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North Dakota



Retirement & Investment Office

An Agency of the State of North Dakota



Comprehensive Annual Financial Report

For the Fiscal Years Ended June 30, 2017 & 2016



North Dakota

Retirement and Investment Office

An Agency of the State of North Dakota

Comprehensive Annual Financial Report

*Prepared by the ND Retirement and Investment Office Staff
3442 East Century Avenue, P.O. Box 7100
Bismarck, ND 58507-7100
Phone: (701) 328-9885
www.nd.gov/rio*

For the Fiscal Years Ended June 30, 2017 and 2016

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

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INTRODUCTORY SECTION



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Telephone: 701-328-9885 | Toll Free: 800-952-2970 | Fax: 701-328-9897 | www.nd.gov/rio

December 1, 2017

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

Dear Board Members:

With pleasure we present to you the June 30, 2017, Comprehensive Annual Financial Report (CAFR) 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 teachers and administrators. The TFFR plan is funded on an actuarial reserve basis. Benefit funding comes from member and employer contributions and investment earnings. TFFR serves nearly 10,900 teachers from 214 employer groups and pays benefits to more than 8,500 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 nearly \$12.3 billion in assets for seven pension funds and 17 non-pension funds. Their investments are divided into two investment trust funds and four 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 of 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, 2017:

	Fair Value in millions	% Of Pool	FY2017 Return		Fair Value in millions	% Of Pool	FY2017 Return
PENSION POOL PARTICIPANTS				INSURANCE POOL PARTICIPANTS			
Teachers' Fund for Retirement	\$2,318.21	43.7%	12.92%	Workforce Safety & Insurance Fund	\$1,894.61	93.1%	8.29%
Public Employees Retirement System	2,781.35	52.5%	13.05%	State Fire and Tornado Fund	22.01	1.1%	9.30%
Bismarck City Employee Pension Fund	91.95	1.7%	11.56%	State Bonding Fund	3.37	0.2%	2.40%
Bismarck City Police Pension Fund	38.14	0.7%	12.24%	Petroleum Tank Release Fund	6.40	0.3%	2.23%
City of Grand Forks Pension Fund	63.39	1.2%	12.84%	Insurance Regulatory Trust Fund	5.29	0.3%	7.40%
Grand Forks Park District Pension Fund	6.16	0.1%	12.74%	State Risk Management Fund	5.78	0.3%	8.27%
Subtotal Pension Pool Participants	\$5,299.21	100.0%		State Risk Management Workers Comp	5.53	0.3%	9.41%
INDIVIDUAL INVESTMENT ACCOUNTS				Cultural Endowment Fund	0.43	0.0%	12.71%
Legacy Fund	\$4,687.96		12.03%	Budget Stabilization Fund	6.13	0.3%	0.80%
Retiree Health Insurance Credit Fund	116.15		11.81%	ND Assoc. of Counties (NDACo) Fund	4.38	0.2%	8.30%
Job Service of North Dakota	97.33		5.63%	City of Bismarck Deferred Sick Leave	0.70	0.0%	8.85%
Tobacco Prevention and Control Trust Fund	57.46		1.66%	PERS Group Insurance	37.50	1.8%	0.08%
				State Board of Medical Examiners	2.18	0.1%	5.29%
				City of Fargo FargoDome Permanent Fund	41.63	2.0%	12.25%
				Subtotal Insurance Pool Participants	2,035.96	100.0%	
TOTAL ASSETS UNDER MANAGEMENT					<u>\$12,294.07</u>		

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 of 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 Grand Forks Park District pension plan began participating in the pension pool in December 2009.

Two plans have left the pension pool since its inception.

- The City of Fargo Employees pension plan withdrew the bulk of their assets from the SIB in December 2013, and their remaining assets in fiscal year 2016.
- 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.

The insurance investment pool began in December 1993 with the pooling of the assets of the WSI, Fire and Tornado, Bonding, Insurance Regulatory, and Petroleum Tank Release 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 joined the pool in April, 2014.

Eight funds have left the insurance investment pool after having been included in it at some point during its existence.

- The Veterans' Home Improvement Fund was added in July 1996 and removed in August 1997.
- The National Guard Tuition Waiver Fund was added in June 1996 and removed in June 1999.
- The Veterans Post War Trust Fund was added in December 1997 and left the pool in September 2005.
- The Veterans Cemetery Trust joined the pool in August 1997 and was removed in August 2007.
- The ND Health Care Trust Fund was added to the pool in July 2001 and left the pool in June 2012.
- The National Board Certification Fund joined in July 2009 and was removed in September 2011.
- Additionally, the two NDACo funds were combined into one fund in July, 2010.
- The Legacy Fund assets were removed from the insurance investment pool during fiscal year 2015 after being added to SIB management in September 2011 and subsequently pooled during implementation of their diversified asset allocation in fiscal year 2014. 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.

MAJOR INITIATIVES

TFFR Retirement Program

- Received favorable IRS determination letter on TFFR plan.
- Received results of actuarial audit of the TFFR plan's current actuary, Segal Consultants. The actuarial audit report results were generally positive, and indicated actuarial valuation results were reasonable, accurate, and performed by qualified actuaries in accordance with the Actuarial Standards Board. The auditor noted a few minor issues for Segal's consideration.
- Awarded actuarial consulting contract to the TFFR plan's current actuary, Segal Consulting, after a competitive bid process.
- Approved board policies relating to board appeals, board communications, board policy introduction, amendment, and passage, and in-staff subbing contract period.
- Governor Dalrymple re-appointed Mike Burton to another five-year term on the Board from July 1, 2017 to June 30, 2022.

SIB Investment Program

- Investment details by trust fund can be found in the Investment Section.
- Initiatives completed by the SIB during the year included:
 - ✓ Implemented a new comprehensive risk management system utilizing industry leading technology in order to enhance our analytical risk management framework and expand risk reporting.
 - ✓ Conducted extensive fixed income manager due diligence within the Pension Investment Pool in order to improve expected risk adjusted returns with a focus on improved downside risk protection.

- ✓ Expanded continuing professional education initiatives for our board members with a keen focus on best practices for institutional investors and the importance of strong governance.
- ✓ Completed a search for two middle market direct lending managers in the Pension Investment Pool and Legacy Fund.
- ✓ Continued to successfully renegotiate investment management fees throughout the year while generating over \$100 million of incremental income from the prudent use of active management (after deducting fees and expenses) for the fiscal year ended June 30, 2017.

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 comprehensive annual financial report for the fiscal year ended June 30, 2016. This was the nineteenth consecutive year that RIO has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual 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 comprehensive annual 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 also received the 2017 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, 2017.

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

Pension Trust Fund (TFFR)	6/30/2017 (in millions)	6/30/2016 (in millions)	Incr/(Decr) \$ (in millions)	Incr/(Decr) %
Additions	\$ 435	\$ 170	\$ 265	155.4%
Deductions	199	188	11	5.8%
Net Change	\$ 236	\$ (18)	\$ 254	1442.9%

In the pension trust fund, additions increased significantly due to stronger financial markets. 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	6/30/2017 (in millions)	6/30/2016 (in millions)	Incr/(Decr) \$ (in millions)	Incr/(Decr) %
Additions	\$ 1,648	\$ 907	\$ 741	81.6%
Deductions	912	266	\$ 646	242.3%
Net Change	\$ 736	\$ 641	\$ 95	14.8%

In the investment trust funds, additions also increased due to stronger financial markets. Deductions increased due to an increase in the amount of unit redemptions requested from the individual funds, specifically the Budget Stabilization Fund, which was tapped into as a result of lower than anticipated State General Fund revenues.

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. 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 26 years beginning July 1, 2017, 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 (26 years remaining as of July 1, 2017). For this calculation, payroll is assumed to increase 3.25% per year. As of July 1, 2017, the ADC is 12.99%, compared to 13.22% last year. This is greater than the 12.75% rate currently required by law. The decrease in ADC is primarily driven by an actuarial gain on assets and demographic experience emerging more favorably than assumed.

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) increased from last year. The funded ratio at July 1, 2016, was 62.1%, while it is 63.7% as of July 1, 2017. Based on the market values rather than actuarial values of assets, the funded ratio increased to 63.2% from 59.2% last year.

The plan has a net investment loss of \$19 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 due to market losses during FY 2015 and FY 2016 offset by market gains in FY2014 and FY2017. As these losses are recognized over the next four years, the funded ratio is expected to slightly decline, assuming the plan earns 7.75% 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, 2017 (in millions)	July 1, 2016 (in millions)
Actuarial Accrued Liability (AAL)	\$ 3,734.0	\$ 3,589.4
Actuarial value of assets (AVA)	2,379.8	2,229.3
Unfunded actuarial accrued liability (UAAL)	1,354.2	1,360.1
Funded ratio	63.7%	62.1%

FINANCIAL REPORTING FOR PENSIONS

Government Accounting Standards Board (GASB) Statement 67 for accounting and financial reporting of pension liabilities became effective in FY 2014. The GASB rules only define pension liability and expense for financial reporting purposes, and do 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, 2017 (in millions)	July 1, 2016 (in millions)
Total pension liability (TPL)	\$ 3,734.0	\$ 3,589.4
Plan fiduciary net position (FNP)	2,360.5	2,124.3
Net pension liability (NPL)	1,373.5	1,465.1
Plan FNP as % of TPL	63.2%	59.2%

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 Associates, 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,



DAVID HUNTER
Executive Director/
Chief Investment Officer



FAY KOPP
Deputy Executive Director/
Chief Retirement Officer



CONNIE L. FLANAGAN
Fiscal & Investment
Operations Manager

NORTH DAKOTA RETIREMENT AND INVESTMENT OFFICE As of June 30, 2017

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.

Administrative Staff



David Hunter
*Executive Director
Chief Investment Officer*



Fay Kopp
*Deputy Executive Director/
Chief Retirement Officer*



Darren Schulz, CFA
Deputy CIO

Supervisory Staff

Connie L. Flanagan
Fiscal Management

Shelly Schumacher
Retirement Services

Terra Miller Bowley
Audit Services

Bonnie Heit
Administrative Services

Richard Nagel
Information Services

NORTH DAKOTA STATE INVESTMENT BOARD Board Members as of June 30, 2017

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



Mike Sandal
Vice Chair
PERS Trustee



Kelly Schmidt
State Treasurer



Jon Godfread
State Insurance
Commissioner



Cindy Ternes, CPA
Workforce Safety &
Insurance Designee



Lance Gaebe
University and
School Land
Commissioner



Rob Lech
TFFR Trustee



Mike Gessner
TFFR Trustee



Mel Olson
TFFR Trustee



Yvonne Smith
PERS Trustee



Troy Seibel
PERS Trustee

NORTH DAKOTA TEACHERS' FUND FOR RETIREMENT Board of Trustees as of June 30, 2017

Retirement Program

Mission

The mission of the Teachers' Fund for Retirement, a trust fund, is to advocate for, develop, and administer a comprehensive retirement program for all trust fund members within the resources available.

Goals

Investment and Funding Goals:

- 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 benefits.

Service Goals:

- Administer accurate, prompt, and efficient pension benefits program.
- Deliver high quality, friendly service to members and employers.
- Provide educational outreach programs including pre-retirement seminars and individual counseling sessions.



Mike Gessner
President
(active teacher)



Rob Lech
Vice President
(active administrator)



Toni Gumeringer
Trustee
(active teacher)



Mike Burton
Trustee
(retired member)



Mel Olson
Trustee
(retired member)

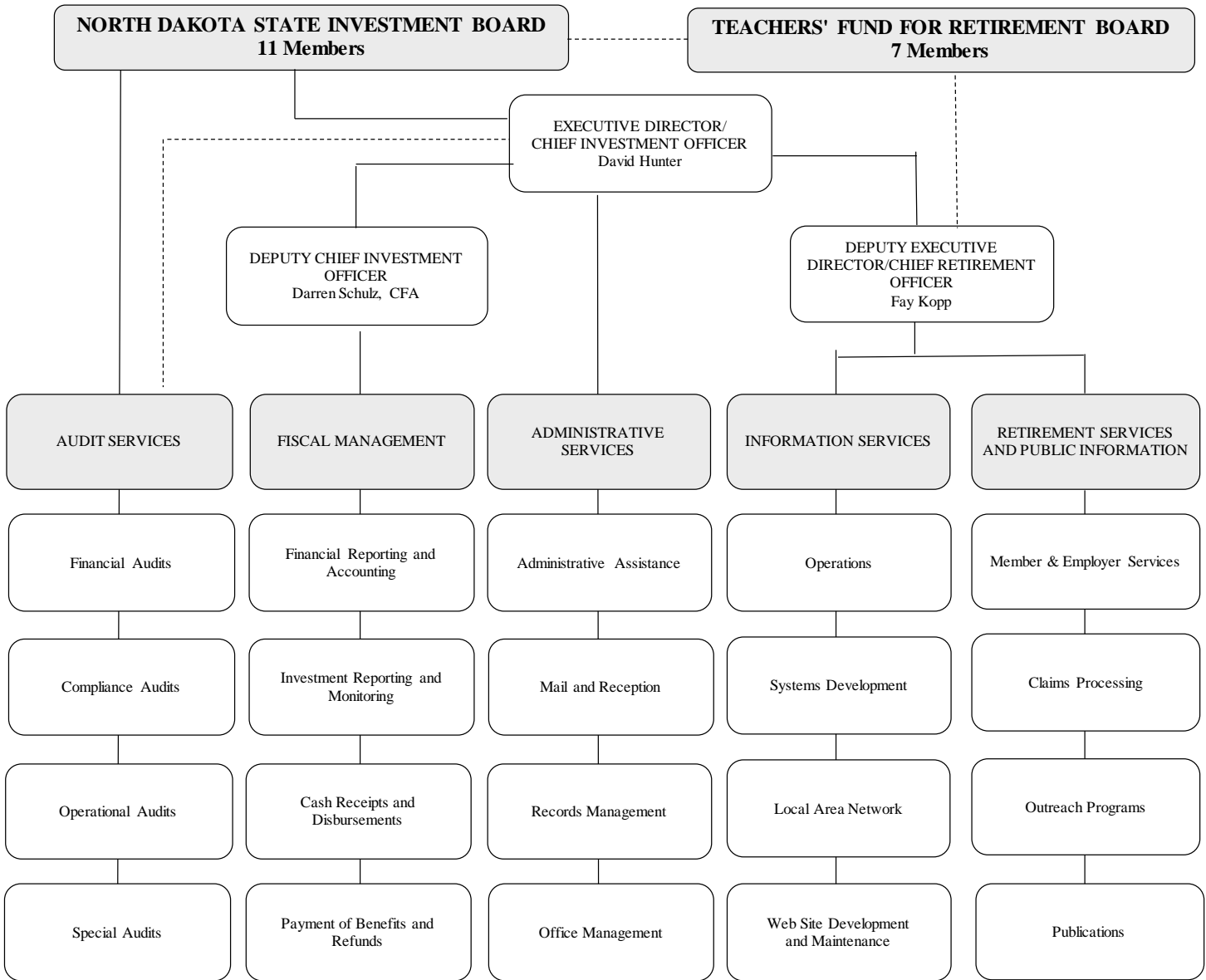


Kelly Schmidt
State Treasurer



Kirsten Baesler
State Superintendent
of Public Instruction

NORTH DAKOTA RETIREMENT AND INVESTMENT OFFICE
ADMINISTRATIVE ORGANIZATION
JUNE 30, 2017



See pages 87-88 in the Investment Section for a summary of fees paid to investment professionals and pages 187-193 in the Statistical Section for a detailed list of the investment professionals who provide services to the State Investment Board and their corresponding fees.

NORTH DAKOTA RETIREMENT AND INVESTMENT OFFICE
CONSULTING AND PROFESSIONAL SERVICES
AS OF JUNE 30, 2017

Actuary

The Segal Company
Chicago, Illinois

Auditor

CliftonLarsonAllen LLP
Baltimore, Maryland

Legal Counsel

North Dakota Attorney General's
Office
Bismarck, North Dakota

Kasowitz, Benson, Torres & Friedman
New York, New York

K&L Gates
Boston, Massachusetts

Information Technology

Advent Software, Inc.
San Francisco, CA

Blackrock Financial Management, Inc.
New York, New York

Bloomberg LP
New York, New York

CPAS Systems Inc.
Toronto, Ontario

Master Custodian

The Northern Trust Company
Chicago, Illinois

**Investment Consultant and
Performance Measurement**

Callan Associates Inc.
San Francisco, California

Investment Consulting (Fee Analysis)

Novarca North America LLC
Palo Alto, California

**Investment Consulting (Private Equity
Monitoring)**

Adams Street Partners, LLC
Chicago, Illinois

Investment Managers

Adams Street Partners, LLC
Chicago, Illinois

Atlanta Capital Investment Managers
Atlanta, Georgia

Axiom International Investors
Greenwich, Connecticut

Blackrock Private Equity Partners
New York, New York

Brandywine Asset Management
Wilmington, Delaware

Capital Group
Los Angeles, California

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

Goldman Sachs Asset Mgmt
New York, New York

Grosvenor Capital Management
New York, NY

Hearthstone Homebuilding Investors,
LLC
Encino, California

INVESCO Realty Advisors
Dallas, Texas

InvestAmerica L&C, LLC
Cedar Rapids, Iowa

J.P. Morgan Invest. Mgmt, Inc.
New York, New York

Loomis Sayles & Company
Boston, Massachusetts

Los Angeles Capital Management
Los Angeles, California

LSV Asset Management
Chicago, Illinois

Investment Managers (cont.)

Manulife Asset Management, LLC
McLean, Virginia

Matlin Patterson Global Advisers LLC
New York, New York

Northern Trust Asset Management
Chicago, Illinois

Parametric Portfolio Associates
DBA The Clifton Group
Minneapolis, Minnesota

PIMCO
Newport Beach, California

Prudential Investment Management
Newark, New Jersey

Quantum Energy Partners
Houston, Texas

SEI Investments Management Co.
Oaks, Pennsylvania

State Street Global Advisors
Boston, Massachusetts

Timberland Investment
Resources, LLC
Atlanta, Georgia

UBS Global Asset Management
Chicago, Illinois

The Vanguard Group
Valley Forge, Pennsylvania

Wellington Trust Company, NA
Boston, Massachusetts

Wells Capital Management, Inc.
Menomonee Falls, Wisconsin

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 Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2016

Executive Director/CEO



Public Pension Coordinating Council

**Recognition Award for Administration
2017**

Presented to

North Dakota Teachers' Fund for Retirement

In recognition of meeting professional standards for
plan 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)

A handwritten signature in black ink, appearing to read 'Alan H. Winkle'.

Alan H. Winkle
Program Administrator



FINANCIAL SECTION



CliftonLarsonAllen LLP
CLAconnect.com

INDEPENDENT AUDITORS' REPORT

Governor Doug Burgum
The Legislative Assembly
David Hunter, Executive Director/CIO
State Investment Board
Teachers' Fund for Retirement Board
North Dakota Retirement and Investment Office

Report on the Financial Statements

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, 2017, and the related statement of changes in net position – fiduciary funds for the year 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 year ended June 30, 2017, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes 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.

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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 the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of RIO as of June 30, 2017, and the respective changes in financial position for the year 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 financial position of each of the individual funds of RIO as of June 30, 2017, and the results of the changes in financial position of such funds for the year 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, 2017, and the changes in its financial position for the year 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.

Other Matters*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 – 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, 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 auditing standards generally accepted in the United States of America, 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.

Other 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, 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.

These schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such 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 auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The Introductory, Investment, Actuarial and Statistical Section, as listed in the table of contents, have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Audit Standards*, we have also issued our report dated November 2, 2017, 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.



CliftonLarsonAllen LLP

Baltimore, Maryland
November 2, 2017

North Dakota Retirement and Investment Office
Management's Discussion and Analysis
June 30, 2017 and 2016

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 year ended June 30, 2017. Please read it 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 23 investment clients in two investment pools and four individual investment accounts.

Financial Highlights

Total net position increased in the fiduciary funds by \$972 million or 8.6% from the prior year. Approximately 90% of that 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 \$399.5 million and net investment income exceeded \$480 million during the fiscal year.

Total additions in the fiduciary funds for the year increased over \$1 billion or 93.3% from the previous year. Net investment income rose by \$1.1 billion over the prior year, largely due to strong financial markets. There was a decrease of \$115.1 million in new purchases of units in the investment program mainly due to the slowdown of oil and gas tax collections in the Legacy Fund. Total contributions increased \$6.1 million or 3.8%.

Deductions in the fiduciary funds increased over the prior year by \$656.4 million or 144.5%. Approximately 87% of that increase was due to the drawdown of the Budget Stabilization Fund to cover the State's income shortfall during the 2015-17 biennium. Payments to TFFR members in the form of benefits and refunds increased by \$10.5 million or 5.7%. This increase 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, 2017, the TFFR pension plan had a Net Pension Liability (NPL) of \$1.37 billion and Plan Fiduciary Net Position as a percent of Total Pension Liability (TPL) of 63.2%.

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

North Dakota Retirement and Investment Office
Management's Discussion and Analysis
June 30, 2017 and 2016

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, 2017, were \$12.4 billion and were comprised mainly of investments. Total assets increased by \$932.2 million or 8.1% from the prior year primarily due to strong financial markets.

Total liabilities as of June 30, 2017, were \$87.2 million. The majority of the liabilities was comprised of the securities lending collateral payable. Total liabilities decreased by \$39.6 million or 31.2% from the prior year due almost entirely to the decrease in securities lending collateral as a result of having fewer securities on loan at year-end.

RIO's fiduciary fund total net position was \$12.3 billion at the close of fiscal year 2017.

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

	<u>2017</u>	<u>2016</u>	Total % Change
Assets			
Investments	\$ 12,251.5	\$ 11,278.3	8.6%
Securities Lending Collateral	77.7	116.6	-33.4%
Receivables	69.0	70.5	-2.2%
Cash & Other	19.3	19.9	-2.9%
Total Assets	<u>12,417.5</u>	<u>11,485.3</u>	8.1%
Deferred Outflows of Resources			
Deferred outflows related to pensions	<u>0.6</u>	<u>0.3</u>	126.0%
Liabilities			
Obligations under Securities Lending	77.7	116.6	-33.4%
Accounts Payable & Accrued Expenses	9.5	10.1	-5.5%
Total Liabilities	<u>87.2</u>	<u>126.7</u>	-31.2%
Deferred Inflows of Resources			
Deferred inflows related to pensions	<u>0.1</u>	<u>0.1</u>	-21.9%
Total Net Position	<u>\$ 12,330.8</u>	<u>\$ 11,358.8</u>	8.6%

North Dakota Retirement and Investment Office
Management's Discussion and Analysis
June 30, 2017 and 2016

	<u>2016</u>	<u>2015</u>	<u>Total % Change</u>
Assets			
Investments	\$ 11,278.3	\$ 10,668.6	5.7%
Sec Lending Collateral	116.6	-	100.0%
Receivables	70.5	61.1	15.3%
Cash & Other	<u>19.9</u>	<u>19.0</u>	4.5%
Total Assets	<u>11,485.3</u>	<u>10,748.7</u>	6.9%
Deferred Outflows of Resources			
Deferred outflows related to pensions	0.3	0.1	128.8%
Liabilities			
Obligations under Securities Lending	116.6	-	100.0%
Accounts Payable & Accrued Expenses	<u>10.1</u>	<u>13.2</u>	-23.7%
Total Liabilities	<u>126.7</u>	<u>13.2</u>	860.4%
Deferred Inflows of Resources			
Deferred inflows related to pensions	<u>0.1</u>	<u>0.2</u>	-25.4%
Total Net Position	<u>\$ 11,358.8</u>	<u>\$ 10,735.5</u>	5.8%

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

	<u>2017</u>	<u>2016</u>	<u>Total % Change</u>
Additions:			
Contributions	\$ 168.1	\$ 162.0	3.8%
Net Investment Income	1,265.3	151.0	738.1%
Net Securities Lending Income	1.2	1.4	-16.1%
Purchase of Units	<u>648.1</u>	<u>763.2</u>	-15.1%
Total Additions	<u>2,082.7</u>	<u>1,077.6</u>	93.3%
Deductions:			
Payments to TFFR members	196.5	186.0	5.7%
Administrative Expenses	3.5	2.9	19.1%
Redemption of Units	<u>910.7</u>	<u>265.4</u>	243.1%
Total Deductions	<u>1,110.7</u>	<u>454.3</u>	144.5%
Total Change in Net Position	<u>\$ 972.0</u>	<u>\$ 623.3</u>	56.0%

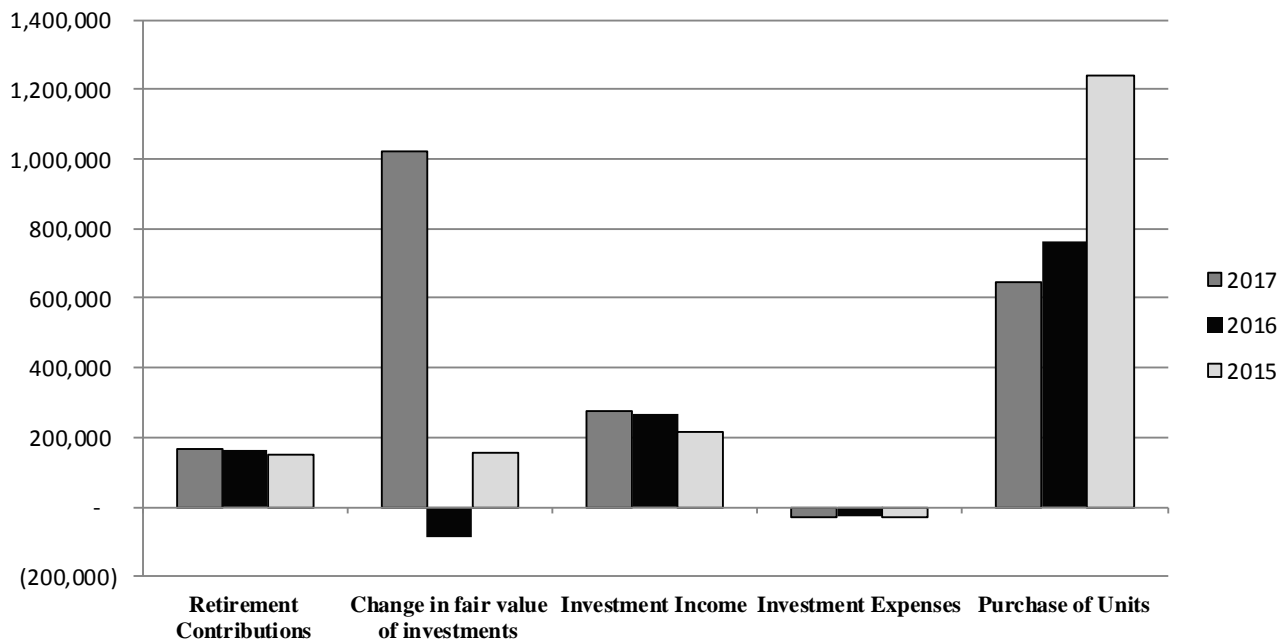
North Dakota Retirement and Investment Office
Management’s Discussion and Analysis
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	2016	2015	Total % Change
Additions:			
Contributions	\$ 162.0	\$ 152.5	6.3%
Net Investment Income	151.0	340.0	-55.6%
Net Securities Lending Income	1.4	-	100.0%
Purchase of Units	763.2	1,239.9	-38.4%
Total Additions	1,077.6	1,732.4	-37.8%
Deductions:			
Payments to TFFR members	186.0	172.2	8.0%
Administrative Expenses	2.9	2.9	1.9%
Redemption of Units	265.4	249.1	6.6%
Total Deductions	454.3	424.2	7.1%
 Total Change in Net Position	 \$ 623.3	 \$ 1,308.2	 -52.4%

Statement of Changes in Net Position – Additions

Contributions collected by the pension trust fund increased by \$6.1 million or 3.8% over the previous fiscal year 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) increased by \$1.1 billion or 731% from last year. This was the result of very strong financial markets during the fiscal year. Deposits of funds into the investment trust fund (purchase of units) decreased by \$115.1 million or 15.1% partially due to lower oil and gas tax collections affecting the Legacy Fund.

**Additions to Net Position
(in thousands)**



North Dakota Retirement and Investment Office
 Management’s Discussion and Analysis
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Statement of Changes in Net Position – Deductions

Benefits paid to TFFR plan participants, including partial lump-sum distributions, increased by \$10.5 million or 5.7% during the fiscal year ended June 30, 2017. This was 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 upon. Refunds increased in fiscal year 2017 by \$61K or 1.1%.

Administrative expenses increased by \$559K in fiscal year 2017. This increase was mainly due to an increase in IT contractual services, including the addition of investment risk analysis/monitoring software in the second half of the fiscal year and the payment of the biennial retirement administration software maintenance, as well as an increase in pension expense due to RIO’s participation in the NDPERS pension plan.

The redemption of units in the investment trust funds increased by \$645.3 million or 243.1% due mainly to the drawdown of the Budget Stabilization Fund to cover the State’s income shortfall during the 2015-17 biennium.

**Deductions from Net Position
(in thousands)**



Conclusion

For the fiscal year ended June 30, 2017, the pension investment pool and the Legacy Fund generated net time weighted investment returns of 12.9% and 12.0%, respectively, surpassing their respective policy benchmarks. The TFFR pension plan generated a net time weighted return of 12.9%, also exceeding its policy benchmark. The insurance investment pool also performed well and achieved a net time weighted return of 7.8% last year. Investment returns exceeded long-term expectations in fiscal 2017 due to the surprising strength and resilience of the global financial markets. Investment performance benefitted from relatively low volatility throughout most of last year despite increasing concerns over geopolitical risk in the U.S. and abroad. Global equities earned 19% overall with the pension international equity portfolio (up 21%) outperforming U.S. equity (up 17%). The story was reversed within fixed income, where U.S. centric debt strategies returned over 6% while international debt earned less than 1%. Real asset performance was mixed with strong, above benchmark returns posted in real estate and infrastructure (both up 9%), while our timber portfolio lost 9% in the last year. Private equity returned 11% for the 1-year ended June 30, 2017.

While cumulative returns in the post-credit crisis era have been strong, investors today face numerous

North Dakota Retirement and Investment Office
Management's Discussion and Analysis
June 30, 2017 and 2016

challenges in the future that may limit the potential for high market returns and amplify investment risk. First, one could argue that many asset classes and strategies no longer offer compelling valuations for investors. Second, the ever-growing debt burden from unprecedented monetary policy and muted economic growth in a range of economies makes it less and less likely that authorities will be in a position to provide a cushion in a downturn when it occurs. Finally, the specter of the Federal Reserve continuing to raise short-term interest rates in the near future poses a challenge to certain asset classes and strategies to varying degrees. To meet this challenge, the State Investment Board will continue to research strategies and investment options that mitigate and diversify the sources of risk accepted to address funding issues in the challenging years ahead.

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.

As of July 1, 2017, TFFR's funding level was 63.7% on an actuarial basis (and 63.2% on a market basis). Investment performance for FY2017, and for the last five years, has been greater than expected, resulting in improvement in TFFR's funding status in 2017. Over the long term, the plan's funding level is expected to gradually improve with full funding expected in 30 years, if all actuarial assumptions are met in the future, including the 7.75% 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, 2017 and 2016

	Pension Trust		Investment Trust		Total	
	2017	2016	2017	2016	2017	2016
Assets:						
Investments, at fair value						
Equities	\$ -	\$ -	\$ 2,418,573,847	\$ 1,900,710,606	\$ 2,418,573,847	\$ 1,900,710,606
Equity pool	1,275,571,112	1,131,917,482	2,175,628,519	1,921,253,074	3,451,199,631	3,053,170,556
Fixed income	-	-	1,694,762,634	1,415,525,781	1,694,762,634	1,415,525,781
Fixed income pool	521,927,872	479,086,760	1,843,971,620	2,285,945,327	2,365,899,492	2,765,032,087
Real assets	-	-	712,121,488	615,513,449	712,121,488	615,513,449
Real assets pool	407,547,460	369,771,496	949,595,089	889,167,336	1,357,142,549	1,258,938,832
Private equity pool	76,976,255	73,374,321	90,185,661	85,965,628	167,161,916	159,339,949
Cash pool	27,243,767	18,515,640	57,364,379	91,516,800	84,608,146	110,032,440
Total investments	<u>2,309,266,466</u>	<u>2,072,665,699</u>	<u>9,942,203,237</u>	<u>9,205,598,001</u>	<u>12,251,469,703</u>	<u>11,278,263,700</u>
Invested securities lending collateral	12,839,759	19,859,451	64,829,660	96,710,963	77,669,419	116,570,414
Receivables:						
Investment income	8,947,870	9,517,943	33,653,192	35,454,773	42,601,062	44,972,716
Contributions	26,326,188	25,494,939	-	-	26,326,188	25,494,939
Miscellaneous	7,398	7,963	21,368	13,880	28,766	21,843
Total receivables	<u>35,281,456</u>	<u>35,020,845</u>	<u>33,674,560</u>	<u>35,468,653</u>	<u>68,956,016</u>	<u>70,489,498</u>
Due from other state agency	36	-	14	-	50	-
Cash and cash equivalents	19,073,513	19,747,422	263,961	168,372	19,337,474	19,915,794
Equipment & Software (net of depr)	8,549	-	-	-	8,549	-
Total assets	<u>2,376,469,779</u>	<u>2,147,293,417</u>	<u>10,040,971,432</u>	<u>9,337,945,989</u>	<u>12,417,441,211</u>	<u>11,485,239,406</u>
Deferred outflows of resources						
Related to pensions	<u>384,391</u>	<u>168,324</u>	<u>252,274</u>	<u>113,380</u>	<u>636,665</u>	<u>281,704</u>
Liabilities:						
Accounts payable	191,738	118,477	201,551	38,269	393,289	156,746
Investment expenses payable	1,583,834	1,713,404	5,165,064	6,349,541	6,748,898	8,062,945
Securities lending collateral	12,839,759	19,859,451	64,829,660	96,710,963	77,669,419	116,570,414
Accrued expenses	1,685,809	1,354,756	644,911	443,950	2,330,720	1,798,706
Miscellaneous payable	-	-	16,983	17,233	16,983	17,233
Due to other state agencies	6,613	10,055	1,649	7,234	8,262	17,289
Total liabilities	<u>16,307,753</u>	<u>23,056,143</u>	<u>70,859,818</u>	<u>103,567,190</u>	<u>87,167,571</u>	<u>126,623,333</u>
Deferred inflows of resources						
Related to pensions	<u>55,342</u>	<u>70,310</u>	<u>32,528</u>	<u>42,271</u>	<u>87,870</u>	<u>112,581</u>
Net position:						
Restricted for pensions	2,360,491,075	2,124,335,288	-	-	2,360,491,075	2,124,335,288
Held in trust for external investment pool participants:						
Pension pool	-	-	2,978,824,123	2,637,238,130	2,978,824,123	2,637,238,130
Insurance pool	-	-	2,035,100,078	2,538,236,673	2,035,100,078	2,538,236,673
Held in trust for individual investment accounts						
	<u>-</u>	<u>-</u>	<u>4,956,407,159</u>	<u>4,058,975,105</u>	<u>4,956,407,159</u>	<u>4,058,975,105</u>
Total net position	<u>\$ 2,360,491,075</u>	<u>\$ 2,124,335,288</u>	<u>\$ 9,970,331,360</u>	<u>\$ 9,234,449,908</u>	<u>\$ 12,330,822,435</u>	<u>\$ 11,358,785,196</u>
Each participant unit is valued at \$1.00						
Participant units outstanding			<u>9,970,331,360</u>	<u>9,234,449,908</u>		

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, 2017 and 2016

	Pension Trust		Investment Trust		Total	
	2017	2016	2017	2016	2017	2016
Additions:						
Contributions:						
Employer contributions	\$ 86,058,868	\$ 82,839,932	\$ -	\$ -	\$ 86,058,868	\$ 82,839,932
Member contributions	79,309,153	76,342,685	-	-	79,309,153	76,342,685
Purchased service credit	2,553,200	2,768,245	-	-	2,553,200	2,768,245
Interest, penalties and other	235,890	44,966	-	-	235,890	44,966
Total contributions	168,157,111	161,995,828	-	-	168,157,111	161,995,828
Investment income:						
Net change in fair						
value of investments	221,797,589	(35,952,316)	797,372,051	(51,056,400)	1,019,169,640	(87,008,716)
Interest, dividends and other income	50,718,890	49,982,337	224,483,911	217,167,354	275,202,801	267,149,691
	272,516,479	14,030,021	1,021,855,962	166,110,954	1,294,372,441	180,140,975
Less investment expenses	6,011,791	6,034,689	23,033,769	23,130,811	29,045,560	29,165,500
Net investment income	266,504,688	7,995,332	998,822,193	142,980,143	1,265,326,881	150,975,475
Securities lending activity:						
Securities lending income	229,936	304,571	1,254,228	1,465,052	1,484,164	1,769,623
Less securities lending expenses	(45,973)	(60,907)	(250,628)	(292,852)	(296,601)	(353,759)
Net securities lending income	183,963	243,664	1,003,600	1,172,200	1,187,563	1,415,864
Purchase of units (\$1 per unit)	-	-	648,096,361	763,176,205	648,096,361	763,176,205
Total additions	434,845,762	170,234,824	1,647,922,154	907,328,548	2,082,767,916	1,077,563,372
Deductions:						
Benefits paid to participants	190,029,141	179,625,551	-	-	190,029,141	179,625,551
Partial lump-sum distributions	1,075,553	992,233	-	-	1,075,553	992,233
Refunds	5,411,850	5,350,896	-	-	5,411,850	5,350,896
Administrative expenses	2,173,431	1,851,656	1,303,019	1,066,070	3,476,450	2,917,726
Redemption of units (\$1 per unit)	-	-	910,737,683	265,411,054	910,737,683	265,411,054
Total deductions	198,689,975	187,820,336	912,040,702	266,477,124	1,110,730,677	454,297,460
Change in net position	236,155,787	(17,585,512)	735,881,452	640,851,424	972,037,239	623,265,912
Net position:						
Beginning of year	2,124,335,288	\$ 2,141,920,800	\$ 9,234,449,908	\$ 8,593,598,484	\$ 11,358,785,196	\$ 10,735,519,284
End of Year	\$ 2,360,491,075	\$ 2,124,335,288	\$ 9,970,331,360	\$ 9,234,449,908	\$ 12,330,822,435	\$ 11,358,785,196

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

North Dakota Retirement and Investment Office

Notes to Combined Financial Statements

June 30, 2017 and 2016

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 Comprehensive Annual 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. This criteria includes 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.

New Accounting Standards

In fiscal year 2016, the Plan implemented GASB Statement No. 72, Fair Value Measurement and Application, ("GASB 72"). This statement defines fair value and describes how state and local governments should define and measure fair value, what assets and liabilities should be measured at fair value, and what information about fair value should be disclosed in the notes to the financial statements. GASB 72 enhances transparency through new note disclosures as reflected in Note 3 Investments - Fair Value Measurement.

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 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. SIB manages the investments of the North Dakota Public Employees Retirement System, Bismarck City Employees and Police, City of Grand Forks Employees and City of Grand Forks Park District Employees pension plans in the pension pool. The investments of Workforce Safety & Insurance, State Fire and Tornado, State Bonding, Petroleum Tank Release Compensation Fund, Insurance Regulatory Trust, North Dakota Association of Counties Fund, Risk Management, Risk Management Workers Comp, PERS Group Insurance, City of Bismarck Deferred Sick Leave, City of Fargo FargoDome Permanent Fund, Cultural Endowment Fund, ND State Board of Medicine, and Budget Stabilization Fund are managed in the insurance pool. The Legacy

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Fund, Job Service of North Dakota, Tobacco Prevention and Control Fund, and PERS Retiree Health investments are managed by SIB in individual investment accounts; except for a small portion of the Legacy Fund fixed income assets that will remain pooled until they are liquidated at a future date and their cash allocation that will remain pooled for operational efficiency.

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 the 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 it does not budget by fund. The

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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:

	<u>Years</u>
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

Most 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 U.S. 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.

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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

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the ND Public Employees Retirement System (NDPERS) 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, 2017 and 2016 were deposited in the Bank of North Dakota. At June 30, 2017 and 2016, the carrying amount of TFFR's deposits was \$19,073,513 and \$19,747,422, respectively, and the bank balance was \$19,081,337 and \$19,799,474, 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 and a pension pool cash account are recorded as investments and have a cost and carrying value of \$92,016,033 and \$81,143,786 at June 30, 2017 and 2016, respectively. In addition these funds carry cash and cash equivalents totaling \$263,961 and \$168,372 at June 30, 2017 and 2016, 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

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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, 2017 and 2016, the following tables show the investments by investment type and maturity (expressed in thousands).

2017	Total Fair Value	Less than 1 Year	1-6 Years	6-10 Years	More than 10 Years
Asset Backed Securities	\$ 101,522	\$ -	\$ 16,105	\$ 24,636	\$ 60,781
Bank Loans	3,687	100	2,301	1,286	-
Commercial Mortgage-Backed	119,452	-	3,999	777	114,676
Corporate Bonds	1,199,355	44,108	391,131	376,693	387,423
Corporate Convertible Bonds	14,457	-	5,026	4,582	4,849
Government Agencies	105,235	8,803	62,171	20,754	13,507
Government Bonds	464,441	2,402	155,204	105,268	201,567
Gov't Mortgage Backed	651,844	1,055	18,024	27,933	604,832
Gov't-issued CMB	57,767	343	4,089	7,011	46,324
Index Linked Government Bonds	31,880	-	13,599	12,357	5,924
Municipal/Provincial Bonds	46,016	4,172	11,454	7,198	23,192
Non-Government Backed CMOs	73,991	2,567	10,902	571	59,951
Other Fixed Income	3,575	1,681	1,894	-	-
Repurchase Agreements	(3,208)	(3,208)	-	-	-
Short Term Bills and Notes	7,827	7,827	-	-	-
Funds/Pooled Investments	1,962,531	-	361,109	1,043,860	557,562
Total Debt Securities	<u>\$ 4,840,372</u>	<u>\$ 69,850</u>	<u>\$ 1,057,008</u>	<u>\$ 1,632,926</u>	<u>\$ 2,080,588</u>

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2016	Total Fair Value	Less than 1 Year	1-6 Years	6-10 Years	More than 10 Years
Asset Backed Securities	\$ 214,093	\$ 1,354	\$ 73,333	\$ 35,566	\$ 103,840
Bank Loans	7,523	-	5,407	2,116	-
Commercial Mortgage-Backed	143,357	67	17	5,760	137,513
Corporate Bonds	1,292,451	56,049	432,650	433,705	370,047
Corporate Convertible Bonds	8,502	-	6,629	190	1,683
Government Agencies	68,113	5,900	44,149	8,266	9,798
Government Bonds	567,638	26,480	273,899	107,544	159,715
Gov't Mortgage Backed and CMB	715,219	256	27,624	36,868	650,471
Repurchase Agreements	(14,482)	(14,482)	-	-	-
Index Linked Government Bonds	34,183	5,903	-	7,456	20,824
Municipal/Provincial Bonds	36,951	154	5,845	9,704	21,248
Non-Government Backed CMOs	60,641	-	8,303	900	51,438
Other Fixed Income	6,528	1,455	5,073	-	-
Short Term Bills and Notes	17,161	17,161	-	-	-
Funds/Pooled Investments	1,713,792	172,187	701,969	442,005	397,631
Total Debt Securities	\$ 4,871,670	\$ 272,484	\$ 1,584,898	\$ 1,090,080	\$ 1,924,208

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 IOs valued at \$8.7 million and \$7.7 million and POs valued at \$4.8 million and \$6.7 million at June 30, 2017 and 2016, 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, 2017 and 2016, (expressed in thousands).

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2017	Total Fair Value	Credit Rating*										
		AAA	AA	A	BBB	BB	B	CCC	CC	C	D	NR
Asset Backed Securities	\$ 101,522	\$ 55,001	\$ 4,386	\$ 9,003	\$ 10,555	\$ 4,143	\$ 2,805	\$ 11,811	\$ 1,766	\$ 67	\$ 1,985	\$ -
Bank Loans	3,687	-	-	-	396	1,993	426	-	-	-	-	872
Commercial Mortgage Backed	85,465	44,485	8,826	6,350	6,958	7,045	4,366	5,349	455	-	1,532	99
Corporate Bonds	1,199,355	8,280	38,298	195,825	744,656	142,769	60,766	8,201	-	105	455	-
Corporate Convertible Bonds	14,457	-	-	-	1,627	3,499	3,911	5,420	-	-	-	-
Gov't Agencies	89,139	11,380	53,086	3,228	19,666	1,779	-	-	-	-	-	-
Gov't Bonds	123,863	-	9,813	46,574	45,427	17,267	4,782	-	-	-	-	-
Gov't Mortgage Backed	492,868	-	492,868	-	-	-	-	-	-	-	-	-
Gov't Issued CMB	11,824	-	11,597	-	227	-	-	-	-	-	-	-
Municipal/Provincial Bonds	46,016	3,909	14,473	9,834	15,514	-	2,286	-	-	-	-	-
Non-Gov't Backed CMOs	72,957	17,748	10,630	20,144	3,981	3,000	3,246	7,752	3,588	-	2,868	-
Other Fixed Income	3,575	3,575	-	-	-	-	-	-	-	-	-	-
Repurchase Agreements	(3,208)	-	(3,208)	-	-	-	-	-	-	-	-	-
Short Term Bills & Notes	3,892	-	3,597	295	-	-	-	-	-	-	-	-
Funds/Pooled Investments	1,962,531	161,292	1,005,167	198,871	329,090	247,377	20,734	-	-	-	-	-
Total Credit Risk of Debt Securities	4,207,943	\$ 305,670	\$ 1,649,533	\$ 490,124	\$ 1,178,097	\$ 428,872	\$ 103,322	\$ 38,533	\$ 5,809	\$ 172	\$ 6,840	\$ 971
US Gov't & Agencies **	632,429											
Total Debt Securities	\$ 4,840,372											

2016	Total Fair Value	Credit Rating*										
		AAA	AA	A	BBB	BB	B	CCC	CC	C	D	NR
Asset Backed Securities	\$ 213,219	\$ 123,092	\$ 21,414	\$ 30,455	\$ 19,980	\$ 3,822	\$ 2,797	\$ 9,202	\$ 1,804	\$ -	\$ 653	\$ -
Bank Loans	7,523	-	-	-	2,977	2,305	2,241	-	-	-	-	-
Commercial Mortgage Backed	111,063	47,154	23,370	10,891	9,682	5,798	6,791	6,618	-	-	759	-
Commercial Paper	-	-	-	-	-	-	-	-	-	-	-	-
Corporate Bonds	1,292,451	2,026	45,795	218,343	783,700	165,038	64,841	9,969	471	-	2,268	-
Corporate Convertible Bonds	8,502	-	-	-	34	2,689	3,905	1,477	-	-	397	-
Gov't Agencies	63,908	4,305	44,179	1,066	14,358	-	-	-	-	-	-	-
Gov't Bonds	128,745	8,315	12,427	34,160	41,997	28,531	3,315	-	-	-	-	-
Gov't Issued Commercial & Gov't Mortgage Backed	507,990	2,587	505,403	-	-	-	-	-	-	-	-	-
Index Linked Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Municipal/Provincial Bonds	36,951	4,517	16,036	7,456	8,788	-	-	-	-	-	-	154
Non-Gov't Backed CMOs	59,280	7,493	6,533	18,982	8,676	699	4,242	4,664	2,924	-	5,067	-
Other Fixed Income	6,528	-	6,528	-	-	-	-	-	-	-	-	-
Repurchase Agreements	(14,482)	3,700	(18,182)	-	-	-	-	(18,182)	-	-	-	-
Short Term Bills & Notes	15,697	-	15,697	-	-	-	-	-	-	-	-	-
Funds/Pooled Investments	1,713,792	107,858	940,656	418,236	190,616	49,459	6,967	-	-	-	-	-
Total Credit Risk of Debt Securities	4,151,167	\$ 311,047	\$ 1,619,856	\$ 739,589	\$ 1,080,808	\$ 258,341	\$ 95,099	\$ 31,930	\$ 5,199	\$ -	\$ 9,144	\$ 154
US Gov't & Agencies **	720,503											
Total Debt Securities	\$ 4,871,670											

- * 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 *Gov't Issued Commercial & Gov't Mortgage Backed*, *Gov't Agencies*, and

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Short Term Bills and Notes categories are issued by FNMA, FDIC, FHLB, FHLMC, FICO, FAMC and NCUA and TVA.

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, 2017 and 2016, 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 U.S. 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, 2017 and 2016 (expressed in thousands).

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2017

Currency	Short-Term	Debt	Equity	Real Estate	Total
Argentine peso	\$ -	\$ 509	\$ -	\$ -	\$ 509
Australian dollar	3,344	8,461	64,338	-	76,143
Brazilian real	641	6,742	14,678	-	22,061
British pound sterling	14,956	9,761	195,199	-	219,916
Canadian dollar	6,084	-	55,194	-	61,278
Chilean peso	54	-	-	-	54
Colombian peso	204	-	-	-	204
Czech koruna	-	-	760	-	760
Danish krone	-	-	13,941	-	13,941
Euro	(13,111)	13,951	401,660	9,954	412,454
Hong Kong dollar	1,601	-	77,234	-	78,835
Hungarian forint	89	-	4,413	-	4,502
Indian rupee	7,193	1,398	-	-	8,591
Indonesian Rupiah	59	6,939	1,003	-	8,001
Japanese yen	712	381	221,644	-	222,737
Malaysian Ringgit	74	8,006	1,530	-	9,610
Mexican peso	(45)	26,092	-	-	26,047
New Israeli shekel	543	-	4,103	-	4,646
New Taiwan dollar	(378)	-	3,896	-	3,518
New Zealand dollar	88	-	2,177	-	2,265
Norwegian krone	8,121	-	12,450	-	20,571
Peruvian nuevo sol	2	-	-	-	2
Polish zloty	(5)	9,101	1,684	-	10,780
Russian ruble	325	-	-	-	325
Singapore dollar	300	-	6,177	-	6,477
South African rand	47	7,137	7,663	-	14,847
South Korean won	134	-	12,364	-	12,498
Swedish krona	6,408	-	39,213	-	45,621
Swiss franc	128	-	79,937	-	80,065
Thai baht	197	-	5,013	-	5,210
Turkish lira	25	2,461	806	-	3,292
International commingled funds (various currencies)	-	105,946	916,411	61,315	1,022,357
Total international investment securities	\$ 37,790	\$ 206,885	\$ 2,143,488	\$ 71,269	\$ 2,398,117

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2016

Currency	Short-Term	Debt	Equity	Total
Australian dollar	\$ 508	\$ 11,044	\$ 40,740	\$ 52,292
Brazilian real	560	7,856	4,035	12,451
British pound sterling	(839)	8,370	194,291	201,822
Canadian dollar	48	-	22,605	22,653
Chilean peso	54	9,704	853	10,611
Chinese yuan renminbi	(17)	-	-	(17)
Columbian peso	-	2,184	-	2,184
Czech koruna	-	-	743	743
Israeli shekel	46	-	5,332	5,378
Danish krone	70	-	12,863	12,933
Euro	(9,287)	12,557	287,286	290,556
Hong Kong dollar	419	-	67,721	68,140
Hungarian forint	3	5,619	1,912	7,534
Indian rupee	6,858	-	-	6,858
Indonesian Rupiah	33	6,771	1,051	7,855
Japanese yen	2,582	397	190,320	193,299
Malaysian Ringgit	59	6,469	-	6,528
Mexican peso	(304)	25,778	7,358	32,832
New Zealand dollar	28	5,187	2,476	7,691
Norwegian krone	4,735	-	12,551	17,286
Polish zloty	-	2,952	1,177	4,129
Russian ruble	(546)	-	-	(546)
Singapore dollar	113	-	6,049	6,162
South African rand	93	4,540	9,775	14,408
South Korean won	486	-	18,227	18,713
Swedish krona	9,995	-	27,601	37,596
Swiss franc	62	-	68,795	68,857
Taiwan dollar	9	-	2,807	2,816
Thai baht	387	-	3,838	4,225
Turkish lira	42	-	1,173	1,215
International commingled funds (various currencies)	-	110,368	762,502	872,870
Total international investment securities	\$ 16,197	\$ 219,796	\$ 1,754,081	\$ 1,990,074

Negative amounts represent short positions.

Prior to 2017, foreign currency related to real estate was included in the equity column.

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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, 2017 and 2016, 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 \$133.8 million and \$(7.5) million for fiscal years 2017 and 2016, respectively. At June 30, 2017 and 2016, the SIB investment portfolio had the notional futures balances shown below (expressed in thousands).

<u>Futures</u>	<u>Notional Value</u>	
	<u>June 30, 2017</u>	<u>June 30, 2016</u>
Cash & Cash Equivalent Derivative Futures		
Long	\$ 68,249	\$ 37,736
Short	(725,425)	(946,602)
Equity Derivative Futures		
Long	623,945	623,571
Short	-	-
Fixed Income Derivative Futures		
Long	287,137	509,240
Short	(194,390)	(290,226)
Total Futures	<u>\$ 59,516</u>	<u>\$ (66,281)</u>

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 \$(0.2) million and \$0.4 million for fiscal years 2017 and 2016, respectively. At June 30, 2017 and 2016, the SIB investment portfolio had the following option balances (expressed in thousands).

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<u>Options</u>	Fair Value	
	<u>June 30, 2017</u>	<u>June 30, 2016</u>
Cash & Other Options		
Call	\$ (2)	\$ (72)
Put	23	72
Fixed Income Options		
Call	88	(37)
Put	203	(1)
Total Options	<u>\$ 312</u>	<u>\$ (38)</u>

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, currency 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 \$9.2 million and \$(10.7) million for fiscal years 2017 and 2016, respectively. The maximum loss that would be recognized at June 30, 2017 and 2016, if all counterparties failed to perform as contracted is \$2.0 million and \$3.25 million, respectively. Swap fair values are determined by a third party pricing source. At June 30, 2017 and 2016, 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.

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Counterparty/Moody's Rating	Notional Amount		Expiration Date Range	Fair Value	
	June 30, 2017	June 30, 2016		June 30, 2017	June 30, 2016
Bank of America/A3 (1 contract)	\$ -	\$ (2,600)	12/2018	\$ -	\$ 40
Bank of America/A1 (2 contracts)	(2,700)		12/2018 - 12/2021	35	
Barclays/A2 (1 contract)		(100)	9/2019		1
BNP Paribas/A1 (2 contracts)	(600)		6/2019 - 6/2022	(5)	
BNP Paribas/A2 (2 contracts)		(450)	12/2016 - 6/2019		(44)
Citibank/A1 (4 contracts)	(7,750)		12/2018 - 12/2019	119	
Citibank/A3 (4 contracts)		(11,050)	12/2018 - 12/2019		105
Citigroup Global Markets/A1		(6,500)	12/2018		75
Credit Suisse First Boston/A1 (8 contracts)	11,550		12/2017 - 6/2022	(759)	
Credit Suisse First Boston/A1 (2 contracts)		4,340	6/2021		(81)
Deutsche Bank/A2 (2 contracts)		2,400	6/2017		(18)
Goldman Sachs/A3 (2 contracts)	(1,800)		6/2019 - 3/2020	22	
Goldman Sachs/A3 (5 contracts)		(1,850)	12/2016 - 3/2020		(2)
HSBC Bank/A1 (1 contract)	(100)		6/2022	(1)	
JP Morgan Chase/Aa3 (3 contracts)	(930)		12/2019 - 9/2020	2	
JP Morgan Chase/Aa3 (14 contracts)		2,181	12/2016 - 11/2045		(51)
Total Credit Default Swaps	\$ (2,330)	\$ (13,629)		\$ (587)	\$ 25

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

Currency Swaps

Currency risk represents the exposure to fair value losses arising from the change in price of one currency against another. A currency swap is a foreign-exchange agreement between two parties to exchange principal and interest in one currency for the same in another currency.

Counterparty/Moody's Rating	Notional Amount		Expiration Date Range	Fair Value	
	June 30, 2017	June 30, 2016		June 30, 2017	June 30, 2016
Deutsche Bank London/A2	\$ -	\$ 281	5/2017	\$ -	\$ 1
Goldman Sachs/A3		150	1/2017		5
JP Morgan Chase/Aa3 (1 contract)	106		2/2020	(6)	
JP Morgan Chase/Aa3 (8 contracts)		181,560	11/2016 - 11/2024		-
Total Currency Swaps	\$ 106	\$ 181,991		\$ (6)	\$ 6

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.

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Counterparty/Moody's Rating	Notional Amount		Expiration Date Range	Fair Value	
	June 30, 2017	June 30, 2016		June 30, 2017	June 30, 2016
Bank of America/A3 (1 contract)	\$ -	\$ 6,243	1/2018	\$ -	\$ (50)
Citigroup Global Markets/A1 (3 contracts)		(3,055)	8/2020		(178)
Credit Suisse First Boston/A1 (34 contracts)	(231,315)		12/2017 - 3/2048	1,168	
Credit Suisse First Boston/A1 (24 contracts)		(235,092)	12/2017 - 6/2046		(3,352)
Credit Suisse International/A1 (4 contracts)		8,137	1/2018 - 1/2021		(76)
Deutsche Bank/A2 (4 contracts)		6,697	1/2018 - 1/2021		(18)
Goldman Sachs/A3 (1 contract)	5		12/2017	-	
Goldman Sachs/A3 (3 contracts)		7,850	1/2021 - 6/2026		(69)
HSBC Bank/A1 (2 contracts)		20,500	3/2020 - 9/2033		(4)
JP Morgan Chase/Aa3 (130 contracts)	42,989		8/2017 - 9/2046	1,322	
JP Morgan Chase/Aa3 (86 contracts)		(4,765)	2/2019 - 6/2046		(3,798)
Morgan Stanley/A3 (1 contract)	3,900		5/2022	(3)	
Morgan Stanley/Baa1 (1 contract)		3,900	5/2022		8
Total Interest Rate Swaps	\$ (184,421)	\$ (189,585)		\$ 2,487	\$ (7,537)

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).

Counterparty/Moody's Rating	Notional Amount		Expiration Date Range	Fair Value	
	June 30, 2017	June 30, 2016		June 30, 2017	June 30, 2016
Bank of America/A3 (7 contracts)	\$ -	\$ 700	1/2020	\$ -	\$ (10)
Credit Suisse First Boston/A1 (3 contracts)	426		1/2020 - 11/2030	(3)	
BNP Paribas/A2 (3 contracts)		600	1/2020		(8)
Citibank/A3 (4 contracts)		520	3/2020 - 6/2030		(11)
Deutsche Bank/A2 (1 contract)		206	11/2030		16
Goldman Sachs/A3 (5 contracts)	1,530		3/2020 - 1/2030	(14)	
Goldman Sachs/A3 (11 contracts)		4,430	1/2020 - 1/2030		(52)
Total Inflation Swaps	\$ 1,956	\$ 6,456		\$ (17)	\$ (65)

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.

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Counterparty/Moody's Rating	Notional Amount		Expiration Date Range	Fair Value	
	June 30, 2017	June 30, 2016		June 30, 2017	June 30, 2016
Credit Suisse International/A1 (2 contracts)	\$ 4,800	\$ -	1/2041	\$ 21	\$ -
Credit Suisse International/A1 (2 contracts)		2,252	1/2041		(26)
Total Total Return Swaps	\$ 4,800	\$ 2,252		\$ 21	\$ (26)

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 \$0.5 million and \$0.9 million for fiscal years 2017 and 2016, respectively. At June 30, 2017 and 2016, the SIB's investment portfolio included the currency forwards balances shown below (expressed in thousands).

Currency	Cost	Purchases	Sales	Fair Value	
				6/30/2017	6/30/2016
Australian dollar	\$ 3,175	\$ 3,234	\$ (59)	\$ 3,297	\$ (60)
Brazilian real	501	1,028	(527)	480	230
British pound sterling	12,934	14,836	(1,902)	13,007	(1,222)
Canadian dollar	6,003	6,280	(277)	6,110	(84)
Chilean peso	87	3,766	(3,679)	-	9,704
Chinese yuan renminbi	6	228	(222)	-	(4,492)
Colombian peso	214	214	-	204	-
Euro	(15,804)	264	(16,068)	(16,369)	(7,919)
Hong Kong dollar	-	-	-	-	4,475
Hungarian forint	(19)	-	(19)	(20)	(19)
Indian rupee	7,186	7,186	-	7,193	6,858
Israeli shekel	(26)	-	(26)	(27)	-
Japanese yen	(320)	7,553	(7,873)	(329)	(2,353)
South Korean won	(169)	-	(169)	(166)	-
Mexican peso	(1,129)	561	(1,690)	(1,125)	(467)
Norwegian krone	7,146	7,146	-	7,333	4,099
Peruvian nuevo sol	-	332	(332)	2	-
Polish zloty	43	43	-	46	-
Russian ruble	338	424	(86)	325	(546)
Singapore dollar	(513)	-	(513)	(514)	-
South African rand	(514)	-	(514)	(515)	-
Swedish krona	6,245	6,245	-	6,415	9,986
Turkish lira	446	446	-	446	-
New Taiwan dollar	(503)	-	(503)	(498)	-
United States dollar	(25,329)	34,457	(59,786)	(25,329)	(18,315)
Total forwards subject to currency risk				\$ (34)	\$ (125)

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Derivative Interest Rate Risk

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, 2017 and 2016, the tables below show the SIB's derivative investments subject to interest rate risk (expressed in thousands).

2017

	Total Notional					Greater than
	Value	3 months or less	3 to 6 months	6 to 12 months	1-5 years	5 years
Futures-interest rate contracts	\$ (564,429)	\$ (615,292)	\$ 128,182	\$ (63,483)	\$ (13,836)	\$ -
Total	\$ (564,429)	\$ (615,292)	\$ 128,182	\$ (63,483)	\$ (13,836)	\$ -

	Total Fair					Greater than
	Value	3 months or less	3 to 6 months	6 to 12 months	1-5 years	5 years
Options - caps and floors	\$ 46	\$ -	\$ -	\$ -	\$ 46	\$ -
Options - interest rate contracts	(1)	(1)	-	-	-	-
Options on futures	253	253	-	-	-	-
Swaps - interest rate contracts	2,470	136	131	97	532	1,574
Swaps - credit contracts	(587)	-	1	-	(588)	-
Total	\$ 2,181	\$ 388	\$ 132	\$ 97	\$ (10)	\$ 1,574

2016

	Total Notional					Greater than
	Value	3 months or less	3 to 6 months	6 to 12 months	1-5 years	5 years
Futures-interest rate contracts	\$ (689,852)	\$ (586,165)	\$ (93,571)	\$ 37,736	\$ (47,852)	\$ -
Options-margined interest rate contracts	(2)	(2)	-	-	-	-
Total	\$ (689,854)	\$ (586,167)	\$ (93,571)	\$ 37,736	\$ (47,852)	\$ -

	Total Fair					Greater than
	Value	3 months or less	3 to 6 months	6 to 12 months	1-5 years	5 years
Options on interest rate futures	\$ (37)	\$ (37)	\$ -	\$ -	\$ -	\$ -
Options - credit contracts	(1)	(1)	-	-	-	-
Swaps - interest rate contracts	(7,602)	-	-	-	(1,103)	(6,499)
Swaps - credit contracts	24	-	1	(16)	83	(44)
Total	\$ (7,616)	\$ (38)	\$ 1	\$ (16)	\$ (1,020)	\$ (6,543)

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.

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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, 2017 and 2016 (expressed in thousands).

2017	Fair Value 6/30/17	Fair Value Measures Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level				
Short Term Securities				
Short Term Bills and Notes	\$ 7,826	\$ -	\$ 7,532	\$ 294
Short Term Securities	7,826	-	7,532	294
Fixed income investments				
Asset Backed Securities	100,985	-	100,823	162
Bank Loans	3,687	-	3,687	-
Commercial Mortgage-Backed	119,451	-	119,451	-
Corporate Bonds	1,199,355	-	1,198,360	995
Corporate Convertible Bonds	14,456	-	14,456	-
Funds - Fixed Income ETF	29,259	29,259	-	-
Government Agencies	104,775	-	98,097	6,678
Government Bonds	464,441	-	464,441	-
Government Mortgage Backed Securities	652,306	-	651,753	553
Gov't-issued Commercial Mortgage-Backed	57,767	-	57,767	-
Index Linked Government Bonds	31,880	-	31,880	-
Municipal/Provincial Bonds	46,016	-	46,016	-
Non-Government Backed C.M.O.s	65,402	-	62,487	2,915
Other Fixed Income	3,578	-	3,575	3
Total fixed income investments	2,893,358	29,259	2,852,793	11,306
Equity investments				
Common Stock	3,752,805	3,752,771	-	34
Convertible Equity	1,746	-	1,746	-
Funds - Common Stock	4,149	4,149	-	-
Funds - Equities ETF	221,791	221,791	-	-
Preferred Stock	2,898	2,898	-	-
Rights/Warrants	12	-	-	12
Stapled Securities	4,547	4,547	-	-
Total equity investments	3,987,948	3,986,156	1,746	46
Derivative investments				
Exchange Cleared Swaps	1,842	-	1,851	(9)
Options	312	253	59	-
Swaps	58	-	58	-
Total derivative investments	2,212	253	1,968	(9)
Total investments by fair value level	\$ 6,891,344	\$ 4,015,668	\$ 2,864,039	\$ 11,637

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		Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Investments measured at the net asset value (NAV)				
Commingled Funds-Debt	\$ 1,729,361	\$ -	Daily, monthly	1-15 days
Commingled Funds-Equities	1,039,323	-	Daily, monthly	1-15 days
Distressed Debt	318,519	12,500	Quarterly, Not eligible	60 days
Long/Short	193,356	-	Monthly	15 days
Mezzanine Debt	1,781	8,526	Not eligible	Not eligible
Private Equity	167,162	286,819	Not eligible	Not eligible
Real Assets	1,603,883	163,475	Quarterly, Not eligible	30-90 days
Total investments measured at the NAV	\$ 5,053,385	\$ 471,320		
Investments at other than fair value				
Cash and adjustments to cash	\$ 244,004			
Bank Certificates of Deposit	56,819			
Other miscellaneous securities	9,126			
Repurchase Agreements	(3,208)			
Total investments at other than fair value	\$ 306,741			
Total investments	<u>\$ 12,251,470</u>			

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2016	Fair Value Measures Using			
	Fair Value 6/30/16	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level				
Short Term Securities				
Short Term Bills and Notes	\$ 17,161	\$ -	\$ 17,161	\$ -
Short Term Securities	17,161	-	17,161	-
Fixed income investments				
Asset Backed Securities	214,093	-	212,013	2,080
Bank Loans	7,524	-	7,524	-
Commercial Mortgage-Backed	143,357	-	141,957	1,400
Corporate Bonds	1,292,451	-	1,289,656	2,795
Corporate Convertible Bonds	8,502	-	8,312	190
Funds - Fixed Income ETF	29,531	29,531	-	-
Government Agencies	68,113	-	68,113	-
Government Bonds	567,638	-	567,638	-
Government Mortgage Backed Securities	657,728	-	656,882	846
Gov't-issued Commercial Mortgage-Backed	57,491	-	57,491	-
IndexLinked Government Bonds	34,183	-	34,183	-
Municipal/Provincial Bonds	36,951	-	36,951	-
Non-Government Backed C.M.O.s	60,641	-	55,099	5,542
Other Fixed Income	6,528	-	6,528	-
Total fixed income investments	3,184,731	29,531	3,142,347	12,853
Equity investments				
Common Stock	3,136,055	3,130,843	4,375	837
Convertible Equity	1,495	899	596	-
Funds - Common Stock	22,430	22,430	-	-
Funds - Equities ETF	84,030	84,030	-	-
Preferred Stock	2,550	2,550	-	-
Rights/Warrants	12	-	-	12
Stapled Securities	2,228	2,228	-	-
Total equity investments	3,248,800	3,242,980	4,971	849
Derivative investments				
Exchange Cleared Swaps	(6,584)	-	(6,584)	-
Options	(38)	(52)	14	-
Swaps	(1,015)	-	(1,018)	3
Total derivative investments	(7,637)	(52)	(7,588)	3
Total investments by fair value level	\$ 6,443,055	\$ 3,272,459	\$ 3,156,891	\$ 13,705

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Investments measured at the net asset value (NAV)		Unfunded Commitments	Redemption	
			Frequency (If Currently Eligible)	Redemption Notice Period
Commingled Funds-Debt	\$ 1,510,097	\$ -	Daily, monthly	1-15 days
Commingled Funds-Equities	885,713	-	Daily, monthly	1-15 days
Distressed Debt	268,329	20,000	Quarterly, Not eligible	60 days
Long/Short	167,752	-	Monthly	15 days
Mezzanine Debt	3,686	13,147	Not eligible	Not eligible
Private Equity	159,340	107,028	Not eligible	Not eligible
Real Assets	1,457,778	212,297	Quarterly, Not eligible	30-90 days
Total investments measured at the NAV	\$ 4,452,695	\$ 352,472		
Investments at other than fair value				
Cash and adjustments to cash	\$ 315,852			
Bank Certificates of Deposit	81,144			
Repurchase Agreements	(14,482)			
Total investments at other than fair value	\$ 382,514			
Total investments	\$ 11,278,264			

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.

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 asset class for private equity investments. The SIB does not have the option to request redemptions from its private equity funds. The

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General Partner distributes earnings and proceeds from the sale of the underlying investments as transactions occur. The SIB has \$286.8 million and \$107.0 million in unfunded private equity commitments as of June 30, 2017 and 2016, 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.

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 fixed income asset classes. As of June 30, 2017 and 2016, unfunded commitments in one of its two distressed debt funds totaled \$12.5 million and \$20.0 million, respectively. This fund is not eligible for redemptions. The other fund is eligible for redemptions with quarterly liquidity and 60 days notice, and has no unfunded commitment.

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 below investment grade fixed income allocation. The two funds in this category are not eligible for redemptions, have remaining lives of 2-5 years, and unfunded commitments of \$8.5 million and \$13.2 million as of June 30, 2017 and 2016 respectively.

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 US 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, 2017 and 2016.

Real Estate and Real “Tangible” 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 Estate and 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 asset class for these types of investments. There are currently 11 different real estate funds in the portfolio. Three of those funds are open-ended vehicles that accept redemption requests quarterly with a 30-90 day notification period. One fund is in wind-down and will be distributing the final proceeds within the next 6-12 months. The remaining seven funds are closed-ended limited partnerships that are not eligible for redemptions. Those eight funds have a combined unfunded commitment of \$78.4 million and \$112.2 million as of June 30, 2017 and 2016, respectively.

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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 has a dedicated asset class for these types of investments. 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 2-8 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 has a dedicated asset class for these types of investments. The infrastructure investments in the portfolio as of June 30, 2017 and 2016, include both open and closed-ended funds. The 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 closed-ended funds have unfunded commitments of \$85.0 million and \$100.1 million at June 30, 2017 and 2016, 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, U.S. government securities and irrevocable letters of credit. U.S. securities are loaned versus collateral valued at 102% of the fair value of the securities plus any accrued interest. Non-U.S. 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 59 and 69 days as of June 30, 2017 and 2016, respectively. Cash open collateral is invested in a short term investment pool, which had an interest sensitivity of 3 days and 1 day as of June 30, 2017 and 2016. 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, 2017 and 2016 (expressed in thousands).

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	2017	Securities Lent	Non-Cash Collateral Value	Cash Collateral Investment Value
Lent for cash collateral:				
US agency securities		\$ 546	\$ -	\$ 558
US government securities		2,268	-	2,326
US corporate fixed income securities		23,063	-	23,596
Global government fixed income securities		3,285	-	3,443
US equities		43,984	-	45,032
Global equities		2,531	-	2,714
Lent for non-cash collateral:				
US agency securities		4,978	5,071	-
US government securities		2,089	2,128	-
US corporate fixed income securities		112,041	114,160	-
US equities		187,733	191,606	-
Global equities		40,229	42,734	-
Total		<u>\$ 422,747</u>	<u>\$ 355,699</u>	<u>\$ 77,669</u>
	2016	Securities Lent	Non-Cash Collateral Value	Cash Collateral Investment Value
Lent for cash collateral:				
US agency securities		\$ 10	\$ -	\$ 10
US government securities		10,435	-	10,603
US corporate fixed income securities		29,492	-	29,954
Global government fixed income securities		2,992	-	3,125
US equities		65,991	-	66,969
Global equities		5,603	-	5,909
Lent for non-cash collateral:				
US agency securities		-	-	-
US government securities		212	216	-
US corporate fixed income securities		1,574	1,599	-
US equities		18,636	18,949	-
Global equities		20,525	21,776	-
Total		<u>\$ 155,470</u>	<u>\$ 42,540</u>	<u>\$ 116,570</u>

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Note 4 - Capital Assets

	June 30, 2015	Additions	Retirements	June 30, 2016	Additions	Retirements	June 30, 2017
Office equipment	\$19,321	\$ -	\$ -	\$19,321	\$ 8,999	\$ (11,441)	\$16,879
Less accumulated depreciation on office equipment	(19,321)	-	-	(19,321)	(450)	11,441	(8,330)
Software	1,213,500	-	-	1,213,500	-	-	1,213,500
Less accumulated depreciation on software	(1,213,500)	-	-	(1,213,500)	-	-	(1,213,500)
	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 8,549</u>	<u>\$ -</u>	<u>\$ 8,549</u>

Note 5 - State Agency Transactions**Due From/To Other State Agencies**

Amounts due from/to other state agencies are as follows as of June 30, 2017 and 2016:

	2017	2016
Due To		
Information Technology Department	\$ 6,617	\$ 8,469
Office of Attorney General	1,356	8,666
Office of Management and Budget	289	154
Total due to other state agencies	<u>\$ 8,262</u>	<u>\$ 17,289</u>
Due From		
Surplus Property	<u>\$ 50</u>	<u>\$ -</u>

These 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.

Note 6 - Operating Leases

RIO leased office space under an operating lease effective July 1, 2015 through June 30, 2017. RIO also incurs rent expense at other locations on a temporary basis to sponsor retirement education for TFFR members. Rent expense totaled \$82,861 and \$81,886 for fiscal years 2017 and 2016, respectively. RIO has entered into a new lease effective July 1, 2017 through June 30, 2019. Minimum payments under that lease for fiscal 2018 and 2019 are \$86,171 annually.

Note 7 - 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, 2017 and 2016 are summarized as follows:

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	Beginning Balance 7/1/2016	Additions	Reductions	Ending Balance 6/30/2017	Amounts Due Within One Year
Accrued Leave	\$171,503	\$144,423	(\$139,062)	\$176,864	\$109,212

	Beginning Balance 7/1/2015	Additions	Reductions	Ending Balance 6/30/2016	Amounts Due Within One Year
Accrued Leave	\$155,443	\$138,889	(\$122,829)	\$171,503	\$96,470

Pension and Investment Trust Funds liquidate the accrued annual leave.

Note 8 - 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, 2017 and 2016, the number of participating employer units was 215 and 214, respectively, consisting of the following:

	June 30, 2017	June 30, 2016
Public School Districts	176	176
County Superintendents	6	6
Special Education Units	19	19
Vocational Education Units	5	5
Other	9	8
Total	<u>215</u>	<u>214</u>

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TFFR’s membership consisted of the following:

	2017	2016
Retirees and beneficiaries currently receiving benefits	8,501	8,249
Terminated employees - vested	1,600	1,601
Terminated employees - nonvested	878	779
Total	10,979	10,629
Current employees		
Vested	7,543	7,433
Nonvested	3,331	3,380
Total	10,874	10,813

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 nonvested 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.

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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 12.81% and 0.39% for the years ended June 30, 2017 and 2016, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

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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, 2017 and 2016, TFFR had net realized gains of \$72,282,438 and \$60,426,737, respectively.

Net Pension Liability

The components of the net pension liability of TFFR at June 30, 2017 and 2016 (expressed in thousands), were as follows:

	June 30, 2017	June 30, 2016
Total pension liability	\$ 3,734,017	\$ 3,589,394
Plan fiduciary net position	<u>(2,360,491)</u>	<u>(2,124,335)</u>
Net pension liability (NPL)	<u>\$ 1,373,526</u>	<u>\$ 1,465,059</u>
Plan fiduciary net position as a percentage of the total pension liability	63.2%	59.2%

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of July 1, 2017 and 2016, using the following actuarial assumptions:

Valuation date	July 1, 2017	July 1, 2016
Inflation	2.75%	2.75%
Salary increases	4.25% to 14.50%; varying by service, including inflation and productivity	4.25% to 14.50%; varying by service, including inflation and productivity
Cost of living adjustments	None	None
Investment rate of return	7.75% net of investment expenses, including inflation	7.75% net of investment expenses, including inflation

For active and inactive members, mortality rates were based on the RP-2014 Employee Mortality Table projected generationally using Scale MP-2014. For healthy retirees, mortality rates were based on the RP-2014 Healthy Annuitant Mortality Table set back one year, multiplied by 50% for ages under 75 and grading up to 100% by age 80, projected generationally using Scale MP-2014. For disabled retirees, mortality rates were based on the RP-2014 Disabled Mortality Table set forward four years.

The actuarial assumptions used in the July 1, 2017 and 2016 valuations were based on the results of an actuarial experience study dated April 30, 2015, for the period July 1, 2009 – June 30, 2014. An actuarial experience study is generally conducted every five years.

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.

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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 June 30, 2017 and 2016 are summarized in the following tables:

2017	Long-Term Expected	
Asset Class	Target Allocation	Real Rate of Return
Global Equity	58.0%	6.7%
Global Fixed Income	23.0%	0.8%
Global Real Assets	18.0%	5.2%
Cash Equivalents	1.0%	0.0%

2016	Long-Term Expected	
Asset Class	Target Allocation	Real Rate of Return
Global Equity	58.0%	7.3%
Global Fixed Income	23.0%	0.9%
Global Real Assets	18.0%	5.3%
Cash Equivalents	1.0%	0.0%

Private equity is included in the Global Equity asset class.

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 2.75% for expected inflation.

Discount Rate

The discount rate used to measure the total pension liability was 7.75% as of June 30, 2017 and 2016. 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, 2017 and 2016 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, 2017 and 2016. 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, 2017 and 2016.

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Sensitivity of Net Pension Liability

The following presents the net pension liability of the TFFR employers calculated using the discount rate of 7.75% as of June 30, 2017 and 2016, 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:

	2017		
	1% Decrease (6.75%)	Current Discount Rate (7.75%)	1% Increase (8.75%)
Employers' net pension liability	\$ 1,826,126,843	\$ 1,373,525,753	\$ 996,748,988
	2016		
	1% Decrease (6.75%)	Current Discount Rate (7.75%)	1% Increase (8.75%)
Employers' net pension liability	\$ 1,900,291,033	\$ 1,465,058,563	\$ 1,102,551,032

Note 9 - Public Employees Retirement System (PERS)

Permanent employees of RIO participate in PERS, which is also an agency of the State of North Dakota financial reporting entity and is included in the State of North Dakota's Comprehensive Annual 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 is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all employees of the State of North Dakota, its agencies and various participating political subdivisions (Main System). NDPERS provides for pension, death and disability benefits. The cost to administer the plan is financed through the contributions and investment earnings of the plan.

Responsibility for administration of the NDPERS defined benefit pension plan is assigned to a Board comprised of seven 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; and one member elected by the retired public employees. Effective July 1, 2015, the board was expanded to include 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. 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

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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 System 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. Member contribution rates are 7% and employer contribution rates are 7.12% of covered compensation.

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

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

At June 30, 2017 and 2016, RIO reported a liability of \$1,490,832 and \$989,688, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2016 and 2015, and the total pension liability used to calculate the net pension 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 plan relative to the covered payroll of all participating NDPERS Main System employers. At June 30, 2016, RIO's proportion was 0.152969 percent and as of June 30, 2015, RIO's proportion was 0.145546 percent.

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For the years ended June 30, 2017 and 2016, RIO recognized pension expense of \$121,469 and \$122,885, respectively. At June 30, 2017 and 2016, RIO reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources		Deferred Inflows of Resources	
	2017	2016	2017	2016
Differences between expected and actual experience	\$ 22,395	\$ 28,712	\$ 13,805	\$ -
Changes in assumptions	137,436	-	74,065	88,177
Net differences between projected and actual earnings on pension plan investments	207,993	-		20,892
Changes in proportion and differences between employer contributions and proportionate share of contributions	155,225	145,647		3,512
Employer contributions subsequent to the measurement date	113,616	107,345		-
Total	<u>\$ 636,665</u>	<u>\$ 281,704</u>	<u>\$ 87,870</u>	<u>\$ 112,581</u>

Deferred outflows of resources related to pensions resulting from employer contributions subsequent to the measurement date in the amount of \$113,616 will be recognized as a reduction of the net pension liability in the year ended June 30, 2018.

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

Year Ended June 30	
2018	\$ 87,559
2019	87,559
2020	132,932
2021	97,977
2022	29,152
	<u>\$ 435,179</u>

Actuarial assumptions

The total pension liability in the July 1, 2016 and 2015 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.50%
Salary increase (Payroll Growth)	4.50% per annum
Investment Rate of Return	8.00%, net of investment expenses
Cost of Living Adjustment	None

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For active members, inactive members and healthy retirees, mortality rates were based on the RP-2000 Combined Healthy Mortality Table set back two years for males and three years for females, projected generationally using the SSA 2014 Intermediate Cost scale from 2014. For disabled retirees, mortality rates were based on the RP-2000 Disabled Mortality Table set back one year for males (no setback for females) multiplied by 125%.

The actuarial assumptions used were based on the results of an actuarial experience study completed in 2015. They are the same as the assumptions used in the July 1, 2016 and 2015, funding actuarial valuation for NDPERS.

As a result of the 2015 actuarial experience study, the NDPERS Board adopted several changes to the actuarial assumptions effective July 1, 2015. This includes changes to the mortality tables, disability incidence rates, retirement rates, administrative expenses, salary scale, and percent married assumption.

The long-term expected rate of return on pension 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 pension plan 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 Fund’s target asset allocation are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Global Equity	58%	7.2%
Global Fixed Income	23%	1.1%
Global Real Assets	18%	5.2%
Cash Equivalents	1%	0.0%

Discount rate

The discount rate used to measure the total pension liability was 8 percent as of June 30, 2016. The projection of cash flows used to determine the discount rate assumes that member and employer contributions will be made at rates equal to those based on the July 1, 2016 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, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments for current plan members as of June 30, 2016. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability as of June 30, 2016.

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

The following presents the Employer's proportionate share of the net pension liability calculated using the discount rate of 8 percent, as well as what the Employer's proportionate share of the net pension liability would

North Dakota Retirement and Investment Office

Notes to Combined Financial Statements

June 30, 2017 and 2016

be if it were calculated using a discount rate that is 1-percentage-point lower (7 percent) or 1-percentage-point higher (9 percent) than the current rate:

	2017		
	1% Decrease (7%)	Current Discount Rate (8%)	1% Increase (9%)
Employers' net pension liability	\$ 2,114,716	\$ 1,490,832	\$ 965,177
	2016		
	1% Decrease (7%)	Current Discount Rate (8%)	1% Increase (9%)
Employers' net pension liability	\$ 1,517,637	\$ 989,688	\$ 557,730

Pension plan fiduciary net position

Detailed information about the pension plan's fiduciary net position is available in the separately issued NDPERS Comprehensive Annual Financial Report. This report can be accessed on the NDPERS website at <https://ndpers.nd.gov/about/financial/annual-report-archive/>.

Note 10 - 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 11 - Contingencies/Litigation

The State Investment Board has been named as a defendant in two cases, arising out of the Tribune and General Motors 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 has been retained for both cases, in addition to assistance received from the ND Office of Attorney General. As of June 30, 2017, no liability has been recorded for the General Motors bankruptcy proceedings as it is too early in the litigation process to reasonably determine whether any payments will be required. The claim against the SIB in the Tribune bankruptcy litigation has been dismissed, but a final order has not been entered because the Court has yet to decide the remaining claims in the case against unrelated defendants. Any final judgment (including with respect to the claim against the SIB) is subject to appeal. Accordingly, no liability has been recorded at this time.

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)

	2017	2016	2015	2014
Total pension liability				
Service cost	\$ 75,476	\$ 68,239	\$ 60,618	\$ 56,752
Interest	276,412	265,440	249,064	237,821
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	(10,749)	(8,093)	2,209	9,347
Changes of assumptions	-	-	171,325	-
Benefit payments, including refunds of member contributions	(196,516)	(185,969)	(172,239)	(162,259)
Net change in total pension liability	<u>144,623</u>	<u>139,617</u>	<u>310,977</u>	<u>141,661</u>
Total pension liability - beginning	<u>3,589,394</u>	<u>3,449,777</u>	<u>3,138,800</u>	<u>2,997,139</u>
Total pension liability - ending (a)	<u><u>\$3,734,017</u></u>	<u><u>\$3,589,394</u></u>	<u><u>\$3,449,777</u></u>	<u><u>\$ 3,138,800</u></u>
Plan fiduciary net position				
Contributions - employer	\$ 86,059	\$ 82,840	\$ 78,422	\$ 62,355
Contributions - member	79,309	76,343	72,268	56,555
Contributions - purchased service credit	2,553	2,768	1,601	2,034
Contributions - other	236	45	172	48
Net investment income	266,688	8,239	73,205	294,246
Benefit payments, including refunds of member contributions	(196,516)	(185,969)	(172,239)	(162,259)
Administrative expenses	(2,173)	(1,852)	(1,923)	(1,586)
Net change in plan fiduciary net position	<u>236,156</u>	<u>(17,586)</u>	<u>51,506</u>	<u>251,393</u>
Plan fiduciary net position - beginning **	<u>2,124,335</u>	<u>2,141,921</u>	<u>2,090,415</u>	<u>1,839,584</u>
Plan fiduciary net position - ending (b)	<u><u>\$2,360,491</u></u>	<u><u>\$2,124,335</u></u>	<u><u>\$2,141,921</u></u>	<u><u>\$ 2,090,977</u></u>
Plan's net pension liability - ending (a) - (b)	<u><u>\$1,373,526</u></u>	<u><u>\$1,465,059</u></u>	<u><u>\$1,307,856</u></u>	<u><u>\$ 1,047,823</u></u>
Plan fiduciary net position as a percentage of the total pension liability	63.2%	59.2%	62.1%	66.6%
Covered-employee payroll	\$ 674,971	\$ 649,725	\$ 615,105	\$ 580,053
Plan's net pension liability as a percentage of covered-employee payroll	203.5%	225.5%	212.6%	180.6%

Notes to Schedule:

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

** Beginning plan fiduciary net position restated in 2015 due to GASB 68 implementation.

Changes of assumptions: 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- employee payroll	Contributions as a percentage of covered- employee payroll
2008	\$ 44,115	\$ 33,684	\$ 10,431	\$ 434,626	7.75%
2009	41,986	37,488	4,498	454,396	8.25%
2010	52,053	39,837	12,216	482,868	8.25%
2011	65,113	44,545	20,568	509,091	8.75%
2012	69,374	46,126	23,248	527,156	8.75%
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%

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	26 years
Asset valuation method	5-year smoothed market
Inflation	2.75%; decreased from 3.0% prior to July 1, 2015
Salary increases	4.25% - 14.5%, including inflation and productivity; 4.5% - 14.75% prior to July 1, 2015
Investment rate of return	7.75%, net of investment expenses, including inflation; rate was decreased from 8% beginning July 1, 2015
Retirement age	In the 2015 valuation, rates of retirement were changed to better reflect anticipated future experience. In the 2010 valuation, expected retirement ages of plan members were adjusted to more closely reflect actual experience.
Mortality	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.

North Dakota Retirement and Investment Office
Required Supplementary Information

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

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Annual money-weighted rate of return, net of investment expense	12.81%	0.39%	3.56%	16.35%	13.60%

***Note:** Annual money-weighted rates of return not available prior to 2013.

North Dakota Retirement and Investment Office
Required Supplementary Information

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

	<u>2017</u>	<u>2016</u>	<u>2015</u>
RIO's proportion of NDPERS net pension liability (asset)	<u>0.152969%</u>	<u>0.145546%</u>	<u>0.121849%</u>
RIO's proportionate share of NDPERS net pension liability (asset)	<u>\$ 1,491</u>	<u>\$ 990</u>	<u>\$ 773</u>
RIO's covered-employee payroll	<u>\$ 1,507</u>	<u>\$ 1,377</u>	<u>\$ 1,026</u>
RIO's proportionate share of NDPERS net pension liability (asset) as a percentage of its covered-employee payroll	<u>98.94%</u>	<u>71.90%</u>	<u>75.34%</u>
NDPERS Plan fiduciary net position as a percentage of the total pension liability	<u>70.46%</u>	<u>77.15%</u>	<u>77.70%</u>

Notes to schedule:

*Complete data for this schedule is not available prior to 2015.

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

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

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
RIO's Statutorily required contributions	\$ 114	\$ 107	\$ 98	\$ 73
RIO's Contributions in relation to the statutory required contribution	<u>114</u>	<u>107</u>	<u>98</u>	<u>73</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
RIO's Covered-employee payroll	\$ 1,596	\$ 1,507	\$ 1,377	\$ 1,026
RIO's Contributions as a percentage of covered-employee payroll	7.12%	7.12%	7.12%	7.12%

Notes to schedule:

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

ND Retirement and Investment Office – Financial Section

	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
Assets:												
Investments												
Equities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equity pool	1,545,325,416	39,619,222	17,988,730	35,188,399	3,749,992	468,704,171	7,700,401	-	-	1,590,266	237,498	1,740,072
Fixed income	-	-	-	-	-	-	-	-	-	-	-	-
Fixed income pool	631,954,767	31,218,832	11,035,760	15,349,945	1,532,157	996,919,448	11,994,245	1,832,575	3,147,347	1,841,923	159,492	3,708,392
Real assets												
Real assets pool	504,434,723	18,367,467	7,628,749	9,602,403	626,178	404,652,132	-	-	-	-	21,400	-
Private equity pool	83,862,751	2,391,283	1,328,566	2,376,851	226,210	-	-	-	-	-	-	-
Cash pool	10,472,896	241,073	97,062	824,548	21,415	14,865,520	2,180,276	1,516,571	3,194,278	1,848,607	12,918	286,493
Total investments	2,776,050,553	91,837,877	38,078,867	63,342,146	6,155,952	1,885,141,271	21,874,922	3,349,146	6,341,625	5,280,796	431,308	5,734,957
Invested sec lending collateral	15,935,976	540,955	232,608	388,398	19,644	13,348,052	188,823	13,788	23,489	35,019	4,365	51,714
Investment income receivable	5,296,506	116,286	57,917	50,239	4,616	9,473,522	133,404	25,252	54,785	8,369	163	46,047
Operating Cash	88,280	-	-	-	-	64,600	1,148	995	1,159	1,188	32	1,223
Miscellaneous receivable	6,336	-	-	-	-	4,413	52	8	16	5	1	14
Due from other state agency	4	-	-	-	-	3	-	-	-	-	-	-
Total assets	2,797,377,655	92,495,118	38,369,392	63,780,783	6,180,212	1,908,031,861	22,198,349	3,389,189	6,421,074	5,325,377	435,869	5,833,955
Deferred outflows of resources												
Related to pensions	74,094	-	-	-	-	52,527	640	94	192	48	12	172
Liabilities:												
Investment expenses payable	1,912,009	64,873	27,202	44,571	1,747	688,422	10,536	668	1,163	1,889	246	2,597
Securities lending collateral	15,935,976	540,955	232,608	388,398	19,644	13,348,052	188,823	13,788	23,489	35,019	4,365	51,714
Accounts payable	60,267	-	-	-	-	41,589	493	74	149	45	10	132
Accrued expenses	208,675	-	-	-	-	150,929	2,231	283	616	130	33	536
Miscellaneous payable	-	2,737	1,132	-	1,826	-	-	-	-	-	-	-
Due to other state agencies	489	-	-	-	-	341	4	1	1	-	-	1
Total liabilities	18,117,416	608,565	260,942	432,969	23,217	14,229,333	202,087	14,814	25,418	37,083	4,654	54,980
Deferred inflows of resources												
Related to pensions	10,022	-	-	-	-	7,479	117	15	32	1	2	32
Net position held in trust for external investment pool participants	\$ 2,779,324,311	\$ 91,886,553	\$ 38,108,450	\$ 63,347,814	\$ 6,156,995	\$ 1,893,847,576	\$ 21,996,785	\$ 3,374,454	\$ 6,395,816	\$ 5,288,341	\$ 431,225	\$ 5,779,115
Each participant unit is valued at \$1.00												
Participant units outstanding	2,779,324,311	91,886,553	38,108,450	63,347,814	6,156,995	1,893,847,576	21,996,785	3,374,454	6,395,816	5,288,341	431,225	5,779,115

North Dakota Retirement and Investment Office
 Combining Statement of Net Position – Investment Trust Funds – Fiduciary Funds
 June 30, 2017
 (With Comparative Totals for 2016)

Insurance Pool Participants				Individual Investment Accounts								Totals	
Risk Mgmt Workers' Comp	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	Legacy Fund	Job Service of North Dakota	Tobacco Prevention and Control Fund	PERS Retiree Health Credit Fund	2017	2016	
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,342,635,671	\$ -	\$ 5,723,979	\$ 70,214,197	\$ 2,418,573,847	\$ 1,900,710,606	
2,043,119	1,319,297	-	-	209,408	20,742,271	461,521	-	29,008,736	-	-	2,175,628,519	1,921,253,074	
-	-	-	-	-	-	-	1,605,730,810	-	43,110,708	45,921,116	1,694,762,634	1,415,525,781	
3,323,271	2,501,005	35,938,094	5,494,545	453,102	16,225,823	1,680,251	-	67,660,646	-	-	1,843,971,620	2,285,945,327	
-	-	-	-	-	4,218,171	43,866	712,121,488	-	-	-	712,121,488	615,513,449	
-	-	-	-	-	-	-	-	-	-	-	949,595,089	889,167,336	
-	-	-	-	-	-	-	-	-	-	-	90,185,661	85,965,628	
164,610	563,020	1,782,066	185,398	34,285	411,619	7,202	9,349,540	663,259	8,626,110	15,613	57,364,379	91,516,800	
5,531,000	4,383,322	37,720,160	5,679,943	696,795	41,597,884	2,192,840	4,669,837,509	97,332,641	57,460,797	116,150,926	9,942,203,237	9,205,598,001	
52,833	35,751	177,305	29,496	5,987	429,706	14,494	33,301,257	-	-	-	64,829,660	96,710,963	
3,627	600	(219,845)	447,902	1,337	37,035	(12,929)	18,126,221	178	1,939	21	33,653,192	35,454,773	
1,224	-	-	8,470	-	-	-	95,642	-	-	-	263,961	168,372	
14	-	-	15	-	-	-	10,494	-	-	-	21,368	13,880	
-	-	-	-	-	-	-	7	-	-	-	14	-	
5,588,698	4,419,673	37,677,620	6,165,826	704,119	42,064,625	2,194,405	4,721,371,130	97,332,819	57,462,736	116,150,947	10,040,971,432	9,337,945,989	
168	-	-	4,943	-	-	-	119,384	-	-	-	252,274	113,380	
2,686	1,977	17,521	4,144	344	24,764	1,125	2,187,485	72,896	7,690	88,509	5,165,064	6,349,541	
52,833	35,751	177,305	29,496	5,987	429,706	14,494	33,301,257	-	-	-	64,829,660	96,710,963	
132	-	-	136	-	-	-	98,524	-	-	-	201,551	38,269	
492	-	-	27,848	-	-	-	253,138	-	-	-	644,911	443,950	
-	250	1,264	-	236	1,309	250	-	3,289	1,467	3,223	16,983	17,233	
1	-	-	1	-	-	-	810	-	-	-	1,649	7,234	
56,144	37,978	196,090	61,625	6,567	455,779	15,869	35,841,214	76,185	9,157	91,732	70,859,818	103,567,190	
28	-	-	3,231	-	-	-	11,569	-	-	-	32,528	42,271	
<u>\$ 5,532,694</u>	<u>\$ 4,381,695</u>	<u>\$ 37,481,530</u>	<u>\$ 6,105,913</u>	<u>\$ 697,552</u>	<u>\$ 41,608,846</u>	<u>\$ 2,178,536</u>	<u>\$ 4,685,637,731</u>	<u>\$ 97,256,634</u>	<u>\$ 57,453,579</u>	<u>\$ 116,059,215</u>	<u>\$ 9,970,331,360</u>	<u>\$ 9,234,449,908</u>	
5,532,694	4,381,695	37,481,530	6,105,913	697,552	41,608,846	2,178,536	4,685,637,731	97,256,634	57,453,579	116,059,215	9,970,331,360	9,234,449,908	

ND Retirement and Investment Office – Financial Section

	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
Additions:											
Investment income:											
Net change in fair value of investments	\$ 266,102,905	\$ 7,655,028	\$ 3,396,504	\$ 5,945,750	\$ 611,751	\$ 105,693,277	\$ 1,593,978	\$ 30,591	\$ 53,887	\$ 109,740	\$ 40,393
Interest, dividends and other income	61,615,229	2,110,479	862,083	1,342,535	119,884	46,210,318	491,258	50,948	99,013	41,650	9,403
	327,718,134	9,765,507	4,258,587	7,288,285	731,635	151,903,595	2,085,236	81,539	152,900	151,390	49,796
Less investment expenses	7,250,325	255,656	106,294	160,995	13,430	4,085,404	36,787	2,568	4,744	3,667	871
Net investment income	320,467,809	9,509,851	4,152,293	7,127,290	718,205	147,818,191	2,048,449	78,971	148,156	147,723	48,925
Securities lending activity:											
Securities lending income	280,172	8,907	3,781	6,445	558	184,972	2,952	81	154	250	68
Less Securities lending expenses	(56,015)	(1,780)	(755)	(1,288)	(111)	(36,942)	(588)	(17)	(32)	(50)	(14)
Net securities lending income	224,157	7,127	3,026	5,157	447	148,030	2,364	64	122	200	54
Purchase of units (\$1 per unit)	4,785,000	-	-	3,777,523	282,104	7,500,000	-	-	-	8,155,600	-
Total Additions	325,476,966	9,516,978	4,155,319	10,909,970	1,000,756	155,466,221	2,050,813	79,035	148,278	8,303,523	48,979
Deductions:											
Administrative Expenses	403,185	-	-	-	-	262,771	3,299	1,047	1,115	1,030	610
Redemption of units (\$1 per unit)	3,025,000	-	-	5,486,114	559,697	92,500,000	4,125,000	-	900,000	4,100,000	3,500
Total Deductions	3,428,185	-	-	5,486,114	559,697	92,762,771	4,128,299	1,047	901,115	4,101,030	4,110
Change in net position	322,048,781	9,516,978	4,155,319	5,423,856	441,059	62,703,450	(2,077,486)	77,988	(752,837)	4,202,493	44,869
Net position:											
Beginning of year	2,457,275,530	82,369,575	33,953,131	57,923,958	5,715,936	1,831,144,126	24,074,271	3,296,466	7,148,653	1,085,848	386,356
End of year	\$ 2,779,324,311	\$ 91,886,553	\$ 38,108,450	\$ 63,347,814	\$ 6,156,995	\$ 1,893,847,576	\$ 21,996,785	\$ 3,374,454	\$ 6,395,816	\$ 5,288,341	\$ 431,225

North Dakota Retirement and Investment Office
Combining Statement of Changes in Net Position – Investment Trust Funds – Fiduciary Funds
Year Ended June 30, 2017
(With Comparative Totals for 2016)

Insurance Pool Participants								Individual Investment Accounts						Totals	
Risk Mgmt	Risk Mgmt Workers' Comp	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	Legacy Fund	Job Service of North Dakota	Tobacco Prevention and Control Fund	PERS Retiree Health Credit Fund	2017	2016		
\$ 371,439	\$ 401,369	\$ 254,411	\$ (673,576)	\$ (2,161,212)	\$ 43,207	\$ 3,624,439	\$ 69,279	\$ 389,970,910	\$ 3,337,293	\$ 839,579	\$ 10,061,109	\$ 797,372,051	\$ (51,056,400)		
135,891	128,181	88,365	809,996	5,327,628	14,747	814,008	51,834	99,597,760	2,187,163	33,094	2,342,444	224,483,911	217,167,354		
507,330	529,550	342,776	136,420	3,166,416	57,954	4,438,447	121,113	489,568,670	5,524,456	872,673	12,403,553	1,021,855,962	166,110,954		
8,699	8,993	7,656	106,491	258,392	2,097	81,422	7,288	9,982,236	285,579	28,415	335,760	23,033,769	23,130,811		
498,631	520,557	335,120	29,929	2,908,024	55,857	4,357,025	113,825	479,586,434	5,238,877	844,258	12,067,793	998,822,193	142,980,143		
628	673	488	1,011	3,912	80	7,031	186	751,879	-	-	-	1,254,228	1,465,052		
(125)	(135)	(98)	(202)	(781)	(14)	(1,401)	(38)	(150,242)	-	-	-	(250,628)	(292,852)		
503	538	390	809	3,131	66	5,630	148	601,637	-	-	-	1,003,600	1,172,200		
-	-	-	206,150,000	-	-	6,000,000	-	399,501,134	-	9,500,000	2,445,000	648,096,361	763,176,205		
499,134	521,095	335,510	206,180,738	2,911,155	55,923	10,362,655	113,973	879,689,205	5,238,877	10,344,258	14,512,793	1,647,922,154	907,328,548		
1,082	1,086	-	-	34,979	-	-	-	592,815	-	-	-	1,303,019	1,066,070		
1,250,000	500,000	-	206,400,000	572,485,454	-	7,500,000	142,654	-	4,510,264	7,250,000	-	910,737,683	265,411,054		
1,251,082	501,086	-	206,400,000	572,520,433	-	7,500,000	142,654	592,815	4,510,264	7,250,000	-	912,040,702	266,477,124		
(751,948)	20,009	335,510	(219,262)	(569,609,278)	55,923	2,862,655	(28,681)	879,096,390	728,613	3,094,258	14,512,793	735,881,452	640,851,424		
6,531,063	5,512,685	4,046,185	37,700,792	575,715,191	641,629	38,746,191	2,207,217	3,806,541,341	96,528,021	54,359,321	101,546,422	9,234,449,908	8,593,598,484		
\$ 5,779,115	\$ 5,532,694	\$ 4,381,695	\$ 37,481,530	\$ 6,105,913	\$ 697,552	\$ 41,608,846	\$ 2,178,536	\$ 4,685,637,731	\$ 97,256,634	\$ 57,453,579	\$ 116,059,215	\$ 9,970,331,360	\$ 9,234,449,908		

North Dakota Retirement and Investment Office
 Pension and Investment Trust Funds – Schedule of Administrative Expenses
 Years Ended June 30, 2017 and 2016

	Pension Trust		Investment Trust	
	2017	2016	2017	2016
Salaries and wages:				
Salaries and wages	\$ 819,284	\$ 759,748	\$ 795,303	\$ 766,619
Fringe benefits	392,012	318,254	294,409	250,520
Total salaries and wages	<u>1,211,296</u>	<u>1,078,002</u>	<u>1,089,712</u>	<u>1,017,139</u>
Operating expenses:				
Travel	23,870	28,153	25,098	37,121
Supplies	13,216	2,746	6,454	1,083
Postage and Mailing Services	55,577	53,804	31,428	31,194
Printing	17,106	15,057	6,375	6,743
Small Office Equipment and Furniture	30,542	2,655	12,589	1,557
Insurance	405	401	233	230
Rent/Lease of Building Space	51,561	50,841	31,300	31,045
Repairs	596	-	314	12
Information Technology and Communications	68,469	71,447	14,928	16,231
IT Contractual Services	173,580	17,575	212,767	61,061
Professional Development	13,563	16,052	4,189	7,477
Operating Fees and Services	16,445	16,535	22,148	7,115
Professional Fees and Services	10,446	10,242	9,619	13,019
Consultant Services	264,493	270,302	57,681	52,887
Total operating expenses	<u>739,869</u>	<u>555,810</u>	<u>435,123</u>	<u>266,775</u>
Pension trust portion of investment program expenses	221,816	217,844	(221,816)	(217,844)
Depreciation	450	-	-	-
Total administrative expenses	<u>2,173,431</u>	<u>1,851,656</u>	<u>1,303,019</u>	<u>1,066,070</u>
Capital assets purchased	<u>8,999</u>	<u>-</u>	<u>-</u>	<u>-</u>
Less - nonappropriated items:				
Consultant Services	264,493	270,302	57,681	52,887
Other operating fees paid under continuing appropriation	75,026	37,530	275,461	121,645
Depreciation	450	-	-	-
Accrual adjustments to employee benefits	75,607	22,352	51,223	13,046
Total nonappropriated items	<u>415,576</u>	<u>330,184</u>	<u>384,365</u>	<u>187,578</u>
Total appropriated expenditures	<u>\$ 1,766,854</u>	<u>\$ 1,521,472</u>	<u>\$ 918,654</u>	<u>\$ 878,492</u>

North Dakota Retirement and Investment Office
 Schedule of Appropriations – Budget Basis – Fiduciary Funds
 July 1, 2015 to June 30, 2017 Biennium

All Fund Types:	Approved 2015-2017 Appropriation	2015-2017 Appropriation Adjustment	Adjusted 2015-2017 Appropriation	Fiscal 2016 Expenses	Fiscal 2017 Expenses	Unexpended Appropriations
Salaries and wages	\$ 4,340,551	\$ 2,005	\$ 4,342,556	\$ 2,059,743	\$ 2,174,177	\$ 108,636
Operating expenses	990,874	-	990,874	340,221	502,332	148,321
Contingency	82,000	-	82,000	-	8,999	73,001
Total	\$ 5,413,425	\$ 2,005	\$ 5,415,430	\$ 2,399,964	\$ 2,685,508	\$ 329,958

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

Reconciliation of Administrative Expenses
 to Appropriated Expenditures

	2016	2017
Administrative expenses as reflected in the financial statements	\$ 2,917,726	3,476,450
Plus:		
Capitalized equipment purchases - appropriated	0	8,999
Less:		
Professional fees*	(323,189)	(322,174)
Other operating fees paid under continuing appropriations*	(159,175)	(350,487)
Depreciation expense	0	(450)
Changes in benefit accrual amounts	(35,398)	(126,830)
Total appropriated expenses	\$ 2,399,964	\$ 2,685,508

* 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, 2017 and 2016

	Pension Trust		Investment Trust	
	2017	2016	2017	2016
Actuary fees:				
Cavanaugh MacDonald Consulting	\$ 38,632	\$ -	\$ -	\$ -
Segal Company	91,742	144,633	-	-
Total Actuary Fees	<u>130,374</u>	<u>144,633</u>	-	-
Auditing/Accounting fees:				
CliftonLarsonAllen LLP	108,987	104,507	28,213	27,993
Total Auditing Fees	<u>108,987</u>	<u>104,507</u>	<u>28,213</u>	<u>27,993</u>
Disability consulting fees:				
Sanford Health	300	300	-	-
Legal fees:				
K&L Gates LLP	3,152	2,598	4,171	3,401
Kasowitz, Benson, Torres & Friedman	1,357	-	1,777	-
Ice Miller LLP	-	-	-	-
ND Attorney General	20,323	18,264	23,520	21,493
Total legal fees:	<u>24,832</u>	<u>20,862</u>	<u>29,468</u>	<u>24,894</u>
Total consultant expenses	<u>\$ 264,493</u>	<u>\$ 270,302</u>	<u>\$ 57,681</u>	<u>\$ 52,887</u>

North Dakota Retirement and Investment Office
Pension and Investment Trust Funds – Schedule of Investment Expenses
Years Ended June 30, 2017 and 2016

	Pension Trust		Investment Trust	
	2017	2016	2017	2016
Investment managers' fees:				
Global equity managers	\$ 1,426,842	\$ 1,230,533	\$ 1,835,909	\$ 1,594,767
Domestic large cap equity managers	551,198	903,523	3,136,644	3,847,413
Domestic small cap equity managers	455,668	563,542	1,424,504	2,268,783
International equity managers	852,764	977,198	5,315,874	4,609,027
Emerging markets equity managers	633,942	529,699	955,585	770,162
Domestic fixed income managers	2,017,975	1,005,950	12,073,101	7,607,743
Below investment grade fixed income managers	1,383,336	1,082,779	1,997,463	1,462,837
Diversified Real Assets	-	-	2,634,755	3,001,349
International fixed income managers	423,318	376,723	481,699	457,845
Real estate managers	2,541,836	2,053,698	5,885,718	4,873,012
Infrastructure managers	803,006	1,027,901	990,596	1,241,458
Timber managers	437,057	(956,302)	524,309	(1,130,962)
Private equity managers	1,225,954	1,399,707	1,436,330	1,639,900
Short term fixed income managers	-	-	347,423	719,134
Cash & equivalents managers	20,203	23,185	60,352	149,960
Balanced account managers	-	-	896,911	642,747
Total investment managers' fees	<u>\$ 12,773,099</u>	<u>\$ 10,218,136</u>	<u>\$ 39,997,173</u>	<u>\$ 33,755,175</u>
Custodian fees	213,843	197,310	839,740	831,889
Investment consultant fees	124,539	204,752	446,215	475,338
SIB Service Fees	-	-	70,812	60,211
Total investment expenses	<u><u>\$ 13,111,481</u></u>	<u><u>\$ 10,620,198</u></u>	<u><u>\$ 41,353,940</u></u>	<u><u>\$ 35,122,613</u></u>

Reconciliation of investment expenses to financial statements

	2017	2016	2017	2016
Investment expenses as reflected in the financial statements	\$ 6,011,791	\$ 6,034,689	\$ 23,033,769	\$ 23,130,811
Plus investment management fees included in investment income				
Domestic large cap equity managers	137,262	354,231	449,770	872,120
Domestic small cap equity managers	-	207,192	-	267,457
International equity managers	245,130	216,778	1,324,344	1,121,711
Emerging markets equity managers	633,942	529,699	955,585	770,162
Domestic fixed income managers	1,636,949	727,899	8,458,272	4,282,647
Below investment grade fixed income managers	984,510	660,499	1,427,213	901,054
Diversified real assets managers	-	-	937,298	1,093,122
Real estate managers	1,458,158	999,958	2,025,430	1,245,203
Infrastructure managers	340,728	453,976	419,451	548,295
Timber managers	437,057	(956,302)	524,309	(1,130,962)
Private equity managers	1,225,954	1,391,579	1,436,329	1,630,377
Cash equivalents managers	-	-	40,973	113,080
Balanced account managers	-	-	321,197	277,536
Investment expenses per schedule	<u><u>\$ 13,111,481</u></u>	<u><u>\$ 10,620,198</u></u>	<u><u>\$ 41,353,940</u></u>	<u><u>\$ 35,122,613</u></u>

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INVESTMENT SECTION



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December 1, 2017

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, 2017.

Introduction

For the fiscal year ended June 30, 2017, the \$5.3 billion North Dakota pension investment pool portfolio experienced a net total return of 12.96%. The insurance investment pool, valued at \$2.0 billion on June 30, 2017, returned 7.80% (net), during the same time frame. The Legacy Fund, valued at \$4.7 billion the last day of the fiscal year returned 12.03% (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 \$399.5 million during the fiscal year ended June 30, 2017.

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 61 basis points for the pension pool, 41 basis points for the insurance pool, and 35 basis points for the Legacy Fund and includes investment office administrative expenses, consultant fees, money manager fees and master custodian fees. 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, 2017, as measured by standard deviation has been 4.79% for the pension pool, 2.67% for the insurance pool and 3.89% 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, 2017

Investor angst over the unexpected Brexit vote was short lived and a "risk on" environment returned to the market in July, 2016. Highly unusual election antics and continued geopolitical concerns on a number of fronts did not dampen investors' appetite or their quest for yield. This environment prevailed through December, shaped by the U.S presidential election and the expectation of decreased regulation and lower taxes under the Trump

administration. The first quarter of calendar-year 2017 was a period of shifting sentiment. The “Trump Trade” and market momentum in general, died on March 21 when doubts surfaced over the viability of the Republicans’ health care reform bill. The bill was withdrawn on the 29th. While the U.S. entered its 96th month of expansion in the second quarter of calendar-year 2017, economic data was uninspiring. While growth appeared to have moderated, the Fed expressed their belief in continued upward trajectory.

The U.S. Federal Reserve was active during the 2017 fiscal year. After leaving rates unchanged at their September meeting, the number of dissenting votes from Federal Reserve officials marked a shift in sentiment. At the December meeting, the Federal Open Market Committee (FOMC) moved the target overnight rate to 0.50%-0.75%, marking the first rate hike since December 2015. The FOMC then followed suit at their March meeting, increasing the target rate by 25 basis points to 0.75%-1.00%. The FOMC cited “solid and strengthening” workforce figures as well as moderate growth and inflation as justification for the rate increase. Finally, while growth appeared to have moderated, the Fed raised the Fed Funds rate to 1.00%-1.25% at their June meeting, the third rate hike of the fiscal year.

After declining GDP growth through the first three quarters of the fiscal year, the U.S. economy grew a bit faster than previously estimated in the second quarter of calendar-year 2017. Gross domestic product increased at a 3.1% annualized rate for the period. The upward revision from the original 3.0% reading reflected a slightly faster pace of inventory investment. The U.S. managed to outpace the euro zone’s GDP growth of 2.3% (annualized), the best in two years.

In the euro zone, fears around Brexit faded though economic growth remained weak through the third quarter of calendar-year 2016. Late in the quarter, the Bank of Japan (BOJ) announced a shift in policy. While maintaining asset purchases, the BOJ added a new tool to its quantitative easing kit – “yield curve control.” Concerns over euro zone stability briefly reentered the spotlight in December as Italy’s prime minister lost a key referendum vote causing him to resign. Japan and the euro zone began calendar-year 2017 on a positive note. The BOJ lifted its growth forecasts and held off initiating additional monetary easing. News from the euro zone was less consistent. Year-over-year inflation reached 1.80% in February; however momentum stalled in March when year-over-year inflation fell 0.50%. The ECB quickly pledged to continue their current stimulus measures. On March 29, UK Prime Minister Theresa May signed a letter invoking Article 50, kicking off a two year period of Brexit negotiations. Finally, at their June meeting, the ECB kept rates unchanged and confirmed that net asset purchases will run at least through December 2017. They cited better than expected GDP growth as well as falling unemployment.

Domestic Equity Overview

The fiscal year ended June 30, 2017, brought exceptionally strong returns across domestic equity markets. The S&P 1500 Index, a broad market indicator for the U.S. stock market, finished the period up 18.09%. The S&P 600, a gauge of small cap stock performance, outperformed its large cap peers by a large margin, though both provided impressive returns. The S&P 600 rose 22.47% while the S&P 500 returned 17.90%. During the year growth stocks outperformed value stocks with the Russell 3000 Growth Index advancing 20.72% versus a gain of 16.21% for the Russell 3000 Value Index.

International Equity Overview

Developed international equity returns, as represented by the MSCI EAFE Index, rebounded during fiscal year 2017 after a poor 2016. The index returned 20.27%, outpacing its -10.16% performance in the prior fiscal year. Value fared better than growth in the international developed equity space. For the trailing 12-months ended June 30, 2017, the MSCI EAFE Value Index increased 25.01% while the MSCI EAFE Growth Index rose a respectable 15.70%. Emerging market equity returns also performed well for the fiscal year. The MSCI Emerging Markets Index returned 23.75% for the fiscal year ended June 30, 2017, after losing 12.05% for the previous fiscal year ended June 30, 2016. Overall, international stock markets performed well during the period.

Private Equity Overview

Private equity boomed in fiscal year 2017 as institutional investors placed significant capital into new programs. According to the Dow Jones Private Equity Analyst service, 1,128 new partnerships were formed raising \$322 billion in commitments during the past 12 months. Compared to fiscal year 2016, this is an increase in both the total number of new partnerships (677) and dollars invested (\$269 billion). Due to the nature of private equity performance measurement, relative comparisons of fund performance with benchmarks are inherently ambiguous.

Domestic Fixed Income Overview

The U.S. bond market, as measured by the Bloomberg Aggregate Bond Index, fell 0.31% in fiscal year 2017. The Fed increased their target overnight rate three times during the period and rates rose across the curve. Consequently, the Bloomberg Government/Credit Index fell 0.41% over the 12-month period and the Bloomberg Government Long Index returned an understandable yet painful -6.96%. Credit oriented indexes however rallied during the period with the Bloomberg Credit and Bloomberg Corporate High Yield Indexes rising 1.84% and 12.70% respectively.

International Fixed Income Overview

International developed fixed income markets performed poorly in the fiscal year 2017. The Citi Non-U.S. World Government Hedged Bond Index fell 1.87%. The Citi Non-U.S. World Government Unhedged Bond Index lost 5.01% as the dollar strengthened. Sovereign yields in Europe rose, particularly on the long end, during the fiscal year. The Citi Euro Government Bond Index fell 0.75%. Emerging market countries, which have a credit perception similar to high yield, continued their 2016 performance through 2017; the JP Morgan Emerging Markets Bond Index Plus returned 3.75% over the 12-month period.

Real Estate Overview

The NCREIF Property Index, a measure of the domestic direct private real estate market, gained 6.97% during the 2017 fiscal year. The index was positive each of the four quarters, extending its winning streak to 30 straight quarters. The FTSE NAREIT Equity Index, a measure of the public real estate securities market, fell 1.70% after an exceptionally strong performance in 2016 (+24.04%).

Timber

The timber sector experienced small increases to both its market value and acreage during fiscal year 2017. As of June 30, 2017, the total size of the NCREIF Timberland Property Index was \$25.4 billion, representing approximately 13.9 million acres of land. Of the total index, the South region remains the largest, representing \$17.2 billion in market value and 9.7 million acres of land. For the fiscal year ending June 30, 2017, the NCREIF Timberland Property Index rose moderately, returning 3.35%, consisting of a 0.70% appreciation return and a 2.65% income return. The Lake States was the best performing region gaining 8.10%.

Infrastructure

Approximately 4.67% of the North Dakota State Investment Board's pension pool assets, 4.89% of the insurance pool, and 2.81% of the Legacy Fund are invested in infrastructure investments spread among four strategies: the JP Morgan Asian Infrastructure fund; the JP Morgan Infrastructure Investments Fund, and the Grosvenor Customized Infrastructure Strategies funds. 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 incarceration facilities. Most of these facilities have traditionally been owned and regulated by municipalities and states. The private sector's participation has been limited, to varying degrees, to the areas of design, construction, and operation. Budget and fiscal pressures limit the ability of public authorities to maintain existing infrastructure, much less to build the 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.

Over the one-year period ended June 30, 2017, the SIB's infrastructure program provided net returns of 9.21% for the pension investment pool, 6.74% for the insurance investment pool and 5.85% for the Legacy Fund.

Summary

In a stark contrast to the prior two fiscal years, both of which produced subdued investment returns, fiscal year 2017 was marked by strong investment returns across a variety of risk assets. With respect to relative performance, all three investment pools outperformed their respective policy benchmarks for the year. Performance was most favorably impacted by exposure to domestic and international equities, whereas international fixed income and timberland detracted from total fund performance.

While heartened by last year's performance, the North Dakota State Investment Board and Staff take a long-term perspective in its asset allocation, investment decisions, and performance evaluation. Over the past five years ending June 30, 2017, the pension and insurance pools and Legacy Fund returned 9.14%, 5.45%, and 4.76%, respectively; over the past seven years, which most closely approximates the most recent market cycle, the pension and insurance pools returned 8.72% and 5.87%, respectively.

Going forward, the State Investment Board and Staff will continue to focus on monitoring and managing strategic asset allocations that prudently balance the menu of risks deemed acceptable, particularly given elevated valuations of some asset classes as we enter the ninth year of continued economic expansion in the U.S. This includes carefully selecting and sizing a range of strategies and managers that we believe can achieve our clients' investment objectives in a sound fiduciary manner.

Sincerely,



DARREN SCHULZ, CFA
Deputy Chief Investment Officer



DAVID HUNTER
Executive Director/Chief Investment Officer

INVESTMENT PERFORMANCE SUMMARY JUNE 30, 2017

	Fair Value	% Of Pool	Rates of Return (net of fees)									
			For Fiscal Year Ended 6/30					Annualized				
			2017	2016	2015	2014	2013	3 Years	5 Years	10 Years	20 Years	30 Years
PENSION POOL PARTICIPANTS												
Teachers' Fund for Retirement	\$2,318,214,336	43.7%	12.92%	0.28%	3.52%	16.53%	13.57%	5.44%	9.18%	3.81%	6.19%	7.84%
Public Employees Retirement System	2,781,347,059	52.5%	13.05%	0.28%	3.53%	16.38%	13.44%	5.48%	9.16%	4.28%	6.57%	7.85%
Bismarck City Employee Pension Fund	\$91,954,163	1.7%	11.56%	0.82%	3.69%	14.56%	12.41%	5.26%	8.47%	4.68%	6.55%	*
Bismarck City Police Pension Fund	\$38,136,784	0.7%	12.24%	0.32%	3.56%	15.27%	13.03%	5.26%	8.72%	4.53%	6.43%	*
City of Grand Forks Pension Fund	\$63,392,385	1.2%	12.84%	0.11%	3.53%	16.33%	14.01%	5.36%	9.18%	*	*	*
Grand Forks Park District Pension Fund	\$6,160,568	0.1%	12.74%	0.36%	4.22%	16.44%	14.43%	5.65%	9.46%	*	*	*
Subtotal Pension Pool Participants	5,299,205,294	100.0%										
INSURANCE POOL PARTICIPANTS												
Workforce Safety & Insurance Fund	1,894,614,793	93.1%	8.29%	3.58%	3.27%	11.71%	8.31%	5.02%	6.98%	5.46%	6.40%	*
State Fire and Tornado Fund	22,008,326	1.1%	9.30%	2.67%	3.16%	12.78%	10.59%	5.00%	7.62%	5.57%	6.41%	*
State Bonding Fund	3,374,398	0.2%	2.40%	3.48%	1.25%	4.06%	2.96%	2.37%	2.83%	1.13%	4.25%	*
Petroleum Tank Release Fund	6,396,410	0.3%	2.23%	3.17%	1.13%	3.68%	2.47%	2.18%	2.53%	0.86%	3.96%	*
Insurance Regulatory Trust Fund	5,289,165	0.3%	7.40%	1.46%	2.04%	9.88%	8.49%	3.60%	5.80%	4.27%	5.49%	*
State Risk Management Fund	5,781,004	0.3%	8.27%	4.46%	4.08%	12.29%	10.19%	5.59%	7.81%	6.30%	5.76%	*
State Risk Management Workers Comp	5,534,627	0.3%	9.41%	4.21%	4.57%	13.68%	11.61%	6.04%	8.63%	6.47%	*	*
Cultural Endowment Fund	431,471	0.0%	12.71%	2.18%	5.22%	16.94%	15.58%	6.62%	10.37%	6.05%	*	*
Budget Stabilization Fund	6,127,845	0.3%	0.80%	1.82%	1.86%	1.94%	1.87%	1.49%	1.66%	1.68%	*	*
ND Assoc. of Counties (NDACo) Fund	4,383,922	0.2%	8.30%	2.76%	2.77%	11.61%	9.46%	4.58%	6.92%	4.06%	*	*
City of Bismarck Deferred Sick Leave	698,132	0.0%	8.85%	3.26%	2.95%	12.32%	9.83%	4.99%	7.38%	5.80%	*	*
PERS Group Insurance	37,500,315	1.8%	0.08%	1.49%	0.01%	0.00%	0.11%	0.53%	0.38%	0.73%	*	*
State Board of Medicine	2,179,911	0.1%	5.29%	1.63%	2.70%	*	*	3.20%	*	*	*	*
City of Fargo FargoDome Permanent Fund	41,634,919	2.0%	12.25%	1.19%	3.38%	16.34%	13.46%	5.50%	9.16%	5.81%	*	*
Subtotal Insurance Pool Participants	2,035,955,239	100.0%										
INDIVIDUAL INVESTMENT ACCOUNTS												
Legacy Fund	4,687,963,730		12.03%	1.06%	3.31%	6.64%	1.15%	5.36%	4.76%	*	*	*
Retiree Health Insurance Credit Fund	116,150,947		11.81%	0.72%	3.06%	16.53%	14.80%	5.09%	8.80%	4.69%	6.02%	*
Job Service of North Dakota Pension Fund	97,332,819		5.63%	5.45%	3.30%	13.54%	11.71%	4.79%	7.85%	5.02%	6.56%	*
Tobacco Prevention and Control Trust Fund	57,462,736		1.66%	*	*	*	*	*	*	*	*	*
TOTAL	<u>\$12,294,070,765</u>											
BENCHMARKS												
S&P 500			17.90%	3.99%	7.42%	24.61%	20.60%	9.61%	14.63%	7.18%	7.15%	9.60%
Barclays Aggregate			-0.31%	6.00%	1.86%	4.37%	-0.69%	2.48%	2.21%	4.48%	5.24%	6.42%
90 Day T-Bills			0.49%	0.19%	0.02%	0.05%	0.11%	0.23%	0.17%	0.58%	2.17%	3.34%
Callan Public Plan Sponsors Database (Median-Gross of Fees)			12.42%	0.86%	3.23%	16.31%	11.98%	5.30%	8.78%	5.44%	6.83%	8.28%

* These funds do not have the specified years of history under SIB management.

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, 2017
PENSION INVESTMENT POOL**

	Style	Date Initiated	Fair Value	Annualized Rates of Return Net of Fees		
				1 Year	3 Years	5 Years
GLOBAL EQUITY:						
Epoch Investment Partners, Inc.	Core	01/2012	\$ 395,944,967	16.96%	5.65%	10.68%
LSV Asset Management	Core Value	03/2013	493,628,676	23.29%	4.70%	*
TOTAL GLOBAL EQUITY			889,573,644	20.57%	5.10%	10.62%
MSCI World Index				18.20%	5.24%	11.38%
DOMESTIC LARGE CAP EQUITY:						
Parametric Clifton	Enhanced S&P 500	06/2011	192,250,585	17.72%	9.77%	14.65%
Los Angeles Capital Management	Structured Growth	08/2003	344,801,503	15.66%	10.95%	15.26%
Los Angeles Capital Management	Enhanced Russell 1000	08/2000	200,427,446	15.44%	9.75%	14.82%
Northern Trust Asset Management	Enhanced S&P 500	08/2000	167,318,509	16.51%	7.88%	14.28%
TOTAL DOMESTIC LARGE CAP EQUITY			904,798,043	16.20%	9.91%	15.33%
Russell 1000 Index				18.03%	9.26%	14.67%
DOMESTIC SMALL CAP EQUITY:						
Atlanta Capital	High Quality	04/2016	130,237,677	15.83%	*	*
Parametric Clifton	Enhanced Russell 2000	11/2009	158,623,505	24.44%	7.89%	14.25%
TOTAL DOMESTIC SMALL CAP EQUITY			288,861,182	20.09%	5.63%	13.08%
Russell 2000 Index				24.60%	7.36%	13.70%
DEVELOPED INTERNATIONAL EQUITY:						
William Blair Investment Management	Growth-oriented	06/2016	146,159,414	20.15%	*	*
Dimensional Fund Advisors	Small Cap Value	11/2007	87,623,186	28.80%	4.16%	13.74%
Northern Trust Asset Management	Core	12/2013	301,033,064	19.92%	1.01%	*
Wellington Trust Company, NA	Small Cap Growth	03/2002	97,530,440	19.62%	6.42%	14.09%
TOTAL DEVELOPED INTERNATIONAL EQUITY			632,346,105	21.04%	2.50%	10.33%
Benchmark ⁽¹⁾				19.49%	0.93%	8.55%
EMERGING MARKETS EQUITY:						
Axiom International Investors	Core	07/2014	156,217,685	22.29%	*	*
Dimensional Fund Advisors	Small Cap	10/2005	50,085,583	19.52%	3.49%	6.86%
TOTAL EMERGING MARKETS EQUITY			206,303,268	21.55%	3.08%	4.96%
MSCI Emerging Markets Index				23.75%	1.07%	3.96%
PRIVATE EQUITY:						
Adams St. Partners (1998 Fund)	Diversified Private Equity	01/1998	125,606	-0.16%	1.08%	4.12%
Adams St. Partners (1999 Fund)	Diversified Private Equity	01/1999	337,144	-0.25%	-2.85%	3.36%
Adams St. Partners (2000 Fund)	Diversified Private Equity	10/1999	553,857	3.00%	-3.33%	0.71%
Adams St. Partners (2001 Fund)	Diversified Private Equity	12/2000	1,329,647	7.60%	-1.19%	5.31%
Adams St. Partners (2002 Fund)	Diversified Private Equity	03/2002	339,221	19.56%	1.74%	5.99%
Adams St. Partners (2003 Fund)	Diversified Private Equity	04/2003	288,137	11.44%	7.19%	11.45%
Adams St. Partners (1999 Non-U.S. Fund)	Diversified Private Equity	01/1999	69,632	1.60%	0.03%	6.19%
Adams St. Partners (2000 Non-U.S. Fund)	Diversified Private Equity	01/2000	530,987	13.07%	-0.25%	0.63%
Adams St. Partners (2001 Non-U.S. Fund)	Diversified Private Equity	02/2001	162,493	-4.37%	11.33%	14.86%
Adams St. Partners (2002 Non-U.S. Fund)	Diversified Private Equity	05/2002	502,108	-5.01%	4.42%	5.43%
Adams St. Partners (2003 Non-U.S. Fund)	Diversified Private Equity	04/2003	323,478	26.53%	13.54%	18.17%
Adams St. Partners (2004 Non-U.S. Fund)	Diversified Private Equity	04/2004	319,996	9.42%	-2.02%	7.06%
Adams St. Partners (2008 Non-U.S. Fund)	Diversified Private Equity	01/2008	7,770,177	15.67%	11.65%	12.86%
Adams St. Partners (2010 Direct Fund)	Direct Private Equity	04/2010	1,031,502	12.03%	8.00%	11.92%
Adams St. Partners (2010 Non-U.S. Developed)	Diversified Private Equity	04/2010	3,148,471	21.63%	9.17%	10.50%

**SCHEDULE OF INVESTMENT CONSULTANTS AND RESULTS
FOR PERIODS ENDED JUNE 30, 2017
PENSION INVESTMENT POOL (CONTINUED)**

	Style	Date Initiated	Fair Value	Annualized Rates of Return Net of Fees		
				1 Year	3 Years	5 Years
PRIVATE EQUITY (continued):						
Adams St. Partners (2010 Partnership Fund)	Diversified Private Equity	04/2010	6,216,403	15.12%	13.11%	13.30%
Adams St. Partners (2010 Emerging Mkts Fund)	Diversified Private Equity	01/2011	1,438,104	10.13%	14.02%	7.90%
Adams St. Partners (2015 Global Fund)	Diversified Private Equity	10/2015	8,071,559	51.76%	*	*
Adams St. Partners (2016 Global Fund)	Diversified Private Equity	12/2016	2,128,412	*	*	*
Adams St. Partners (B.V.C.F. IV)	Diversified Private Equity	05/1999	3,460,356	7.91%	14.68%	18.81%
Adams St. Partners (Direct Co-Investment)	Direct Private Equity	09/2006	3,270,630	-4.11%	8.19%	10.58%
Blackrock Investment Management	Diversified Private Equity	01/2017	8,611,773	*	*	*
Capital International (Fund V)	EM Private Equity	08/2007	2,013,333	-49.48%	-31.17%	-20.15%
Capital International (Fund VI)	EM Private Equity	12/2011	23,602,740	9.55%	-4.66%	-8.71%
EIG (formerly Trust Company of the West)	Mezz Debt - Energy	07/2007	6,099,526	12.11%	-34.78%	-23.36%
Corsair Capital (Fund III)	Pvt Eq - Financial Svcs	02/2006	14,359,422	6.84%	9.34%	3.15%
Corsair Capital (Fund IV)	Pvt Eq - Financial Svcs	05/2010	24,055,395	22.98%	15.91%	14.40%
Invest America (Lewis and Clark Fund)	Direct Venture Capital	02/2002	1,622,825	22.03%	-26.04%	-17.39%
Invest America (L&C Fund II)	Direct Venture Capital	06/2009	9,118,782	10.83%	-1.11%	-2.96%
Matlin Patterson Global Opportunities Fund II	Distressed Debt	10/2004	1,157,048	-28.84%	-2.99%	-7.24%
Matlin Patterson Global Opportunities Fund III	Distressed Debt	06/2007	24,790,467	6.84%	-0.56%	5.14%
Quantum Energy Partners	Pvt Equity - Energy	01/2007	<u>8,020,000</u>	68.38%	1.68%	10.37%
TOTAL PRIVATE EQUITY			167,161,917	11.11%	-0.82%	1.59%
INVESTMENT GRADE FIXED INCOME:						
Manulife Asset Management	Securitized	04/2012	90,750,663	4.99%	3.74%	5.14%
J. P. Morgan Investment Mgmt. Inc.	Mortgage Backed	09/2014	131,206,979	0.62%	*	*
PIMCO	Distressed Sr. Debt	10/2012	107,377,713	17.08%	8.43%	13.70%
PIMCO	Mortgage Backed	03/2012	183,534,801	0.19%	2.18%	1.95%
PIMCO	Unconstrained	03/2012	67,365,621	9.22%	2.97%	2.50%
State Street Global Advisors	Passive BC Long Treasury	06/2013	<u>118,180,932</u>	-7.27%	5.52%	*
TOTAL INVESTMENT GRADE FIXED INCOME			698,416,709	3.65%	4.06%	4.55%
Bloomberg Aggregate Index				-0.31%	2.48%	2.21%
BELOW INVESTMENT GRADE FIXED INCOME:						
Goldman Sachs	Mezzanine Debt-2006	04/2006	381,850	59.81%	27.41%	25.21%
Goldman Sachs	Mezzanine Debt-Fund V	11/2007	1,398,900	-13.28%	-1.99%	3.94%
Loomis Sayles	High Yield Bonds	04/2004	200,807,828	12.91%	4.16%	7.40%
PIMCO	Res. & Comm. Debt	10/2013	<u>57,304,239</u>	13.38%	10.22%	*
TOTAL BELOW INVESTMENT GRADE FIXED INCOME			259,892,817	12.86%	4.95%	8.21%
Bloomberg High Yield Corp 2% Issuer Cap				12.69%	4.50%	6.90%
DEVELOPED INTERNATIONAL FIXED INCOME:						
UBS Global Asset Management	Core Non-U.S.	03/1989	105,946,147	-4.01%	-2.78%	-0.87%
Brandywine Asset Management	Core-Plus Non-U.S.	05/2003	<u>153,803,731</u>	4.38%	1.00%	3.16%
TOTAL DEVELOPED INTERNATIONAL FIXED INCOME			259,749,878	0.79%	-0.74%	1.24%
Bloomberg Global Aggregate ex-US Index				-3.80%	-2.42%	-0.36%

**SCHEDULE OF INVESTMENT CONSULTANTS AND RESULTS
FOR PERIODS ENDED JUNE 30, 2017
PENSION INVESTMENT POOL (CONTINUED)**

	Style	Date Initiated	Fair Value	Annualized Rates of Return Net of Fees		
				1 Year	3 Years	5 Years
GLOBAL REAL ESTATE:						
INVESCO Realty Advisors	Core Commingled	08/1997	257,521,398	8.16%	11.52%	11.59%
INVESCO Realty Advisors	Core Plus LP (Fund II)	11/2007	188,225	22.72%	11.61%	14.46%
INVESCO Realty Advisors	Core Plus LP (Fund III)	05/2012	21,815,113	11.58%	14.81%	15.89%
INVESCO Realty Advisors	Core Plus LP (Fund IV)	04/2015	44,296,474	8.07%	*	*
INVESCO Realty Advisors	Asian LP	11/2008	279,160	982.41%	203.10%	97.81%
INVESCO Realty Advisors	Asian LP (Fund III)	11/2015	21,688,372	21.25%	*	*
J. P. Morgan Investment Mgmt. Inc.	Core Commingled	10/1987	197,342,292	7.08%	10.52%	11.82%
J. P. Morgan Investment Mgmt. Inc.	Alternative Commingled	01/2006	292,644	6.73%	-9.88%	-2.58%
J. P. Morgan Investment Mgmt. Inc.	European LP	09/2009	9,954,015	-0.51%	13.11%	4.86%
J. P. Morgan Investment Mgmt. Inc.	Asian LP	01/2008	<u>15,776,662</u>	37.81%	23.20%	24.37%
TOTAL GLOBAL REAL ESTATE			569,154,356	9.13%	11.81%	12.43%
NCREIF Total Index				6.97%	10.17%	10.49%
TIMBER:						
Timberland Investment Resources - Teredo	Timberland	06/2001	31,445,437	-7.02%	5.49%	5.75%
Timberland Investment Resources - Springbank	Timberland	09/2004	<u>105,042,460</u>	-10.13%	-3.20%	-2.37%
TOTAL TIMBER			136,487,897	-9.44%	-0.60%	0.27%
NCREIF Timber Index				3.35%	5.54%	7.16%
INFRASTRUCTURE:						
Grosvenor CIS Fund I	Infrastructure	12/2011	37,507,235	8.70%	7.49%	8.94%
Grosvenor CIS Fund II	Infrastructure	03/2015	7,472,221	3.28%	*	*
J.P. Morgan Investment Management, Inc.	Asian Infrastructure	07/2008	23,570,946	35.48%	6.04%	8.92%
J.P. Morgan Investment Management, Inc.	Infrastructure	05/2007	<u>178,979,737</u>	6.33%	3.47%	5.65%
TOTAL INFRASTRUCTURE			247,530,139	9.21%	4.21%	6.52%
CPI-W				1.50%	0.58%	1.11%
CASHEQUIVALENTS:						
Bank of North Dakota	Money Market	09/2016	10,054,403	*	*	*
Northern Trust Asset Management	STIF	07/1994	<u>28,874,936</u>	0.76%	0.37%	0.25%
TOTAL CASH EQUIVALENTS			38,929,339	0.72%	0.36%	0.24%
90 Day T-Bills				0.49%	0.23%	0.17%
TOTAL PENSION INVESTMENT POOL			<u>\$ 5,299,205,294</u>	12.96%	5.46%	9.14%
Policy Target				11.74%	4.73%	8.20%

**SCHEDULE OF INVESTMENT CONSULTANTS AND RESULTS
FOR PERIODS ENDED JUNE 30, 2017
INSURANCE INVESTMENT POOL**

	Style	Date Initiated	Fair Value	Annualized Rates of Return Net of Fees		
				1 Year	3 Years	5 Years
DOMESTIC LARGE CAP EQUITY:						
Parametric Clifton	Enhanced S&P 500	11/2008	\$ 48,932,900	17.71%	9.87%	14.82%
Los Angeles Capital Management	Structured Growth	08/2003	73,031,179	15.06%	10.79%	15.16%
Los Angeles Capital Management	Enhanced Russell 1000	04/2004	48,265,388	15.52%	9.81%	14.82%
LSV Asset Management	Structured Value	06/1998	74,213,660	21.39%	7.85%	16.23%
TOTAL DOMESTIC LARGE CAP EQUITY			244,443,126	17.62%	9.55%	15.38%
Russell 1000 Index				18.03%	9.26%	14.67%
DOMESTIC SMALL CAP EQUITY:						
Parametric Clifton	Enhanced Russell 2000	11/2008	40,967,447	24.59%	8.16%	14.46%
PIMCO (RAE)	Core	07/2007	40,276,972	21.28%	6.93%	14.59%
TOTAL DOMESTIC SMALL CAP EQUITY			81,244,418	22.79%	7.64%	14.60%
Russell 2000 Index				24.60%	7.36%	13.70%
INTERNATIONAL EQUITY:						
William Blair Investment Management	Growth-oriented	06/2016	70,714,203	19.50%	*	*
Dimensional Fund Advisors	Small Cap Value	11/2007	19,561,888	28.80%	4.16%	13.74%
LSV Asset Management	Core	11/2004	72,838,071	26.66%	2.55%	10.43%
The Vanguard Group	Small Cap Growth	06/2003	16,992,660	26.60%	5.69%	13.05%
TOTAL INTERNATIONAL EQUITY			180,106,822	24.24%	2.66%	10.33%
Benchmark ⁽¹⁾				19.49%	0.93%	8.55%
DOMESTIC FIXED INCOME:						
Manulife Asset Management	Securitized	12/2013	83,910,558	4.99%	3.71%	*
PIMCO	Distressed Sr. Debt	10/2012	49,318,442	17.08%	8.43%	13.70%
PIMCO	Res. & Comm. Debt	10/2013	29,276,593	13.38%	10.22%	*
Prudential	Core-Plus	08/2006	115,288,216	2.52%	3.78%	3.90%
State Street Global Advisors	Passive BC Gov't/Credit	06/2013	141,844,286	-0.46%	2.58%	*
Wells Capital	Baa Average Bonds	04/2002	314,324,222	5.24%	4.30%	5.11%
Western Asset Management Co.	Core Bonds	07/1990	314,199,305	2.60%	3.94%	3.95%
TOTAL DOMESTIC FIXED INCOME			1,048,161,623	4.71%	4.41%	5.10%
Bloomberg Aggregate Index				-0.31%	2.48%	2.21%
DIVERSIFIED REAL ASSETS:						
Grosvenor CIS Fund I	Infrastructure	12/2011	18,753,608	8.70%	7.49%	8.94%
J. P. Morgan Investment Mgmt. Inc.	Infrastructure	11/2008	85,292,003	6.31%	3.04%	5.39%
Timberland Investment Resources	Timberland	10/2008	55,349,404	4.31%	2.81%	4.30%
Western Asset Management Co.	Global TIPS	05/2004	114,027,560	0.82%	0.09%	1.27%
TOTAL INFLATION PROTECTED ASSETS			273,422,575	3.73%	1.87%	3.17%
Weighted Benchmark ⁽²⁾				1.65%	0.76%	2.25%
REAL ESTATE:						
INVESCO Realty Advisors	Core Commingled	10/2012	65,481,054	8.16%	11.52%	*
J. P. Morgan Investment Mgmt. Inc.	Core Commingled	11/2005	72,968,522	7.98%	10.77%	12.52%
TOTAL REAL ESTATE			138,449,576	8.07%	11.06%	12.14%
NCREIF Total Index				6.97%	10.17%	10.49%
CASH EQUIVALENTS:						
Bank of North Dakota	Money Market	09/2016	15,105,524	*	*	*
Northern Trust Asset Management	STIF	07/2013	11,960,142	0.32%	0.15%	0.15%
TOTAL CASH EQUIVALENTS			27,065,666	0.44%	0.19%	0.17%
90 Day T-Bills				0.49%	0.23%	0.17%

**SCHEDULE OF INVESTMENT CONSULTANTS AND RESULTS
FOR PERIODS ENDED JUNE 30, 2017
INSURANCE INVESTMENT POOL (CONTINUED)**

	Style	Date Initiated	Fair Value	Annualized Rates of Return Net of Fees		
				1 Year	3 Years	5 Years
SHORT-TERM FIXED INCOME						
J.P. Morgan Investment Mgmt. Inc.	Short Term Bonds	09/2011	43,061,432	0.05%	0.91%	0.94%
TOTAL SHORT-TERM FIXED INCOME			43,061,432	0.59%	1.29%	1.40%
Benchmark ⁽³⁾				0.04%	0.75%	0.67%
TOTAL INSURANCE INVESTMENT POOL			<u>\$2,035,955,239</u>	7.80%	4.41%	5.45%
Policy Target				4.55%	3.17%	3.90%

LEGACY FUND

	Style	Date Initiated	Fair Value	Annualized Rates of Return Net of Fees		
				1 Year	3 Years	5 Years
DOMESTIC LARGE CAP EQUITY:						
Parametric Clifton	Enhanced S&P 500	08/2013	\$ 203,767,236	17.39%	9.87%	*
Los Angeles Capital Management	Structured Growth	08/2013	313,133,611	15.21%	10.69%	*
Los Angeles Capital Management	Enhanced Russell 1000	08/2013	200,847,139	14.84%	9.52%	*
LSV Asset Management	Structured Value	08/2013	311,808,031	21.69%	8.01%	*
TOTAL DOMESTIC LARGE CAP EQUITY			1,029,556,017	17.51%	9.48%	*
Russell 1000 Index				18.03%	9.26%	
DOMESTIC SMALL CAP EQUITY:						
Parametric Clifton	Enhanced Russell 2000	08/2013	208,245,366	24.35%	8.16%	*
PIMCO (RAE)	Core	08/2013	171,130,970	21.12%	6.86%	*
TOTAL DOMESTIC SMALL CAP EQUITY			379,376,336	22.87%	7.71%	*
Russell 2000 Index				24.60%	7.36%	
INTERNATIONAL EQUITY:						
William Blair Investment Management	Core	08/2013	368,775,754	19.56%	*	*
Dimensional Fund Advisors	Small Cap Value	08/2013	93,652,212	28.80%	4.16%	*
LSV Asset Management	Core	08/2013	382,364,713	26.38%	2.60%	*
The Vanguard Group	Small Cap Growth	08/2013	93,713,936	26.60%	5.69%	*
TOTAL INTERNATIONAL EQUITY			938,506,615	23.91%	2.56%	*
Benchmark ⁽¹⁾				19.49%	0.93%	
DOMESTIC FIXED INCOME:						
Bank of North Dakota Match Loan CDs	Certificates of Deposit	various	57,188,509	*	*	*
Manulife Asset Management	Securitized	12/2013	126,385,793	4.99%	3.71%	*
PIMCO	Distressed Sr. Debt	12/2013	47,214,503	17.08%	8.43%	*
PIMCO	Res. & Comm. Debt	12/2013	28,027,646	13.38%	10.22%	*
Prudential	Core-Plus	12/2013	178,188,628	2.83%	3.96%	*
State Street Global Advisors	Passive BC Gov't/Credit	12/2013	231,692,172	-0.46%	2.59%	*
Wells Capital	Baa Average Bonds	12/2013	473,768,708	5.05%	4.26%	*
Western Asset Management Co.	Core Bonds	12/2013	472,234,602	2.35%	3.74%	*
TOTAL DOMESTIC FIXED INCOME			1,614,700,561	3.55%	3.97%	*
Bloomberg Aggregate Index				-0.31%	2.48%	

**SCHEDULE OF INVESTMENT CONSULTANTS AND RESULTS
FOR PERIODS ENDED JUNE 30, 2017
LEGACY FUND (CONTINUED)**

	Style	Date Initiated	Fair Value	Annualized Rates of Return Net of Fees		
				1 Year	3 Years	5 Years
DIVERSIFIED REAL ASSETS:						
Grosvenor CIS Fund II	Infrastructure	03/2015	18,680,554	3.28%	*	*
J. P. Morgan Investment Mgmt. Inc.	Infrastructure	03/2015	113,161,582	6.27%	*	*
Western Asset Management Co.	Global TIPS	02/2014	<u>320,367,718</u>	0.82%	0.12%	*
TOTAL DIVERSIFIED REAL ASSETS			452,209,854	2.10%	1.03%	*
Weighted Benchmark ⁽²⁾				1.02%	-0.21%	
REAL ESTATE:						
INVESCO Realty Advisors	Core Commingled	08/2013	127,038,113	8.16%	11.52%	*
J. P. Morgan Investment Mgmt. Inc.	Core Commingled	08/2013	<u>137,219,677</u>	8.03%	10.80%	*
TOTAL REAL ESTATE			264,257,790	8.09%	11.09%	*
NCREIF Total Index				6.97%	10.17%	
CASH EQUIVALENTS:						
Bank of North Dakota	Money Market	09/2016	5,221,955	*	*	*
Northern Trust Asset Management	STIF	07/2013	<u>4,134,602</u>	0.32%	0.15%	0.15%
TOTAL CASH EQUIVALENTS			9,356,557	0.44%	0.19%	0.16%
90 Day T-Bills				0.49%	0.23%	0.17%
TOTAL LEGACY FUND			<u>\$4,687,963,730</u>	12.03%	5.36%	4.76%
Policy Target				9.91%	4.42%	3.84%

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	Balanced Account	07/2009	\$ 116,150,947	11.81%	5.09%	8.80%
Policy Target				11.32%	5.42%	8.82%
JOB SERVICE ND PENSION FUND						
SEI	Balanced Account	12/2015	<u>97,332,819</u>	5.63%	*	*
TOTAL JOB SERVICE ND PENSION FUND			\$ 97,332,819	5.63%	4.79%	7.85%
Policy Target				7.85%	3.84%	6.42%
TOBACCO PREVENTION AND CONTROL TRUST FUND						
State Street Global Advisors	S&P 500 ex Tobacco	10/2015	\$ 5,723,979	17.88%	*	*
State Street Global Advisors	Short Term Bonds	10/2015	43,110,708	-0.12%	*	*
Bank of North Dakota	Money Market	09/2016	4,815,370	*	*	*
Northern Trust Asset Management	STIF	10/2015	<u>3,812,679</u>	0.32%	*	*
TOTAL TOBACCO PREVENTION AND CONTROL TRUST FUND			\$ 57,462,736	1.66%	*	*
Policy Target				1.67%		

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

(1) MSCI EAFE through 6/30/16 and MSCI World ex-US thereafter.

(2) Weighted benchmark is based on pro-rata share of Barclays Global Inflation-linked, CPI and NCREIF Timberland indices.

(3) 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 market values and are subject to independent review.

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)
AT JUNE 30, 2017**

PENSION INVESTMENT POOL

Shares	Stocks	Fair Value
325,707	Apple Incorporated	\$ 46,908,322
517,836	Microsoft Corporation	35,694,435
23,977	Amazon Company Incorporated	23,209,736
120,196	Facebook Incorporated	18,147,192
73,758	Allergan PLC	17,929,832
378,194	Morgan Stanley	16,852,325
394,185	Applied Materials Incorporated	16,283,782
175,926	JP Morgan Chase & Company	16,079,636
168,275	Visa Incorporated	15,780,830
84,898	United Health Group Incorporated	15,741,787
Par	Bonds	Fair Value
21,755,348	FNMA Pool #AS9487 4% Due 05-01-2047	\$ 22,880,317
13,000,000	FHLMC Gold Single Family 3.5% 30 Years Settles August	13,330,746
12,800,000	FNMA Single Family Mortgage 3.5% 30 Years Settles September	13,104,640
12,000,000	GNMA II Jumbos 3.5% 30 Years Settles August	12,410,628
10,500,000	GNMA II Jumbos 5.4% 30 Years Settles August	11,148,659
9,150,000	FNMA Single Family Mortgage 3% 30 Years Settles September	9,108,349
8,571,437	GNMA Pool #AP0272 3.5% Due 09-15-2045	8,908,551
8,000,000	GNMA II Jumbos 4% 30 Years Settles August	8,406,872
6,135,000	United Kingdom (Government of) 1.25% Due 07-22-2018	8,047,952
1,370,000	Mexico (United Mexican States) 7.75% Notes Due 11-13-2042	8,011,205

INSURANCE INVESTMENT POOL

Shares	Stocks	Fair Value
48,569	Apple Incorporated	\$ 6,994,907
5,113	Amazon Company Incorporated	4,949,384
52,605	Microsoft Corporation	3,626,063
23,498	Facebook Incorporated	3,547,728
28,374	JP Morgan Chase & Company	2,593,384
33,618	Altria Group Incorporated	2,503,532
18,714	Johnson & Johnson Company	2,475,675
9,939	Broadcom Limited	2,316,284
278,698	BAE Systems	2,293,363
65,873	Pfizer Incorporated	2,212,674
Par	Bonds	Fair Value
21,000,000	US Treasury Bonds 3.75% Due 11-15-2043	\$ 24,685,668
12,790,000	US Treasury Bonds 3% Due 05-15-2045	13,179,200
5,380,000	US Treasury Notes 2.125% Due 03-31-2024	5,383,992
4,330,000	US Treasury Notes Due 04-15-2021	4,460,760
4,315,000	US Treasury Bonds 3% Due 02-15-2047	4,451,190
4,630,000	US Treasury Notes 1.375% Due 08-31-2023	4,448,055
4,280,000	US Treasury Bonds 2.875% Due 11-15-2046	4,303,574
4,245,000	Morgan Stanley 2.625% Due 11-17-2021	4,238,743
4,060,000	US Treasury Notes 1.75% Due 06-30-2022	4,033,675
3,357,000	PVTPL Verizon Communications Inc. 5.012% Due 04-15-2049	3,390,258

**LARGEST HOLDINGS (By Fair Value)
AT JUNE 30, 2017**

LEGACY FUND

Shares	Stocks	Fair Value
188,020	Apple Incorporated	\$ 27,078,640
20,820	Amazon Company Incorporated	20,153,760
225,275	Microsoft Corporation	15,528,206
100,778	Facebook Incorporated	15,215,462
97,089	Johnson & Johnson Company	12,843,904
85,942	Siemens	11,796,845
1,419,715	BAE Systems	11,682,619
140,476	Altria Group Incorporated	10,461,248
119,831	ADR HDFC Bank LTD	10,421,702
143,639	BNP Paribas	10,330,959
Par	Bonds	Fair Value
23,070,000	US Treasury Notes 3.75% Due 11-15-2045	\$ 27,118,970
10,720,000	US Treasury Bonds 3% Due 05-15-2045	11,046,210
9,420,000	US Treasury Notes 1.75% Due 03-31-2022	9,371,430
9,025,000	US Treasury Notes 1.75% Due 06-30-2022	8,966,482
8,650,000	US Treasury Bonds 3% Due 02-15-2047	8,923,011
8,000,000	US Treasury Notes 2.125% Due 08-15-2021	8,112,496
8,040,000	US Treasury Notes 1.875% Due 06-30-2024	7,969,023
7,580,000	US Treasury Notes 2.125% Due 03-31-2024	7,585,624
7,120,000	US Treasury Bonds 2.875% Due 08-15-2045	7,159,772
7,100,000	US Treasury Notes 1.375% Due 08-31-2023	6,820,991

The individual investment accounts for PERS Retiree Health Credit Fund, Job Service Pension Fund and Tobacco Prevention and Control 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, 2017
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	\$ 842,728,214	\$ 3,262,751	39			
Domestic large cap equity managers	874,030,393	1,242,901	14	\$ 241,419,142	\$ 520,685	22
Domestic small cap equity managers	274,718,261	1,065,452	39	81,636,936	183,906	23
Developed international equity managers	591,488,375	1,868,856	32	177,158,443	746,128	42
Emerging markets equity managers	194,317,458	1,589,527	82			
Private equity managers	157,677,583	2,662,285	169			
Investment grade fixed income managers	655,849,031	4,688,246	71	1,021,625,542	4,415,240	43
Diversified real asset managers				268,153,493	1,266,358	47
Below investment grade fixed income managers	248,571,563	3,380,799	136			
Developed international fixed income managers	252,895,331	905,017	36			
Real estate managers	548,110,164	6,102,851	111	135,459,651	810,456	60
Timber managers	142,907,010	961,366	67			
Infrastructure managers	224,400,096	1,793,601	80			
Cash & equivalents managers	35,273,526	39,582	11	39,749,210	31,215	8
Short term fixed income managers				178,321,943	332,044	19
Total investment manager fees	<u>\$ 5,042,967,006</u>	<u>29,563,234</u>	<u>59</u>	<u>\$ 2,143,524,361</u>	<u>8,306,032</u>	<u>39</u>
Custodian fees		481,835	1		193,003	1
Investment consultant fees		245,192	0		103,085	0
SIB Service Fees		24,691	0		12,670	0
Total investment expenses *		<u>\$ 30,314,952</u>	<u>60</u>		<u>\$ 8,614,790</u>	<u>40</u>

Reconciliation of Investment Expenses to Financial Statements

Investment expenses as reflected in the financial statements	\$ 13,798,491	\$ 4,615,079
Plus investment management fees included in investment income (booked as net income)		
Domestic large cap equity managers	308,653	74,672
Developed international equity managers	537,233	188,416
Emerging markets equity managers	1,589,527	
Investment Grade domestic fixed income managers	3,801,908	3,143,110
Diversified real assets managers	-	562,298
Below investment grade domestic fixed income managers	2,411,723	
Timber managers	961,366	
Infrastructure managers	760,180	
Real estate managers	3,483,588	-
Private equity managers	2,662,284	
Cash & equivalents managers	-	31,215
Investment expenses per schedule	<u>\$ 30,314,952</u>	<u>\$ 8,614,790</u>

* Individual investment funds' total basis points vary depending upon their asset allocation.

Columns may not foot due to rounding.

**SCHEDULE OF COMMISSIONS
FOR THE FISCAL YEAR ENDED JUNE 30, 2017**

Brokers	Number of shares traded	Total commissions	Commissions per share
Citigroup	79,534,222	\$ 65,322	\$0.001
Merrill Lynch	40,676,729	46,977	0.001
Credit Suisse	15,540,191	66,665	0.004
UBS	13,164,760	92,699	0.007
Jeffries and Company	12,990,076	179,512	0.014
Investment Technologies Group	10,973,514	99,465	0.009
Sanford Bernstein	7,925,069	72,624	0.009
Morgan Stanley	6,086,396	86,698	0.014
Loop Capital Markets	5,319,307	46,255	0.009
Convergex	4,981,107	49,811	0.010
Other 77 Brokers *	47,337,685	732,173	0.015
Total commissions	<u>244,529,056</u>	<u>\$ 1,538,201</u>	<u>\$0.006</u>

* 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

❖ Teachers' Fund for Retirement Investment Objectives and Policy Guidelines

Plan Characteristics and Fund Constraints

The North Dakota Teachers’ Fund for Retirement (TFFR) is a pension benefit plan that was established in 1913 to provide retirement income to all public school and certain state teachers and administrators in the state of North Dakota. The plan is administered by a seven member Board of Trustees comprised of five active and retired members of the fund appointed by the Governor of North Dakota and two elected officials - the State Treasurer and the State Superintendent of Public Instruction.

The plan is a multi-employer 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:

	<u>7/1/2011</u>	<u>7/1/2012</u>	<u>7/1/2014</u>
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 7.75% 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:

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

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 institutional 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/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 %	Rebalancing Range %
Global Equity	58	46-65
Public Equity	52	44-60
U.S.	29	23-35
Global ex-U.S.	23	18-28
Private Equity	6	4-8
Global Fixed Income	23	16-30
Investment Grade	19	14-24
Non-investment Grade	4	2-6
Global Real Assets	18	12-24
Global Real Estate	10	5-15
Other	8	0-12
Infrastructure		0-10
Timber		0-7
Commodities		0-5
Inflation Linked Bonds		0-10
Other Inflation Sensitive		0-5
Global Alternatives		0-10
Cash	1	0-2

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. Allocations to Global Alternatives will result in pro-rata reduction in the policy targets.

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 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.

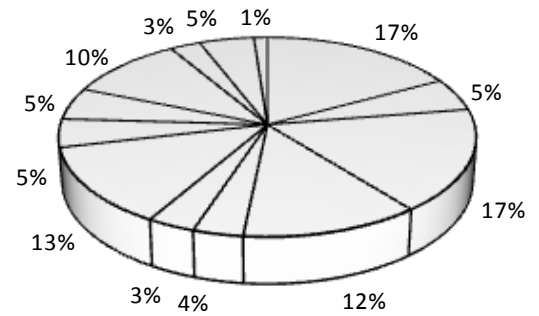
Performance reports will be provided to the TFFR Board periodically, but not less than annually. Such reports will include asset returns and allocation data as well as information regarding all significant and/or material matters and changes pertaining to the investment of the Fund, including, but not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

1. A list of the advisory services managing investments for the Board.
2. A list of investments at market value, compared to previous reporting period, of each fund managed by each advisory service.
3. Earnings, percentage earned, and change in market value of each fund's investments.
4. 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.
5. All material legal or legislative proceedings affecting the SIB.
6. Compliance with this investment policy statement.

❖ **Teachers' Fund for Retirement**
Actual Asset Allocation – June 30, 2017

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Domestic Large Cap Equity	\$ 397,798,520	17%	16.20%
Domestic Small Cap Equity	123,299,684	5%	20.08%
Global Equity	388,563,404	17%	20.57%
Developed International Equity	287,498,117	12%	21.05%
Emerging Markets Equity	80,771,845	4%	21.55%
Private Equity	76,976,315	3%	11.12%
Investment Grade Fixed Income	298,944,159	13%	3.65%
Below Investment Grade Fixed Income	106,062,664	5%	12.86%
International Fixed Income	121,140,506	5%	0.79%
Global Real Estate	237,904,250	10%	9.12%
Timber	61,609,798	3%	-9.44%
Infrastructure	110,390,549	5%	9.21%
Cash Equivalents	27,254,525	1%	0.74%
Total Fund	\$ 2,318,214,336		12.92%
Policy Benchmark			11.63%

Columns may not foot due to rounding.



PUBLIC EMPLOYEES RETIREMENT SYSTEM

❖ 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 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 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, National Guard and Law Enforcement 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 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 National Guard Plan the employee contribution is 4.5% and employer contribution is 7%, for the Law Enforcement Plan with prior service the employee contribution is 5.5% and the employer contribution is 9.81% and for the Law Enforcement 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 7.75%.

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 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 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.

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 advisory services, and amounts to be invested by advisory services 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 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 acceptable to the SIB.
3. Guidelines for the selection and redemption of investments pursuant to 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 measurements, 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	18	13-23
Non-investment Grade	5	3-7
Global Real Assets	19	10-25
Global Real Estate	11	5-15
Other (Infrastructure/Timber)	8	5-10
Inflation Linked Bonds		0-5
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.

- G. Publicly Traded REITs may not be used in the Real Estate asset allocation.

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

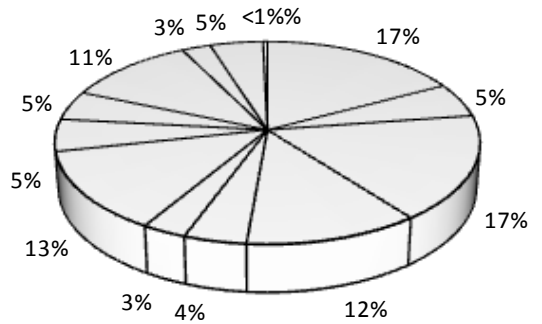
information from CEM or other acceptable source showing the value added versus the cost.

- 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.

❖ **Public Employees Retirement Fund**
Actual Asset Allocation – June 30, 2017

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 479,066,244	17%	16.20%
Domestic Small Cap Equity	152,211,261	5%	20.08%
Global Equity	468,680,340	17%	20.57%
Developed International Equity	329,244,318	12%	21.05%
Emerging Markets Equity	118,126,140	4%	21.55%
Private Equity	83,862,622	3%	11.12%
Investment Grade Fixed Income	359,796,107	13%	3.65%
Below Investment Grade Fixed Income	142,824,137	5%	12.86%
International Fixed Income	130,196,253	5%	0.79%
Global Real Estate	311,147,233	11%	9.13%
Timber	68,942,678	3%	-9.44%
Infrastructure	126,763,569	5%	9.21%
Cash Equivalents	10,486,155	<1%	0.74%
Total Fund	<u>\$ 2,781,347,059</u>		13.05%
Policy Benchmark			11.87%



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BISMARCK CITY EMPLOYEE PENSION PLAN

❖ 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
Domestic Equity	25
Large Cap	15
Small Cap	10
International Equity	17
Developed	12
Emerging	5
Private Equity	4
Global Fixed Income	34
Domestic Fixed	30

Investment Grade	24
Non-investment Grade	6
International Fixed	4
Developed	4
Emerging	
Global Real Assets	20
Global Real Estate	10
Other	10
Infrastructure	5
Timber	5

While the BCEPP Board recognizes fluctuations in market values will lead to short-term deviations from policy targets, the BCEPP 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. 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

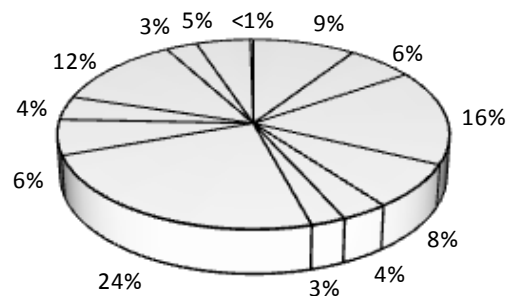
Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards. Emphasis will be placed on three and five year results. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the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

**❖Bismarck City Employee Pension Plan
Actual Asset Allocation – June 30, 2017**

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 8,674,859	9%	16.20%
Domestic Small Cap Equity	5,687,584	6%	20.09%
Global Equity	14,996,984	16%	20.57%
Developed International Equity	7,100,032	8%	21.04%
Emerging Markets Equity	3,189,664	4%	21.55%
Private Equity	2,391,312	3%	11.11%
Investment Grade Fixed Income	21,970,263	24%	3.65%
Below Investment Grade Fixed Income	5,541,820	6%	12.86%
International Fixed Income	3,692,303	4%	0.79%
Global Real Estate	11,226,730	12%	9.13%
Timber	2,642,769	3%	-9.44%
Infrastructure	4,596,352	5%	9.21%
Cash Equivalents	243,491	<1%	0.72%
Total Fund	\$ 91,954,163		11.56%
Policy Benchmark			9.98%



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BISMARCK CITY POLICE PENSION PLAN

❖ 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 BCPBP 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 BCPBP 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 BCPBP 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 BCPBP Board has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. The BCPBP 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 BCPBP 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 BCPBP 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 BCPBP 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 BCPBP 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
Domestic Equity	27
Large Cap	16
Small Cap	11
International Equity	19
Developed	13
Emerging	6
Private Equity	5
Global Fixed Income	29
Domestic Fixed	25
Investment Grade	19
Non-investment Grade	6

International Fixed	4
Developed	4
Emerging	
Global Real Assets	20
Global Real Estate	10
Other	10
Infrastructure	5
Timber	5

While the BCEPP Board recognizes fluctuations in market values will lead to short-term deviations from policy targets, the BCEPP 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. 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

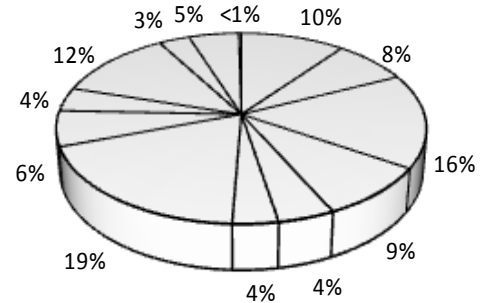
Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards. Emphasis will be placed on three and five year results. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the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

❖ **Bismarck City Police Pension Plan
Actual Asset Allocation – June 30, 2017**

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Domestic Large Cap Equity	\$ 3,991,230	10%	16.20%
Domestic Small Cap Equity	2,875,817	8%	20.09%
Global Equity	6,088,651	16%	20.57%
Developed International Equity	3,391,422	9%	21.04%
Emerging Markets Equity	1,656,201	4%	21.55%
Private Equity	1,328,607	4%	11.11%
Investment Grade Fixed Income	7,218,113	19%	3.65%
Below Investment Grade Fixed Income	2,287,794	6%	12.86%
International Fixed Income	1,534,453	4%	0.79%
Global Real Estate	4,567,786	12%	9.13%
Timber	1,180,790	3%	-9.44%
Infrastructure	1,917,492	5%	9.21%
Cash Equivalents	98,428	<1%	0.72%
Total Fund	\$ 38,136,784		12.24%
Policy Benchmark			10.98%



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CITY OF GRAND FORKS PENSION PLAN

❖ 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
Domestic Equity	40
Large	30
Small	10
International Equity	15
Developed	10
Emerging	5
Private Equity	5
Global Fixed Income	24
Investment Grade	17
Non-investment Grade	7
Global Real Assets	15
Global Real Estate	7
Infrastructure	5
Timber	3
Cash	1

While the City Council recognizes fluctuations in market values will lead to short-term deviations from policy targets, the City Council 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

- 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.

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. 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.

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.

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

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

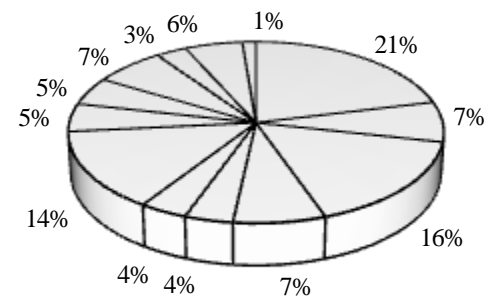
achieving those objectives.

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:

1. A list of the advisory services managing investments for the SIB.
2. A list of investments at market value, compared to previous reporting period, of each account managed by each advisory service.
3. Earnings, percentage earned, and change in market value of each account’s investments.
4. 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.
5. All material legal or legislative proceedings affecting the SIB.
6. Compliance with this investment policy statement.

❖ **City of Grand Forks Pension Plan
Actual Asset Allocation – June 30, 2017**

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Domestic Large Cap Equity	\$ 13,457,599	21%	16.20%
Domestic Small Cap Equity	4,549,344	7%	20.09%
Global Equity	10,243,359	16%	20.57%
Developed International Equity	4,568,697	7%	21.04%
Emerging Markets Equity	2,397,628	4%	21.55%
Private Equity	2,376,851	4%	11.11%
Investment Grade Fixed Income	8,959,534	14%	3.65%
Below Investment Grade Fixed Income	3,176,402	5%	12.86%
International Fixed Income	3,186,362	5%	0.79%
Global Real Estate	4,308,357	7%	9.13%
Timber	1,877,451	3%	-9.44%
Infrastructure	3,465,468	6%	9.21%
Cash Equivalents	825,333	1%	0.72%
Total Fund	\$ 63,392,385		12.84%
Policy Benchmark			12.07%



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PARK DISTRICT OF THE CITY OF GRAND FORKS PENSION PLAN

❖ 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	65
Domestic Equity	45
Large	40
Small	5
International Equity	15
Developed	12
Emerging	3
Private Equity	5
Global Fixed Income	25
Domestic Fixed	25
Investment Grade	25
Global Real Assets	10
Infrastructure	7
Timber	3

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

- 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.
- 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.

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.

- f. 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

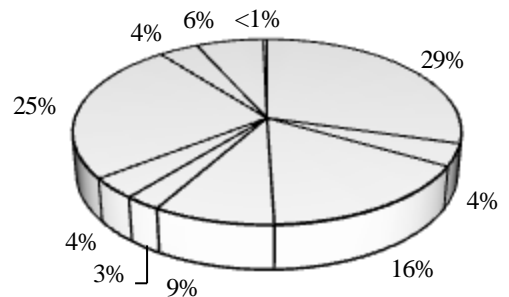
Investment management of the Fund will be evaluated against the Fund’s investment objectives. Emphasis will be placed on five year results. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the appropriateness of the Investment Policy Statement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

1. A list of the advisory services managing investments for the SIB.
2. A list of investments at market value, compared to previous reporting period, of each account managed by each advisory service.
3. Earnings, percentage earned, and change in market value of each account’s investments.
4. 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.
5. All material legal or legislative proceedings affecting the SIB.
6. Compliance with this investment policy statement.

**❖ Park District of the City of Grand Forks Pension Fund
Actual Asset Allocation – June 30, 2017**

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 1,809,591	29%	16.20%
Domestic Small Cap Equity	237,493	4%	20.09%
Global Equity	1,000,907	16%	20.57%
Developed International Equity	543,519	9%	21.04%
Emerging Markets Equity	161,791	3%	21.55%
Private Equity	226,210	4%	11.11%
Investment Grade Fixed Income	1,528,532	25%	3.65%
Timber	234,411	4%	-9.44%
Infrastructure	396,708	6%	9.21%
Cash Equivalents	21,407	<1%	0.72%
Total Fund	\$ 6,160,568		12.74%
Policy Benchmark			11.83%



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WORKFORCE SAFETY & INSURANCE FUND

❖ 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.

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.

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 April of 2014, 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.

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:

<u>Asset Class</u>	<u>Target Allocation</u>
Large Cap Equity	12%
Small Cap Equity	4%
International Equity	9%
Domestic Fixed Income	53%
Diversified Real Assets	15%
Real Estate	6%
Cash Equivalents	1%

- (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.

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:

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.

- 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.

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.

Internal Controls

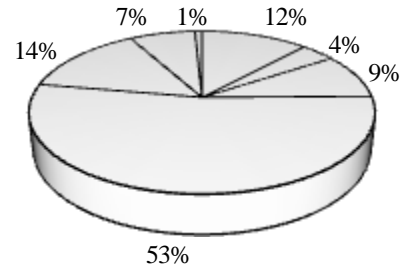
A system of internal controls must be in place by the SIB to prevent losses of public funds arising from fraud or employee error. Such controls deemed most important are the separation of responsibilities for investment purchases from the recording of investment activity, custodial safekeeping, written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

For the purpose of this document, Social Investing is defined as *"The investment or commitment of public*

audit must include a comprehensive review of the portfolio, accounting procedures for security transactions, and compliance with the investment policy.

❖ Workforce Safety & Insurance Fund
Actual Asset Allocation – June 30, 2017

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 225,967,421	12%	17.68%
Domestic Small Cap Equity	73,302,944	4%	22.79%
International Equity	170,421,846	9%	24.25%
Fixed Income	1,002,477,211	53%	4.01%
Diversified Real Assets	269,189,521	14%	3.74%
Real Estate	138,384,075	7%	8.07%
Cash Equivalents	14,871,774	1%	0.44%
Total Fund	\$ <u>1,894,614,793</u>		8.29%
Policy Benchmark			5.20%



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STATE FIRE AND TORNADO FUND

❖ 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 probably safety of capital as well as probably 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

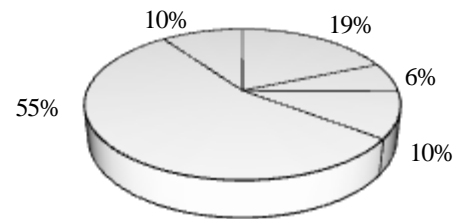
Investment management of the Fund will be evaluated against the Fund’s investment objectives and investment performance standards. Emphasis will be placed on five year results. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the appropriateness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

1. A list of advisory services managing investments for the Board.
2. A list of investments at market value, compared to the previous reporting period, of each fund managed by each advisory service.
3. Earnings, percentage earned, and change in market value of each fund’s investments.
4. 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.
5. All material legal or legislative proceedings affecting the SIB.
6. Compliance with this investment policy statement.

❖ State Fire and Tornado Fund
Actual Asset Allocation – June 30, 2017

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 4,137,577	19%	17.63%
Domestic Small Cap Equity	1,390,660	6%	22.78%
International Equity	2,199,549	10%	24.25%
Fixed Income	12,099,629	55%	4.07%
Cash Equivalents	2,180,910	10%	0.44%
Total Fund	<u>\$ 22,008,326</u>		9.30%
Policy Benchmark			6.47%



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STATE BONDING FUND

❖ 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 statutory 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 probably safety of capital as well as probably 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	55.00%
Cash Equivalents	45.00%

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.

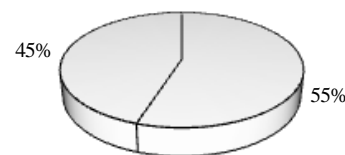
Performance reports will be provided to the Insurance Department periodically, but not less than annually. Such reports will include asset returns and allocation data as well as information regarding all significant and/or material matters and changes pertaining to the investment of the Fund, including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

- 1. A list of advisory services managing investments for the Board.
- 2. A list of investments at market value, compared to the previous reporting period, of each fund managed by each advisory service.
- 3. Earnings, percentage earned, and change in market value of each fund’s investments.
- 4. 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.
- 5. All material legal or legislative proceedings affecting the SIB.
- 6. Compliance with this investment policy statement.

❖ **State Bonding Fund**

Actual Asset Allocation – June 30, 2017

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Fixed Income	\$ 1,857,387	55%	4.00%
Cash Equivalents	1,517,011	45%	0.44%
Total Fund	<u>\$ 3,374,398</u>		2.40%
Policy Benchmark			0.05%



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PETROLEUM TANK RELEASE COMPENSATION FUND

❖ 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 ND23-37. 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 above ground 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.

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 probably safety of capital as well as probably 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.

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

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	50.00%
Cash Equivalents	50.00%

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.

- (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:

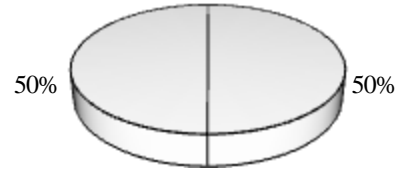
- 1. A list of advisory services managing investments for the Board.
- 2. A list of investments at market value, compared to the previous reporting period, of each fund managed by each advisory service.
- 3. Earnings, percentage earned, and change in market value of each fund’s investments.

4. 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.

5. All material legal or legislative proceedings affecting the SIB.
6. Compliance with this investment policy statement.

**❖Petroleum Tank Release Compensation Fund
Actual Asset Allocation – June 30, 2017**

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Fixed Income	\$ 3,201,159	50%	4.03%
Cash Equivalents	3,195,251	50%	0.44%
Total Fund	<u>\$ 6,396,410</u>		2.23%
Policy Benchmark			0.09%



Columns may not foot due to rounding.

INSURANCE REGULATORY TRUST FUND

❖ 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 probably safety of capital as well as probably 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

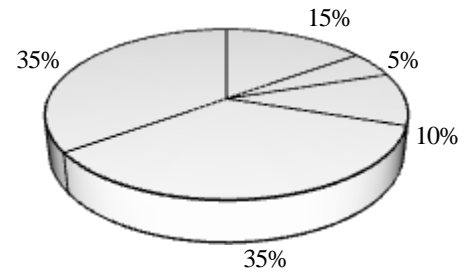
Investment management of the Fund will be evaluated against the Fund’s investment objectives and investment performance standards. Emphasis will be placed on five year results. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the appropriateness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

- 1. A list of advisory services managing investments for the Board.
- 2. A list of investments at market value, compared to the previous reporting period, of each fund managed by each advisory service.
- 3. Earnings, percentage earned, and change in market value of each fund’s investments.
- 4. 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.
- 5. All material legal or legislative proceedings affecting the SIB.
- 6. Compliance with this investment policy statement.

❖ **Insurance Regulatory Trust Fund**
Actual Asset Allocation – June 30, 2017

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 794,005	15%	17.63%
Domestic Small Cap Equity	264,720	5%	22.78%
International Equity	530,326	10%	24.25%
Fixed Income	1,851,283	35%	3.52%
Cash Equivalents	<u>1,848,831</u>	35%	0.44%
Total Fund	\$ <u><u>5,289,165</u></u>		7.40%
Policy Benchmark			5.69%



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STATE RISK MANAGEMENT FUND

❖ 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%

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.

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

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

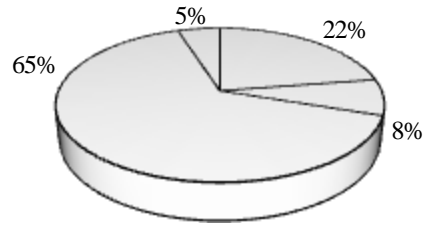
Investment management of the Fund will be evaluated against the Fund’s investment objectives. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the appropriateness of the Investment Policy Statement for achieving those objectives.

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:

- 1) A list of the advisory services managing investments for the board.
- 2) A list of investments at market value, compared to previous reporting period, of each fund managed by each advisory service.
- 3) Earnings, percentage earned, and change in market value of each fund’s investments.
- 4) 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.
- 5) All material legal or legislative proceedings affecting the SIB.
- 6) Compliance with this investment policy statement.

❖ **State Risk Management Fund**
Actual Asset Allocation – June 30, 2017

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 1,303,332	22%	17.63%
Domestic Small Cap Equity	437,893	8%	22.78%
Fixed Income	3,753,188	65%	4.10%
Cash Equivalents	286,592	5%	0.44%
Total Fund	<u>\$ 5,781,004</u>		8.27%
Policy Benchmark			5.47%



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STATE RISK MANAGEMENT WORKERS COMPENSATION FUND

❖ State Risk Management Workers Comp 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

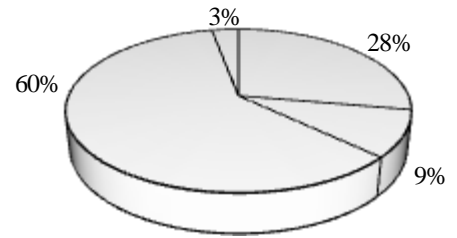
Investment management of the Fund will be evaluated against the Fund's investment objectives. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the appropriateness of the Investment Policy Statement for achieving those objectives.

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:

- 1) A list of the advisory services managing investments for the board.
- 2) A list of investments at market value, compared to previous reporting period, of each fund managed by each advisory service.
- 3) Earnings, percentage earned, and change in market value of each fund's investments.
- 4) 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.
- 5) All material legal or legislative proceedings affecting the SIB.
- 6) Compliance with this investment policy statement.

❖ **State Risk Management WC Fund**
Actual Asset Allocation – June 30, 2017

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 1,535,244	28%	17.63%
Domestic Small Cap Equity	510,050	9%	22.78%
Fixed Income	3,324,696	60%	4.07%
Cash Equivalents	164,637	3%	0.44%
Total Fund	<u>\$ 5,534,627</u>		9.41%
Policy Benchmark			6.83%



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NORTH DAKOTA CULTURAL ENDOWMENT FUND

❖ND 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.

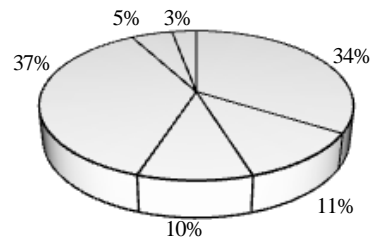
Evaluation and Review

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.

**❖ND Cultural Endowment Fund
Actual Asset Allocation – June 30, 2017**

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Domestic Large Cap Equity	\$ 145,676	34%	17.63%
Domestic Small Cap Equity	49,020	11%	22.78%
International Equity	43,073	10%	24.25%
Fixed Income	159,207	37%	3.95%
Real Estate	21,573	5%	8.07%
Cash Equivalents	12,922	3%	0.44%
Total Fund	\$ 431,471		12.71%
Policy Benchmark			10.79%



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NORTH DAKOTA BUDGET STABILIZATION FUND

❖ND 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. Notwithstanding the provisions of sections 54-27.2-01 and 54-27.2-02, \$124,936,548 was required to be transferred by the state treasurer to the budget stabilization fund from the general fund on July 1, 2009, along with \$61,414,562 on July 1, 2011 and \$181,060,584 on July 1, 2013. The statutory cap for the 2015-17 biennium is \$572,485,454. 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 five 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.

If the director of the office of management and budget projects that general fund revenues for the biennium will be at least two and one-half percent less than estimated by the most recently adjourned special or regular session of the legislative assembly, and if the governor orders a transfer, the state treasurer shall transfer the appropriate funds from the budget stabilization fund to the state general fund to offset the decrease in general fund revenues. The amount transferred from the budget stabilization fund upon order of the governor may not exceed the difference between an amount two and one-half percent below the general fund revenue projections for the biennium and the general fund revenue projections for the biennium by the director of the office of management and budget.

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.

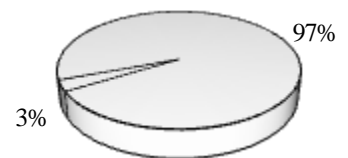
Evaluation and Review

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.

❖ND Budget Stabilization Fund
Actual Asset Allocation – June 30, 2017

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Short-term Fixed Income	\$ 5,941,546	97%	0.51%
Cash Equivalents	186,299	3%	0.43%
Total Fund	<u>\$ 6,127,845</u>		0.80%
Policy Benchmark			0.37%



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NORTH DAKOTA ASSOCIATION OF COUNTIES

❖ND Association of Counties (NDACo) Fund 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.

Investment Objectives

Fund 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 Fund in excess of those required for operating and claims payment needs. The investment fund(s) may be comprised of fixed income securities and equity securities. Individual investments may be either actively or passively managed.

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 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.

Policy and Guidelines

The asset allocation is established by the North Dakota Association of Counties with input from the SIB. Asset allocation is based upon the appraisal of projected liquidity and income requirements.

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

Domestic Large Cap Equity	15%
Domestic Small Cap Equity	5%
International Equity	10%
Domestic Fixed Income	57%
Cash Equivalents	13%

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 Fund 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

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 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

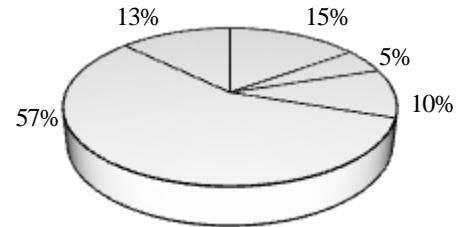
Investment management of the Fund will be evaluated against the Fund’s investment objectives and investment performance standards. Evaluation will be conducted quarterly by the SIB through its review of funds participating in the Insurance Trust.

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

**❖ ND Association of Counties (NDACo) Fund
Actual Asset Allocation – June 30, 2017**

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 659,952	15%	17.63%
Domestic Small Cap Equity	221,866	5%	22.78%
International Equity	438,788	10%	24.25%
Fixed Income	2,500,138	57%	3.87%
Cash Equivalents	563,179	13%	0.44%
Total Fund	<u>\$ 4,383,922</u>		8.30%
Policy Benchmark			5.51%

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CITY OF BISMARCK DEFERRED SICK LEAVE ACCOUNT

❖ City of Bismarck Deferred Sick Leave 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

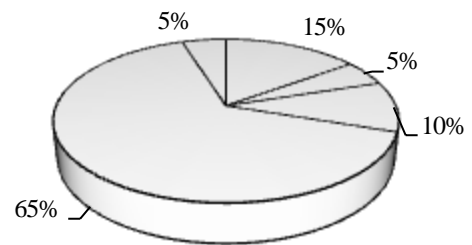
Investment management of the Fund will be evaluated against the Fund’s investment objectives and investment performance standards. Evaluation will be conducted quarterly by the SIB through its review of funds participating in the Insurance Trust.

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

**❖ City of Bismarck Deferred Sick Leave
Actual Asset Allocation – June 30, 2017**

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 105,042	15%	17.63%
Domestic Small Cap Equity	35,343	5%	22.78%
International Equity	69,777	10%	24.25%
Fixed Income	453,677	65%	4.26%
Cash Equivalents	34,294	5%	0.44%
Total Fund	\$ 698,132		8.85%
Policy Benchmark			5.44%

Columns may not foot due to rounding.



NDPERS GROUP INSURANCE ACCOUNT

❖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 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. 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.

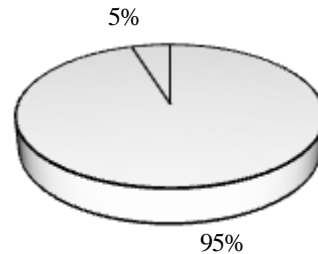
Evaluation and Review

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.

**❖NDPERS Group Insurance Account
Actual Asset Allocation – June 30, 2017**

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Short Term Fixed Income	\$ 35,715,236	95%	0.05%
Cash Equivalents	<u>1,785,079</u>	5%	0.44%
Total Fund	<u><u>\$37,500,315</u></u>		0.08%
Policy Benchmark			0.37%



CITY OF FARGO FARGODOME PERMANENT FUND

❖ 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

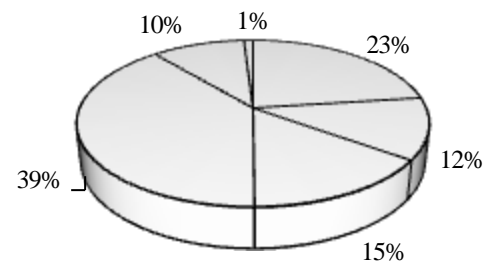
Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards. Evaluation will be conducted quarterly by the SIB through its review of funds participating in the Insurance Trust.

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

**❖ City of Fargo FargoDome Permanent Fund
Actual Asset Allocation – June 30, 2017**

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 9,553,525	23%	17.63%
Domestic Small Cap Equity	4,965,412	12%	22.78%
International Equity	6,250,078	15%	24.25%
Fixed Income	16,221,161	39%	4.13%
Diversified Real Assets	4,233,054	10%	1.56%
Cash Equivalents	411,689	1%	0.44%
Total Fund	\$ 41,634,919		12.25%
Policy Benchmark			9.74%

Columns may not foot due to rounding.



ND STATE BOARD OF MEDICINE FUND

❖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.

Large Cap Domestic Equity	11%
Small Cap Domestic Equity	3%
International Equity	7%
Fixed Income	12%
Real Estate	2%
Short-term Fixed Income	65%

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

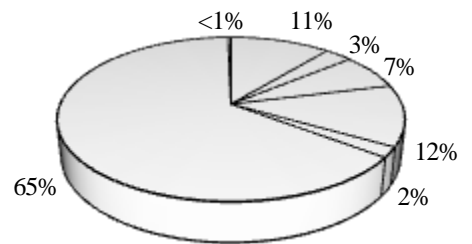
matters and changes pertaining to the investment of the Fund, including, but not limited to:

1. A list of the advisory services managing investments for the SIB.
2. A list of investments at market value, compared to previous reporting period, of each account managed by each advisory service.
3. Earnings, percentage earned, and change in market value of each account’s investments.

4. 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.
5. All material legal or legislative proceedings affecting the SIB.
6. Compliance with this investment policy statement.

**❖ND State Board of Medicine Fund
Actual Asset Allocation – June 30, 2017**

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 241,352	11%	17.63%
Domestic Small Cap Equity	66,511	3%	22.78%
International Equity	153,386	7%	24.25%
Fixed Income	262,887	12%	3.97%
Real Estate	43,928	2%	8.07%
Short-Term Fixed Income	1,404,650	65%	0.93%
Cash Equivalents	7,197	<1%	0.44%
Total Fund	\$ 2,179,911		5.29%
Policy Benchmark			4.06%



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NORTH DAKOTA LEGACY FUND

❖ND 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:

Asset Class	Policy Target Percentage
Broad US Equity	30%
Broad International Equity	20%
Fixed Income	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. The SIB approved an 18-month implementation strategy which completed in January 2015. On June 17, 2017, the Advisory Board acknowledged the transfer of the Bank of North Dakota Match Loan Certificates of Deposit Program (“BND CD”) to the Legacy Fund in early-2017. The BND CD investment will be limited to the lesser of \$200 million or 5% of the Legacy Fund (and represent a sector allocation within fixed income). The Advisory Board approved this future change in the Legacy Fund’s asset allocation without exception. BND will be requested to guarantee a minimum 1.75% investment return. The minimum return requirement will be periodically reviewed in connection with the Legacy Fund’s overall asset allocation framework. BND CD’s are rated AA by S&P.

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.

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 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:

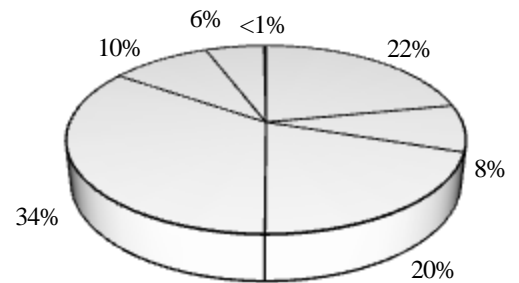
- Changes in asset class portfolio structures, tactical approaches, and market values.
- Loss of principal, if any.
- Management costs associated with various types of investments.
- All material legal or legislative proceedings affecting the SIB.
- Compliance with this investment policy statement.
- 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.

❖ **ND Legacy Fund**

Actual Asset Allocation – June 30, 2017

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 1,029,556,017	22%	17.51%
Domestic Small Cap Equity	379,376,336	8%	22.87%
International Equity	938,506,615	20%	23.91%
Fixed Income	1,614,700,561	34%	3.55%
Diversified Real Assets	452,209,854	10%	2.10%
Real Estate	264,257,790	6%	8.09%
Cash Equivalents	9,356,557	<1%	0.44%
Total Fund	\$ 4,687,963,730		12.03%
Policy Benchmark			9.91%



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RETIREMENT PLAN FOR EMPLOYEES OF JOB SERVICE NORTH DAKOTA

❖ Job Service ND

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 6.5%.

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 7% return and 2-3% 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 funds 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 2016. 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	18%
Global Equity	12%
US High Yield Bonds	3%
Emerging Markets Debt	3%
Core Fixed Income	23%
Limited Duration Fixed Income	22%
Diversified Short Term Fixed Income	12%
Short Term Corporate Fixed Inc	7%

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.

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.”*

- 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.

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.

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

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:

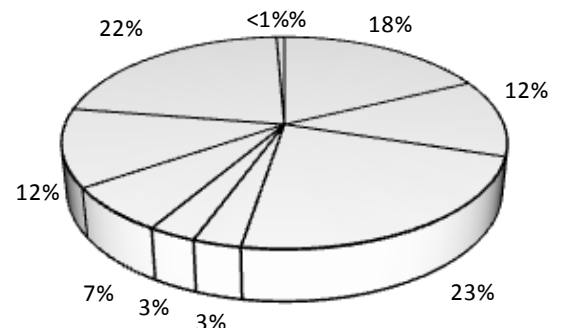
- Changes in asset class portfolio structures, tactical approaches and market values;
- All pertinent legal or legislative proceedings affecting the SIB.
- Compliance with these investment goals, objectives and policies.
- A general market overview and market expectations.
- A review of fund progress 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.

❖ Job Service ND

Actual Asset Allocation – June 30, 2017

Asset Allocation	Fair Value	Percent of Total	One Year Return (net)
Domestic Equity	\$ 17,417,740	18%	10.19%
Global Equity	11,590,995	12%	11.08%
Core Fixed Income	22,221,043	23%	0.43%
High Yield Bonds	2,914,010	3%	13.67%
Emerging Markets Debt	2,891,558	3%	7.54%
Short Term Corporate Fixed Income	6,768,894	7%	1.34%
Diversified Short Term Fixed Income	11,590,995	12%	4.38%
Limited Duration Fixed Income	21,274,145	22%	0.29%
Cash Equivalents	663,437	<1%	0.75%
Total Fund	\$ 97,332,819		5.63%
Policy Benchmark			7.85%



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RETIREE HEALTH INSURANCE CREDIT FUND

❖ 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 one 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 8.0%.

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, 21-10-02 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 February 2009 – SEI Corporation

Domestic Large Cap	37%
Domestic Small Cap	9%
International Equities	14%
Core Plus Fixed Income	40%
Expected Return	8.4%
Standard Deviation of Returns	11.7%

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.

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."

- 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.

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.

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

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

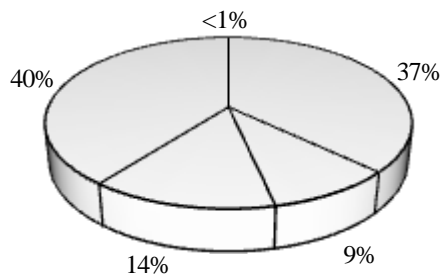
Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards.

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.

**❖ Retiree Health Insurance Credit Fund
Actual Asset Allocation – June 30, 2017**

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 43,067,596	37%	17.50%
Domestic Small Cap Equity	11,018,083	9%	17.72%
International Equity	16,128,519	14%	21.47%
Core Plus Fixed Income	45,921,116	40%	2.42%
Cash Equivalents	15,634	<1%	0.44%
Total Fund	\$ 116,150,947		11.81%
Policy Benchmark			11.32%



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TOBACCO PREVENTION AND CONTROL FUND

❖ Tobacco Prevention and Control Fund Investment Objectives and Policy Guidelines

Plan Characteristics and Constraints

The North Dakota Tobacco Prevention and Control fund (fund) was established in 1999 for the purpose of creating and implementing a comprehensive statewide tobacco prevention and control plan (comprehensive plan). NDCC 54-27-25(2). The comprehensive plan is administered by the Executive Committee and is to be consistent with the centers for disease control best practices for comprehensive tobacco prevention and control programs. NDCC 23-42-01. The Executive Committee has the power and duty to provide direction to the state investment board for investment of the fund. NDCC 23-42-04(1).

Fund Goals

The fund consists of the tobacco settlement dollars obtained by the state under section IX(c)(2) of the agreement adopted by the east central judicial district court in its judgment entered December 28, 1998 [Civil No. 98-3778] in State of North Dakota, ex rel. Heidi Heitkamp v. Philip Morris, Inc. Interest earned on the fund must be credited to the fund. NDCC 54-27-25(2). The fund Executive Committee recognizes that a sound investment program is essential to meet the goals of the comprehensive plan. As a result, the fund goal is to protect and sustain the fund in order to implement the comprehensive plan.

Responsibilities and Discretion of the State Investment Board (SIB)

The Executive Committee has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. The Executive Committee is charged by law under NDCC 23-42-04 with the responsibility of providing direction to the state investment board for investment 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.

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 Executive Committee is unwilling to undertake investment strategies that might jeopardize the ability of the fund to finance the comprehensive plan.

The Executive Committee actively seeks to sustain the fund by taking on risk for which it expects to be compensated over the long term. The Executive Committee 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. The Executive Committee believes that such an approach, prudently implemented, best serves the long-run interests of the State.

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 the Executive Committee 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 of its own collective risk tolerance, the Executive Committee approves the appropriate policy asset mix for the fund.

<u>Asset Class</u>	<u>Policy Target</u>	<u>Rebalancing Range</u>
Global Equity	10%	5-20%
Global Fixed Income	75%	60-90%
Cash	15%	10-20%

While the Executive Committee recognizes fluctuations in market values will lead to short-term deviations from

policy targets, the Executive Committee 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. Because the statutory purpose of the Executive Committee is to reinforce best practices related to comprehensive tobacco prevention and control programs, and to invest in or profit from the manufacturer and sale of tobacco products would contradict that purpose, the assets shall only be invested in securities issued by tobacco-free firms, defined as those which generate revenues of no greater than 0% from tobacco products. In the event of an inadvertent de minimis investment in a firm with any exposure to tobacco products, the inadvertent investment will be immediately divested upon discovery. For investment purposes "tobacco product" means tobacco or any product containing, made from, or derived from tobacco, in whole or in part, that is intended for human consumption, whether chewed, smoked, absorbed, dissolved, inhaled, snorted, sniffed, consumed, or ingested by any other means, including cigarettes, cigars, electronic smoking devices, pipe tobacco, chewing tobacco, snuff, snus, liquid, or other kinds and forms of tobacco. "Tobacco product" includes any product or device that contains nicotine, in any form, that is derived from tobacco. Any product that contains nicotine shall be presumed to contain nicotine derived from tobacco unless the nicotine is confirmed to be derived from a different source.
- 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 Executive Committee'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 Executive Committee quarterly and investment performance presentations will be provided to the Executive Committee 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:

1. A list of the advisory services managing investments for the Executive Committee.

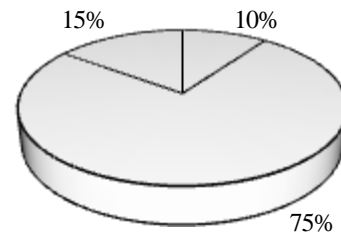
2. A list of investments at market value, compared to previous reporting period, of each fund managed by each advisory service.
3. Earnings, percentage earned, and change in market value of each fund’s investments.
4. Comparison of the performance of each fund managed by each advisory service to other funds under the

Executive Committee’s control and to generally accepted market indicators.

5. All material legal or legislative proceedings affecting the SIB.
6. Compliance with this investment policy statement.

**❖ Tobacco Prevention and Control Fund
Actual Asset Allocation – June 30, 2017**

<u>Asset Allocation</u>	<u>Fair Value</u>	<u>Percent of Total</u>	<u>One Year Return (net)</u>
Domestic Large Cap Equity	\$ 5,723,979	10%	17.88%
Short-Term Fixed Income	43,110,708	75%	-0.14%
Cash Equivalents	8,628,049	15%	0.44%
Total Fund	<u>\$ 57,462,736</u>		1.66%
Policy Benchmark			1.67%



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ACTUARIAL SECTION



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T 312.984.8500 www.segalco.com

October 13, 2017

Board of Trustees
North Dakota Teachers' Fund for Retirement
3442 East Century Avenue
Bismarck, ND 58507-7100

Re: Actuarial Valuation as of July 1, 2017

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, 2017.

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. Both are Fellows of the Society of Actuaries, Enrolled Actuaries, and Members of the American Academy of Actuaries, and both are experienced in performing valuations for large public retirement systems. They both 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 the 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 accrued liability (UAAL) over a period of 26 years beginning July 1, 2017, although at any given time the statutory rates may be insufficient.

Board of Trustees
 North Dakota Teachers' Fund for Retirement
 October 13, 2017
 Page 2

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 (26 years remaining as of July 1, 2017). For this calculation, payroll is assumed to increase 3.25% per year. As of July 1, 2017, the ADC is 12.99%, compared to 13.22% last year. This is greater than the 12.75% rate currently required by law.

The decrease in ADC is primarily driven by an actuarial gain on assets and demographic experience emerging more favorably than assumed.

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) increased from last year. The funded ratio at July 1, 2016, was 62.1%, while it is 63.7% as of July 1, 2017. Based on the market value of assets rather than the actuarial value of assets, the funded ratio increased to 63.2%, compared to 59.2% last year.

The Plan has a net investment loss of \$19 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 due to market losses during FY 2015 and FY 2016 offset by market gains in FY 2014 and FY 2017. As these losses are recognized over the next four years, the funded ratio is expected to slightly decline, assuming the plan earns 7.75% in the future.

REPORTING CONSEQUENCES

TFFR is required to disclose certain actuarial information in its Comprehensive Annual Financial Report (CAFR), 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. On April 30, 2015, the Board adopted new assumptions, effective for the July 1, 2015 valuation. In our opinion, the actuarial assumptions as approved by the Board are reasonable, taking into account the experience of the Plan and reasonable long-term expectations, and represent our best estimate of the anticipated long-term experience of the Plan. 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.

Board of Trustees
North Dakota Teachers' Fund for Retirement
October 13, 2017
Page 3

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.

DATA

Member data for retired, active, and inactive participants was supplied as of July 1, 2017, by the staff of the Retirement Office. We have not subjected this data to any auditing procedures, but have examined the data for reasonableness and consistency with the prior year's data. Asset information was also supplied by the staff. That assistance is gratefully acknowledged.

CAFR SCHEDULES

The undersigned provided the information used to prepare all of the schedules and exhibits in this section except for the Schedule of Retirees and Beneficiaries, which was prepared by the Retirement and Investment Office staff.

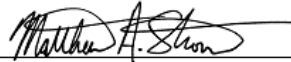
We also provided the information shown on the Schedule of Changes in Net Pension Liability and Related Ratios and the Schedule of Employer Contributions in the Financial Section.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.



By: Kim Nicholl, FSA, MAAA, EA, FCA
Senior Vice President and Actuary



Matthew A. Strom, FSA, MAAA, EA
Vice President and Actuary

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SUMMARY OF ACTUARIAL VALUATION RESULTS

	2017	2016
Demographic Data for Plan Year Beginning July 1:		
• Number of		
- Retirees and Beneficiaries	8,501	8,249
- Inactive, Vested	1,600	1,601
- Inactive, Nonvested	878	779
- Active Members	10,874	10,813
• Payroll (annualized)	\$650.1 million	\$627.0 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	12.99%	13.22%
• Margin/(Deficit)	-0.24%	-0.47%
Assets:		
• Fair value	\$2,360.5 million	\$2,124.3 million
• Actuarial value	2,379.8 million	2,229.3 million
• Return on market value (per actuary)	12.6%	0.4%
• Return on actuarial value	8.2%	6.2%
• Ratio - actuarial value to market value	100.8%	104.9%
• Net cash flow % relative to market value	-1.3%	-1.2%
Actuarial Information:		
• Normal cost %	12.05%	12.04%
• Normal cost	\$83.2 million	\$80.2 million
• Actuarial accrued liability	\$3,734.0 million	\$3,589.4 million
• Unfunded actuarial accrued liability (UAAL)	\$1,354.2 million	\$1,360.1 million
• Funded ratio	63.7%	62.1%
• Effective amortization period	27 years	29 years
GASB Information:		
• Discount rate	7.75%	7.75%
• Total pension liability	\$3,734.0 million	\$3,589.4 million
• Plan fiduciary net position	\$2,360.5 million	\$2,124.3 million
• Net pension liability	\$1,373.5 million	\$1,465.1 million
• Plan fiduciary net position as % of total pension liability	63.2%	59.2%
Gains/(Losses):		
• Asset experience	\$ 9.5 million	\$(33.6) million
• Liability experience	11.4 million	(7.7) million
• Administrative Expenses	(0.3) million	0.1 million
• Benefit changes	0.0 million	0.0 million
• Assumption/method changes	0.0 million	0.0 million
• Total Gain/(Loss)	\$20.6 million	\$(41.2) 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 April 30, 2015, effective for the July 1, 2015 valuation.

ACTUARIAL ASSUMPTIONS

Investment Return Rate 7.75% per annum, compounded annually, equal to an assumed 2.75% inflation rate plus a 5.50% real rate of return, less 0.50% for expected investment and administrative expenses. (Adopted effective July 1, 2015)

Mortality Rates The mortality rates were based on historical and current demographic data, as used in the experience study dated April 30, 2015. The underlying tables reasonably reflect the mortality experience of the Fund as of the measurement date.

Post-Retirement Non-Disabled: RP-2014 Healthy Annuitant Mortality Table set back one year, multiplied by 50% for ages under 75 and grading up to 100% by age 80, projected generationally using Scale MP-2014. (Adopted effective July 1, 2015)
Sample 2014 mortality rates are as follows:

Age	Male	Female
50	0.20%	0.14%
55	0.27%	0.17%
60	0.37%	0.24%
65	0.51%	0.37%
70	0.77%	0.58%
75	1.22%	0.95%
80	3.62%	2.82%
85	6.93%	5.40%
90	12.15%	9.56%
95	20.11%	16.30%
100	29.38%	25.11%

The mortality tables are adjusted forward from 2014 using the generational projection to reflect future mortality improvement.

Post-Retirement Disabled: RP-2014 Disabled Mortality Table set forward 4 years. (Adopted effective July 1, 2015)

Pre-Retirement Non-Disabled: RP-2014 Employee Mortality Table projected generationally using Scale MP-2014. (Adopted effective July 1, 2015)

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, 2015)

Age	Unreduced Retirement*		Reduced Retirement
	Male	Female	Male/Female
50-54	15.00%	15.00%	
55-57	15.00%	15.00%	2.00%
58	15.00%	15.00%	3.00%
59	15.00%	15.00%	3.50%
60	15.00%	15.00%	4.00%
61	25.00%	25.00%	6.50%
62	35.00%	35.00%	9.00%
63	25.00%	30.00%	12.00%
64	35.00%	40.00%	12.00%
65	40.00%	50.00%	
66	30.00%	40.00%	
67	30.00%	30.00%	
68	25.00%	30.00%	
69	25.00%	30.00%	
70-74	25.00%	25.00%	
75	100.00%	100.00%	

** 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), 10% is added to the rate at the age (and only this age) the member first becomes eligible for an unreduced retirement benefit.*

Disability Rates

Shown below for selected ages. (Adopted effective July 1, 2010)

Disabilities per 100 Members	
Age	Number
20	0.011%
25	0.011%
30	0.011%
35	0.011%
40	0.033%
45	0.055%
50	0.088%
55	0.154%
60	0.297%

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, 2015)

Years of Service	Male	Female
0	20.00%	20.00%
1	14.00%	12.00%
2	11.00%	9.00%
3	8.00%	7.00%
4	6.50%	6.00%
5	5.00%	5.00%
6	4.00%	4.00%
7	3.50%	3.50%
8	3.00%	3.00%
9	2.50%	2.50%
10	2.50%	2.50%
11	2.00%	2.50%
12	2.00%	2.50%
13	2.00%	2.50%
14	2.00%	2.50%
15-18	1.50%	2.00%
19	0.75%	2.00%
20-24	0.75%	1.50%
25 and over	0.75%	0.75%

Termination rates eliminated at first retirement eligibility.

Salary Increase Rates

Inflation rate of 2.75% plus productivity increase rate of 1.50%, plus step-rate/promotional increase as shown below. (Adopted effective July 1, 2015)

Years of Service	Annual Step-Rate Promotional Component	Annual Total Salary Increase
0	10.25%	14.50%
1	3.50%	7.75%
2	3.25%	7.50%
3	3.00%	7.25%
4	2.75%	7.00%
5	2.50%	6.75%
6	2.25%	6.50%
7	2.00%	6.25%
8-9	1.75%	6.00%
10-11	1.50%	5.75%
12-13	1.25%	5.50%
14-15	1.00%	5.25%
16-18	0.75%	5.00%
19-22	0.50%	4.75%
23-24	0.25%	4.50%
25 & over	0.00%	4.25%

Summary of Actuarial Assumptions and Methods (continued)

<u>Payroll Growth Rate</u>	3.25% per annum. This assumption does not include any allowance for future increase in the number of members. (Adopted effective July 1, 2010)
<u>Percent Married</u>	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)
<u>Percent Electing a Deferred Termination Benefit</u>	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)
<u>Loading Factor for New Retirees</u>	The liability includes a 3% load for members who retired during the year ended June 30, 2017, to reflect that their benefit is not finalized as of the valuation date.
<u>Annual Administrative Expenses</u>	Administrative expenses of \$2,233,200 (actual expenses for the previous year, increased with inflation) are expected to be paid for the year beginning July 1, 2017.
<u>Asset Valuation Method</u>	The actuarial value of assets is based on the market 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 market value of assets (adjusted for receipts and disbursements during the year). The actual investment return for this purpose is determined net of all investment and administrative expenses. The actuarial value is further adjusted, if necessary, to be within 20% of the market value.
<u>Actuarial Cost Method</u>	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.
<u>Amortization Period and Method</u>	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.

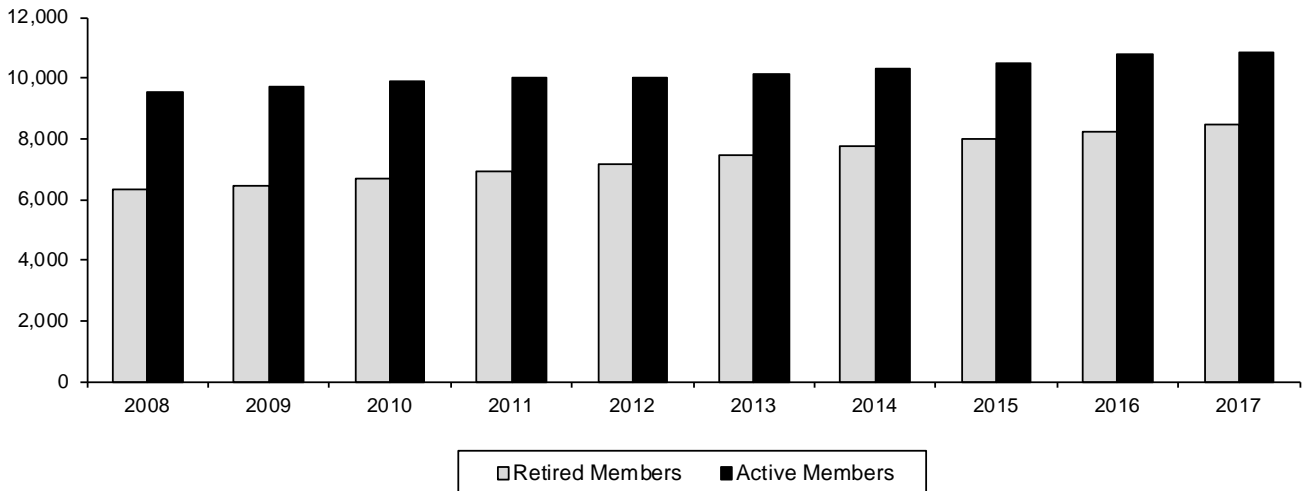
SCHEDULE OF ACTIVE MEMBERS

Valuation Year	Active Members		Covered Payroll (annualized)		Average Salary		Average Age	Average Service
	Number	Percent Increase	Amount in \$ Millions	Percent Increase	\$ Amount	Percent Increase		
2008	9,561	(0.4)	417.7	4.1	43,684	4.5	44.6	14.4
2009	9,707	1.5	440.0	5.3	45,327	3.8	44.5	14.3
2010	9,907	2.1	465.0	5.7	46,937	3.6	44.2	14.0
2011	10,004	1.0	488.8	5.1	48,857	4.1	43.9	13.8
2012	10,014	0.1	505.3	3.4	50,458	3.3	43.7	13.7
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

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
2008	406	\$ 9.4	166	\$ 1.9	6,317	\$ 17,724	\$106.5	6.8
2009	346	7.9	197	2.5	6,466	18,168	114.0	7.0
2010	406	10.1	200	2.0	6,672	18,768	124.5	9.2
2011	426	9.9	165	2.0	6,933	19,272	127.4	2.3
2012	416	10.2	198	2.3	7,151	19,968	135.3	6.1
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

**ACTIVE MEMBERS VS RETIRED MEMBERS
10-YEAR SUMMARY**



**ANALYSIS OF CHANGE IN
ACTUARIALLY DETERMINED CONTRIBUTION (ADC)**

	<u>7/1/2017</u>	<u>7/1/2016</u>
Prior valuation	13.22 %	13.04 %
Increases/(decreases) due to:		
Change in remaining amortization period	0.00 %	0.00 %
Change in covered payroll and normal cost	(0.03)%	(0.39)%
Employer contributions received at 12.75% rather than 13.04% for FY2016 and rather than 11.57% for FY2015	(0.01)%	(0.06)%
Liability experience	(0.10)%	0.07 %
Investment experience	(0.09)%	0.32 %
Legislative changes	0.00 %	0.00 %
Change in actuarial assumptions	0.00 %	0.00 %
Change to valuation software as a result of the actuarial audit	0.00 %	0.24 %
Total	<u>(0.23)%</u>	<u>0.18 %</u>
Current valuation	12.99 %	13.22 %
Statutory employer contribution rate	12.75 %	12.75 %
Margin available [contribution sufficiency/(deficiency)]	<u>(0.24)%</u>	<u>(0.47)%</u>

**DEVELOPMENT OF UNFUNDED
ACTUARIAL ACCRUED LIABILITY (UAAL)**

	<u>(\$ in millions)</u>	
	<u>7/1/2017</u>	<u>7/1/2016</u>
UAAL at beginning of year	\$ 1,360.1	\$ 1,324.7
Normal cost	77.3	70.1
Total contributions	(168.1)	(161.9)
Interest on:		
UAAL and normal cost	111.4	108.1
Total contributions	<u>(5.9)</u>	<u>(5.7)</u>
Expected UAAL	\$ 1,374.8	\$ 1,335.3
Changes due to (gain)/loss from:		
Investments	\$ (9.5)	\$ 33.6
Demographics	(11.1)	7.6
Change due to actuarial audit	-	(16.4)
Change in actuarial assumptions	<u>-</u>	<u>-</u>
UAAL at end of year	<u>\$ 1,354.2</u>	<u>\$ 1,360.1</u>

SOLVENCY TEST

Valuation Year	Actuarial Accrued Liability (AAL) (in millions)				Portion of AAL Covered by Valuation Assets		
	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)
2008	\$547.3	\$1,074.8	\$ 708.6	\$1,909.5	100.0%	100.0%	40.6%
2009	576.8	1,134.2	734.8	1,900.3	100.0	100.0	25.8
2010	600.4	1,246.1	790.7	1,842.0	100.0	99.6	0.0
2011	626.0	1,332.1	791.6	1,822.6	100.0	89.8	0.0
2012	647.9	1,429.0	794.9	1,748.1	100.0	77.0	0.0
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

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 Compensation
2008	\$1,909.5	\$2,330.6	\$ 421.1	81.9%	\$417.7	100.8%
2009	1,900.3	2,445.9	545.6	77.7	440.0	124.0
2010	1,842.0	2,637.2	795.2	69.8	465.0	171.0
2011	1,822.6	2,749.8	927.2	66.3	488.8	189.7
2012	1,748.1	2,871.9	1,123.8	60.9	505.3	222.4
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

Please also refer to the Schedule of Employer Contributions in the required supplementary information to the financial statements on page 61.

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 which 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 (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 assessment rate 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. Effect 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:

1. 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.

STATISTICAL SECTION

This part of the Retirement and Investment Office's (RIO) comprehensive annual 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.

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These schedules contain trend information to help the reader understand how RIO's financial performance and well-being have changed over time.

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These schedules offer demographic indicators to help the reader understand the environment within which RIO's financial activities take place.

Operating Information

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These schedules contain service data to help the reader understand how the information in RIO's financial report relates to the services RIO provides and the activities it performs.

Sources: Unless otherwise noted, the information in these schedules is derived from the comprehensive annual financial reports for the relevant year.

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
2008	\$ 33,237,677	\$ 33,683,550	7.75	\$ (140,625,425)	\$ 3,636,528	\$ (70,067,670)
2009	34,712,846	37,487,655	8.25	(492,738,080)	2,176,734	(418,360,845)
2010	36,848,481	39,836,646	8.25	179,066,695	1,413,481	257,165,303
2011	38,869,260	44,545,433	8.75	334,965,040	1,499,748	419,879,481
2012	40,254,562	46,126,193	8.75	(21,501,670)	2,417,995	67,297,080
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

DEDUCTIONS:

Fiscal Year	Benefits Paid to Participants	Refunds	Administrative Charges	Total Deductions	Change in Net Position
2008	\$ 106,456,334	\$ 5,500,476	\$ 1,639,521	\$ 113,596,331	\$ (183,664,001)
2009	113,966,079	2,362,251	1,707,506	118,035,836	(536,396,681)
2010	124,472,154	2,557,240	1,902,796	128,932,190	128,233,113
2011	127,435,564	2,210,738	2,003,705	131,650,007	288,229,474
2012	135,250,568	2,479,194	1,596,976	139,326,738	(72,029,658)
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	236,155,787

BENEFIT AND REFUND DEDUCTIONS BY TYPE

Fiscal Year	Annuity Payments					Refunds			Total Benefit Expenses
	Service Retirements	PLSO Distributions	Disability Retirements	Beneficiaries	Total Annuity Payments	Separation	Death	Total Refunds	
2008	\$ 98,381,551	\$ 692,139	\$ 1,296,946	\$ 6,085,698	\$ 106,456,334	\$ 5,154,211	\$ 346,265	\$ 5,500,476	\$ 111,956,810
2009	105,258,155	895,742	1,419,050	6,393,132	113,966,079	2,131,709	230,542	2,362,251	116,328,330
2010	115,203,349	821,478	1,440,481	7,006,846	124,472,154	2,300,466	256,774	2,557,240	127,029,394
2011	117,868,157	951,229	1,705,041	6,911,137	127,435,564	1,871,271	339,467	2,210,738	129,646,302
2012	125,721,931	532,104	1,685,206	7,311,327	135,250,568	2,296,492	182,702	2,479,194	137,729,762
2013	135,498,122	863,990	1,738,006	7,843,205	145,943,323	2,595,636	457,759	3,053,395	148,996,718
2014	147,286,889	820,463	1,960,290	8,282,713	158,350,355	3,109,595	799,326	3,908,921	162,259,276
2015	157,134,597	557,332	1,891,043	8,766,790	168,349,762	3,156,932	732,739	3,889,671	172,239,433
2016	168,179,310	992,233	1,920,107	9,526,134	180,617,784	4,715,602	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

**SCHEDULE OF CONTRIBUTION RATES
LAST 10 FISCAL YEARS**

<u>Fiscal Year</u>	<u>Member Rate</u>	<u>Employer Rate</u>
2008	7.75%	7.75%
2009	7.75%	8.25%
2010	7.75%	8.25%
2011	7.75%	8.75%
2012	7.75%	8.75%
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%

**PRINCIPAL PARTICIPATING EMPLOYERS
CURRENT YEAR AND NINE YEARS AGO**

<u>Participating Employer</u>	<u>2017</u>			<u>2008</u>		
	<u>Covered Employees</u>	<u>Rank</u>	<u>% of Total System</u>	<u>Covered Employees</u>	<u>Rank</u>	<u>% of Total System</u>
Bismarck Public Schools	1,201	1	10.14%	939	2	9.11%
Fargo Public Schools	1,108	2	9.36%	992	1	9.62%
West Fargo Schools	987	3	8.34%	517	5	5.02%
Grand Forks Schools	837	4	7.07%	738	3	7.16%
Minot Schools	723	5	6.11%	614	4	5.96%
Mandan Public Schools	336	6	2.84%	274	6	2.66%
Dickinson Schools	297	7	2.51%	235	7	2.28%
Williston Schools	281	8	2.37%	187	9	1.81%
Jamestown Schools	216	9	1.82%	224	8	2.17%
Devils Lake Schools	173	10	1.46%	174	10	1.69%
All Other ¹	5,682		47.99%	5,413		52.52%
Total (215 & 235 employers) ²	11,841		100.00%	10,307		100.00%

¹ In 2017 "all other" consisted of:

<u>Type</u>	<u>Number</u>	<u>Employees</u>
School Districts	166	5,102
County Superintendents	6	6
Special Education Units	19	358
Vocational Centers	5	55
State Agencies/Institutions	5	102
Other	4	59
Total	<u>205</u>	<u>5,682</u>

¹ In 2008 "all other" consisted of:

<u>Number</u>	<u>Employees</u>
178	4,889
12	12
21	378
3	46
7	79
4	9
<u>225</u>	<u>5,413</u>

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, 2017

School Districts

Alexander	Grafton	Minot
Anamoose	Grand Forks	Minto
Apple Creek Elementary	Grenora	Mohall-Lansford-Sherwood
Ashley	Griggs County Central	Montpelier
Bakker Elementary	Halliday	Mott-Regent
Barnes County North	Hankinson	Mt. Pleasant
Beach	Harvey	Munich
Belcourt	Hatton	Napoleon
Belfield	Hazelton – Moffit	Naughton Rural
Beulah	Hazen	Nedrose
Billings County School	Hebron	Nesson
Bismarck	Hettinger	New Public
Bottineau	Hillsboro	New England
Bowbells	Hope	New Rockford-Sheyenne
Bowman	Horse Creek Elementary	New Salem-Almont
Burke Central	Jamestown	New Town
Carrington	Kenmare	Newburg United
Cavalier	Kensal	North Border School
Center-Stanton	Kidder County School	North Sargent
Central Cass	Killdeer	North Star
Central Elementary	Kindred	Northern Cass
Central Valley	Kulm	Northwood
Dakota Prairie	Lakota	Oakes
Devils Lake	LaMoure	Oberon Elementary
Dickinson	Langdon	Page
Divide	Larimore	Park River Area
Drake	Leeds	Parshall
Drayton	Lewis and Clark	Pingree – Buchanan
Dunseith	Lidgerwood	Powers Lake
Earl Elementary	Linton	Richardton-Taylor
Edgeley	Lisbon	Richland
Edmore	Litchville-Marion	Rolette
Eight Mile	Little Heart Elementary	Roosevelt
Elgin/New Leipzig	Lone Tree Elementary	Rugby
Ellendale	Maddock	Sargent Central
Emerado Elementary	Mandan	Sawyer
Enderlin Area School	Mandaree	Scranton
Fairmount	Manning Elementary	Selfridge
Fargo	Manvel Elementary	Solen-Cannonball
Fessenden-Bowdon	Maple Valley	South Heart
Finley-Sharon	Mapleton Elementary	South Prairie Elementary
Flasher	Marmarth Elementary	St. John's
Fordville Lankin	Max	St. Thomas
Fort Ransom Elementary	Mayville – Portland CG	Stanley
Fort Totten	McClusky	Starkweather
Fort Yates	McKenzie County School	Sterling
Gackle-Streeter	Medina	Strasburg
Garrison	Menoken Elementary	Surrey
Glen Ullin	Midkota	Sweet Briar Elementary
Glenburn	Midway	TGU
Goodrich	Milnor	Thompson
	Minnewauken	Tioga

SCHEDULE OF PARTICIPATING EMPLOYERS (Continued)

School Districts (cont.)

Turtle Lake – Mercer
 Twin Buttes Elementary
 Underwood
 United
 Valley-Edinburg
 Valley City
 Velva
 Wahpeton
 Warwick
 Washburn
 West Fargo
 Westhope
 White Shield
 Williston
 Wilton
 Wing
 Wishek
 Wolford
 Wyndmere
 Yellowstone
 Zeeland

Total School Districts 176

County Superintendents

Logan County
 McKenzie County
 Morton County
 Nelson County
 Slope County
 Ward County

Total County Super. 6

Special Education Units

Burleigh County Special Ed.
 E Central Center for Exc. Children
 GST Educational Services
 James River Multidistrict Spec. Ed.
 Lake Region Special Ed.
 Lonetree 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

N Central Area Career & Tech
 North Valley Career & Tech Center
 Roughrider Area Career & Tech
 SE Region Career & Tech Center
 Sheyenne Valley Area Voc Center

Total Vocational Centers 5

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 215

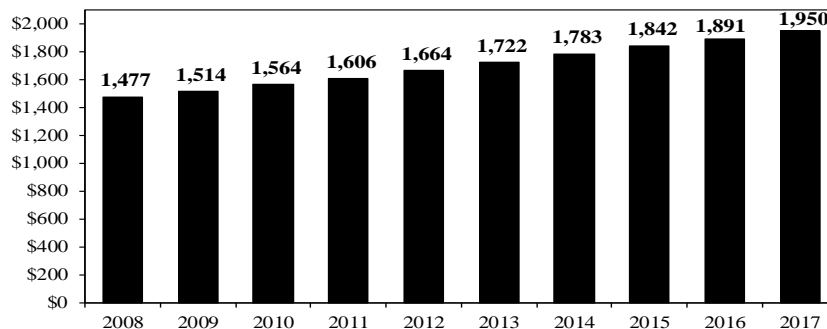
**SCHEDULE OF RETIREES RESIDING IN NORTH DAKOTA BY COUNTY
AS OF JUNE 30, 2017**

County	Number	Average Benefit	County	Number	Average Benefit	County	Number	Average Benefit
Adams	25	\$ 1,923	Griggs	43	\$ 1,909	Richland	143	\$ 2,191
Barnes	164	2,196	Hettinger	27	1,871	Rolette	88	1,917
Benson	55	2,111	Kidder	38	1,802	Sargent	43	1,594
Billings	4	1,479	LaMoure	61	1,823	Sheridan	16	1,620
Bottineau	129	1,696	Logan	20	1,850	Sioux	6	902
Bowman	44	1,896	McHenry	75	1,950	Slope	4	1,190
Burke	41	1,539	McIntosh	39	1,734	Stark	216	2,063
Burleigh	860	2,123	McKenzie	59	2,024	Steele	20	1,766
Cass	1109	2,225	McLean	124	1,840	Stutsman	224	2,026
Cavalier	72	1,704	Mercer	106	2,000	Towner	37	1,885
Dickey	72	1,921	Morton	297	1,961	Traill	105	1,883
Divide	33	1,903	Mountrail	77	1,580	Walsh	162	1,938
Dunn	40	2,108	Nelson	61	1,827	Ward	607	2,096
Eddy	41	1,987	Oliver	17	2,019	Wells	67	1,864
Emmons	36	1,964	Pembina	98	2,165	Williams	182	2,102
Foster	48	2,271	Pierce	66	1,817	Out of State	1,707	1,571
Golden Valley	18	1,838	Ramsey	140	1,857			
Grand Forks	610	2,200	Ransom	53	1,734	GRAND TOTALS:	8,501	\$ 1,950
Grant	31	1,434	Renville	41	1,874			

SCHEDULE OF AVERAGE BENEFIT PAYMENTS

Valuation Year		Years of Service								TOTAL
		<5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	> 34	
2008	Number of Retirees	83	222	451	421	670	1,363	1,938	1,169	6,317
	Average Monthly Benefit	220	310	410	656	1,025	1,471	1,897	2,066	1,477
	Average Years of Service	3	7	13	17	23	28	32	38	28
2009	Number of Retirees	90	243	450	420	692	1,410	2,008	1,153	6,466
	Average Monthly Benefit	216	308	417	670	1,074	1,515	1,942	2,120	1,514
	Average Final Average Salary	1,751	1,984	1,751	2,144	2,627	2,972	3,318	3,315	2,910
	Average Years of Service	3	7	13	17	23	28	32	38	28
2010	Number of Retirees	90	262	463	430	717	1,438	1,971	1,301	6,672
	Average Monthly Benefit	199	316	441	695	1,130	1,569	1,984	2,194	1,564
	Average Final Average Salary	1,695	2,034	1,901	2,253	2,761	3,100	3,403	3,427	3,018
	Average Years of Service	3	7	13	17	23	28	32	38	28
2011	Number of Retirees	99	291	475	446	746	1,494	2,148	1,234	6,933
	Average Monthly Benefit	203	316	457	719	1,182	1,626	2,015	2,306	1,606
	Average Final Average Salary	1,806	2,072	1,967	2,351	2,869	3,209	3,456	3,537	3,100
	Average Years of Service	3	7	12	17	23	28	32	38	27
2012	Number of Retirees	99	309	482	464	771	1,521	2,232	1,273	7,151
	Average Monthly Benefit	202	317	479	757	1,228	1,673	2,065	2,438	1,664
	Average Final Average Salary	1,973	2,118	2,120	2,507	3,008	3,322	3,570	3,740	3,235
	Average Years of Service	3	7	13	17	23	28	32	38	27
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	3	7	13	17	23	28	32	38	27
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	3	7	12	17	23	28	32	38	27
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	3	7	12	17	23	28	32	38	27
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	7	12	17	23	28	32	38	27
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	7	12	17	23	28	32	38	27

Average Final Average Salary detail not available prior to 2009.



**SCHEDULE OF RETIREES
BY BENEFIT AMOUNT**

Monthly Benefit	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Under \$200	251	241	231	228	224	215	215	199	193	185
200 to 399	460	461	465	462	464	464	471	466	475	470
400 to 599	435	445	449	443	454	473	489	500	517	539
600 to 799	400	387	392	402	417	418	436	446	469	506
800 to 999	401	398	402	408	410	409	410	410	417	419
1,000 to 1,199	497	506	511	522	533	518	515	527	529	538
1,200 to 1,399	513	528	527	532	535	525	524	514	505	498
1,400 to 1,599	567	583	590	587	591	573	574	556	550	534
1,600 to 1,799	622	619	619	615	607	592	568	550	525	510
1,800 to 1,999	605	608	599	599	586	570	557	526	513	499
2,000 to 2,199	566	557	557	537	522	501	474	445	412	377
2,200 to 2,399	531	514	484	462	435	409	394	381	353	329
2,400 to 2,599	421	406	398	377	349	325	313	287	267	250
2,600 to 2,799	372	356	347	320	303	281	267	237	208	185
2,800 to 2,999	356	336	309	301	261	227	200	178	155	144
3,000 & Over*										334
3,000 to 3,199	314	292	277	228	206	178	155	124	110	
3,200 to 3,399	272	239	210	178	147	124	91	84	70	
3,400 to 3,599	197	175	156	141	114	92	79	72	61	
3,600 to 3,799	162	144	132	101	83	72	55	46	41	
3,800 to 3,999	115	105	79	62	58	42	35	34	24	
4,000 & Over	444	349	291	242	190	143	111	90	72	
TOTAL	8,501	8,249	8,025	7,747	7,489	7,151	6,933	6,672	6,466	6,317

* Breakdown of data for monthly benefits > \$3,000 is not available for years prior to 2009.

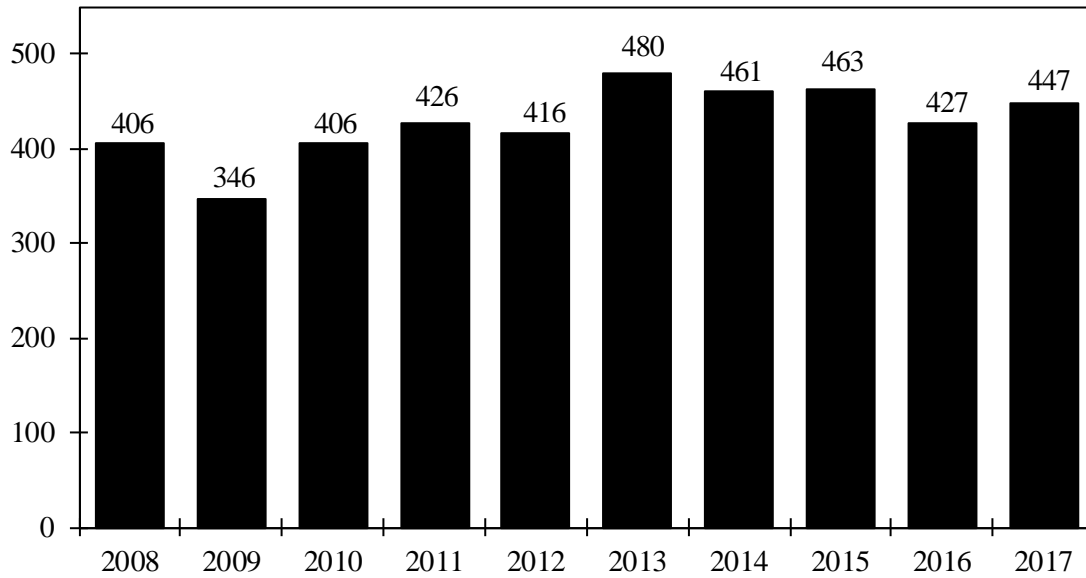
**SCHEDULE OF RETIREES
BY BENEFIT TYPE**

Form of Payment	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Service:										
Straight Life	2,960	2,917	3,096	3,014	2,916	2,801	2,739	2,583	2,560	2,578
100% J&S	3,195	3,035	2,733	2,570	2,449	2,279	2,153	2,095	1,963	1,836
50% J&S	666	644	576	552	531	515	501	500	468	458
5 Years C&L	18	19	19	21	22	23	28	32	32	32
10 Years C&L	172	175	171	175	177	178	184	179	174	169
20 Years C&L	113	100	96	91	85	73	63	55	46	38
Level	540	545	559	568	574	579	584	585	590	584
Subtotal	7,664	7,435	7,250	6,991	6,754	6,448	6,252	6,029	5,833	5,695
Disability:										
Straight Life	102	105	105	105	103	96	97	88	85	81
100% J&S	18	14	12	13	12	13	11	11	13	12
50% J&S	6	7	8	7	6	8	8	7	6	5
5 Years C&L	1	1	1	2	2	2	2	2	2	2
10 Years C&L	0	0	0	0	0	0	1	2	1	1
20 Years C&L	1	1	2	2	1	1	1	1	1	1
Subtotal	128	128	128	129	124	120	120	111	108	102
Beneficiaries:										
Straight Life	667	662	631	612	599	571	545	522	513	506
5 Years Certain Only	0	3	2	2	2	2	6	6	6	9
10 Years Certain Only	4	11	9	9	9	9	9	3	5	5
20 Years Certain Only	12	10	5	4	1	1	1	1	1	0
QDRO Alternate Payee*	26									
Subtotal	709	686	647	627	611	583	561	532	525	520
TOTAL	8,501	8,249	8,025	7,747	7,489	7,151	6,933	6,672	6,466	6,317

* Prior to 2017, QDRO Alternate Payees were included within the other listed beneficiary options.

SCHEDULE OF NEW RETIREES BY TYPE

<u>Valuation Year</u>	<u>Retirement</u>	<u>Disability</u>	<u>Beneficiary</u>	<u>Total</u>
2008	357	10	39	406
2009	304	8	34	346
2010	366	8	32	406
2011	370	12	44	426
2012	371	7	38	416
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



**PAYMENTS TO INVESTMENT CONSULTANTS
FOR FISCAL YEARS ENDED JUNE 30**

PENSION INVESTMENT POOL

	2017	2016	2015	2014	2013
INVESTMENT MANAGERS					
Global Equity:					
Calamos Advisors LLC	\$ -	\$ -	\$ -	\$ 191,300	\$ 386,180
Epoch Investment Partners	2,338,179	2,100,500	2,023,872	1,940,561	1,412,498.00
LSV Asset Management *	924,572	724,800	3,643,600	3,789,558	1,366,232.00
Total Global Equity	<u>3,262,751</u>	<u>2,825,300</u>	<u>5,667,472</u>	<u>5,921,419</u>	<u>3,164,910</u>
Domestic Large Cap Equity:					
Parametric Clifton *	41,718	372,195	3,940	21,044	(139,667)
Los Angeles Capital Management *	1,201,183	1,646,315	903,165	1,470,279	903,986
LSV Asset Management	-	-	-	-	441,745
Northern Trust Asset Management *	-	-	285,132	799,906	279,317
Total Domestic Large Cap Equity	<u>1,242,901</u>	<u>2,018,510</u>	<u>1,192,237</u>	<u>2,291,229</u>	<u>1,485,381</u>
Domestic Small Cap Equity:					
Atlanta Capital Management Co.	893,943	207,293	-	-	-
Callan Associates Inc.	-	474,648	633,323	833,802	834,282
Parametric Clifton *	171,509	612,566	452,665	434,565	665,402
Total Domestic Small Cap Equity	<u>1,065,452</u>	<u>1,294,507</u>	<u>1,085,988</u>	<u>1,268,367</u>	<u>1,499,684</u>
Developed International Equity:					
Capital Guardian Trust Company	-	456,437	509,570	417,810	307,729
The Clifton Group	-	-	-	88,357	172,768
Dimensional Fund Advisors	537,233	482,027	495,410	481,941	380,923
LSV Asset Management	-	-	-	-	286,530
Northern Trust Asset Management	91,468	80,928	83,991	41,760	-
State Street Global Advisors	-	319,219	-	23,910	248,591
Wellington Trust Company, NA	733,503	749,986	712,517	705,784	561,117
William Blair Investment Management, LLC	506,652	39,430	-	-	-
Total Developed International Equity	<u>1,868,856</u>	<u>2,128,027</u>	<u>1,801,488</u>	<u>1,759,562</u>	<u>1,957,658</u>
Emerging Markets Equity:					
Axiom International Investors	1,261,070	1,045,569	965,372	-	-
Dimensional Fund Advisors	328,457	254,292	237,037	219,392	235,763
J.P. Morgan Investment Management, Inc.	-	-	16,647	188,645	267,068
Northern Trust Asset Management	-	-	34,682	84,874	28,323
PanAgora Asset Management, Inc.	-	-	-	52,302	116,010
UBS Global Asset Management	-	-	-	88,171	291,475
Total Emerging Markets Equity	<u>1,589,527</u>	<u>1,299,861</u>	<u>1,253,738</u>	<u>633,384</u>	<u>938,639</u>

*Indicates fee schedule for this account includes some form of performance based fees.

**PAYMENTS TO INVESTMENT CONSULTANTS
FOR FISCAL YEARS ENDED JUNE 30**

PENSION INVESTMENT POOL (Continued)

	2017	2016	2015	2014	2013
INVESTMENT MANAGERS (cont.)					
Private Equity:					
Adams Street Partners *	902,808	727,923	567,390	1,905,053	991,683
Blackrock Private Equity Partners *	112,085	-	-	-	-
Capital International *	285,272	604,904	691,023	692,462	768,528
Coral Partners, Inc. *	-	-	-	45,836	129,958
Corsair Capital *	430,092	699,738	697,648	699,007	736,919
EIG Global Energy Partners *	252,756	279,354	272,048	286,426	365,606
Hearthstone Homebuilding Investors, LLC *	-	-	-	-	566
InvestAmerica L&C, LLC *	403,938	390,201	515,216	506,227	536,928
Matlin Patterson Global Opportunities, LLC *	196,956	259,393	265,398	239,020	(427,781)
Quantum Energy Partners *	78,378	78,094	117,658	866,226	844,935
Quantum Resources Management *	-	-	21,916	43,659	52,006
Total Private Equity	2,662,285	3,039,607	3,148,297	5,283,916	3,999,348
Investment Grade Fixed Income:					
Bank of North Dakota	-	-	-	-	24,323
Calamos Advisors LLC	-	-	-	-	-
Declaration Management & Research LLC *	402,814	388,981	354,224	362,017	350,673
J.P. Morgan Investment Management, Inc.	255,042	249,491	187,706	-	-
PIMCO *	3,995,408	1,673,974	1,874,275	3,340,986	6,296,078
State Street Global Advisors	34,982	27,411	37,074	23,979	992
Western Asset Management Company	-	-	42,533	178,762	182,317
Total Investment Grade Fixed Income	4,688,246	2,339,857	2,495,812	3,905,744	6,854,383
Below Investment Grade Fixed Income:					
Goldman Sachs Asset Management *	44,401	240,248	429,787	583,611	754,745
Loomis Sayles & Company	969,076	984,062	1,121,922	1,053,137	882,685
PIMCO *	2,367,322	1,321,306	1,353,712	69,443	2,075,630
Total Below Investment Grade Fixed Income	3,380,799	2,545,616	2,905,421	1,706,191	3,713,060
Developed International Fixed Income:					
UBS Global Asset Management	340,270	329,637	344,541	315,675	285,673
Brandywine Asset Management	564,747	504,931	486,017	447,343	427,725
Total Developed International Fixed Income	905,017	834,568	830,558	763,018	713,398
Real Estate:					
INVESCO Realty Advisors *	4,187,428	2,757,733	3,352,638	2,394,225	2,104,737
J.P. Morgan Investment Management, Inc. *	1,915,423	1,917,259	1,838,780	1,735,021	1,941,237
Total Real Estate	6,102,851	4,674,992	5,191,418	4,129,246	4,045,974

*Indicates fee schedule for this account includes some form of performance based fees.

**PAYMENTS TO INVESTMENT CONSULTANTS
FOR FISCAL YEARS ENDED JUNE 30**

PENSION INVESTMENT POOL (Continued)

	2017	2016	2015	2014	2013
INVESTMENT MANAGERS (cont.)					
Timber:					
Timberland Investment Resources *	961,366	(2,087,264)	695,255	747,283	771,816
Infrastructure:					
Grosvenor (formerly Credit Suisse) *	347,288	552,733	761,185	(39,829)	443,767
J.P. Morgan Investment Management, Inc.*	1,446,313	1,716,626	1,515,953	1,540,242	1,643,680
Total Infrastructure	1,793,601	2,269,359	2,277,138	1,500,413	2,087,447
Cash Equivalents:					
The Northern Trust Company, Inc.	39,582	60,064	65,340	61,796	60,936
Total Investment Manager Fees	29,563,234	23,243,004	28,610,162	29,971,568	31,292,634
INVESTMENT CUSTODIAN					
The Northern Trust Company, Inc	481,835	441,915	476,210	655,257	573,140
INVESTMENT CONSULTANTS					
Adams Street Partners	61,805	84,222	147,024	149,210	221,839
Aon Hewitt	-	26,750			
Callan Associates Inc.	183,387	256,302	230,922	237,304	206,020
Total Investment Consultants	245,192	367,274	377,946	386,514	427,859
SIB SERVICE FEES	24,691	21,255	32,030	29,694	30,505
SECURITIES LENDING FEES	105,925	137,658	-	-	-

**INDIVIDUAL INVESTMENT ACCOUNT
JOB SERVICE PENSION FUND**

	2017	2016**
INVESTMENT MANAGERS		
SEI Investment Management	\$ 431,519	\$ 227,664
INVESTMENT CUSTODIAN		
The Northern Trust Company, Inc	10,609	10,843
INVESTMENT CONSULTANTS		
Callan Associates	-	1,584
SIB SERVICE FEES	12,835	11,389
SECURITIES LENDING FEES	-	879

*Indicates fee schedule for this account includes some form of performance based fees.

**The Job Service Pension Fund participated in the Pension Investment Pool until December 2015. For fiscal year 2016, the fees for this fund are included within both the pension pool accounts and the individual investment account sections. Prior to FY2016, the Job Service Pension Fund fees were included in the Pension Pool amounts.

**PAYMENTS TO INVESTMENT CONSULTANTS
FOR FISCAL YEARS ENDED JUNE 30**

INSURANCE INVESTMENT POOL

	2017	2016	2015	2014	2013
INVESTMENT MANAGERS					
Domestic Large Cap Equity:					
Parametric Clifton *	\$ 6,800	\$ 92,954	\$ 125,535	\$ 91,661	\$ 35,780
Los Angeles Capital Management *	289,660	340,320	806,792	502,980	182,394
LSV Asset Management	224,225	202,634	764,278	321,710	158,764
Total Domestic Large Cap Equity	520,685	635,908	1,696,605	916,351	376,938
Domestic Small Cap Equity:					
Parametric Clifton *	85,563	256,569	1,096,485	307,732	129,312
PIMCO (RAE)	98,343	76,474	303,313	219,926	138,437
Total Domestic Small Cap Equity	183,906	333,043	1,399,798	527,658	267,749
International Equity:					
Capital Guardian Trust Company	-	259,524	1,158,305	505,274	239,917
Dimensional Fund Advisors	122,008	109,336	466,024	182,738	70,574
LSV Asset Management	295,142	254,911	1,257,835	549,302	228,459
The Vanguard Group	66,408	61,236	271,480	129,150	45,054
William Blair Investment Management, LLC	262,570	20,870			
Total International Equity	746,128	705,877	3,153,644	1,366,464	584,004
Domestic Fixed Income:					
Bank of North Dakota	-	-	-	-	56,395
Declaration Management & Research LLC	372,451	359,662	711,401	382,078	268,169
PIMCO *	2,770,659	1,257,819	2,492,526	2,189,998	4,806,203
Prudential Investment Management	296,247	269,566	474,211	286,136	204,186
State Street Global Advisors	48,158	47,250	90,132	60,760	2,309
Wells Capital Management, Inc.	517,742	547,028	1,137,478	822,098	613,148
Western Asset Management Company	409,983	416,435	866,068	553,056	376,703
Total Domestic Fixed Income	4,415,240	2,897,760	5,771,816	4,294,126	6,327,113
Diversified Real Assets:					
Grosvenor (formerly Credit Suisse) *	98,545	195,138	513,926	(19,915)	221,884
J.P. Morgan Investment Management, Inc.	553,145	677,029	839,294	686,158	717,674
Timberland Investment Resources *	463,753	491,838	516,091	507,992	507,622
Western Asset Management Company *	150,915	152,219	401,110	340,795	335,329
Total Diversified Real Assets	1,266,358	1,516,224	2,270,421	1,515,030	1,782,509
Real Estate:					
INVESCO Realty Advisors	220,613	205,252	429,567	234,851	124,733
J.P. Morgan Investment Management, Inc.	589,843	698,911	1,509,756	1,004,205	782,809
Total Real Estate	810,456	904,163	1,939,323	1,239,056	907,542

*Indicates fee schedule for this account includes some form of performance based fees.

**PAYMENTS TO INVESTMENT CONSULTANTS
FOR FISCAL YEARS ENDED JUNE 30**

INSURANCE INVESTMENT POOL (Continued)

	2017	2016	2015	2014	2013
INVESTMENT MANAGERS (cont.)					
Short Term Fixed Income:					
Babson Capital Management LLC	163,354	410,645	521,304	984,722	758,881
J.P. Morgan Investment Management, Inc.	168,690	297,128	344,082	577,441	477,048
Total Short Term Fixed Income	332,044	707,773	865,386	1,562,163	1,235,929
Cash Equivalents:					
The Northern Trust Company, Inc.	31,215	92,129	136,209	163,876	-
Total Investment Manager Fees	8,306,032	7,792,877	17,233,202	11,584,724	11,481,784
INVESTMENT CUSTODIAN					
The Northern Trust Company, Inc	193,003	209,187	496,506	486,404	401,511
INVESTMENT CONSULTANTS					
Callan Associates	78,430	99,941	254,898	148,256	113,813
Novarca	24,655	12,406	15,688	-	-
R.V. Kuhns & Associates, Inc.	-	-	-	-	70,000
Total Investment Consultants	103,085	112,347	270,586	148,256	183,813
SIB SERVICE FEES	12,670	12,069	12,516	10,450	9,656
SECURITIES LENDING FEES	40,439	193,355			

*Indicates fee schedule for this account includes some form of performance based fees.

**INDIVIDUAL INVESTMENT ACCOUNT
TOBACCO PREVENTION AND CONTROL FUND**

	2017	2016
INVESTMENT MANAGERS		
Domestic Large Cap Equity:		
State Street Global Advisors	\$ 1,841	\$ 1,290
Short Term Fixed Income:		
State Street Global Advisors	15,379	11,361
Total Investment Manager Fees	17,220	12,651
INVESTMENT CUSTODIAN		
The Northern Trust Company, Inc	4,550	3,477
SIB SERVICE FEES	6,645	4,200

**PAYMENTS TO INVESTMENT CONSULTANTS
FOR FISCAL YEARS ENDED JUNE 30**

**INDIVIDUAL INVESTMENT ACCOUNT
LEGACY FUND**

	<u>2017</u>	<u>2016</u>
INVESTMENT MANAGERS		
Domestic Large Cap Equity:		
Parametric Clifton *	\$ -	\$ 412,028
Los Angeles Capital Management *	1,049,994	1,004,869
LSV Asset Management	872,421	678,332
Total Domestic Large Cap Equity	<u>1,922,415</u>	<u>2,095,229</u>
Domestic Small Cap Equity:		
Parametric Clifton *	212,781	887,562
PIMCO (RAE)	418,033	317,213
Total Domestic Small Cap Equity	<u>630,814</u>	<u>1,204,775</u>
International Equity:		
Capital Guardian Trust Company	-	874,221
Dimensional Fund Advisors	541,627	441,975
LSV Asset Management	1,373,395	1,100,741
The Vanguard Group	302,197	243,914
William Blair Investment Management, LLC	1,336,436	91,470
Total International Equity	<u>3,553,655</u>	<u>2,752,321</u>
Domestic Fixed Income:		
Declaration Management & Research LLC	497,743	460,254
PIMCO *	2,652,461	1,237,699
Prudential Investment Management	435,033	377,155
State Street Global Advisors	67,914	60,222
Wells Capital Management, Inc.	745,273	704,934
Western Asset Management Company	589,167	535,812
Total Domestic Fixed Income	<u>4,987,591</u>	<u>3,376,076</u>
Diversified Real Assets:		
Grosvenor (formerly Credit Suisse) *	375,000	406,147
J.P. Morgan Investment Management, Inc.	600,104	720,763
Western Asset Management Company *	393,293	358,215
Total Diversified Real Assets	<u>1,368,397</u>	<u>1,485,125</u>
Real Estate:		
INVESCO Realty Advisors	423,353	371,780
J.P. Morgan Investment Management, Inc.	1,090,894	975,774
Total Real Estate	<u>1,514,247</u>	<u>1,347,554</u>
Cash Equivalents:		
The Northern Trust Company, Inc.	9,758	20,951
Total Investment Manager Fees	<u>13,986,877</u>	<u>12,282,031</u>

*Indicates fee schedule for this account includes some form of performance based fees.

**PAYMENTS TO INVESTMENT CONSULTANTS
FOR FISCAL YEARS ENDED JUNE 30**

LEGACY FUND (Continued)

	<u>2017</u>	<u>2016</u>
INVESTMENT CUSTODIAN		
The Northern Trust Company, Inc	<u>355,376</u>	<u>355,571</u>
INVESTMENT CONSULTANTS		
Callan Associates	139,123	145,310
Novarca	<u>83,354</u>	<u>53,574</u>
Total Investment Consultants	<u>222,477</u>	<u>198,884</u>
SECURITIES LENDING FEES	116,833	166,936

The Legacy Fund was part of the Insurance Investment Pool for most of FY2015 therefore all of the fees for that fund are reflected in the Insurance Investment Pool for that entire year and previous.

**INDIVIDUAL INVESTMENT ACCOUNT
PERS RETIREE HEALTH INSURANCE CREDIT FUND**

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
INVESTMENT MANAGERS					
SEI Investment Management	\$ 465,392	\$ 415,083	\$ 402,347	\$ 352,919	\$ 294,454
INVESTMENT CUSTODIAN					
The Northern Trust Company, Inc	8,210	8,207	8,387	2,620	705
SIB SERVICE FEES	13,971	11,298	10,646	8,353	7,171

See reconciliation of current year investment expenses to financial statements on page 71.

**SUMMARY OF OPERATIONS
FOR FISCAL YEARS ENDED JUNE 30
PENSION INVESTMENT POOL**

	2017	2016	2015	2014	2013
Public Employees Retirement System					
Net position beginning of year *	\$ 2,457,275,530	\$ 2,418,931,000	\$ 2,328,985,200	\$ 1,998,564,252	\$ 1,772,254,556
Net change in fair value of investments	266,102,905	(39,399,793)	46,174,788	293,366,241	200,819,548
Interest, dividends and other income	61,615,229	58,071,997	45,848,042	40,924,671	44,790,884
Expenses	(7,653,510)	(7,314,631)	(8,177,030)	(8,429,942)	(6,911,611)
Net securities lending income	224,157	286,957	-	-	-
Net change in net position resulting from unit transactions	1,760,000	26,700,000	6,100,000	4,650,000	(12,389,125)
Net position end of year	<u>\$ 2,779,324,311</u>	<u>\$ 2,457,275,530</u>	<u>\$ 2,418,931,000</u>	<u>\$ 2,329,075,222</u>	<u>\$ 1,998,564,252</u>
City of Bismarck Employees Pension Plan					
Net position beginning of year	\$ 82,369,575	\$ 81,619,071	\$ 78,675,585	\$ 68,738,254	\$ 61,115,742
Net change in fair value of investments	7,655,028	(962,485)	1,640,168	8,799,404	6,237,415
Interest, dividends and other income	2,110,479	1,944,554	1,580,510	1,414,916	1,613,666
Expenses	(255,656)	(240,726)	(277,192)	(276,989)	(228,569)
Net securities lending income	7,127	9,161	-	-	-
Net change in net position resulting from unit transactions	-	-	-	-	-
Net position end of year	<u>\$ 91,886,553</u>	<u>\$ 82,369,575</u>	<u>\$ 81,619,071</u>	<u>\$ 78,675,585</u>	<u>\$ 68,738,254</u>
City of Bismarck Police Pension Plan					
Net position beginning of year	\$ 33,953,131	\$ 35,834,028	\$ 34,585,870	\$ 30,034,601	\$ 26,558,055
Net change in fair value of investments	3,396,504	(604,855)	683,609	4,059,353	2,898,709
Interest, dividends and other income	862,083	821,724	686,314	615,490	680,528
Expenses	(106,294)	(101,614)	(121,765)	(123,574)	(102,691)
Net securities lending income	3,026	3,848	-	-	-
Net change in net position resulting from unit transactions	-	(2,000,000)	-	-	-
Net position end of year	<u>\$ 38,108,450</u>	<u>\$ 33,953,131</u>	<u>\$ 35,834,028</u>	<u>\$ 34,585,870</u>	<u>\$ 30,034,601</u>
City of Grand Forks Pension Plan					
Net position beginning of year	\$ 57,923,958	\$ 59,147,291	\$ 57,805,527	\$ 50,088,805	\$ 43,890,145
Net change in fair value of investments	5,945,750	(1,154,709)	1,108,806	7,198,621	4,988,932
Interest, dividends and other income	1,342,535	1,271,401	1,076,573	947,544	1,104,377
Expenses	(160,995)	(158,797)	(187,677)	(198,607)	(162,026)
Net securities lending income	5,157	6,461	-	-	-
Net change in net position resulting from unit transactions	(1,708,591)	(1,187,689)	(655,938)	(230,836)	267,377
Net position end of year	<u>\$ 63,347,814</u>	<u>\$ 57,923,958</u>	<u>\$ 59,147,291</u>	<u>\$ 57,805,527</u>	<u>\$ 50,088,805</u>
Grand Forks Park District Pension Plan					
Net position beginning of year	\$ 5,715,936	\$ 6,027,469	\$ 5,930,656	\$ 5,104,575	\$ 4,490,835
Net change in fair value of investments	611,751	(86,854)	167,018	768,855	561,321
Interest, dividends and other income	119,884	120,995	100,269	82,159	97,383
Expenses	(13,430)	(13,850)	(17,396)	(18,886)	(14,622)
Net securities lending income	447	645	-	-	-
Net change in net position resulting from unit transactions	(277,593)	(332,469)	(153,078)	(6,047)	(30,342)
Net position end of year	<u>\$ 6,156,995</u>	<u>\$ 5,715,936</u>	<u>\$ 6,027,469</u>	<u>\$ 5,930,656</u>	<u>\$ 5,104,575</u>

**SUMMARY OF OPERATIONS
FOR FISCAL YEARS ENDED JUNE 30**

PENSION INVESTMENT POOL (Continued)

	2017	2016	2015	2014	2013
City of Fargo Employee Pension Plan					
Net position beginning of year	\$ -	\$ 1,459	\$ 9,653	\$ 34,092,918	\$ 29,522,766
Net change in fair value of investments	-	-	-	3,209,058	3,464,908
Interest, dividends and other income	-	41,431	12	312,254	763,619
Expenses	-	(242)	(50)	(50,674)	(112,375)
Net securities lending income	-	-	-	-	-
Net change in net position resulting from unit transactions	-	(42,648)	(8,156)	(37,553,903)	454,000
Net position end of year	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 1,459</u>	<u>\$ 9,653</u>	<u>\$ 34,092,918</u>

INSURANCE INVESTMENT POOL

Workforce Safety & Insurance Fund

Net position beginning of year *	\$ 1,831,144,126	\$ 1,761,372,600	\$ 1,703,113,129	\$ 1,556,724,746	\$ 1,433,799,144
Net change in fair value of investments	105,693,277	22,777,732	19,423,177	147,114,353	75,120,636
Interest, dividends and other income	46,210,318	46,504,149	40,772,394	36,959,249	48,176,241
Expenses	(4,348,175)	(4,681,475)	(4,436,100)	(4,118,600)	(4,871,275)
Net securities lending income	148,030	171,120	-	-	-
Net change in net position resulting from unit transactions	(85,000,000)	5,000,000	2,500,000	(33,500,000)	4,500,000
Net position end of year	<u>\$ 1,893,847,576</u>	<u>\$ 1,831,144,126</u>	<u>\$ 1,761,372,600</u>	<u>\$ 1,703,179,748</u>	<u>\$ 1,556,724,746</u>

State Fire & Tornado Fund

Net position beginning of year *	\$ 24,074,271	\$ 23,400,586	\$ 29,208,127	\$ 26,614,418	\$ 24,503,500
Net change in fair value of investments	1,593,978	150,447	249,666	2,812,662	1,873,759
Interest, dividends and other income	491,258	567,145	513,284	634,670	803,166
Expenses	(40,086)	(46,813)	(45,491)	(52,464)	(66,007)
Net securities lending income	2,364	2,906	-	-	-
Net change in net position resulting from unit transactions	(4,125,000)	-	(6,525,000)	(800,000)	(500,000)
Net position end of year	<u>\$ 21,996,785</u>	<u>\$ 24,074,271</u>	<u>\$ 23,400,586</u>	<u>\$ 29,209,286</u>	<u>\$ 26,614,418</u>

State Bonding Fund

Net position beginning of year *	\$ 3,296,466	\$ 3,180,146	\$ 3,269,043	\$ 3,141,217	\$ 3,056,345
Net change in fair value of investments	30,591	68,582	(3,765)	81,431	16,248
Interest, dividends and other income	50,948	51,284	43,443	50,268	73,189
Expenses	(3,615)	(3,614)	(3,575)	(3,744)	(4,565)
Net securities lending income	64	68	-	-	-
Net change in net position resulting from unit transactions	-	-	(125,000)	-	-
Net position end of year	<u>\$ 3,374,454</u>	<u>\$ 3,296,466</u>	<u>\$ 3,180,146</u>	<u>\$ 3,269,172</u>	<u>\$ 3,141,217</u>

Petroleum Tank Release Compensation Fund

Net position beginning of year *	\$ 7,148,653	\$ 7,161,986	\$ 7,092,048	\$ 6,838,697	\$ 6,762,398
Net change in fair value of investments	53,887	133,864	(10,166)	160,709	35,781
Interest, dividends and other income	99,013	108,926	86,302	99,366	148,726
Expenses	(5,859)	(6,259)	(6,198)	(6,443)	(8,208)
Net securities lending income	122	136	-	-	-
Net change in net position resulting from unit transactions	(900,000)	(250,000)	-	-	(100,000)
Net position end of year	<u>\$ 6,395,816</u>	<u>\$ 7,148,653</u>	<u>\$ 7,161,986</u>	<u>\$ 7,092,329</u>	<u>\$ 6,838,697</u>

**SUMMARY OF OPERATIONS
FOR FISCAL YEARS ENDED JUNE 30
INSURANCE INVESTMENT POOL (Continued)**

	2017	2016	2015	2014	2013
Insurance Regulatory Trust Fund					
Net position beginning of year *	\$ 1,085,848	\$ 2,635,975	\$ 1,146,179	\$ 1,043,935	\$ 962,611
Net change in fair value of investments	109,740	(14,307)	(21,102)	87,259	61,472
Interest, dividends and other income	41,650	26,821	13,845	17,515	22,735
Expenses	(4,697)	(2,768)	(2,947)	(2,485)	(2,883)
Net securities lending income	200	127	-	-	-
Net change in net position resulting from unit transactions	4,055,600	(1,560,000)	1,500,000	-	-
Net position end of year	<u>\$ 5,288,341</u>	<u>\$ 1,085,848</u>	<u>\$ 2,635,975</u>	<u>\$ 1,146,224</u>	<u>\$ 1,043,935</u>
Risk Management Fund					
Net position beginning of year *	\$ 6,531,063	\$ 6,845,712	\$ 6,945,451	\$ 6,184,088	\$ 5,163,495
Net change in fair value of investments	371,439	142,283	119,666	618,416	352,442
Interest, dividends and other income	135,891	154,478	142,740	154,962	181,504
Expenses	(9,781)	(12,010)	(12,145)	(11,745)	(13,353)
Net securities lending income	503	600	-	-	-
Net change in net position resulting from unit transactions	(1,250,000)	(600,000)	(350,000)	-	500,000
Net position end of year	<u>\$ 5,779,115</u>	<u>\$ 6,531,063</u>	<u>\$ 6,845,712</u>	<u>\$ 6,945,721</u>	<u>\$ 6,184,088</u>
Risk Management Workers Comp Fund					
Net position beginning of year *	\$ 5,512,685	\$ 6,221,021	\$ 5,962,912	\$ 5,244,603	\$ 5,011,391
Net change in fair value of investments	401,369	110,474	140,595	598,129	349,656
Interest, dividends and other income	128,181	142,278	129,379	131,002	144,640
Expenses	(10,079)	(11,724)	(11,865)	(10,590)	(11,084)
Net securities lending income	538	636	-	-	-
Net change in net position resulting from unit transactions	(500,000)	(950,000)	-	-	(250,000)
Net position end of year	<u>\$ 5,532,694</u>	<u>\$ 5,512,685</u>	<u>\$ 6,221,021</u>	<u>\$ 5,963,144</u>	<u>\$ 5,244,603</u>
Cultural Endowment Fund					
Net position beginning of year *	\$ 386,356	\$ 383,024	\$ 365,140	\$ 323,798	\$ 284,275
Net change in fair value of investments	40,393	59	11,196	47,641	35,577
Interest, dividends and other income	9,403	9,737	8,147	8,031	9,320
Expenses	(1,481)	(1,525)	(1,459)	(1,315)	(1,374)
Net securities lending income	54	61	-	-	-
Net change in net position resulting from unit transactions	(3,500)	(5,000)	-	(13,000)	(4,000)
Net position end of year	<u>\$ 431,225</u>	<u>\$ 386,356</u>	<u>\$ 383,024</u>	<u>\$ 365,155</u>	<u>\$ 323,798</u>
Budget Stabilization Fund					
Net position beginning of year *	\$ 575,715,191	\$ 573,636,701	\$ 585,977,310	\$ 401,157,397	\$ 394,954,806
Net change in fair value of investments	(2,161,212)	(2,598,566)	(3,424,930)	(2,296,687)	(3,112,671)
Interest, dividends and other income	5,327,628	14,079,730	15,215,741	13,897,151	10,804,040
Expenses	(293,371)	(806,390)	(798,665)	(634,071)	(451,981)
Net securities lending income	3,131	9,885	-	-	-
Net change in net position resulting from unit transactions	(572,485,454)	(8,606,169)	(23,332,755)	173,877,180	(1,036,797)
Net position end of year	<u>\$ 6,105,913</u>	<u>\$ 575,715,191</u>	<u>\$ 573,636,701</u>	<u>\$ 586,000,970</u>	<u>\$ 401,157,397</u>

**SUMMARY OF OPERATIONS
FOR FISCAL YEARS ENDED JUNE 30**

INSURANCE INVESTMENT POOL (Continued)

	2017	2016	2015	2014	2013
ND Association of Counties Fund					
Net position beginning of year	\$ 4,046,185	\$ 3,831,089	\$ 3,443,524	\$ 2,715,432	\$ 1,650,887
Net change in fair value of investments	254,411	32,045	26,016	267,459	107,664
Interest, dividends and other income	88,365	90,580	68,564	66,825	63,052
Expenses	(7,656)	(7,974)	(7,015)	(6,192)	(6,171)
Net securities lending income	390	445	-	-	-
Net change in net position resulting from unit transactions	-	100,000	300,000	400,000	900,000
Net position end of year	<u>\$ 4,381,695</u>	<u>\$ 4,046,185</u>	<u>\$ 3,831,089</u>	<u>\$ 3,443,524</u>	<u>\$ 2,715,432</u>
City of Bismarck Deferred Sick Leave Fund					
Net position beginning of year	\$ 641,629	\$ 871,405	\$ 849,149	\$ 1,015,873	\$ 925,488
Net change in fair value of investments	43,207	4,725	6,205	88,516	60,827
Interest, dividends and other income	14,747	17,577	18,591	22,312	32,997
Expenses	(2,097)	(2,153)	(2,540)	(2,552)	(3,439)
Net securities lending income	66	75	-	-	-
Net change in net position resulting from unit transactions	-	(250,000)	-	(275,000)	-
Net position end of year	<u>\$ 697,552</u>	<u>\$ 641,629</u>	<u>\$ 871,405</u>	<u>\$ 849,149</u>	<u>\$ 1,015,873</u>
PERS Group Insurance Fund					
Net position beginning of year	\$ 37,700,792	\$ 39,652,179	\$ 37,424,174	\$ 42,791,312	\$ 6,899,554
Net change in fair value of investments	(673,576)	208,951	-	-	-
Interest, dividends and other income	809,996	389,887	4,993	5,659	129,167
Expenses	(106,491)	(42,532)	(5,336)	(4,539)	(3,819)
Net securities lending income	809	185	-	-	-
Net change in net position resulting from unit transactions	(250,000)	(2,507,878)	2,228,348	(5,368,258)	35,766,410
Net position end of year	<u>\$ 37,481,530</u>	<u>\$ 37,700,792</u>	<u>\$ 39,652,179</u>	<u>\$ 37,424,174</u>	<u>\$ 42,791,312</u>
City of Fargo FargoDome Permanent Fund					
Net position beginning of year	\$ 38,746,191	\$ 40,968,808	\$ 41,747,304	\$ 36,375,195	\$ 32,051,664
Net change in fair value of investments	3,624,439	(402,921)	579,771	5,037,808	3,435,467
Interest, dividends and other income	814,008	970,497	840,686	823,378	997,950
Expenses	(81,422)	(97,132)	(98,953)	(89,077)	(109,886)
Net securities lending income	5,630	6,939	-	-	-
Net change in net position resulting from unit transactions	(1,500,000)	(2,700,000)	(2,100,000)	(400,000)	-
Net position end of year	<u>\$ 41,608,846</u>	<u>\$ 38,746,191</u>	<u>\$ 40,968,808</u>	<u>\$ 41,747,304</u>	<u>\$ 36,375,195</u>
ND State Board of Medicine					
Net position beginning of year	\$ 2,207,217	\$ 2,172,692	\$ 1,888,805	\$ -	\$ -
Net change in fair value of investments	69,279	(13,650)	8,349	17,764	-
Interest, dividends and other income	51,834	53,273	50,585	8,273	-
Expenses	(7,288)	(5,270)	(5,047)	(1,535)	-
Net securities lending income	148	172	-	-	-
Net change in net position resulting from unit transactions	(142,654)	-	230,000	1,864,303	-
Net position end of year	<u>\$ 2,178,536</u>	<u>\$ 2,207,217</u>	<u>\$ 2,172,692</u>	<u>\$ 1,888,805</u>	<u>\$ -</u>

**SUMMARY OF OPERATIONS
FOR FISCAL YEARS ENDED JUNE 30
INDIVIDUAL INVESTMENT ACCOUNTS**

	2017	2016	2015	2014	2013
Legacy Fund					
Net position beginning of year *	\$ 3,806,541,341	\$ 3,325,835,711	\$ 2,214,519,573	\$ 1,194,228,388	\$ 398,885,883
Net change in fair value of investments	389,970,910	(31,454,851)	45,818,808	74,027,273	(12,331,605)
Interest, dividends and other income	99,597,760	86,798,282	62,243,945	43,256,691	17,696,018
Expenses	(10,575,051)	(10,160,008)	(8,089,655)	(4,130,302)	(1,148,387)
Net securities lending income	601,637	668,257	-	-	-
Net change in net position resulting from unit transactions	399,501,134	434,853,950	1,011,343,040	907,214,971	791,126,479
Net position end of year	<u>\$ 4,685,637,731</u>	<u>\$ 3,806,541,341</u>	<u>\$ 3,325,835,711</u>	<u>\$ 2,214,597,021</u>	<u>\$ 1,194,228,388</u>
PERS Retiree Health Insurance Credit Fund					
Net position beginning of year	\$ 101,546,422	\$ 97,598,008	\$ 90,294,490	\$ 73,623,303	\$ 62,080,211
Net change in fair value of investments	10,061,109	(1,185,174)	936,842	10,620,455	6,384,010
Interest, dividends and other income	2,342,444	2,271,408	2,105,154	1,984,435	1,776,879
Expenses	(335,760)	(292,820)	(281,478)	(238,703)	(197,797)
Net securities lending income	-	-	-	-	-
Net change in net position resulting from unit transactions	2,445,000	3,155,000	4,543,000	4,305,000	3,580,000
Net position end of year	<u>\$ 116,059,215</u>	<u>\$ 101,546,422</u>	<u>\$ 97,598,008</u>	<u>\$ 90,294,490</u>	<u>\$ 73,623,303</u>
Job Service North Dakota					
Net position beginning of year	\$ 96,528,021	\$ 96,270,523	\$ 97,682,159	\$ 90,359,858	\$ 84,680,884
Net change in fair value of investments	3,337,293	2,352,098	1,818,431	10,466,656	7,978,316
Interest, dividends and other income	2,187,163	2,650,945	1,721,361	1,725,637	2,248,708
Expenses	(285,579)	(166,226)	(279,285)	(304,454)	(242,783)
Net securities lending income	-	3,516	-	-	-
Net change in net position resulting from unit transactions	(4,510,264)	(4,582,835)	(4,672,143)	(4,565,538)	(4,305,267)
Net position end of year	<u>\$ 97,256,634</u>	<u>\$ 96,528,021</u>	<u>\$ 96,270,523</u>	<u>\$ 97,682,159</u>	<u>\$ 90,359,858</u>
Tobacco Prevention and Control Fund					
Net position beginning of year	\$ 54,359,321	\$ -	\$ -	\$ -	\$ -
Net change in fair value of investments	839,579	840,505	-	-	-
Interest, dividends and other income	33,094	8,255	-	-	-
Expenses	(28,415)	(20,328)	-	-	-
Net securities lending income	-	-	-	-	-
Net change in net position resulting from unit transactions	2,250,000	53,530,889	-	-	-
Net position end of year	<u>\$ 57,453,579</u>	<u>\$ 54,359,321</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

* Restated for FY2015 due to prior period adjustment.

Legacy Fund was part of the Insurance Investment Pool until near the end of FY2015.

Job Service North Dakota was part of the Pension Investment Pool until mid-FY2016.