

**NORTH DAKOTA RETIREMENT  
AND INVESTMENT OFFICE**

**FINANCIAL STATEMENTS**

**YEAR ENDED JUNE 30, 2016**

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## INDEPENDENT AUDITORS' REPORT

Governor Jack Dalrymple  
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, 2016, 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, 2016, 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 audit. 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, 2016, 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, 2016, 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, 2016, 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 7, 2016, 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 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 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.

A handwritten signature in cursive script that reads "CliftonLarsonAllen LLP".

**CliftonLarsonAllen LLP**

Baltimore, Maryland  
November 7, 2016



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

Governor Jack Dalrymple  
The Legislative Assembly  
David Hunter, Executive Director/CIO  
State Investment Board  
Teacher's Fund for Retirement Board  
North Dakota Retirement and Investment Office

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the schedule of employer allocations and the total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense as of and for the year ended June 30, 2016 (specified column totals), included in the schedule of pension amounts by employer of the North Dakota Retirement and Investment Office - North Dakota Teachers' Fund for Retirement (TFFR), and have issued our report thereon dated November 7, 2016.

**Internal Control over Financial Reporting**

Management of TFFR is responsible for establishing and maintaining effective internal control over financial reporting. In planning and performing our audits, we considered TFFR's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer, but not for the purpose of expressing an opinion on the effectiveness of TFFR's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of TFFR's internal control over financial reporting.

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

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

### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether TFFR's schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer amounts. However, providing an opinion on compliance with those provisions was not an objective of our audits, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

### **Purpose of this Report**

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

*CliftonLarsonAllen LLP*

Baltimore, Maryland  
November 7, 2016

We did not identify any findings that are required to be reported in accordance with *Government Auditing Standards*.



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, 2016. 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 \$623.3 million or 5.8% from the prior year. Approximately 78% of that increase is due to the growth of the Legacy Fund and the addition of the assets of the Tobacco Prevention and Control 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 \$434.9 million during the fiscal year. The Tobacco Prevention and Control Fund had a net contribution of \$53.5 million during its first fiscal year within the SIB investment program.

Additions in the fiduciary funds for the year decreased \$654.8 million or 37.8% from the previous year. There was a significant decrease (\$476.7 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. Net investment income decreased by \$189.0 million and total contributions increased \$9.5 million.

Deductions in the fiduciary funds increased over the prior year by \$30.1 million or 7.1%. Payments to TFFR members in the form of benefits and refunds increased by \$13.7 million or 8.0%. 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. The redemption of units from the investment trust increased by \$16.3 million or 6.6%.

As of June 30, 2016, the TFFR pension plan had a Net Pension Liability (NPL) of \$1.47 billion and Plan Fiduciary Net Position as a percent of Total Pension Liability (TPL) of 59.2%.

### **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 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, 2016, were \$11.5 billion and were comprised mainly of investments. Total assets increased by \$736.6 million or 6.9% from the prior year primarily due to the growth of the Legacy Fund and addition of the Tobacco Prevention and Control Fund, as well as securities lending collateral from the program added during the fiscal year.

Total liabilities as of June 30, 2016, were \$126.7 million. The majority of the liabilities was comprised of the securities lending collateral payable due to the addition of the program during the fiscal year. Total liabilities increased by \$113.4 million or 860.4% from the prior year due entirely to the securities lending collateral.

RIO's fiduciary fund total net position was \$11.4 billion at the close of fiscal year 2016.

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

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

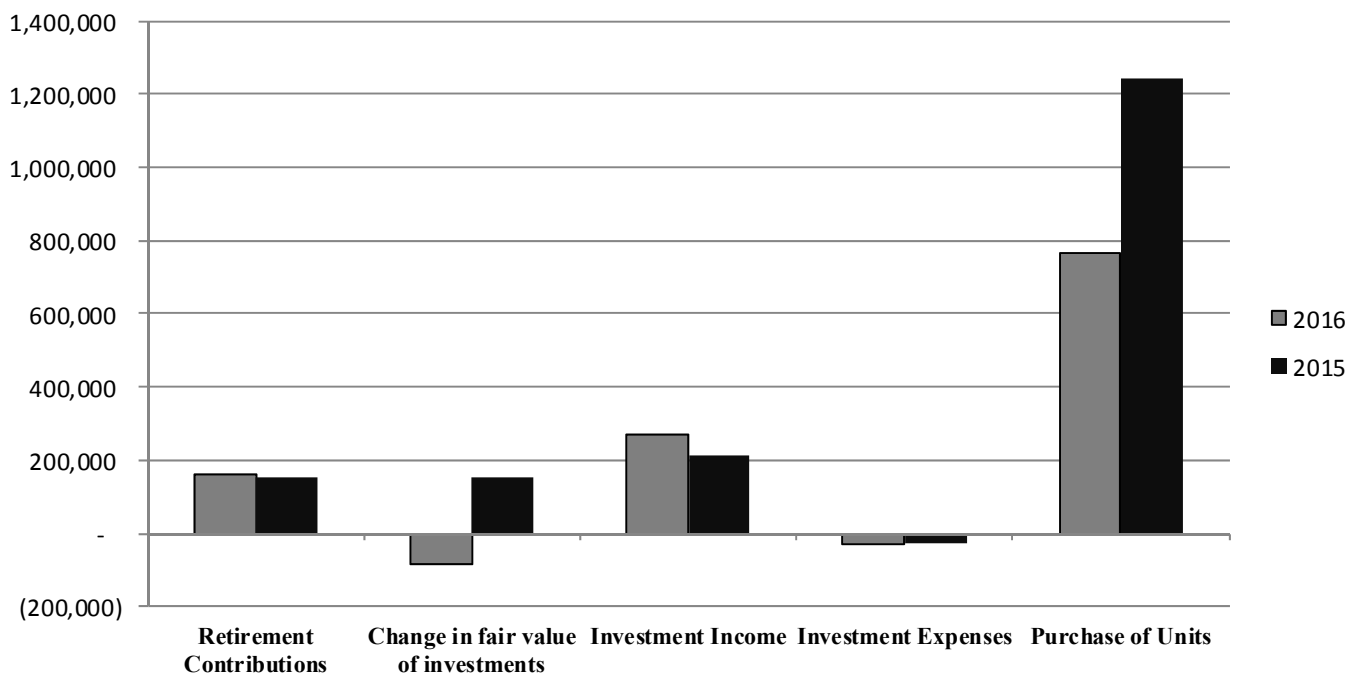
**North Dakota Retirement and Investment Office  
Changes in Net Position – Fiduciary Funds  
(In Millions)**

	<b>2016</b>	<b>2015</b>	<b>Total % Change</b>
<b>Additions:</b>			
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%
<b>Total Additions</b>	<b>1,077.6</b>	<b>1,732.4</b>	<b>-37.8%</b>
<b>Deductions:</b>			
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%
<b>Total Deductions</b>	<b>454.3</b>	<b>424.2</b>	<b>7.1%</b>
<b>Total Change in Net Position</b>	<b>\$ 623.3</b>	<b>\$ 1,308.2</b>	<b>-52.4%</b>

**Statement of Changes in Net Position – Additions**

Contributions collected by the pension trust fund increased by \$9.5 million or 6.3% 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 (net of investment expenses) decreased by \$189.0 million or 55.6% from last year. This was the result of weak financial markets during the fiscal year. Deposits of funds into the investment trust fund (purchase of units) decreased by \$476.7 million or 38.4% due mainly to lower oil and gas tax collections affecting the Legacy Fund.

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

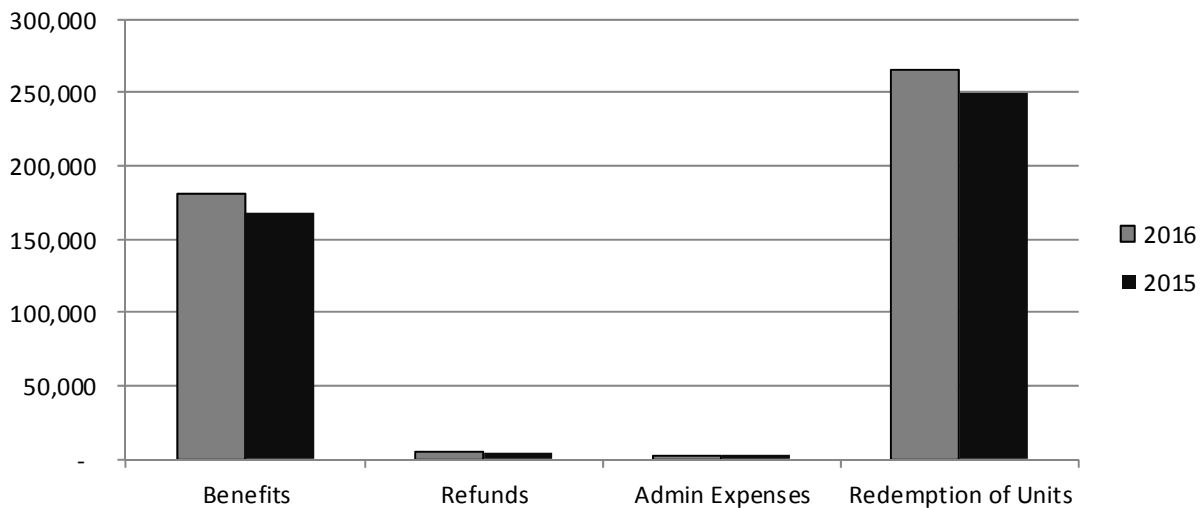


**Statement of Changes in Net Position – Deductions**

Benefits paid to TFFR plan participants, including partial lump-sum distributions, increased by \$12.3 million or 7.3% during the fiscal year ended June 30, 2016. 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 2016 by \$1.5 million or 37.6%.

Administrative expenses remained relatively steady in fiscal year 2016, showing a modest 1.9% increase over the previous fiscal year.

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



**Conclusion**

Net returns were positive despite challenging global economic conditions and heightened volatility in the capital markets last year. China's currency devaluation on August 11, 2015, and the U.K. Brexit vote on June 23, 2016, contributed to this increased volatility. Although the U.S. economy appeared stronger than the broader global markets, GDP growth rates in the U.S. have declined for four consecutive quarters on an annualized basis. For the fiscal year ended June 30, 2016, the TFFR pension plan generated a net investment return of 0.3% which trailed the investment policy benchmark of 0.6%. Strong returns in real estate (up 11%) and international fixed income (up 7%) were largely offset by muted returns in U.S. equities (up 2%) and sharply disappointing results in world, international and private equities (down over 7%). U.S. fixed income and other real assets (including infrastructure and timber) posted net investment returns of less than 4% for fiscal year 2016.

While cumulative returns in the post-credit crisis era have been strong, investors today face numerous 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 raising short-term interest rates in the near future does pose 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, 2016, TFFR's funding level was 62.1% on an actuarial basis (and 59.2% on a market basis). Because recent investment performance has been less than assumed, TFFR's funded status is expected to decline as these losses are recognized over the next few years due to the plan's five-year asset smoothing method. However, over the long term, the plan's funding level is expected to gradually improve with full funding expected in 30-40 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, 2016

	Pension Trust	Investment Trust	Total
Assets:			
Investments, at fair value			
Equities	\$ -	\$ 1,900,710,606	\$ 1,900,710,606
Equity pool	1,131,917,482	1,921,253,074	3,053,170,556
Fixed income	-	1,415,525,781	1,415,525,781
Fixed income pool	479,086,760	2,285,945,327	2,765,032,087
Real assets	-	615,513,449	615,513,449
Real assets pool	369,771,496	889,167,336	1,258,938,832
Private equity pool	73,374,321	85,965,628	159,339,949
Cash pool	18,515,640	91,516,800	110,032,440
Total investments	<u>2,072,665,699</u>	<u>9,205,598,001</u>	<u>11,278,263,700</u>
Invested securities lending collateral	19,859,451	96,710,963	116,570,414
Receivables:			
Investment income	9,517,943	35,454,773	44,972,716
Contributions	25,494,939	-	25,494,939
Miscellaneous	7,963	13,880	21,843
Total receivables	<u>35,020,845</u>	<u>35,468,653</u>	<u>70,489,498</u>
Cash and cash equivalents	<u>19,747,422</u>	<u>168,372</u>	<u>19,915,794</u>
Total assets	<u>2,147,293,417</u>	<u>9,337,945,989</u>	<u>11,485,239,406</u>
Deferred outflows of resources			
Deferred outflows related to pensions	<u>168,324</u>	<u>113,380</u>	<u>281,704</u>
Liabilities:			
Accounts payable	118,477	38,269	156,746
Investment expenses payable	1,713,404	6,349,541	8,062,945
Securities lending collateral	19,859,451	96,710,963	116,570,414
Accrued expenses	1,354,756	443,950	1,798,706
Miscellaneous payable	-	17,233	17,233
Due to other state agencies	10,055	7,234	17,289
Total liabilities	<u>23,056,143</u>	<u>103,567,190</u>	<u>126,623,333</u>
Deferred inflows of resources			
Deferred inflows related to pensions	<u>70,310</u>	<u>42,271</u>	<u>112,581</u>
Net position:			
Restricted for pensions	2,124,335,288	-	2,124,335,288
Held in trust for external investment pool participants:			
Pension pool	-	2,637,238,130	2,637,238,130
Insurance pool	-	2,538,236,673	2,538,236,673
Held in trust for individual investment accounts	<u>-</u>	<u>4,058,975,105</u>	<u>4,058,975,105</u>
Total net position	<u>\$ 2,124,335,288</u>	<u>\$ 9,234,449,908</u>	<u>\$ 11,358,785,196</u>
Each participant unit is valued at \$1.00			
Participant units outstanding		9,234,449,908	9,234,449,908

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  
For the year ended June 30, 2016

	Pension Trust	Investment Trust	Total
Additions:			
Contributions:			
Employer contributions	\$ 82,839,932	\$ -	\$ 82,839,932
Member contributions	76,342,685	-	76,342,685
Purchased service credit	2,768,245	-	2,768,245
Interest, penalties and other	44,966	-	44,966
Total contributions	<u>161,995,828</u>	<u>-</u>	<u>161,995,828</u>
Investment income:			
Net change in fair value of investments	(35,952,316)	(51,056,400)	(87,008,716)
Interest, dividends and other income	49,982,337	217,167,354	267,149,691
	14,030,021	166,110,954	180,140,975
Less investment expenses	<u>6,034,689</u>	<u>23,130,811</u>	<u>29,165,500</u>
Net investment income	<u>7,995,332</u>	<u>142,980,143</u>	<u>150,975,475</u>
Securities lending activity:			
Securities lending income	304,571	1,465,052	1,769,623
Less securities lending expenses	<u>(60,907)</u>	<u>(292,852)</u>	<u>(353,759)</u>
Net securities lending income	<u>243,664</u>	<u>1,172,200</u>	<u>1,415,864</u>
Purchase of units (\$1 per unit)	-	763,176,205	763,176,205
Total additions	<u>170,234,824</u>	<u>907,328,548</u>	<u>1,077,563,372</u>
Deductions:			
Benefits paid to participants	179,625,551	-	179,625,551
Partial lump-sum distributions	992,233	-	992,233
Refunds	5,350,896	-	5,350,896
Administrative expenses	1,851,656	1,066,070	2,917,726
Redemption of units (\$1 per unit)	-	265,411,054	265,411,054
Total deductions	<u>187,820,336</u>	<u>266,477,124</u>	<u>454,297,460</u>
Change in net position	(17,585,512)	640,851,424	623,265,912
Net position:			
Beginning of year	<u>2,141,920,800</u>	<u>8,593,598,484</u>	<u>10,735,519,284</u>
End of Year	<u>\$ 2,124,335,288</u>	<u>\$ 9,234,449,908</u>	<u>\$ 11,358,785,196</u>

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



## **Note 1 - Summary of Significant Accounting Policies**

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

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, 2016 were deposited in the Bank of North Dakota. At June 30, 2016, the carrying amount of TFFR's deposits was \$19,747,422 and the bank balance was \$19,799,474. 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 are recorded as investments and have a cost and carrying value of \$81,143,786 at June 30, 2016. In addition these funds carry cash and cash equivalents totaling \$168,372 at June 30, 2016. These deposits are exposed to custodial credit risk as uninsured and uncollateralized. However, these deposits held at the Bank of North Dakota are guaranteed by the State of North Dakota through NDCC Section 6-09-10.

### **Note 3 - Investments**

The investment policy of the SIB is governed by NDCC 21-10. The SIB shall apply the prudent investor rule in investing for funds under its supervision. The “prudent investor rule” means that in making investments, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income. The retirement funds belonging to the teachers’ fund for retirement and the public employees’ retirement system must be invested exclusively for the benefit of their members and in accordance with the respective funds’ investment goals and objectives.

### **Interest Rate Risk**

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

At June 30, 2016, the following tables show the investments by investment type and maturity (expressed in thousands).

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	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	-
Collateralized Bonds	-	-	-	-	-
Commercial Mortgage-Backed	143,357	67	17	5,760	137,513
Commercial Paper	-	-	-	-	-
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
<b>Total Debt Securities</b>	<b>\$ 4,871,670</b>	<b>\$ 272,484</b>	<b>\$ 1,584,898</b>	<b>\$ 1,090,080</b>	<b>\$ 1,924,208</b>

In the table 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 \$7.7 million and POs valued at \$6.7 million at June 30, 2016. 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 table presents the SIB's ratings as of June 30, 2016 (expressed in thousands).

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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	-
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	-	-	-	-	-	-	-	-	-
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)	-	-	-	-	-	-	-	-	-
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 this table. Implicitly guaranteed agency securities included in the *Gov't Issued Commercial & Gov't Mortgage Backed*, *Gov't Agencies*, and *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, 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 does manage 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 table as of June 30, 2016 (expressed in thousands).

# North Dakota Retirement and Investment Office

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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	<u>\$ 16,197</u>	<u>\$ 219,796</u>	<u>\$ 1,754,081</u>	<u>\$ 1,990,074</u>

Negative amounts represent short positions.



## Derivative Securities

Derivatives are financial arrangements between two parties whose payments are based on, or “derived” from, the performance of some agreed upon benchmark. The investment policies of the SIB’s clients allow the use of derivative securities to hedge or replicate underlying exposures but not for speculation. All derivatives are considered investment derivative instruments. The fair value of all derivative securities is reported in the statement of net position. At June 30, 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 \$(7.5) million for fiscal year 2016. At June 30, 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, 2016</u>
Cash & Cash Equivalent Derivative Futures	
Long	\$ 37,736
Short	(946,602)
Equity Derivative Futures	
Long	623,571
Fixed Income Derivative Futures	
Long	509,240
Short	(290,226)
Total Futures	<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 \$0.4 million for fiscal year 2016. At June 30, 2016, the SIB investment portfolio had the following option balances (expressed in thousands).

<u>Options</u>	<u>Fair Value</u> <u>June 30, 2016</u>
Cash & Other Options	
Call	\$ (72)
Put	72
Fixed Income Options	
Call	(37)
Put	(1)
Total Options	<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 risk and total return.

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.

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).

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.

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.

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.

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 \$(10.7) million for fiscal year 2016. The maximum loss that would be recognized at June 30, 2016, if all counterparties failed to perform as contracted is \$3.25 million. Swap fair values are determined by a third party pricing source. At June 30, 2016, the SIB's investment portfolio had the swap fair value balances as shown below (expressed in thousands).

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**Credit Default Swaps**

Counterparty/Moody's Rating	Notional Amount		Fair Value
	June 30, 2016	Expiration Date Range	June 30, 2016
Bank of America/A3 (1 contract)	\$ (2,600)	12/2018	\$ 40
Barclays/A2 (1 contract)	(100)	9/2019	1
BNP Paribas/A2 (2 contracts)	(450)	12/2016 - 6/2019	(44)
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 (2 contracts)	4,340	6/2021	(81)
Deutsche Bank/A2 (2 contracts)	2,400	6/2017	(18)
Goldman Sachs/A3 (5 contracts)	(1,850)	12/2016 - 3/2020	(2)
JP Morgan Chase/Aa3 (14 contracts)	2,181	12/2016 - 11/2045	(51)
<b>Total Credit Default Swaps</b>	<b>\$ (13,629)</b>		<b>\$ 25</b>

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

**Currency Swaps**

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

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

**Interest Rate Swaps**

Counterparty/Moody's Rating	Notional Amount		Fair Value
	June 30, 2016	Expiration Date Range	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 (24 contracts)	(235,092)	12/2017 - 6/2046	(3,353)
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 (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 (86 contracts)	(4,765)	2/2019 - 6/2046	(3,799)
Morgan Stanley/Baa1 (1 contract)	3,900	5/2022	8
<b>Total Interest Rate Swaps</b>	<b>\$ (189,585)</b>		<b>\$ (7,539)</b>

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

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**Inflation Swaps**

<u>Counterparty/Moody's Rating</u>	<u>Notional Amount</u>		<u>Expiration Date</u>	<u>Fair Value</u>	
	June 30, 2016	June 30, 2016	Range	June 30, 2016	June 30, 2016
Bank of America/A3 (7 contracts)	\$	700	1/2020	\$	(10)
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 (11 contracts)		4,430	1/2020 - 1/2030		(52)
Total Inflation Swaps	\$	<u>6,456</u>		\$	<u>(65)</u>

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**

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

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

					Fair Value
	Currency	Cost	Purchases	Sales	6/30/2016
AUD	Australian dollar	\$ (60)	\$ -	\$ (60)	\$ (60)
BRL	Brazilian real	208	471	(263)	230
GBP	British pound sterling	(1,323)	-	(1,323)	(1,222)
CAD	Canadian dollar	(85)	87	(172)	(84)
CLP	Chilean peso	9,404	9,404	-	9,704
CNY	Chinese yuan renminbi	(4,588)	-	(4,588)	(4,492)
EUR	Euro	(8,067)	2,565	(10,632)	(7,919)
HKD/CNH	Hong Kong dollar	4,598	6,210	(1,612)	4,475
HUF	Hungarian forint	(20)	-	(20)	(19)
INR	Indian rupee	6,920	6,920	-	6,858
JPY	Japanese yen	(2,192)	2,558	(4,750)	(2,353)
MXN	Mexican peso	(470)	-	(470)	(467)
NOK	Norwegian krone	4,162	4,162	-	4,099
RUB	Russian ruble	(540)	678	(1,218)	(546)
SEK	Swedish krona	10,368	10,368	-	9,986
USD	United States dollar	(18,315)	25,108	(43,423)	(18,315)
	Total forwards subject to currency risk				<u>\$ (125)</u>

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

	Total Notional Value					Greater than
	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)	-	-	-	-
<b>Total</b>	<b>\$ (689,854)</b>	<b>\$ (586,167)</b>	<b>\$ (93,571)</b>	<b>\$ 37,736</b>	<b>\$ (47,852)</b>	<b>\$ -</b>

	Total Fair Value					Greater than
	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 - interest rate contracts	-	-	-	-	-	-
Options - credit contracts	(1)	(1)	-	-	-	-
Swaps - interest rate contracts	(7,602)	-	-	-	(1,103)	(6,499)
Swaps - credit contracts	24	-	1	(16)	83	(44)
<b>Total</b>	<b>\$ (7,616)</b>	<b>\$ (38)</b>	<b>\$ 1</b>	<b>\$ (16)</b>	<b>\$ (1,020)</b>	<b>\$ (6,543)</b>

### Fair Value Measurement

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

Level 1 Unadjusted quoted prices for identical instruments in active markets.

Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.

Level 3 Valuations derived from valuation techniques in which significant inputs are unobservable.

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

The following table shows the fair value leveling of the SIB's investment portfolio at June 30, 2016 (expressed in thousands).

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	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	\$ -
<b>Short Term Securities</b>	<b>17,161</b>	<b>-</b>	<b>17,161</b>	<b>-</b>
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	-
Index Linked 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	-
<b>Total fixed income investments</b>	<b>3,184,731</b>	<b>29,531</b>	<b>3,142,347</b>	<b>12,853</b>
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	-	-
<b>Total equity investments</b>	<b>3,248,800</b>	<b>3,242,980</b>	<b>4,971</b>	<b>849</b>
Derivative investments				
Exchange Cleared Swaps	(6,584)	-	(6,584)	-
Options	(38)	(52)	14	-
Swaps	(1,015)	-	(1,018)	3
<b>Total derivative investments</b>	<b>(7,637)</b>	<b>(52)</b>	<b>(7,588)</b>	<b>3</b>
<b>Total investments by fair value level</b>	<b>\$ 6,443,055</b>	<b>\$ 3,272,459</b>	<b>\$ 3,156,891</b>	<b>\$ 13,705</b>

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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
Commingled Funds-Equities	885,713	-	Daily, monthly
Distressed Debt	268,329	21,735	Quarterly, Not eligible
Long/Short	167,752	-	Monthly
Mezzanine Debt	3,686	13,147	Not eligible
Private Equity	159,340	105,293	Not eligible
Real Assets	1,457,778	212,297	Quarterly, Not eligible
<b>Total investments measured at the NAV</b>	<b>\$ 4,452,695</b>	<b>\$ 352,472</b>	
Investments at other than fair value			
Cash and adjustments to cash	\$ 315,852		
Bank Certificates of Deposit	81,144		
Repurchase Agreements	(14,482)		
<b>Total investments at other than fair value</b>	<b>\$ 382,514</b>		
<b>Total investments</b>	<b><u>\$ 11,278,264</u></b>		

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 table 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 General Partner distributes earnings and proceeds from the sale of the underlying investments as transactions occur. The SIB has \$105.3 million in unfunded private equity commitments as of June 30, 2016.

**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 and private equity asset classes. As of June 30, 2016, unfunded commitments in two of the four distressed debt funds totaled \$21.7 million. Those two funds are not eligible for redemptions. Of the other two funds, one is in wind-down with final distributions expected in the next 12-18 months and the other fund is eligible for redemptions with quarterly liquidity and 60 days notice. Neither has an unfunded commitment.

**Mezzanine Debt** — This strategy is a hybrid of debt and equity financing. It is basically 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 3-6 years, and unfunded commitments of \$13.2 million as of June 30, 2016.

**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, 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 10 different real estate funds in the portfolio. Two 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 12-18 months. The remaining seven funds are closed-ended limited partnerships that are not eligible for redemptions. Those seven funds have a combined unfunded commitment of \$112.2 million.

**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 3-9 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, 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 \$100.1 million at June 30, 2016 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 market value of the securities plus any accrued interest. Non-U.S. securities are loaned versus collateral valued at 105% of the market 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 69 days as of June 30, 2016. Cash open collateral is invested in a short term investment pool, which had an interest sensitivity of 1 day as of this statement date. 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

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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, 2016 (expressed in thousands).

	<b>Securities Lent</b>	<b>Non-Cash Collateral Value</b>	<b>Cash Collateral Investment Value</b>
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	-
<b>Total</b>	<b>\$ 155,470</b>	<b>\$ 42,540</b>	<b>\$ 116,570</b>

## Note 4 - Capital Assets

	June 30, 2015	Additions	Retirements	June 30, 2016
Office equipment	\$19,321	\$ -	\$ -	\$19,321
Less accumulated depreciation on office equipment	(19,321)	-	-	(19,321)
Software	1,213,500	-	-	1,213,500
Less accumulated depreciation on software	(1,213,500)	-	-	(1,213,500)
	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**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, 2016:

	2016
Due To	
Information Technology Department	\$ 8,469
Office of Attorney General	8,666
Office of Management and Budget	154
Total due to other state agencies	\$ 17,289

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 leases 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 \$81,886 for fiscal 2016. Minimum payments under the lease for fiscal 2017 are \$80,806.

**Note 7 - Changes in Noncurrent Liabilities**

Changes in noncurrent liabilities for the years ended June 30, 2016 are summarized as follows:

	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.

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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, 2016 and 2015 and 2015 and 2015 and 2015 and 2015 and 2015 and 2015 and 2015 and 2015 and 2015, the number of participating employer units was 214, consisting of the following:

	June 30, 2016
Public School Districts	176
County Superintendents	6
Special Education Units	19
Vocational Education Units	5
Other	8
Total	214

TFFR's membership consisted of the following:

	2016
Retirees and beneficiaries currently receiving benefits	8,249
Terminated employees - vested	1,601
Terminated employees - nonvested	779
Total	10,629
Current employees	
Vested	7,433
Nonvested	3,380
Total	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.

#### ***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 Policy**

The TFFR Board is responsible for establishing investment policy for the fund assets under NDCC 15-39.1-05.2. Benefit payments are projected to occur over a long period of time. This allows TFFR to adopt a long-term investment horizon and asset allocation policy for the management of fund assets. Asset allocation policy is critical because it defines the basic risk and return characteristics of the investment portfolio. Asset allocation targets are established using an asset-liability analysis designed to assist the Board in determining an acceptable volatility target for the fund and an optimal asset allocation policy mix. This asset-liability analysis considers both sides of the plan balance sheet, utilizing both quantitative and qualitative inputs, in order to estimate the potential impact of various asset class mixes on key measures of total plan risk, including the resulting estimated impact of funded status and contribution rates. The following was the TFFR Board's adopted asset allocation policy as of June 30, 2016.

Asset Class	Target Allocation
Global Equity	58.0%
Global Fixed Income	23.0%
Global Real Assets	18.0%
Cash Equivalents	1.0%
Total	100.0%

Private equity is included in the Global Equity asset class.

### Investment Rate of Return

The annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 0.39% for the year ended June 30, 2016. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

### Realized Gains and Losses

Realized gains and losses on sales of investments are components of net change in fair value of investments and are computed as described in Note 1. For the years ended June 30, 2016, TFFR had net realized gains of \$60,426,737.

### Net Pension Liability

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

Total pension liability	3,589,394
Plan fiduciary net position	(2,124,335)
Net pension liability (NPL)	1,465,059
Plan fiduciary net position as a percentage of the total pension liability	59.2%

### Actuarial Assumptions

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

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



**Mortality rates were based on the following:**

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, 2016 valuation 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 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, 2016 and 2015 (see the discussion of TFFR investment policy) are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return
Global Equity	7.3%
Global Fixed Income	0.9%
Global Real Assets	5.3%
Cash Equivalents	0.0%

**Discount Rate**

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

**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, 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:

	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 will be 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 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, 2016, RIO reported a liability of \$989,688 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 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, 2015, RIO's proportion was 0.145546 percent.

North Dakota Retirement and Investment Office  
Notes to Combined Financial Statements  
June 30, 2016

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For the year ended June 30, 2016, RIO recognized pension expense of \$122,885. At June 30, 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
Differences between expected and actual experience	\$ 28,712	\$ -
Changes in assumptions	-	88,177
Net differences between projected and actual earnings on pension plan investments	-	20,892
Changes in proportion and differences between employer contributions and proportionate share of contributions	145,647	3,512
Employer contributions subsequent to the measurement date	107,345	-
Total	\$ 281,704	\$ 112,581

Deferred outflows of resources related to pensions resulting from employer contributions subsequent to the measurement date in the amount of \$107,345 will be recognized as a reduction of the net pension liability in the year ended June 30, 2017.

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		
2017	\$	1,746
2018		1,746
2019		1,746
2020		44,917
2021		11,613
	\$	61,768

**Actuarial assumptions**

The total pension liability in the July 1, 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

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, 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%	7.5%
Global Fixed Income	23%	1.3%
Global Real Assets	18%	5.4%
Cash Equivalents	1%	0.0%

**Discount rate**

The discount rate used to measure the total pension liability was 8 percent as of June 30, 2015. 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, 2015 Actuarial Valuation Report. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included.

# North Dakota Retirement and Investment Office

Notes to Combined Financial Statements

June 30, 2016

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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, 2015. 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, 2015.

## **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 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:

	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 <http://www.nd.gov/ndpers/forms-and-publications/index.html>.

## **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, 2016, no liability has been recorded as it is too early in the litigation process to reasonably determine whether any payments will be required.

**REQUIRED SUPPLEMENTARY INFORMATION**

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)**

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

**Notes to Schedule:**

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

\*\* Restated in 2015 due to GASB 68 implementation.

*Changes of assumptions:* In 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)**

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Actuarially determined contribution	84,724	71,168	59,513	52,396	69,374	65,113	52,053	41,986	44,115	50,532
Contributions in relation to the actuarially determined contribution	82,840	78,422	62,355	59,301	46,126	44,545	39,837	37,488	33,684	31,865
Contribution deficiency (excess)	1,884	(7,254)	(2,842)	(6,905)	23,248	20,568	12,216	4,498	10,431	18,667
Covered-employee payroll	649,725	615,105	580,053	551,656	527,156	509,091	482,868	454,396	434,626	411,167
Contributions as a percentage of covered-employee payroll	12.75%	12.75%	10.75%	10.75%	8.75%	8.75%	8.25%	8.25%	7.75%	7.75%

**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	27 years
Asset valuation method	5-year smoothed market
Inflation	2.75%; decreased from 3% 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.

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

	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Annual money-weighted rate of return, net of investment expense	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

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

	2016	2015
RIO's proportion of NDPERS net pension liability (asset)	0.145546%	0.121849%
RIO's proportionate share of NDPERS net pension liability (asset)	\$ 990	\$ 773
RIO's covered-employee payroll	\$ 1,297	\$ 1,026
RIO's proportionate share of NDPERS net pension liability (asset) as a percentage of its covered-employee payroll	76.33%	75.34%
NDPERS Plan fiduciary net position as a percentage of the total pension liability	77.15%	77.70%

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

	2016	2015
RIO's Statutorily required contributions	\$ 98	\$ 73
RIO's Contributions in relation to the actuarially determined contribution	94	73
Contribution deficiency (excess)	\$ 4	\$ -
RIO's Covered-employee payroll	\$ 1,297	\$ 1,026
RIO's Contributions as a percentage of covered-employee payroll	7.25%	7.12%

**Notes to schedules:**

\*Complete data for these schedules is not available prior to 2015.

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

	Pension Pool Participants					Insurance Pool Participants						
	Public	Bismarck	Bismarck	City of				Petroleum	Insurance			
	Employees	City	City	Grand Forks	City of	Workforce	State	Tank	Regulatory	Cultural		
	Retirement	Employee	Police	Employee	Grand Forks	Safety &	Fire &	State	Release	Trust	Endowment	Risk
System	Pension Plan	Pension Plan	Pension Plan	Park District	Insurance	Tomado	Bonding	Comp. Fund	Fund	Fund	Mgmt	
Assets:												
Investments												
Equities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equity pool	1,313,879,825	35,455,137	15,999,867	32,428,872	3,508,133	446,262,045	8,372,416	-	-	325,475	212,359	1,960,610
Fixed income	-	-	-	-	-	-	-	-	-	-	-	-
Fixed income pool	561,288,209	28,038,870	9,874,331	13,930,739	1,486,259	970,969,515	13,165,969	1,789,154	3,523,663	370,465	143,381	4,201,817
Reassets												
Reassets pool	459,762,805	16,202,424	6,721,270	8,670,751	487,946	393,406,291	-	-	-	-	18,858	-
Private equity pool	79,938,588	2,279,387	1,266,397	2,265,631	215,625	-	-	-	-	-	-	-
Cash pool	38,598,744	334,159	55,819	615,004	16,822	11,801,374	2,413,138	1,482,077	3,571,271	380,209	11,630	326,346
Total investments	2,453,468,171	82,309,977	33,917,684	57,910,997	5,714,785	1,822,439,225	23,951,523	3,271,231	7,094,934	1,076,149	386,228	6,488,773
Invested sec lending collateral	24,703,417	795,849	337,005	603,943	44,106	17,214,543	284,132	17,459	34,435	9,584	5,738	86,602
Investment income receivable	5,919,911	131,024	65,916	64,763	5,457	9,664,982	139,678	25,138	54,576	9,686	219	46,029
Operating Cash	58,769	-	-	-	-	44,480	850	947	889	656	280	1,143
Miscellaneous receivable	3,944	-	-	-	-	2,933	38	5	11	2	1	10
Due from other state agency	-	-	-	-	-	-	-	-	-	-	-	-
Total assets	2,484,154,212	83,236,850	34,320,605	58,579,703	5,764,348	1,849,366,163	24,376,221	3,314,780	7,184,845	1,096,077	392,466	6,622,557
Deferred outflows of resources												
Deferred outflows related to pensions	32,365	-	-	-	-	24,049	318	43	94	14	5	86
Liabilities:												
Investment expenses payable	2,033,481	68,689	29,337	49,976	4,056	902,230	16,077	653	1,296	574	349	4,492
Securities lending collateral	24,703,417	795,849	337,005	603,943	44,106	17,214,543	284,132	17,459	34,435	9,584	5,738	86,602
Accounts payable	11,497	-	-	-	-	8,332	118	14	31	6	2	28
Accrued expenses	147,685	-	-	-	-	109,961	1,781	210	479	75	24	415
Miscellaneous payable	-	2,737	1,132	1,826	250	-	-	-	-	-	-	-
Due to other state agencies	2,055	-	-	-	-	1,529	20	3	6	1	-	5
Total liabilities	26,898,135	867,275	367,474	655,745	48,412	1,823,659	302,128	18,339	36,247	10,240	6,113	91,542
Deferred inflows of resources												
Deferred inflows related to pensions	12,912	-	-	-	-	9,491	140	18	39	3	2	38
Net position held in trust for external investment pool participants												
	\$ 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	\$ 6,531,063
Each participant unit is valued at \$ 100												
Participant units outstanding	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	6,531,063

**North Dakota Retirement and Investment Office**  
**Combining Statement of Net Position – Investment Trust Funds – Fiduciary Funds**  
**June 30, 2016 (with Comparative Totals for 2015)**

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 Fargo Dome Fund	State Board of Medicine	Legacy Fund	Job Service of North Dakota	Tobacco Prevention and Control Fund	PERS Retiree Health Credit Fund	2016	2015		
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,835,361,022	\$ -	\$ 5,446,369	\$ 59,903,215	\$ 1,900,710,606	\$ 1,708,243,680		
2,039,929	1,207,624	-	-	191,332	19,311,569	460,484	-	39,637,397	-	-	1,921,253,074	1,899,373,890		
-	-	-	-	-	-	-	1,333,087,521	-	40,816,114	41,622,146	1,415,525,781	1,186,979,426		
3,306,740	2,313,171	33,598,449	564,094,702	417,733	15,173,457	1,699,775	-	56,558,928	-	-	2,285,945,327	2,202,727,271		
-	-	-	-	-	3,850,123	46,868	615,513,449	-	-	-	615,513,449	509,958,485		
-	-	-	-	-	-	-	-	-	-	-	889,167,336	843,179,560		
-	-	-	-	-	-	-	-	-	-	-	85,965,628	95,675,581		
165,642	526,438	4,098,901	8,994,897	31,692	396,841	2,149	9,199,026	391,845	8,102,776	-	91,516,800	127,180,135		
5,512,311	4,047,233	37,697,350	573,089,599	640,757	38,731,990	2,209,276	3,793,161,018	96,588,170	54,365,259	101,525,361	9,205,598,001	8,573,318,028		
79,306	44,080	45,991	2,571,110	7,375	557,673	18,340	49,250,275	-	-	-	96,710,963	-		
3,863	1,633	18,010	2,828,790	1,507	50,730	(610)	16,324,166	163	1,280	97,862	35,454,773	28,925,179		
1,141	-	-	13,286	-	-	-	45,931	-	-	-	168,372	90,692		
10	-	-	944	-	-	-	5,982	-	-	-	13,880	13,084		
-	-	-	-	-	-	-	-	-	-	-	-	57		
5,596,631	4,092,946	37,761,351	578,503,729	649,639	39,340,393	2,227,006	3,858,787,372	96,588,333	54,366,539	101,623,223	9,337,945,989	8,602,347,040		
79	-	-	7,772	-	-	-	48,555	-	-	-	113,380	47,146		
4,289	2,431	13,304	183,727	399	35,220	1,199	2,861,410	57,023	5,751	73,578	6,349,541	8,326,400		
79,306	44,080	45,991	2,571,110	7,375	557,673	18,340	49,250,275	-	-	-	96,710,963	-		
26	-	-	2,471	-	-	-	15,744	-	-	-	38,269	49,697		
364	-	-	35,273	-	-	-	147,683	-	-	-	443,950	342,998		
-	250	1,264	-	236	1,309	250	-	3,289	1,467	3,223	17,233	16,497		
5	-	-	492	-	-	-	3,118	-	-	-	7,234	2,314		
83,990	46,761	60,559	2,793,073	8,010	594,202	19,789	52,278,230	60,312	7,218	76,801	103,567,190	8,737,906		
35	-	-	3,237	-	-	-	16,356	-	-	-	42,271	57,796		
\$ 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		
5,512,685	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		

	Pension Pool Participants						Insurance Pool Participants					
	Public Employees Retirement System	Bismarck City Employee Pension Plan	Bismarck City Police Pension Plan	City of Fargo Employee Pension Plan	City of Grand Forks Employee Pension Plan	City of Grand Forks Park District Employee 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	\$ (39,399,793)	\$ (962,485)	\$ (604,855)	\$ -	\$ (1,154,709)	\$ (86,854)	\$ 22,777,732	\$ 150,447	\$ 68,582	\$ 133,864	\$ (14,307)	\$ 59
Interest, dividends and other income	58,071,997	1,944,554	821,724	41,431	1,271,401	120,995	46,504,149	567,145	51,284	108,926	26,821	9,737
	18,672,204	982,069	216,869	41,431	116,692	34,141	69,281,881	717,592	119,866	242,790	12,514	9,796
Less investment expenses	6,981,023	240,726	101,614	242	158,797	13,850	4,461,210	43,877	2,589	5,204	1,759	960
Net investment income	11,691,181	741,343	115,255	41,189	(42,105)	20,291	64,820,671	673,715	117,277	237,586	10,755	8,836
Securities lending activity:												
Securities lending income	358,681	11,452	4,809	-	8,076	805	213,849	3,631	85	170	160	76
Less Securities lending expenses	(71,724)	(2,291)	(961)	-	(1,615)	(160)	(42,729)	(725)	(17)	(34)	(33)	(15)
Net securities lending income	286,957	9,161	3,848	-	6,461	645	171,120	2,906	68	136	127	61
Purchase of units (\$ 1 per unit)	29,500,000	-	-	-	4,057,319	286,925	28,000,000	-	-	-	-	-
Total Additions	41,478,138	750,504	119,103	41,189	4,021,675	307,861	92,991,791	676,621	117,345	237,722	10,882	8,897
Deductions:												
Administrative Expenses	333,608	-	-	-	-	-	220,265	2,936	1,025	1,055	1,009	565
Redemption of units (\$ 1 per unit)	2,800,000	-	2,000,000	42,648	5,245,008	619,394	23,000,000	-	-	250,000	1,560,000	5,000
Total Deductions	3,133,608	-	2,000,000	42,648	5,245,008	619,394	23,220,265	2,936	1,025	251,055	1,561,009	5,565
Change in net position	38,344,530	750,504	(1,880,897)	(1,459)	(1,223,333)	(311,533)	69,771,526	673,685	116,320	(13,333)	(1,550,127)	3,332
Net position:												
Beginning of year	2,418,931,000	816,19,071	35,834,028	1,459	59,147,291	6,027,469	1,761,372,600	23,400,586	3,180,146	7,161,986	2,635,975	383,024
Restatement due to implementation of GASB 68	-	-	-	-	-	-	-	-	-	-	-	-
Beginning of year, as restated	2,418,931,000	816,19,071	35,834,028	1,459	59,147,291	6,027,469	1,761,372,600	23,400,586	3,180,146	7,161,986	2,635,975	383,024
End 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

**North Dakota Retirement and Investment Office**  
**Combining Statement of Changes in Net Position – Investment Trust Funds – Fiduciary Funds**  
**Year Ended June 30, 2016 (with Comparative Totals for 2015)**

Insurance Pool Participants													Individual Investment Accounts	
Risk Mgmt	Risk Mgmt	ND Ass'n of Counties Fund	PERS Group Insurance	Budget Stabilization Fund	City of Bismarck Deferred Sick Leave	City of Fargo Fargo Dome Fund	State Board of Medicine	Legacy Fund	Job Service of North Dakota	Tobacco Prevention and Control Fund	PERS Retiree Health Credit Fund	Totals	2016	2015
\$ 142,283	\$ 110,474	\$ 32,045	\$ 208,951	\$ (2,598,566)	\$ 4,725	\$ (402,921)	\$ (13,650)	\$ (31,454,851)	\$ 2,352,098	\$ 840,505	\$ (1,185,174)	\$ (51,056,400)	\$ 115,453,148	
154,478	142,278	90,580	389,887	14,079,730	17,577	970,497	53,273	86,798,282	2,650,945	8,255	2,271,408	217,167,354	173,270,874	
296,761	252,752	122,625	598,838	11,481,164	22,302	567,576	39,623	55,343,431	5,003,043	848,760	1,086,234	166,110,954	288,724,022	
10,962	10,678	7,974	42,532	734,828	2,153	97,132	5,270	9,728,057	166,226	20,328	292,820	23,130,811	21,929,066	
285,799	242,074	114,651	556,306	10,746,336	20,149	470,444	34,353	45,615,374	4,836,817	828,432	793,414	142,980,143	266,794,956	
751	796	558	230	12,354	94	8,671	216	835,193	4,395	-	-	1,465,052	-	
(151)	(160)	(113)	(45)	(2,469)	(19)	(1,732)	(44)	(166,936)	(879)	-	-	(292,852)	-	
600	636	445	185	9,885	75	6,939	172	668,257	3,516	-	-	1,172,200	-	
-	-	100,000	203,692,122	-	-	-	-	434,853,950	-	58,780,889	3,905,000	763,176,205	1,239,909,653	
286,399	242,710	215,096	204,248,613	10,756,221	20,224	477,383	34,525	481,137,581	4,840,333	59,609,321	4,698,414	907,328,548	1,506,704,609	
1,048	1,046	-	-	71,562	-	-	-	431,951	-	-	-	1,066,070	939,798	
600,000	950,000	-	206,200,000	8,606,169	250,000	2,700,000	-	-	4,582,835	5,250,000	750,000	265,411,054	249,087,335	
601,048	951,046	-	206,200,000	8,677,731	250,000	2,700,000	-	431,951	4,582,835	5,250,000	750,000	266,477,124	250,027,133	
(314,649)	(708,336)	215,096	(1,951,387)	2,078,490	(229,776)	(2,222,617)	34,525	480,705,630	257,498	54,359,321	3,948,414	640,851,424	1,256,677,476	
6,845,712	6,221,021	3,831,089	39,652,179	573,636,701	871,405	40,968,808	2,172,692	3,325,835,711	96,270,523	-	97,598,008	8,593,598,484	7,337,180,888	
-	-	-	-	-	-	-	-	-	-	-	-	-	(259,880)	
6,845,712	6,221,021	3,831,089	39,652,179	573,636,701	871,405	40,968,808	2,172,692	3,325,835,711	96,270,523	-	97,598,008	8,593,598,484	7,336,921,008	
\$ 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	

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

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	<u>Pension Trust</u>	<u>Investment Trust</u>
Salaries and wages:		
Salaries and wages	\$ 759,748	\$ 766,619
Fringe benefits	318,254	250,520
Total salaries and wages	<u>1,078,002</u>	<u>1,017,139</u>
Operating expenses:		
Travel	28,153	37,121
Supplies	2,746	1,083
Postage and Mailing Services	53,804	31,194
Printing	15,057	6,743
Small Office Equipment and Furniture	2,655	1,557
Insurance	401	230
Rent/Lease of Building Space	50,841	31,045
Repairs	-	12
Information Technology and Communications	71,447	16,231
IT Contractual Services	17,575	61,061
Professional Development	16,052	7,477
Operating Fees and Services	16,535	7,115
Professional Fees and Services	10,242	13,019
Consultant Services	<u>270,302</u>	<u>52,887</u>
Total operating expenses	<u>555,810</u>	<u>266,775</u>
Pension trust portion of investment program expenses	217,844	(217,844)
Total administrative expenses	<u>1,851,656</u>	<u>1,066,070</u>
Less - nonappropriated items:		
Consultant Services	270,302	52,887
Other operating fees paid under continuing appropriation	37,530	121,645
Accrual adjustments to employee benefits	<u>22,352</u>	<u>13,046</u>
Total nonappropriated items	330,184	187,578
Total appropriated expenditures	<u>\$ 1,521,472</u>	<u>\$ 878,492</u>

The accompanying notes are an integral part of these statements.



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

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	Pension Trust	Investment Trust
Actuary fees:		
Segal Company	\$ 144,633	\$ -
Auditing/Accounting fees:		
CliftonLarsonAllen LLP	104,507	27,993
Disability consulting fees:		
Sanford Health	300	-
Legal fees:		
K&L Gates LLP	2,598	3,401
ND Attorney General	18,264	21,493
Total legal fees:	20,862	24,894
Total consultant expenses	\$ 270,302	\$ 52,887

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

	<u>Pension Trust</u>	<u>Investment Trust</u>
Investment managers' fees:		
Global equity managers	\$ 1,230,533	\$ 1,594,767
Domestic large cap equity managers	903,523	3,847,413
Domestic small cap equity managers	563,542	2,268,783
International equity managers	977,198	4,609,027
Emerging markets equity managers	529,699	770,162
Domestic fixed income managers	1,005,950	7,607,743
Below investment grade fixed income managers	1,082,779	1,462,837
Diversified Real Assets	-	3,001,349
International fixed income managers	376,723	457,845
Real estate managers	2,053,698	4,873,012
Infrastructure managers	1,027,901	1,241,458
Timber managers	(956,302)	(1,130,962)
Private equity managers	1,399,707	1,639,900
Short term fixed income managers	-	719,134
Cash & equivalents managers	23,185	149,960
Balanced account managers	-	642,747
Total investment managers' fees	<u>\$ 10,218,136</u>	<u>\$ 33,755,175</u>
Custodian fees	197,310	831,889
Investment consultant fees	204,752	475,338
SIB Service Fees	-	60,211
Total investment expenses	<u><u>\$ 10,620,198</u></u>	<u><u>\$ 35,122,613</u></u>

Reconciliation of investment expenses to financial statements

Investment expenses as reflected in the financial statement:	\$ 6,034,689	\$ 23,130,811
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Plus investment management fees included in investment income

Domestic large cap equity managers	354,231	872,120
Domestic small cap equity managers	207,192	267,457
International equity managers	216,778	1,121,711
Emerging markets equity managers	529,699	770,162
Domestic fixed income managers	727,899	4,282,647
Below investment grade fixed income managers	660,499	901,054
Inflation protected assets managers	-	1,093,122
Real estate managers	999,958	1,245,203
Infrastructure managers	453,976	548,295
Timber managers	(956,302)	(1,130,962)
Private equity managers	1,391,579	1,630,377
Cash equivalents managers	-	113,080
Balanced account managers	-	277,536
Investment expenses per schedule	<u><u>\$ 10,620,198</u></u>	<u><u>\$ 35,122,613</u></u>

Timber manager fees include a refund of incentive-based fees from prior years that were renegotiated in FY2016.

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

	Approved 2015-2017 Appropriation	2015-2017 Appropriation Adjustment	Adjusted 2015-2017 Appropriation	Fiscal 2016 Expenses	Unexpended Appropriations
All Fund Types:					
Salaries and wages	\$ 4,340,551	\$ 2,250	\$ 4,342,801	\$ 2,059,743	\$ 2,283,058
Operating expenses	990,874	-	990,874	340,221	650,653
Contingency	82,000	-	82,000	-	82,000
Total	<u>\$ 5,413,425</u>	<u>\$ 2,250</u>	<u>\$ 5,415,675</u>	<u>\$ 2,399,964</u>	<u>\$ 3,015,711</u>

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

Reconciliation of Administrative Expenses  
to Appropriated Expenditures

	<u>2016</u>
Administrative expenses as reflected in the financial statements	\$ 2,917,726
Less:	
Professional fees*	(323,189)
Other operating fees paid under continuing appropriations*	(159,175)
Changes in benefit accrual amounts	<u>(35,398)</u>
Total appropriated expenses	<u>\$2,399,964</u>

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

**Special Comments Requested by the Legislative Audit  
and Fiscal Review Committee  
Year Ended June 30, 2016**

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

**Audit Report Communications**

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

Unmodified

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

Yes

3. Was internal control adequate and functioning effectively?

Yes

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

No

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

There were no prior year findings or recommendations.

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

No

## Audit Committee Communications

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

For the year ended June 30, 2016, the financial statements include the impact of adoption of Governmental Accounting Standards Board (GASB) Statement number 72.

GASB 72, *Fair Value Measurement and Application*, is effective for fiscal years beginning after June 15, 2015. This statement addresses accounting and financial reporting requirements related to fair value measurements. GASB 72 requires measurement of certain assets and liabilities at fair value using a consistent and detailed definition of fair value and accepted valuation techniques. It also enhances disclosures about fair value measurements, the level of fair value hierarchy, and valuation techniques. Additional disclosures are also required for investments in certain entities that calculate net asset value per share (or its equivalent).

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

The valuation of alternative investments, including private equity and real asset investments, are a management estimate which is primarily based upon net asset values reported by the investment managers and comprise 18% of the total investment portfolio. The values for these investments are reported based upon the most recent financial data available and are adjusted for cash flows through June 30, 2016. Our audit procedures validated this approach through the use of confirmations sent directly to a sample of investment managers and the review of the most recent audited financial statements for these funds. Furthermore, we reviewed management's estimate and found it to be reasonable.

The actuarial valuation was based on the actuarial assumptions and methods adopted by the Board, including an actuarial expected investment rate of return of 7.75% per annum compounded annually. The valuation takes into account all of the promised benefits to which members are entitled as of July 1, 2016 as required by the North Dakota Century Code. The valuation provides certain information required by GASB to be disclosed in the financial statements. Additionally, the valuation is used to determine the adequacy of the current employer contribution rate. Our audit procedures included reviewing the actuarial valuation and related assumptions used therein and we believe the estimate to be reasonable.

3. Identify any significant audit adjustments.

None

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

None

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

None

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

None

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

None

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

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

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

*CliftonLarsonAllen LLP*

Baltimore, Maryland  
November 7, 2016