74.8%	0.0%
2015	737.5	1,874.7	837.6	2,125.0	100.0%	74.0%	0.0%
2016	792.8	1,976.3	820.3	2,229.3	100.0%	51.4%	0.0%
2017	839.1	2,092.9	802.0	2,379.8	100.0%	73.6%	0.0%
2018	881.4	2,222.0	760.1	2,526.1	100.0%	74.0%	0.0%
2019	941.5	2,314.0	737.9	2,635.6	100.0%	73.2%	0.0%
2020	1,010.5	2,397.6	772.9	2,745.0	100.0%	72.3%	0.0%
2021	1,063.2	2,515.2	757.7	2,973.7	100.0%	76.0%	0.0%
2022	1,124.0	2,606.5	749.5	3,313.0	100.0%	77.1%	0.0%

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date July 1	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded/ Accrued Liability (UAAL)	Funded Ratio	Total Payroll (annualized)	UAAL as a % of Payroll
2013	$ 1,762.3	$ 2,997.1	$ 1,234.8	58.8%	$ 526.7	234.4%
2014	1,940.5	3,138.8	1,198.3	61.8%	557.2	215.1%
2015	2,125.0	3,449.8	1,324.8	61.6%	589.8	224.6%
2016	2,229.3	3,589.4	1,360.1	62.1%	627.0	216.9%
2017	2,379.8	3,734.0	1,354.2	63.7%	650.1	208.3%
2018	2,526.1	3,863.5	1,337.5	65.4%	653.5	204.7%
2019	2,635.6	3,993.4	1,357.9	66.0%	680.5	199.5%
2020	2,745.0	4,181.0	1,436.0	65.7%	711.0	202.0%
2021	2,973.7	4,336.1	1,362.4	68.6%	749.4	181.8%
2022	3,133.0	4,480.0	1,347.0	69.9%	766.1	175.8%

Please also refer to the Schedule of Employer Contributions in the required supplementary information to the financial statements on page 67.

SUMMARY OF PLAN PROVISIONS

Effective Date: July 1, 1971.

Plan Year: July 1 through June 30

Administration: The Teachers' Fund for Retirement (TFFR) is administered by a Board of Trustees. A separate State Investment Board is responsible for the investment of the trust assets, although the TFFR Board establishes the asset allocation policy. The TFFR Board is also responsible for establishing and maintaining a funding policy. The Retirement and Investment Office is the administrative agency for TFFR.

Type of Plan: TFFR is a qualified governmental defined benefit retirement plan. For Governmental Accounting Standards Board purposes, it is a cost-sharing multiple-employer public employee retirement system.

Eligibility: All certified teachers of any public school in North Dakota participate in TFFR. This includes teachers, supervisors, principals, administrators, etc. Non-certified employees such as teacher's aides, janitors, secretaries, drivers, etc. are not allowed to participate in TFFR. Eligible employees become members at their date of employment.

Member Contributions: All active members contribute 11.75% of their salary per year. The employer may "pick up" the member's contributions under the provisions of Internal Revenue Code Section 414(h). The member contribution rate was increased from 7.75% to 9.75% effective July 1, 2012, and was increased to 11.75% effective July 1, 2014. The total addition of 4% to the member contribution rate will remain in effect until TFFR is 100% funded on an actuarial basis. At that point, the member contribution rate will revert to 7.75%.

Salary: A member's total earnings are used for salary purposes, including overtime, etc., and including nontaxable wages under a Section 125 plan, but excluding certain extraordinary compensation, such as fringe benefits or unused sick and vacation leave.

Employer Contributions: The district or other employer that employs a member contributes a percentage of the member's salary. This percentage consists of a base percentage of 7.75%, plus, since July 1, 2008, additions as shown below.

Effective Date	Addition to 7.75% Base Rate	Employer Contribution Rate
July 1, 2008	0.50%	8.25%
July 1, 2010	1.00%	8.75%
July 1, 2012	3.00%	10.75%
July 1, 2014	5.00%	12.75%

However, the additions are subject to a "sunset" provision, so the contribution rate will revert to 7.75% once the funded ratio reaches 100%, measured using the actuarial value of assets. The contribution rate will not automatically increase if the funded ratio later falls back below 100%.

Summary of Plan Provisions (continued)

Service: Employees receive credit for service while a member. A member may also purchase credit for certain periods, such as time spent teaching at a public school in another state, by paying the actuarially determined cost of the additional service. Special rules and limits govern the purchase of additional service.

Tiers: Members who join TFFR by June 30, 2008, are in Tier 1, while members who join later are in Tier 2. If a Tier 1 member terminates, takes a refund, and later rejoins TFFR after June 30, 2008, that member will be in Tier 2. As of June 30, 2013, Tier 1 members who are at least age 55 and vested (3 years of service) as of the effective date, or the sum of the member's age and service is at least 65, are considered Grandfathered, and previous plan provisions will not change. Tier 1 members who do not fit these criteria as of June 30, 2013, are considered Non-grandfathered. These members, along with Tier 2, will have new plan provisions, as described below.

Final Average Compensation (FAC): The average of the member's highest three (Tier 1 members) or five (Tier 2 members) plan year salaries. Monthly benefits are based on one-twelfth of this amount.

Normal Retirement:

a. Eligibility:
- Tier 1 members may retire upon Normal Retirement on or after age 65 with credit for 3 years of service, or if earlier, when the sum of the member's age and service is at least 85. Effective as of June 30, 2013, Tier 1 members who are at least age 55 and vested (3 years of service) as of the effective date, or the sum of the member's age and service is at least 65, normal retirement eligibility will not change (participants are Grandfathered). For those who do not meet this criteria as of June 30, 2013 (Non-grandfathered), members may retire upon Normal Retirement on or after age 65 with credit for 3 years of service, or if earlier, when the sum of the member's age and service is at least 90, with a minimum age of 60.

- Tier 2 members may retire upon Normal Retirement on or after age 65 with credit for 5 years of service, or if earlier, when the sum of the member's age and service is at least 90. Effective July 1, 2013, Tier 2 members may retire upon Normal Retirement on or after age 65 with credit for 5 years of service, or if earlier, when the sum of the member's age and service is at least 90, with a minimum age of 60.

b. Monthly Benefit: 2.00% of FAC (monthly) times years of service.

c. Payment Form: Benefits are paid as a monthly life annuity, with a guarantee that if the payments made do not exceed the member's assessments plus interest, determined as of the date of retirement, the balance will be paid in a lump-sum to the member's beneficiary. Optional forms of payment are available; see below.

Early Retirement:

a. Eligibility: Tier 1 members may retire early after reaching age 55 with credit for three years of service, while Tier 2 members may retire early after reaching age 55 with credit for five years of service.

Summary of Plan Provisions (continued)

b. Monthly Benefit: 2.00% of FAC (monthly) times years of service, multiplied by a factor which reduces the benefit 6% for each year from the earlier of (i) age 65, or (ii) the age at which current service plus age equals 85 (Tier 1 members) or 90 (Tier 2 members). Effective July 1, 2013, for members who are either Non-grandfathered Tier 1 or Tier 2: 2.00% of FAC (monthly) times years of service, multiplied by a factor that reduces the benefit 8% for each year from the earlier of (i) age 65, or (ii) the age at which current service plus age equals 90 with a minimum age of 60.

c. Payment Form: Same as for Normal Retirement above.

Disability Retirement:

a. Eligibility: A member is eligible provided he/she has credit for at least one year of service. Effective July 1, 2013, a member is eligible provided he/she has credit for at least five years of service.

b. Monthly Benefit: 2.00% of FAC (monthly) times years of service with a minimum 20 years of service. Effective July 1, 2013, 2.00% of FAC (monthly) times years of service.

c. Payment Form: The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity with a guarantee that, at the member's death, the sum of the member's contributions plus interest as of the date of retirement that is in excess of the sum of payments already received will be paid in a lump-sum to the member's beneficiary.

d. All alternative forms of payment other than level income and the partial lump-sum option are also permitted in the case of disability retirement. For basis recovery only, disability benefits are converted to normal retirement benefits when the member reaches normal retirement age or age 65, whichever is earlier.

Deferred Termination Benefit:

a. Eligibility: A Tier 1 member with at least three years of service, or a Tier 2 member with at least five years of service, who does not withdraw his/her contributions from the fund, is eligible for a deferred termination benefit.

b. Monthly Benefit: 2.00% of FAC (monthly) times years of service. Both FAC and service are determined at the time the member leaves active employment. Benefits may commence unreduced at age 65 or when the member's age and service is 85 (Grandfathered Tier 1 members) or 90 with a minimum age of 60 (Non-grandfathered Tier 1 and Tier 2 members). Reduced benefits may commence at or after age 55 if the member is not eligible for an unreduced benefit. Reductions are the same as for Early Retirement.

c. Payment Form: The form of payment is the same as for Normal Retirement above.

d. Death Benefit: A member who dies after leaving active service but before retiring is entitled to receive a benefit as described below.

Withdrawal (Refund) Benefit:

a. Eligibility: Tier 1 members leaving covered employment with less than three years of service, and Tier 2 members leaving covered employment with less than five years of service, are eligible. Optionally, vested members may withdraw their contributions plus interest in lieu of the deferred benefits otherwise due.

Summary of Plan Provisions (continued)

b. Benefit: The member who withdraws receives a lump-sum payment of his/her employee contributions, plus the interest credited on these contributions. Interest is credited at 6% per year prior to benefit commencement (0.5% per month).

Death Benefit:

a. Eligibility: Death must have occurred while an active or an inactive, non-retired member.

b. Benefit: Upon the death of a nonvested member, a refund of the member's contributions and interest is paid. Upon the death of a vested member, the beneficiary may elect (i) the refund benefit above, or (ii) a life annuity of the normal retirement benefit, determined under Option One below, based on FAC and service as of the date of death, but without applying any reduction for the member's age at death. In determining the reduction for Option One, members not eligible for normal retirement benefits use the Fund's option tables for disabled members.

Optional Forms of Payment: There are optional forms of payment available on an actuarially equivalent basis, as follows:

a. Option 1 - A life annuity payable while either the participant or his beneficiary is alive, "popping-up" to the original life annuity if the beneficiary predeceases the member.

b. Option 2 - A life annuity payable to the member while both the member and beneficiary are alive, reducing to 50% of this amount if the member predeceases the beneficiary, and "popping-up" to the original life annuity if the beneficiary predeceases the member.

c. Option 3a - A life annuity payable to the member, with a guarantee that, should the member die prior to receiving 60 payments (five years), the payments will be continued to a beneficiary for the balance of the five-year period. (This option has been replaced by Option 3b. It is not available to employees who retire on or after August 1, 2003. Retirees who elected this option prior to that date are unaffected.)

d. Option 3b - A life annuity payable to the member, with a guarantee that, should the member die prior to receiving 240 payments (twenty years), the payments will be continued to a beneficiary for the balance of the twenty-year period. (This option replaced Option 3a effective August 1, 2003.)

e. Option 4 - A life annuity payable to the member, with a guarantee that, should the member die prior to receiving 120 payments (ten years), the payments will be continued to a beneficiary for the balance of the ten-year period.

f. Option 5 - A non-level annuity payable to the member, designed to provide a level total income when combined with the member's Social Security benefit. This option is not available to disabled retirees.

In addition, members may elect a partial lump-sum option (PLSO) at retirement. Under this option, a member receives an immediate lump-sum equal to 12 times the monthly life annuity benefit and a reduced annuity. The reduction is determined actuarially. The member can then elect to receive the annuity benefit in one of the other optional forms, except that members who receive a PLSO may not elect Option 5 – the level income option. The PLSO is not available to disabled retirees or retirees who are not eligible for an unreduced retirement benefit.

Actuarial equivalence is based on tables adopted by the Board of Trustees.

Cost-of-living Increase: From time to time, TFFR has been amended to grant certain post-retirement benefit increases. However, TFFR has no automatic cost-of-living increase features.

SUMMARY OF PLAN CHANGES

1991 Legislative Session:

1. Benefit multiplier increased from 1.275% to 1.39% for all future retirees.

2. Provide a post-retirement benefit increase for all annuitants receiving a monthly benefit on June 30, 1991. The monthly increase is the greater of a 10% increase or a level increase based on years of service and retirement date:

   a. $3 per year of service for retirements before 1980.
   b. $2 per year of service for retirements between 1980 and 1983.
   c. $1 per year of service for retirements from 1984 through June 30, 1991.

   Minimum increase is $5 per month. Maximum increase is $75 per month.

1993 Legislative Session:

1. Benefit multiplier increased from 1.39% to 1.55% for all future retirees.

2. Provide a post-retirement benefit increase for all annuitants receiving a monthly benefit on June 30, 1993. The monthly increase is the greater of a 10% increase or a level increase based on years of service and retirement date:

   a. $3 per year of service for retirements before 1980.
   b. $2.50 per year of service for retirements between 1980 and 1983.
   c. $1 per year of service for retirements from 1984 through June 30, 1993.

   Minimum increase is $5 per month. Maximum increase is $100 per month.

3. Minimum retirement benefit increased to $10 times years of service up to 25, plus $15 times years of service greater than 25. (Previously was $6 up to 25 years of service plus $7.50 over 25 years of service.)

4. Disability benefit changed to 1.55% of FAC times years of service using a minimum of 20 years of service.

1995 Legislative Session:

There were no material changes made during the 1995 legislative session.

1997 Legislative Session:

1. Benefit multiplier increased from 1.55% to 1.75% for all future retirees.

2. Member and employer contribution rate increased from 6.75% to 7.75%.

3. A $30.00/month benefit improvement was granted to all retirees and beneficiaries.

Summary of Plan Changes (continued)

1999 Legislative Session:

1. Active members will now be fully vested after three years (rather than five years) of service.

2. Early retirement benefits will be reduced 6% per year from the earlier of (i) age 65, or (ii) the date as of which age plus service equals 85 (rather than from age 65 in all cases).

3. An ad hoc COLA was provided for all retirees and beneficiaries. This increase is equal to an additional $2 per month for each year of service plus $1 per month for each year since the member's retirement.

4. The formula multiplier was increased from 1.75% to 1.88% effective July 1, 1999.

2001 Legislative Session:

1. An ad hoc COLA was provided for all retirees and beneficiaries. The ad hoc COLA increase is equal to an additional $2.00 per month for each year of service plus $1.00 per month for each year since the member's retirement. Retirees and beneficiaries will also receive two additional increases equal to 0.75% times the monthly benefit, payable July 1, 2001 and July 1, 2002. The two 0.75% increases are conditional. If the actuarial margin is a shortfall, i.e., is negative, by 60 basis points or more, or if the margin has been negative by 30 or more basis points for two years, the Board could elect to suspend the increase.

2. The formula multiplier was increased from 1.88% to 2.00% effective July 1, 2001.

2003 Legislative Session:

1. Partial lump-sum option adopted, equal to twelve times the monthly life annuity benefit. Not available if level-income option is elected. Not available for reduced retirement or disability retirement.

2. Five-year certain and life option replaced with 20-year certain and life. This does not impact retirees who retired under the five-year certain and life option.

3. Employer service purchase authorized.

4. Active members of the Department of Public Instruction are permitted to make a one-time irrevocable election to transfer to the North Dakota Public Employees Retirement System in FY2004. Both assets and liabilities for all TFFR service will be transferred for electing employees. Transferred assets will be based on the actuarial present value of the member's accrued TFFR benefit, or the member's contribution account balance if larger.

2005 Legislative Session:

There were no material changes made during the 2005 legislative session.

Summary of Plan Changes (continued)

2007 Legislative Session:

1. For active members hired on or after July 1, 2008 (called Tier 2 members):

   a. Members will be eligible for an unreduced retirement benefit when they reach age 65 with at least five years of service (rather than three years of service); or if earlier, when the sum of the member's age and service is at least 90 (rather than 85).
   b. Members will be eligible for a reduced (early) retirement benefit when they reach age 55 with five years of service, rather than three years of service.
   c. Members will be fully vested after five years of service (rather than three years of service).
   d. The Final Average Compensation for Tier 2 members is the average of the member's highest five plan year salaries, rather than the average of the three highest salaries.

2. The employer contribution rate increases from 7.75% to 8.25% effective July 1, 2008, but this rate will reset to 7.75% once the Fund reaches a 90% funded ratio, measured using the actuarial value of asset. (If the funded ratio later falls below 90% again, the contribution rate will not automatically return to 8.25%.)

3. Employer contributions are required on the salary of reemployed retirees.

4. Active members of the Department of Career and Technical Education are permitted to make a one-time irrevocable election to transfer to the North Dakota Public Employees Retirement System in FY 2008. Both assets and liabilities for all TFFR service will be transferred for electing employees. Transferred assets will be the actuarial present value of the member's accrued TFFR benefit, or the member's contribution account balance, if larger.

2009 Legislative Session:

1. An individual who retired before January 1, 2009, and is receiving monthly benefits is entitled to receive a supplemental payment from the fund. The supplemental payment is equal to an amount determined by taking twenty dollars multiplied by the member's number of years of service credit plus fifteen dollars multiplied by the number of years since the member's retirement as of January 1, 2009. The supplemental payment may not exceed the greater of 10% of the member's annual annuity or $750.00. TFFR will make the supplemental payment in December 2009.

2. The employer contribution rate increases from 8.25% to 8.75% effective July 1, 2010, but this rate will be reset to 7.75% once the Fund reaches a 90% funded ratio, measured using the actuarial value of assets. (If the funded ratio later falls below 90% again, the contribution rate will not automatically return to 8.75%.)

2011 Legislative Session:

1. The employer contribution rate increases from 8.75% to 10.75% effective July 1, 2012, and increases thereafter to 12.75% effective July 1, 2014. The member contribution rate increases from 7.75% to 9.75% effective July 1, 2012, and increases thereafter to 11.75% effective July 1, 2014. Employer and member contributions will be reset to 7.75% once the Fund reaches a 90% funded ratio, measured using the actuarial value of assets.

2. Current Tier 1 members who, as of June 30, 2013, are vested (at least 3 years of service), and at least age 55, OR the sum of the member's age and service is at least 65, are considered a Tier 1 Grandfathered member. Current Tier 1 members, who do not meet this criteria as of June 30, 2013, are considered a Tier 1 Non-grandfathered member.

Summary of Plan Changes (continued)

3. Eligibility for normal/unreduced retirement benefits do not change for Tier 1 Grandfathered members. For Tier 1 Non-grandfathered and Tier 2 members, effective June 30, 2013, unreduced retirement benefits start when the member reaches age 65 and is vested (3 years for Tier 1 Non-grandfathered, 5 years for Tier 2); or if earlier, when the sum of the member's age and service is at least 90, with a minimum age of 60.

4. Early retirement benefits do not change for Tier 1 Grandfathered members. For Tier 1 Non-grandfathered and Tier 2 members, effective after June 30, 2013, the normal retirement benefit will be reduced by 8% per year from the earlier of age 65 OR the age at which the sum of the member's age and service is at least 90, with the minimum age of 60.

5. Effective after June 30, 2013, all members may retire on disability after a period of at least five years of service (rather than one year of service). The amount of the benefit is based on a 2% multiplier and actual service (rather than a minimum of twenty years of service in the current calculation).

6. Effective July 1, 2012, re-employed retirees are required to pay member contributions.

7. Effective August 1, 2011, beneficiary and death benefit provisions were updated, and the 60-month death payment benefit was removed.

2013 Legislative Session:

1. Employer and member contribution rates will be reset to 7.75% once the Fund reaches a 100% funded ratio (rather than the 90% funded ratio enacted with the 2011 Legislation), measured using the actuarial value of assets.

2. Various technical and administrative changes that do not have an actuarial effect on the Plan were enacted.

2015 Legislative Session:

Various technical and administrative changes that do not have an actuarial effect on the Plan were enacted.

2017 Legislative Session:

There were no material changes made during the 2017 legislative session.

2019 Legislative Session:

There were no material changes made during the 2019 legislative session.

2021 Legislative Session:

There were no material changes made during the 2021 legislative session.

Statistical Section

This part of the Retirement and Investment Office's (RIO) annual comprehensive financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about RIO's overall financial health.

Contents **Page**

Sources: Unless otherwise noted, the information in these schedules is derived from the annual comprehensive financial reports for the relevant years.

CHANGES IN NET POSITION
PENSION TRUST FUND

ADDITIONS

Fiscal Year	Member Contributions	Employer Contributions	Employer Contributions as a Percentage of Annual Covered Payroll	Investment and Other Income	Purchased Service Credit	Total Additions
2013	$ 53,824,557	$ 59,352,860	10.75	$ 220,236,221	$ 2,641,019	$ 336,054,657
2014	56,554,767	62,355,146	10.75	294,294,215	2,034,289	415,238,417
2015	72,268,451	78,422,098	12.75	73,377,280	1,600,739	225,668,568
2016	76,342,685	82,839,932	12.75	8,283,962	2,768,245	170,234,824
2017	79,309,153	86,058,868	12.75	266,924,541	2,553,200	434,845,762
2018	79,877,611	86,675,715	12.75	211,539,397	2,181,106	380,273,829
2019	82,429,594	89,444,881	12.75	135,202,032	1,916,787	308,993,294
2020	85,735,134	93,032,453	12.75	86,364,800	2,175,497	267,307,884
2021	90,557,210	98,264,202	12.75	684,298,642	2,559,121	875,679,175
2022	92,462,223	100,331,347	12.75	(198,855,417)	2,017,055	(4,044,792)

DEDUCTIONS

Fiscal Year	Benefits Paid to Participants	Refunds	Administrative Charges	Total Deductions	Change in Net Position
2013	$ 145,943,323	$ 3,053,395	$ 1,623,638	$ 150,620,356	$ 185,434,301
2014	158,350,355	3,908,921	1,586,045	163,845,321	251,393,096
2015	168,349,762	3,889,671	1,923,392	174,162,825	51,505,743
2016	180,617,784	5,350,896	1,851,656	187,820,336	(17,585,512)
2017	191,104,694	5,411,850	2,173,431	198,689,975	181,583,854
2018	202,417,031	5,561,668	2,128,794	210,107,493	98,885,801
2019	215,328,174	5,900,392	2,251,083	223,479,649	85,513,645
2020	224,361,530	6,489,704	2,095,405	232,946,639	34,361,245
2021	235,205,084	5,923,187	2,678,375	243,806,646	631,872,529
2022	244,705,096	7,142,359	2,592,340	254,439,795	(258,484,587)

BENEFIT AND REFUND DEDUCTIONS BY TYPE

	Annuity Payments					Refunds			
Fiscal Year	Service Retirements	PLSO Distributions	Disability Retirements	Beneficiaries	Total Annuity Payments	Separation	Death	Total Refunds	Total Benefit Expenses
2013	$ 135,498,122	$ 863,990	$ 1,738,006	$ 7,843,205	$ 145,943,323	$ 3,451,162	$ 457,759	$ 3,053,395	$ 148,996,718
2014	147,286,889	820,463	1,960,290	8,282,713	158,350,355	3,090,345	799,326	3,908,921	162,259,276
2015	157,134,597	557,332	1,891,043	8,766,790	168,349,762	4,618,157	732,739	3,889,671	172,239,433
2016	168,179,310	992,233	1,920,107	9,526,134	180,617,784	4,776,556	635,294	5,350,896	185,968,680
2017	177,795,295	1,075,553	1,892,150	10,341,696	191,104,694	4,631,061	780,789	5,411,850	196,516,544
2018	188,684,763	768,829	1,903,460	11,059,979	202,417,031	4,770,163	791,505	5,561,668	207,978,699
2019	200,474,295	1,237,129	1,948,753	11,667,997	215,328,174	5,252,032	648,360	5,900,392	221,228,566
2020	209,416,623	425,297	2,040,107	12,479,503	224,361,530	5,533,401	956,303	6,489,704	230,851,234
2021	218,700,510	993,499	1,984,567	13,526,508	235,205,084	5,021,054	902,133	5,923,187	241,128,271
2022	227,597,400	635,924	1,846,513	14,625,259	244,705,096	5,557,833	1,584,526	7,142,359	251,847,455

SCHEDULE OF CONTRIBUTION RATES
LAST 10 FISCAL YEARS

Fiscal Year	Member Rate	Employer Rate
2013	9.75%	10.75%
2014	9.75%	10.75%
2015	11.75%	12.75%
2016	11.75%	12.75%
2017	11.75%	12.75%
2018	11.75%	12.75%
2019	11.75%	12.75%
2020	11.75%	12.75%
2021	11.75%	12.75%
2022	11.75%	12.75%

PRINCIPAL PARTICIPATING EMPLOYERS
CURRENT YEAR AND NINE YEARS AGO

Participating Employer	2022 Covered Employees	2022 Rank	2022 % of Total System	2013 Covered Employees	2013 Rank	2013 % of Total System
Bismarck Public Schools	1,312	1	10.35%	1,098	1	9.90%
Fargo Public Schools	1,284	2	10.13%	1,085	2	9.78%
West Fargo Schools	1,192	3	9.40%	700	4	6.31%
Grand Forks Schools	852	4	6.72%	802	3	7.23%
Minot Schools	709	5	5.59%	679	5	6.12%
Williston Basin Schools	382	6	3.01%	222	8	2.00%
Mandan Schools	375	7	2.96%	302	6	2.72%
Dickinson Schools	353	8	2.78%	259	7	2.33%
Jamestown Schools	218	9	1.72%	220	9	1.98%
Devils Lake Schools	174	10	1.37%	168	10	1.51%
All Other [1]	5,828		45.97%	5,559		50.11%
Total (207 & 220 employers) [2]	12,679		100.00%	11,094		100.00%

[1] In 2022 "all other" consisted of: / [1] In 2013 "all other" consisted of:

Type	2022 Number	2022 Employees	2013 Number	2013 Employees
School Districts	171	5,166	169	5,063
County Superintendents	4	5	7	7
Special Education Units	19	414	19	347
Vocational Centers	4	66	5	54
State Agencies/Institutions	5	143	5	76
Other	4	34	5	12
Total	207	5,828	210	5,559

[2] This schedule includes all employees who earned service credit during the fiscal year. If an employee worked for more than one employer during the year, that employee is counted multiple times. The total differs from the actuary's total active members as the actuary's total only includes those employees who were active at the end of the fiscal year and only counts each individual one time.

SCHEDULE OF PARTICIPATING EMPLOYERS AT JUNE 30, 2022

School Districts

Alexander
Anamoose
Apple Creek Elementary
Ashley
Bakker Elementary
Barnes County North
Beach
Belcourt
Belfield
Beulah
Billings County School
Bismarck
Bottineau
Bowbells
Bowman
Burke Central
Carrington
Cavalier
Center-Stanton
Central Cass
Central Valley
Dakota Prairie
Devils Lake
Dickinson
Divide
Drake
Drayton
Dunseith
Earl Elementary
Edgeley
Edmore
Eight Mile
Elgin/New Leipzig
Ellendale
Emerado Elementary
Enderlin Area School
Fairmount
Fargo
Fessenden-Bowdon
Finley-Sharon
Flasher
Fordville Lankin
Fort Ransom Elementary
Fort Totten
Fort Yates
Gackle-Streeter
Garrison
Glen Ullin
Glenburn
Goodrich
Grafton
Grand Forks
Grenora
Griggs County Central
Halliday
Hankinson
Harvey
Hatton
Hazelton – Moffit
Hazen
Hebron
Hettinger
Hillsboro
Hope - Page
Horse Creek Elementary
Jamestown
Kenmare
Kensal
Kidder County School
Killdeer
Kindred
Kulm
Lakota
LaMoure
Langdon
Larimore
Leeds
Lewis and Clark
Lidgerwood
Linton
Lisbon
Litchville-Marion
Little Heart Elementary
Lone Tree Elementary
Maddock
Mandan
Mandaree
Manning Elementary
Manvel Elementary
Maple Valley
Mapleton Elementary
Marmarth Elementary
Max
Mayville – Portland CG
McClusky
McKenzie County School
Medina
Menoken Elementary
Midkota
Midway
Milnor
Minnewauken
Minot
Minto
Mohall-Lansford-Sherwood
Montpelier
Mott-Regent
Mt. Pleasant
Munich
Napoleon
Naughton Rural
Nedrose
Nesson
New England
New Rockford-Sheyenne
New Salem-Almont
New Town
Newburg United
North Border School
North Sargent
North Star
Northern Cass
Northwood
Oakes
Oberon Elementary
Park River Area
Parshall
Pingree – Buchanan
Powers Lake
Richardton-Taylor
Richland
Rolette
Roosevelt
Rugby
Sargent Central
Sawyer
Scranton
Selfridge
Solen-Cannonball
South Heart
South Prairie Elementary
St. John's
Stanley
Starkweather
Sterling
Strasburg
Surrey
Sweet Briar Elementary
TGU
Thompson
Tioga
Turtle Lake – Mercer
Twin Buttes Elementary
Underwood

SCHEDULE OF PARTICIPATING EMPLOYERS (Continued)

School Districts (cont.)

United
Valley-Edinburg
Valley City
Velva
Wahpeton
Warwick
Washburn
West Fargo
Westhope
White Shield
Williston Basin
Wilton
Wing
Wishek
Wyndmere
Yellowstone
Zeeland

Total School Districts 171

County Superintendents

McKenzie County
Nelson County
Slope County
Ward County

Total County Super. 4

Special Education Units

Burleigh County Special Ed.
Central Regional Education Assoc.
E Central Center for Exc. Children
GST Educational Services
James River Multidistrict Spec. Ed.
Lake Region Special Ed.
Northern Plains Special Ed.
Oliver – Mercer Special Ed.
Peace Garden Special Ed.
Pembina Spec. Ed. Co-Op
Rural Cass County Special Ed.
Sheyenne Valley Special Ed.
Souris Valley Special Ed.
South Central Prairie Special Ed.
South Valley Special Ed.
Southwest Special Ed.
Upper Valley Special Ed.
West River Student Services
Wil-Mac Special Ed.

Total Special Ed Units 19

Vocational Centers

North Valley Career & Tech Center
Roughrider Area Career & Tech
SE Region Career & Tech Center
Sheyenne Valley Area Voc Center

Total Vocational Centers 4

State Agencies & Institutions

ND Center for Distance Education
ND Dept. of Public Instruction
ND School for the Blind
ND School for the Deaf
ND Youth Correctional Center

Total State Agencies & Institutions 5

Other

Great NW Cooperative
ND United
Roughrider Service Program
South East Education Co-Op

Total Other 4

Total Employers 207

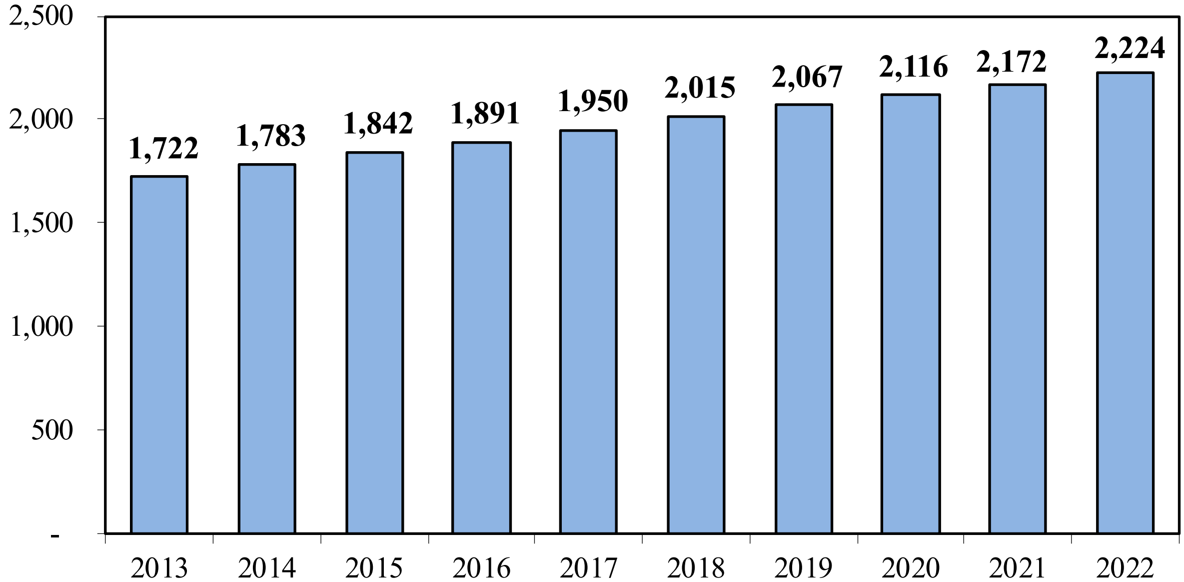
SCHEDULE OF RETIREES RESIDING IN NORTH DAKOTA BY COUNTY
AS OF JUNE 30, 2022

County	Number	Average Benefit	County	Number	Average Benefit	County	Number	Average Benefit
Adams	30	$ 2,031	Griggs	45	$ 2,300	Richland	158	$ 2,487
Barnes	177	2,520	Hettinger	32	2,094	Rolette	116	2,334
Benson	53	2,288	Kidder	40	2,035	Sargent	48	1,851
Billings	4	2,060	LaMoure	66	2,100	Sheridan	13	1,723
Bottineau	137	2,024	Logan	22	1,943	Sioux	8	2,529
Bowman	50	2,064	McHenry	71	2,147	Slope	3	2,478
Burke	42	1,546	McIntosh	38	1,931	Stark	256	2,463
Burleigh	996	2,382	McKenzie	64	2,082	Steele	25	2,597
Cass	1,272	2,493	McLean	130	2,076	Stutsman	247	2,322
Cavalier	69	1,893	Mercer	119	2,210	Towner	30	2,233
Dickey	74	2,140	Morton	308	2,305	Traill	115	2,362
Divide	33	2,071	Mountrail	84	2,009	Walsh	179	2,215
Dunn	47	2,272	Nelson	66	2,083	Ward	683	2,415
Eddy	39	2,127	Oliver	20	2,658	Wells	72	2,283
Emmons	50	2,086	Pembina	124	2,369	Williams	197	2,462
Foster	52	2,326	Pierce	73	1,978	Out of State	1,886	1,761
Golden Valley	22	2,134	Ramsey	155	2,382			
Grand Forks	666	2,465	Ransom	60	2,289	GRAND TOTALS:	9,438	$ 2,224
Grant	32	1,628	Renville	40	2,108			

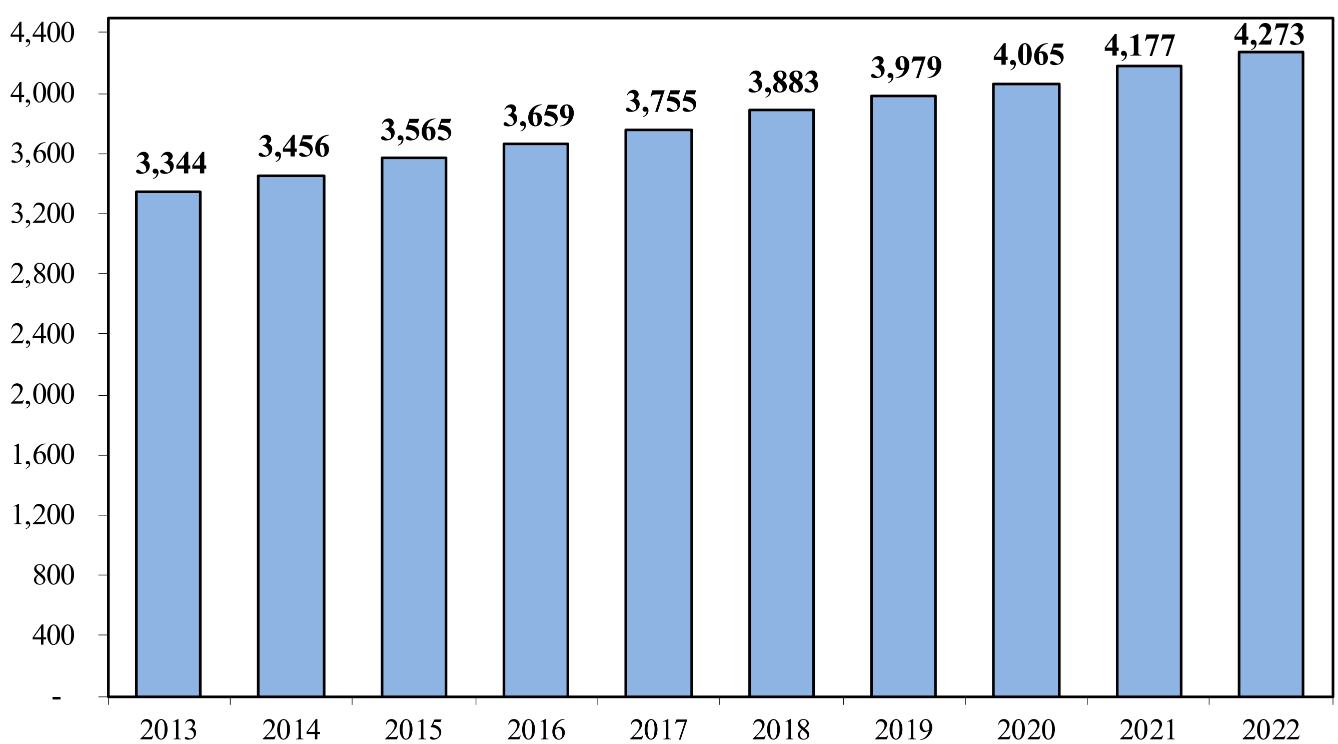
SCHEDULE OF AVERAGE BENEFIT PAYMENTS

Valuation Year		Years of Service								
		< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	> 34	TOTAL
2013	Number of Retirees	105	330	493	497	806	1,571	2,322	1,365	7,489
	Average Monthly Benefit	225	331	496	799	1,275	1,717	2,113	2,558	1,722
	Average Final Average Salary	1,989	2,219	2,210	2,663	3,118	3,412	3,661	3,893	3,344
	Average Years of Service	2.8	7.4	12.5	17.3	22.7	27.5	32.1	38.2	27.5
2014	Number of Retirees	111	351	498	507	835	1,618	2,400	1,427	7,747
	Average Monthly Benefit	232	333	512	837	1,340	1,770	2,169	2,667	1,783
	Average Final Average Salary	2,072	2,274	2,308	2,826	3,266	3,522	3,754	4,018	3,456
	Average Years of Service	2.8	7.4	12.5	17.3	22.7	27.5	32.1	38.1	27.5
2015	Number of Retirees	115	373	513	527	869	1,656	2,492	1,480	8,025
	Average Monthly Benefit	229	339	530	857	1,385	1,822	2,232	2,788	1,842
	Average Final Average Salary	2,112	2,352	2,417	2,895	3,372	3,625	3,862	4,169	3,565
	Average Years of Service	2.8	7.3	12.5	17.3	22.7	27.5	32.1	38.1	27.5
2016	Number of Retirees	118	400	530	540	897	1,692	2,541	1,531	8,249
	Average Monthly Benefit	224	344	547	890	1,435	1,871	2,292	2,868	1,891
	Average Final Average Salary	2,096	2,425	2,523	2,998	3,497	3,716	3,958	4,263	3,659
	Average Years of Service	3.0	7.0	12.0	17.0	23.0	28.0	32.0	38.0	27.0
2017	Number of Retirees	126	419	549	558	920	1,747	2,596	1,586	8,501
	Average Monthly Benefit	215	352	560	917	1,504	1,925	2,346	2,993	1,950
	Average Final Average Salary	2,139	2,501	2,590	3,070	3,647	3,809	4,034	4,403	3,755
	Average Years of Service	3.0	7.0	12.0	17.0	23.0	28.0	32.0	38.0	27.0
2018	Number of Retirees	123	444	560	588	952	1,781	2,659	1,636	8,743
	Average Monthly Benefit	211	361	576	981	1,557	1,990	2,407	3,119	2,015
	Average Final Average Salary	2,140	2,600	2,691	3,303	3,773	3,943	4,137	4,566	3,883
	Average Years of Service	2.8	7.3	12.4	17.3	22.7	27.5	32.1	38.2	27.4
2019	Number of Retirees	132	474	573	597	965	1,814	2,698	1,665	8,918
	Average Monthly Benefit	205	365	592	1,007	1,616	2,039	2,471	3,226	2,067
	Average Final Average Salary	2,167	2,687	2,757	3,384	3,913	4,032	4,233	4,693	3,979
	Average Years of Service	2.9	7.3	12.4	17.3	22.7	27.5	32.1	38.3	27.3
2020	Number of Retirees	133	502	575	608	970	1,838	2,726	1,684	9,036
	Average Monthly Benefit	203	379	619	1,031	1,657	2,087	2,523	3,322	2,116
	Average Final Average Salary	2,201	2,805	2,882	3,459	4,004	4,110	4,306	4,806	4,065
	Average Years of Service	2.8	7.3	12.4	17.3	22.7	27.5	32.1	38.3	27.2
2021	Number of Retirees	140	535	592	625	999	1,866	2,782	1,723	9,262
	Average Monthly Benefit	200	388	643	1,062	1,713	2,139	2,599	3,428	2,172
	Average Final Average Salary	2,198	2,910	2,989	3,565	4,135	4,218	4,428	4,938	4,177
	Average Years of Service	2.9	7.2	12.4	17.3	22.7	27.5	32.1	38.3	27.2
2022	Number of Retirees	147	554	601	633	1,027	1,889	2,826	1,761	9,438
	Average Monthly Benefit	197	402	650	1,084	1,755	2,188	2,669	3,512	2,224
	Average Final Average Salary	2,249	3,043	3,036	3,633	4,243	4,311	4,532	5,040	4,273
	Average Years of Service	2.9	7.2	12.4	17.2	22.7	27.5	32.1	38.3	27.1

AVERAGE BENEFIT PAYMENTS



AVERAGE FINAL AVERAGE SALARY



SCHEDULE OF RETIREES BY BENEFIT AMOUNT

Monthly Benefit	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Under $200	267	270	263	260	253	251	241	231	228	224
200 to 399	447	446	454	463	448	460	461	465	462	464
400 to 599	421	413	409	424	434	435	445	449	443	454
600 to 799	395	398	397	399	403	400	387	392	402	417
800 to 999	373	375	378	387	400	401	398	402	408	410
1,000 to 1,199	471	490	496	498	500	497	506	511	522	533
1,200 to 1,399	460	468	476	490	504	513	528	527	532	535
1,400 to 1,599	517	527	544	550	555	567	583	590	587	591
1,600 to 1,799	596	600	607	608	620	622	619	619	615	607
1,800 to 1,999	601	606	602	608	611	605	608	599	599	586
2,000 to 2,199	573	576	574	573	570	566	557	557	537	522
2,200 to 2,399	560	555	549	542	538	531	514	484	462	435
2,400 to 2,599	458	457	443	440	436	421	406	398	377	349
2,600 to 2,799	429	415	403	402	384	372	356	347	320	303
2,800 to 2,999	434	414	403	387	378	356	336	309	301	261
3,000 to 3,199	381	365	358	341	329	314	292	277	228	206
3,200 to 3,399	342	331	310	301	288	272	239	210	178	147
3,400 to 3,599	288	279	254	239	220	197	175	156	141	114
3,600 to 3,799	255	239	215	197	186	162	144	132	101	83
3,800 to 3,999	213	190	166	154	131	115	105	79	62	58
4,000 & Over	957	848	735	655	555	444	349	291	242	190
TOTAL	9,438	9,262	9,036	8,918	8,743	8,501	8,249	8,025	7,747	7,489

SCHEDULE OF RETIREES BY BENEFIT TYPE

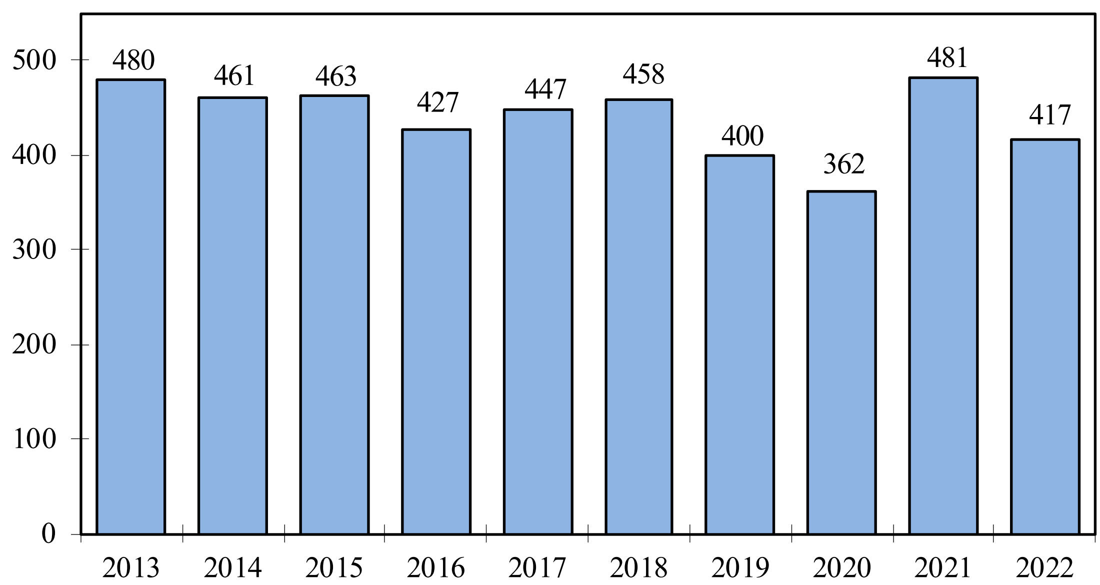
Form of Payment	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Service:										
Straight Life	3,060	3,017	2,983	2,994	2,988	2,960	2,917	3,096	3,014	2,916
100% J&S	3,810	3,712	3,571	3,483	3,358	3,195	3,035	2,733	2,570	2,449
50% J&S	744	730	700	689	680	666	644	576	552	531
5 Years C&L	10	12	14	17	18	18	19	19	21	22
10 Years C&L	159	162	164	175	173	172	175	171	175	177
20 Years C&L	172	166	151	143	130	113	100	96	91	85
Level	469	491	508	518	530	540	545	559	568	574
Subtotal	8,424	8,290	8,091	8,019	7,877	7,664	7,435	7,250	6,991	6,754
Disability:										
Straight Life	94	94	96	98	97	102	105	105	105	103
100% J&S	17	21	22	21	20	18	14	12	13	12
50% J&S	7	7	6	5	5	6	7	8	7	6
5 Years C&L	1	1	1	1	1	1	1	1	2	2
10 Years C&L	0	0	0	0	0	0	0	0	0	0
20 Years C&L	2	2	2	2	2	1	1	2	2	1
Subtotal	121	125	127	127	125	128	128	128	129	124
Beneficiaries:										
Straight Life	814	777	759	717	698	667	662	631	612	599
5 Years Certain Only	0	0	0	0	0	-	3	2	2	2
10 Years Certain Only	11	10	9	4	4	4	11	9	9	9
20 Years Certain Only	36	29	20	23	12	12	10	5	4	1
QDRO Alternate Payee*	32	31	30	28	27	26				
Subtotal	893	847	818	772	741	709	686	647	627	611
TOTAL	9,438	9,262	9,036	8,918	8,743	8,501	8,249	8,025	7,747	7,489

* Prior to 2017, QDRO Alternate Payees were included within the other listed beneficiary options.

SCHEDULE OF NEW RETIREES BY TYPE

Valuation Year	Retirement	Disability	Beneficiary	Total
2013	425	11	44	480
2014	407	7	47	461
2015	415	5	43	463
2016	354	5	68	427
2017	391	4	52	447
2018	398	3	57	458
2019	326	4	70	400
2020	282	3	77	362
2021	403	5	73	481
2022	325	1	91	417

TOTAL NEW RETIREES



SUMMARY OF OPERATIONS
FOR FISCAL YEARS ENDED JUNE 30

PENSION INVESTMENT POOL

	2022	2021	2020	2019	2018
Public Employees Retirement System					
Net position beginning of year	$ 4,021,875,086	$ 3,209,215,627	$ 3,151,659,466	$ 3,023,532,073	$ 2,779,324,311
Net change in fair value of investments	(323,796,192)	811,750,964	44,741,951	103,282,337	196,115,456
Interest, dividends and other income	70,542,585	64,016,475	67,495,427	68,783,166	66,566,132
Expenses	(9,661,916)	(11,255,030)	(8,697,618)	(8,255,626)	(6,981,342)
Net securities lending income	133,994	222,050	166,401	217,516	227,516
Net change in net position resulting from unit transactions	(61,305,000)	(52,075,000)	(46,150,000)	(35,900,000)	(11,720,000)
Net position end of year	$ 3,697,788,557	$ 4,021,875,086	$ 3,209,215,627	$ 3,151,659,466	$ 3,023,532,073
City of Bismarck Employees Pension Plan					
Net position beginning of year	$ 128,345,082	$ 106,845,584	$ 104,464,584	$ 99,136,094	$ 91,886,553
Net change in fair value of investments	(9,403,637)	21,344,943	1,826,538	3,701,861	5,176,598
Interest, dividends and other income	2,377,750	2,243,633	2,335,114	2,384,963	2,310,859
Expenses	(300,443)	(345,797)	(286,083)	(265,103)	(245,148)
Net securities lending income	3,778	6,719	5,431	6,769	7,232
Net change in net position resulting from unit transactions	(2,500,000)	(1,750,000)	(1,500,000)	(500,000)	-
Net position end of year	$ 118,522,530	$ 128,345,082	$ 106,845,584	$ 104,464,584	$ 99,136,094
City of Bismarck Police Pension Plan					
Net position beginning of year	$ 51,889,634	$ 42,509,258	$ 41,841,987	$ 40,089,884	$ 38,108,450
Net change in fair value of investments	(3,823,204)	9,398,347	637,666	1,426,526	2,356,809
Interest, dividends and other income	935,524	870,634	893,700	929,699	921,416
Expenses	(122,917)	(141,287)	(116,264)	(106,866)	(99,784)
Net securities lending income	1,533	2,682	2,169	2,744	2,993
Net change in net position resulting from unit transactions	(750,000)	(750,000)	(750,000)	(500,000)	(1,200,000)
Net position end of year	$ 48,130,570	$ 51,889,634	$ 42,509,258	$ 41,841,987	$ 40,089,884
City of Grand Forks Pension Plan					
Net position beginning of year	$ 81,713,528	$ 67,401,110	$ 68,399,889	$ 63,623,648	$ 63,347,814
Net change in fair value of investments	(6,972,005)	16,531,382	1,027,301	2,413,739	4,557,454
Interest, dividends and other income	1,390,817	1,285,751	1,368,354	1,463,331	1,398,714
Expenses	(178,403)	(215,357)	(169,943)	(160,844)	(137,236)
Net securities lending income	2,856	4,428	3,815	4,958	4,991
Net change in net position resulting from unit transactions	(3,109,542)	(3,293,786)	(3,228,306)	1,055,057	(5,548,089)
Net position end of year	$ 72,847,251	$ 81,713,528	$ 67,401,110	$ 68,399,889	$ 63,623,648
Grand Forks Park District Pension Plan					
Net position beginning of year	$ 9,366,312	$ 7,398,893	$ 7,173,670	$ 6,773,249	$ 6,156,995
Net change in fair value of investments	(884,269)	1,804,671	107,635	258,536	461,549
Interest, dividends and other income	220,803	182,972	178,522	167,316	123,586
Expenses	(24,857)	(28,509)	(22,064)	(20,402)	(10,205)
Net securities lending income	421	504	428	508	368
Net change in net position resulting from unit transactions	(66,509)	7,781	(39,298)	(5,537)	40,956
Net position end of year	$ 8,611,901	$ 9,366,312	$ 7,398,893	$ 7,173,670	$ 6,773,249

SUMMARY OF OPERATIONS
FOR FISCAL YEARS ENDED JUNE 30

INSURANCE INVESTMENT POOL

	2022	2021	2020	2019	2018
Workforce Safety & Insurance Fund					
Net position beginning of year	$ 2,309,697,425	$ 2,124,783,107	$ 2,064,717,584	$ 1,922,758,322	$ 1,893,847,576
Net change in fair value of investments	(248,699,445)	202,419,817	77,621,108	86,250,882	56,336,181
Interest, dividends and other income	48,570,716	45,087,703	47,479,431	50,611,227	47,422,961
Expenses	(4,173,079)	(5,164,378)	(4,137,639)	(4,018,848)	(4,009,141)
Net securities lending income	66,872	71,176	102,623	116,001	160,745
Net change in net position resulting from unit transactions	(51,000,000)	(57,500,000)	(61,000,000)	9,000,000	(71,000,000)
Net position end of year	$ 2,054,462,489	$ 2,309,697,425	$ 2,124,783,107	$ 2,064,717,584	$ 1,922,758,322
State Fire & Tornado Fund					
Net position beginning of year	$ 22,799,801	$ 22,812,681	$ 22,755,052	$ 23,063,239	$ 21,996,785
Net change in fair value of investments	(2,854,462)	3,090,719	624,250	871,338	706,982
Interest, dividends and other income	426,106	396,853	444,343	531,919	488,940
Expenses	(37,183)	(51,462)	(39,601)	(38,158)	(31,810)
Net securities lending income	760	968	1,450	1,714	2,342
Net change in net position resulting from unit transactions	(1,309,687)	(3,449,958)	(972,813)	(1,675,000)	(100,000)
Net position end of year	$ 19,025,335	$ 22,799,801	$ 22,812,681	$ 22,755,052	$ 23,063,239
State Bonding Fund					
Net position beginning of year	$ 3,849,935	$ 3,787,104	$ 3,609,859	$ 3,411,247	$ 3,374,454
Net change in fair value of investments	(288,730)	21,948	114,953	121,242	(25,066)
Interest, dividends and other income	51,932	45,069	66,240	80,844	65,328
Expenses	(4,003)	(4,212)	(4,023)	(3,563)	(3,577)
Net securities lending income	48	26	75	89	108
Net change in net position resulting from unit transactions	-	-	-	-	-
Net position end of year	$ 3,609,182	$ 3,849,935	$ 3,787,104	$ 3,609,859	$ 3,411,247
Petroleum Tank Release Compensation Fund					
Net position beginning of year	$ 6,264,567	$ 6,164,315	$ 5,993,299	$ 6,166,588	$ 6,395,816
Net change in fair value of investments	(425,612)	36,887	170,176	191,339	(39,367)
Interest, dividends and other income	80,952	69,214	106,406	140,430	115,418
Expenses	(5,557)	(5,885)	(5,680)	(5,201)	(5,463)
Net securities lending income	74	36	114	143	184
Net change in net position resulting from unit transactions	-	-	(100,000)	(500,000)	(300,000)
Net position end of year	$ 5,914,424	$ 6,264,567	$ 6,164,315	$ 5,993,299	$ 6,166,588
Insurance Regulatory Trust Fund					
Net position beginning of year	$ 7,132,980	$ 5,713,800	$ 6,219,113	$ 5,638,435	$ 5,288,341
Net change in fair value of investments	(412,257)	332,380	225,107	174,407	114,512
Interest, dividends and other income	53,618	40,881	60,326	81,816	61,910
Expenses	(5,236)	(7,162)	(4,573)	(4,869)	(3,107)
Net securities lending income	120	112	189	224	279
Net change in net position resulting from unit transactions	(148,333)	1,052,969	(786,362)	329,100	176,500
Net position end of year	$ 6,620,892	$ 7,132,980	$ 5,713,800	$ 6,219,113	$ 5,638,435

SUMMARY OF OPERATIONS
FOR FISCAL YEARS ENDED JUNE 30

INSURANCE INVESTMENT POOL (Continued)

	2022	2021	2020	2019	2018
Cultural Endowment Fund					
Net position beginning of year	$ 612,060	$ 493,367	$ 475,438	$ 449,190	$ 431,225
Net change in fair value of investments	(72,271)	111,108	9,624	16,907	26,754
Interest, dividends and other income	11,009	9,979	9,929	10,871	9,983
Expenses	(2,068)	(2,424)	(1,666)	(1,570)	(1,331)
Net securities lending income	24	30	42	40	59
Net change in net position resulting from unit transactions	(28,000)	-	-	-	(17,500)
Net position end of year	$ 520,754	$ 612,060	$ 493,367	$ 475,438	$ 449,190
Risk Management Fund					
Net position beginning of year	$ 4,386,340	$ 4,559,669	$ 4,909,610	$ 4,956,766	$ 5,779,115
Net change in fair value of investments	(537,354)	512,933	172,210	253,740	169,318
Interest, dividends and other income	87,650	73,266	85,016	106,435	114,213
Expenses	(7,103)	(9,656)	(7,478)	(7,629)	(6,357)
Net securities lending income	98	128	311	298	477
Net change in net position resulting from unit transactions	50,000	(750,000)	(600,000)	(400,000)	(1,100,000)
Net position end of year	$ 3,979,631	$ 4,386,340	$ 4,559,669	$ 4,909,610	$ 4,956,766
Risk Management Workers Comp Fund					
Net position beginning of year	$ 4,307,007	$ 5,114,419	$ 5,188,120	$ 5,357,456	$ 5,532,694
Net change in fair value of investments	(413,820)	626,878	190,845	285,789	215,550
Interest, dividends and other income	74,634	75,948	93,400	102,266	115,169
Expenses	(6,259)	(10,393)	(8,332)	(7,707)	(6,488)
Net securities lending income	88	155	386	316	531
Net change in net position resulting from unit transactions	(700,000)	(1,500,000)	(350,000)	(550,000)	(500,000)
Net position end of year	$ 3,261,650	$ 4,307,007	$ 5,114,419	$ 5,188,120	$ 5,357,456
ND Veterans' Cemetery Trust Fund					
Net position beginning of year	$ 380,597	$ 312,537	$ -	$ -	$ -
Net change in fair value of investments	(64,213)	63,161	31,431	-	-
Interest, dividends and other income	8,106	6,348	1,484	-	-
Expenses	(1,569)	(1,476)	(383)	-	-
Net securities lending income	22	22	5	-	-
Net change in net position resulting from unit transactions	99,000	5	280,000	-	-
Net position end of year	$ 421,943	$ 380,597	$ 312,537	$ -	$ -
ND Association of Counties Fund					
Net position beginning of year	$ 7,740,373	$ 6,689,541	$ 6,331,288	$ 5,909,536	$ 4,381,695
Net change in fair value of investments	(1,077,670)	934,566	235,639	286,310	109,928
Interest, dividends and other income	147,667	133,195	134,353	145,905	126,224
Expenses	(13,148)	(17,242)	(12,175)	(10,924)	(8,864)
Net securities lending income	275	313	436	461	553
Net change in net position resulting from unit transactions	-	-	-	-	1,300,000
Net position end of year	$ 6,797,497	$ 7,740,373	$ 6,689,541	$ 6,331,288	$ 5,909,536

SUMMARY OF OPERATIONS
FOR FISCAL YEARS ENDED JUNE 30

INSURANCE INVESTMENT POOL (Continued)

	2022	2021	2020	2019	2018
PERS Group Insurance Fund					
Net position beginning of year	$ 34,546,957	$ 31,479,612	$ 31,053,242	$ 31,600,069	$ 37,481,530
Net change in fair value of investments	(2,420,582)	472,325	(218,883)	603,923	(534,557)
Interest, dividends and other income	765,365	843,264	946,534	917,321	856,706
Expenses	(42,310)	(45,970)	(30,879)	(43,655)	(40,622)
Net securities lending income	1,075	481	698	1,584	1,252
Net change in net position resulting from unit transactions	(730,000)	1,797,245	(271,100)	(2,026,000)	(6,164,240)
Net position end of year	$ 32,120,505	$ 34,546,957	$ 31,479,612	$ 31,053,242	$ 31,600,069
Budget Stabilization Fund					
Net position beginning of year	$ 749,374,748	$ 726,903,611	$ 118,647,704	$ 113,551,329	$ 6,105,913
Net change in fair value of investments	(58,320,756)	10,641,810	(4,511,372)	2,511,852	(694,082)
Interest, dividends and other income	17,633,373	18,793,591	17,188,196	2,762,013	1,024,321
Expenses	(999,529)	(1,030,772)	(874,191)	(183,828)	(89,583)
Net securities lending income	25,140	10,753	11,162	6,338	2,005
Net change in net position resulting from unit transactions	9,646,249	(5,944,245)	596,442,112	-	107,202,755
Net position end of year	$ 717,359,225	$ 749,374,748	$ 726,903,611	$ 118,647,704	$ 113,551,329
City of Bismarck Deferred Sick Leave Fund					
Net position beginning of year	$ 844,666	$ 770,148	$ 779,146	$ 729,656	$ 697,552
Net change in fair value of investments	(114,900)	92,267	27,520	33,901	17,889
Interest, dividends and other income	17,212	14,904	15,694	17,687	16,101
Expenses	(2,312)	(2,683)	(2,258)	(2,152)	(1,960)
Net securities lending income	26	30	46	54	74
Net change in net position resulting from unit transactions	-	(30,000)	(50,000)	-	-
Net position end of year	$ 744,692	$ 844,666	$ 770,148	$ 779,146	$ 729,656
City of Fargo FargoDome Permanent Fund					
Net position beginning of year	$ 49,709,366	$ 43,523,123	$ 44,828,578	$ 44,624,198	$ 41,608,846
Net change in fair value of investments	(6,685,193)	8,520,648	673,479	1,219,139	2,364,132
Interest, dividends and other income	895,252	847,933	908,396	1,034,503	937,419
Expenses	(104,325)	(134,854)	(90,931)	(88,641)	(72,390)
Net securities lending income	2,035	2,516	3,601	4,379	6,191
Net change in net position resulting from unit transactions	(3,800,000)	(3,050,000)	(2,800,000)	(1,965,000)	(220,000)
Net position end of year	$ 40,017,135	$ 49,709,366	$ 43,523,123	$ 44,828,578	$ 44,624,198
ND State Board of Medicine					
Net position beginning of year	$ 2,779,396	$ 2,469,292	$ 2,361,353	$ 2,250,449	$ 2,178,536
Net change in fair value of investments	(383,821)	263,359	57,481	60,744	23,597
Interest, dividends and other income	59,680	53,710	55,665	54,930	50,861
Expenses	(6,339)	(7,067)	(5,331)	(4,935)	(4,025)
Net securities lending income	105	102	124	165	1,480
Net change in net position resulting from unit transactions	300,000	-	-	-	-
Net position end of year	$ 2,749,021	$ 2,779,396	$ 2,469,292	$ 2,361,353	$ 2,250,449

SUMMARY OF OPERATIONS
FOR FISCAL YEARS ENDED JUNE 30

INSURANCE INVESTMENT POOL (Continued)

	2022	2021	2020	2019	2018
Lewis & Clark Interpretive Center Endowment					
Net position beginning of year	$ 914,536	$ 793,124	$ 751,297	$ 702,897	$ -
Net change in fair value of investments	(132,758)	108,123	27,707	32,619	(1,265)
Interest, dividends and other income	17,079	16,218	16,467	17,960	4,667
Expenses	(2,488)	(2,967)	(2,398)	(2,240)	(666)
Net securities lending income	33	38	51	61	22
Net change in net position resulting from unit transactions	-	-	-	-	700,139
Net position end of year	$ 796,402	$ 914,536	$ 793,124	$ 751,297	$ 702,897
Attorney General Settlement Fund					
Net position beginning of year	$ 924,536	$ 1,056,388	$ -	$ -	$ -
Net change in fair value of investments	(266,261)	15,221	(10,306)	-	-
Interest, dividends and other income	69,492	25,331	23,305	-	-
Expenses	(4,950)	(2,184)	(1,952)	-	-
Net securities lending income	99	16	16	-	-
Net change in net position resulting from unit transactions	2,231,300	(170,236)	1,045,325	-	-
Net position end of year	$ 2,954,216	$ 924,536	$ 1,056,388	$ -	$ -
ND University System Capital Building Fund					
Net position beginning of year	$ -	$ -	$ -	$ -	$ -
Net change in fair value of investments	(196,129)	-	-	-	-
Interest, dividends and other income	32,740	-	-	-	-
Expenses	(2,539)	-	-	-	-
Net securities lending income	53	-	-	-	-
Net change in net position resulting from unit transactions	1,768,101	-	-	-	-
Net position end of year	$ 1,602,226	$ -	$ -	$ -	$ -

SUMMARY OF OPERATIONS
FOR FISCAL YEARS ENDED JUNE 30

INDIVIDUAL INVESTMENT ACCOUNTS

	2022	2021	2020	2019	2018
Legacy Fund					
Net position beginning of year	$ 8,115,202,181	$ 6,995,309,070	$ 6,122,227,871	$ 5,576,084,018	$ 4,685,637,731
Net change in fair value of investments	(1,016,618,213)	1,490,459,152	150,636,769	174,927,813	253,324,655
Interest, dividends and other income	157,328,175	142,241,067	140,318,920	147,634,462	117,456,240
Expenses	(17,583,459)	(22,156,353)	(14,954,726)	(14,340,987)	(10,853,698)
Net securities lending income	406,151	478,659	491,195	616,838	648,335
Net change in net position resulting from unit transactions	707,344,657	(491,129,414)	596,589,041	237,305,727	529,870,755
Net position end of year	$ 7,946,079,492	$ 8,115,202,181	$ 6,995,309,070	$ 6,122,227,871	$ 5,576,084,018
Job Service North Dakota					
Net position beginning of year	$ 96,591,274	$ 95,249,099	$ 97,195,676	$ 95,611,108	$ 97,256,634
Net change in fair value of investments	(7,105,726)	4,541,813	149,250	3,497,989	483,223
Interest, dividends and other income	1,862,254	1,805,626	2,792,754	3,043,292	2,739,029
Expenses	(308,015)	(322,167)	(320,937)	(311,651)	(303,667)
Net securities lending income	-	-	-	-	-
Net change in net position resulting from unit transactions	(4,864,873)	(4,683,097)	(4,567,644)	(4,645,062)	(4,564,111)
Net position end of year	$ 86,174,914	$ 96,591,274	$ 95,249,099	$ 97,195,676	$ 95,611,108
Tobacco Prevention and Control Fund					
Net position beginning of year	$ 158	$ 7,586,495	$ 9,291,844	$ 54,357,675	$ 57,453,579
Net change in fair value of investments	-	8,071	282,644	1,117,230	828,375
Interest, dividends and other income	-	51	16,454	113,765	102,409
Expenses	-	(3,704)	(4,447)	(16,826)	(26,688)
Net securities lending income	-	-	-	-	-
Net change in net position resulting from unit transactions	(158)	(7,590,755)	(2,000,000)	(46,280,000)	(4,000,000)
Net position end of year	$ -	$ 158	$ 7,586,495	$ 9,291,844	$ 54,357,675
PERS Retiree Health Insurance Credit Fund					
Net position beginning of year	$ 180,108,082	$ 144,126,212	$ 135,852,378	$ 126,505,792	$ 116,059,215
Net change in fair value of investments	(30,112,037)	34,154,175	3,791,934	5,197,140	5,447,995
Interest, dividends and other income	3,885,504	2,864,088	3,527,296	3,371,362	3,138,168
Expenses	(537,631)	(495,393)	(417,596)	(391,416)	(379,586)
Net securities lending income	-	-	-	-	-
Net change in net position resulting from unit transactions	(1,149,000)	(541,000)	1,372,200	1,169,500	2,240,000
Net position end of year	$ 152,194,918	$ 180,108,082	$ 144,126,212	$ 135,852,378	$ 126,505,792