A Report
to the
Montana
Legislature

Financial-Compliance Audit

# Teachers' Retirement Board

## For the Two Fiscal Years Ended June 30, 2016

December 2016

Legislative Audit
Division

16-09A

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## Financial-Compliance Audits

Financial-compliance audits are conducted by the Legislative Audit Division to determine whether an agency's financial operations are properly conducted, the financial reports are presented fairly, and the agency has complied with applicable laws and regulations. In performing the audit work, the audit staff uses standards set forth by the American Institute of Certified Public Accountants and the United States Government Accountability Office. Financial-compliance audit staff members hold degrees with an emphasis in accounting. Most staff members hold Certified Public Accountant (CPA) licenses.

The Single Audit Act Amendments of 1996 and the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards require the auditor to issue certain financial, internal control, and compliance reports in addition to those reports required by Government Auditing Standards. This individual agency audit report is not intended to comply with these reporting requirements and is therefore not intended for distribution to federal grantor agencies. The Legislative Audit Division issues a statewide biennial Single Audit Report which complies with the above reporting requirements. The Single Audit Report for the two fiscal years ended June 30, 2015, was issued March 29, 2016. The Single Audit Report for the two fiscal years ended June 30, 2017, will be issued by March 31, 2018. Copies of the Single Audit Report can be obtained by contacting:

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LEGISLATIVE AUDIT DIVISION

Angus Maciver, Legislative Auditor
Deborah F. Butler, Legal Counsel

Deputy Legislative Auditors:
Cindy Jorgenson
Joe Murray

December 2016

The Legislative Audit Committee
of the Montana State Legislature:

This is our financial-compliance audit report on the Teachers' Retirement Board (board), a component unit of the state of Montana, for the fiscal year ended June 30, 2016. Included in this report are the Independent Auditor's Report, financial statements prepared by board personnel, related notes to the financial statements, required supplementary information, and supplementary information. Information about the Teachers' Retirement System's total and net pension liability and additional information regarding investment, contribution, and expense data is included in the required supplementary information and supplementary information.

The board's written response to the audit is included in the audit report at page C-1. We thank the executive director and his staff for their cooperation and assistance throughout the audit.

Respectfully submitted,

*/s/ Angus Maciver*

Angus Maciver
Legislative Auditor

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Phone (406) 444-3122 • FAX (406) 444-9784 • E-Mail lad@mt.gov

# Table of Contents

# Appointed and Administrative Officials

| | | | Term Expires |
|---|---|---|---|
| **Teachers' Retirement Board** | Kari Peiffer, Chair | Kalispell | July 2017 |
| | Scott Dubbs, Vice Chair | Lewistown | July 2018 |
| | Janice Muller | Hamilton | July 2021 |
| | Marilyn Ryan | Missoula | July 2021 |
| | Daniel Trost | Helena | July 2019 |
| | Daniel Chamberlin | Helena | July 2020 |

**Administrative Officials**

Shawn Graham, Executive Director

Tammy Rau, Deputy Executive Director

Nolan Brilz, Accounting and Fiscal Manager

Denise Pizzini, Chief Legal Counsel

For additional information concerning the Teachers' Retirement System, contact:

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Montana Legislative Audit Division

# Financial-Compliance Audit
# Teachers' Retirement Board
## For the Fiscal Year Ended June 30, 2016

December 2016 16-09A Report Summary

The July 2016 actuarial valuation of the Teachers' Retirement System indicated the system is actuarially sound. The actuary has estimated that plan assets are sufficient to fund benefit payments for all existing members and the cost of amortizing unfunded liabilities over a period of no more than 30 years. The net pension liability for fiscal year 2016 is approximately $1.8 billion. Employers participating in the Teachers' Retirement System will report their proportionate share of this net pension liability in their financial statements.

## Context

The Teachers' Retirement Board (board) administers the Teachers' Retirement System (system) which is a multiple-employer, cost-sharing, defined-benefit, public pension plan. The board is a component unit of the state of Montana. Full-time members of the public teaching profession, including administrative and professional staff, are required, by law, to be members of the system. Certain employees of the Montana University Systems hired after July 1, 1993, are not required to be members.

There were more than 19,000 active members at July 1, 2016. Members contributed $72.7 million while employers contributed $88.6 million. In total, $205.3 million was contributed to the system, including supplemental contributions. A total of $320.8 million was paid in benefits to the 15,164 retirees and beneficiaries receiving benefits. Investment earnings are used to make up the difference between contributions and benefit payments. There was a market rate of return for investments of 2.08 percent.

The total pension liability and net pension liabilities were approximately $5.5 billion and $1.8 billion, respectively for fiscal year 2016. The fiscal year 2015 total pension liability and net pension liability were approximately $5.4 billion and $1.6 billion, respectively.

Our audit work included reviewing support for contribution receipts and benefit payments, and considering the reasonableness of investment balances. We considered the control systems throughout the audit and evaluated compliance with selected laws and regulations. We reviewed the system's financial statements and note disclosures to determine if they were supported by the underlying accounting records and the actuarial valuation as of June 30, 2016. Additionally, testing was performed over key employee data for retirement system members used by the actuary to calculate the total pension liability.

## Results

The report does not contain any recommendations. We issued an unmodified opinion on the system's financial statements for fiscal year 2016. A reader can rely on the information presented in the financial statements.

For a complete copy of the report (16-09A) or for further information, contact the Legislative Audit Division at 406-444-3122; e-mail to **lad@mt.gov**; or check the web site at **http://leg.mt.gov/audit**
Report Fraud, Waste, and Abuse to the Legislative Auditor's FRAUD HOTLINE
Call toll-free 1-800-222-4446, or e-mail **ladhotline@mt.gov**.

# Chapter I – Introduction

## Introduction

We performed a financial-compliance audit of the Teachers' Retirement Board (board) for the fiscal year ended June 30, 2016. The objectives of our audit were to:

1. Determine if the Teachers' Retirement System's (system) financial statements present fairly, in all material respects, the financial position of the system and the results of operations for the fiscal year ended June 30, 2016.
2. Obtain an understanding of the board's controls to the extent necessary to support our audit of the system's financial statements and, if appropriate, make recommendations for improvement in the internal and management controls of the board.
3. Determine compliance with selected state laws and regulations.

The financial statement notes and required supplementary information disclose the total and net pension liability for the system as well as additional investment and contribution data. The total pension liability is the actuarial present value of projected benefit payments attributable to past periods of member services. The net pension liability is a measure of the extent to which the total pension liability is not covered by the fiduciary net position of the pension plan. The total pension liability and net pension liability for the system at June 30, 2016, were approximately $5.5 billion and $1.8 billion, respectively.

Our audit work included reviewing support for contribution receipts and benefit payments, and considering the reasonableness of investment balances. We considered the control systems throughout the audit and evaluated compliance with selected laws and regulations. We reviewed the system's financial statements and note disclosures to determine if they were supported by the underlying accounting records and the actuarial valuation as of June 30, 2016. Additionally, testing was performed over key employee data for retirement system members used by the actuary to calculate the total pension liability. The report does not contain any recommendations. We issued an unmodified opinion on the system's financial statements for fiscal year 2016. A reader can rely on the information presented in the financial statements.

## Background

The board is a component unit of the state of Montana. A component unit is a legally separate organization for which the state of Montana is financially accountable. The six-member board, appointed by the Governor for five-year terms, governs the system. In addition to providing oversight to system personnel, the board's responsibilities include establishing rules and regulations necessary for the administration and

operation of the system and hiring an actuary to provide consultation on the technical actuarial aspects of the retirement system.

The executive director and board personnel are responsible for the daily administration of the system. At June 30, 2016, 18 full-time equivalent (FTE) positions were authorized for the system.

The system is defined as a multiple-employer, cost-sharing, defined-benefit, public pension plan. Full-time members of the public teaching profession, including administrative and professional staff, are required to be members of the system. Certain employees of the Montana University System hired after July 1, 1993, are not required to be members. The system had 19,048 active contributing members and 14,592 terminated employees not yet receiving benefits at July 1, 2016. There were 15,164 retirees or their beneficiaries receiving retirement, disability, or survivor benefits as of July 1, 2016.

# Independent Auditor's Report and System Financial Statements

LEGISLATIVE AUDIT DIVISION

Angus Maciver, Legislative Auditor
Deborah F. Butler, Legal Counsel

Deputy Legislative Auditors:
Cindy Jorgenson
Joe Murray

# Independent Auditor's Report

The Legislative Audit Committee
of the Montana State Legislature:

***Introduction***

We have audited the accompanying Statement of Fiduciary Net Position of the Teachers' Retirement System (system), prepared by the Teachers' Retirement Board (board), a component unit of the State of Montana, as of June 30, 2016, and the related Statement of Changes in Fiduciary Net Position for the fiscal year then ended, and the related notes which collectively comprise the system's basic financial statements.

***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 responsibility includes designing, implementing, and maintaining internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

***Auditor's Responsibility***

Our responsibility is to express an opinion 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 auditor's 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 controls relevant to the system'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 system's internal control, and accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of

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significant accounting estimates made by management, as well as 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 opinion.

***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Teachers' Retirement System as of June 30, 2016, and the changes in net position for the fiscal year then ended in conformity with accounting principles generally accepted in the United States of America.

***Other Matters***

*Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, Schedule of Changes in Net Pension Liability–TRS Plan, Schedule of the Net Pension Liability–TRS Plan, Schedule of Investment Returns–TRS Plan, Schedule of Employer and Non-Employer Contributing Entities Contributions–TRS Plan, Schedule of Proportionate Share of the Net Pension Liability–TRS as Employer of PERS Plan, Schedule of Contributions–TRS as Employer of PERS Plan, Other Postemployment Benefits Plan Information Schedule of Funding Progress, and the related notes 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.

*Supplementary Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The Schedule of Administrative Expenses, Schedule of Investment Expenses, and Schedule of Payments to Consultants are presented for purposes of additional analysis and are not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such

information directly to the underlying accounting and other records used to prepare the financial statements or to the 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 financial statements as a whole.

***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated December 8, 2016, on our consideration of the board'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 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 the board's internal control over financial reporting and compliance.

Respectfully submitted,

*/s/ Cindy Jorgenson*

Cindy Jorgenson, CPA
Deputy Legislative Auditor
Helena, MT

December 8, 2016

The following discussion and analysis of the Montana Teachers' Retirement System's (TRS or the System) provides a narrative overview of TRS's financial activities for the fiscal year ended June 30, 2016.

## Overview of the Financial Statements

The TRS 2016 financial statements, notes to the financial statements, and required supplementary information were prepared in conformity with GASB Statement No. 67, Financial Reporting for Pension Plans and Statement No. 68, Accounting and Financial Reporting for Pensions.

Because of the long-term nature of a defined benefit pension plan, financial statements alone cannot provide sufficient information to properly reflect the System's ongoing plan perspective. The Statement of Fiduciary Net Position reflects the resources available to pay benefits to retirees and beneficiaries. The Statement of Changes in Fiduciary Net Position presents the changes that occurred in those resources for the fiscal year ended June 30, 2016.

The Notes to the Basic Financial Statements provide additional information that is essential to gain a full understanding of the data provided in the basic financial statements. The required supplementary information consists of the following four schedules of the defined benefit pension plan administered by TRS: changes of employers' net pension liability, employers' net pension liability, employer contributions, and the money-weighted rate of investment returns.

## Financial Highlights

- The TRS fiduciary net position decreased by $51.5 million from $3.708 billion at 06/30/15 to $3.657 billion at 06/30/16, representing a decrease of 1.4% from year to year.
- The TRS plan net investment income was $71.5 million at 06/30/16 compared to $165.7 million at 06/30/15.
- The TRS plan rate of return on investments during FY 2016 was 2.1% compared with FY 2015 rate of return of 4.6%.
- The TRS benefit payments paid to benefit recipients increased 5.6% to $320.8 million for FY 2016, which is consistent with increases in prior years.
- The TRS plan had a Total Pension Liability of $5.484 billion and Fiduciary Net Position of $3.657 billion for a Net Pension Liability of $1.827 billion. Net Pension Liability as a percentage of covered payroll was 229.53% as of June 30, 2016.

## Condensed Financial Information

For comparative purposes, the Condensed Financial Information below the fiscal year ended June 30, 2016 is presented with FY 2015 financial information.

**Fiduciary Net Position**

(in millions)

| | FY2016 | FY2015 | Percent Change |
|---|---|---|---|
| Cash/Short-Term Investments | $ 106.8 | $ 78.5 | 36.1% |
| Receivables | 27.0 | 27.1 | (0.3%) |
| Investments (Fair Value) | 3,623.6 | 3,743.3 | (3.2%) |
| Other Assets (Net) | 2.2 | 1.5 | 46.7% |
| Total Assets | 3,759.6 | 3,850.4 | (2.4%) |
| Pension Deferred Outflows | 0.1 | 0.1 | 0.0% |
| Liabilities | 102.8 | 141.8 | (27.5%) |
| Pension Deferred Inflows | 0.1 | 0.3 | (66.7%) |
| **Net Position** | **$ 3,656.8** | **$ 3,708.4** | **(1.4%)** |

## MANAGEMENT'S DISCUSSION AND ANALYSIS

**Change in Fiduciary Net Position**
(in millions)

| | FY2016 | FY2015 | Percent Change |
|---|---|---|---|
| **Additions** | | | |
| Employer Contributions | $ 88.6 | $ 87.3 | 1.3% |
| Plan Member Contributions | 72.7 | 72.2 | 0.7% |
| Other Contributions | 43.9 | 43.4 | 1.5% |
| Net Investment Income | 71.5 | 165.7 | (71.5%) |
| **Total Additions** | **276.8** | **368.6** | **(24.9%)** |
| **Deductions** | | | |
| Benefit Payments | 320.8 | 303.7 | 5.6% |
| Withdrawals | 5.1 | 5.4 | (5.6%) |
| Administrative and Other Expenses | 2.4 | 2.2 | 9.0% |
| **Total Deductions** | **328.4** | **311.2** | **5.5%** |
| **Change in Net Position** | **$ (51.5)** | **$ 57.4** | **(189.7%)** |

### Financial Analysis

- The increase in Employer Contributions and Plan Member Contributions was due to HB 377 provisions that took effect in FY 2014, which increase contribution rates by 0.10% each year for ten years.
- The increase in Plan Member and Other Contributions are due do to an increase in Reportable Compensation of the System as a whole.
- The decrease in Net Investment Income for FY 2016 was due to a slow down in the economy and capital market conditions.
- Net investment income for FY 2016 was positive. However, the investment income was down significantly from previous fiscal years.
- The increase in Other Assets was due to an investment in an upgrade to the current Pension Administration System. The system will be implemented in stages and the overall cost will be capitalized. The total costs of the project as of 06/30/16 were recorded as Construction Work in Progress.
- The increase in benefit payments from year-to-year reflects an increase in the number of retirees and beneficiaries, plus the 1.5% guaranteed annual benefit adjustment. The increase is comparative to previous fiscal years.
- Administrative Expenses for FY 2016 were 0.75% of Benefit Payments. By the laws set forth in the Montana Code Annotated, TRS is required to keep Administrative Expenses under 1.5% of Benefit Payments.

### Overview of the Actuarial Funding

An actuarial valuation of the System is performed annually. As of July 1, 2016, the date of the most recent actuarial valuation, the funded ratio of the System was 69.28%. This was an increase from the System's July 1, 2015 valuation funded ratio of 67.46%.

In determining contribution rates, an actuarial value of assets is used rather than a market value of assets. The actuarial value of assets is based on a smoothed income investment rate. The TRS plan experienced an actuarial asset gain over the last year. The market value of assets had a positive return of 2.08% net of investment and operating expenses. The actuarial value of assets earned 8.79%, which is 1.04% greater than the actuarial assumption of 7.75%. Actuarial gains or losses result when the return on the actuarial value of assets differs from the actuarial investment return assumption.

MCA §19-20-201 requires the actuarial report to show how market performance is affecting the actuarial funding of the retirement system. The July 1, 2016 market value of assets is $142 million less than the actuarial value of assets. This is due to the smoothing of investment gains and losses over a four year period. If the market value of assets was used, the amortization period the System would be 28 years, and the funded ratio would be 66.69%.

The following table compares the annual returns for the past three fiscal years.

| Fiscal Year | Market Return | Actuarial Return | Actuarial Return Over/ (Under) 7.75% |
|---|---|---|---|
| 7/01/2013-6/30/2014 | 17.09% | 13.21% | 5.46% |
| 7/01/2014-6/30/2015 | 4.57% | 9.59% | 1.84% |
| 7/01/2015-6/30/2016 | 2.08% | 8.79% | 1.04% |

As of July 1, 2016, the System's Actuarial Value of Assets increased by $189 million from $3.610 billion at July 1, 2015 to $3.799 billion at July 1, 2016. This resulted in an Unfunded Actuarial Accrued Liability (UAAL) of $1.685 billion at July 1, 2016. This was a net decrease in the unfunded position of $56.8 million compared to July 1, 2015.

## BASIC FINANCIAL STATEMENTS

### TEACHERS' RETIREMENT SYSTEM
### A COMPONENT UNIT OF THE STATE OF MONTANA
### STATEMENT OF FIDUCIARY NET POSITION
### FISCAL YEAR ENDED JUNE 30, 2016

| | | 2016 |
|---|---|---|
| **Assets** | | |
| Cash/Cash Equivalents-Short Term Investment Pool (Note B) | $ | 106,788,491 |
| Receivables: | | |
| Accounts Receivable | | 22,096,228 |
| Interest Receivable | | 4,934,351 |
| **Total Receivables** | **$** | **27,030,579** |
| Investments, at Fair Value: (Note B) | | |
| Equity in Pooled Investments | $ | 3,522,665,695 |
| Other Investments | | - |
| Securities Lending Collateral (Note B) | | 100,939,896 |
| **Total Investments** | **$** | **3,623,605,591** |
| Assets Used in Plan Operations: | | |
| Land and Buildings | $ | 193,844 |
| Less: Accumulated Depreciation | | (150,545) |
| Equipment | | 229,000 |
| Less: Accumulated Depreciation | | (177,354) |
| Construction Work in Progress | | 2,062,527 |
| **Total Other Assets** | | **2,157,472** |
| **Total Assets** | **$** | **3,759,582,133** |
| Pension Deferred Outflows (Note E) | $ | 128,277 |
| **Liabilities** | | |
| Accounts Payable | $ | 148,655 |
| Securities Lending Liability (Note B) | | 100,939,896 |
| Compensated Absences (Note B) | | 175,277 |
| OPEB Implicit Rate Subsidy (Note G) | | 327,604 |
| Net Pension Liability (Note E) | | 1,177,820 |
| **Total Liabilities** | **$** | **102,769,251** |
| Pension Deferred Inflows (Note E) | $ | 110,361 |
| **Net Position Restricted for Pension Benefits** | **$** | **3,656,830,798** |

*The accompanying Notes to the Financial Statements is an integral part of this financial statement.*

## TEACHERS' RETIREMENT SYSTEM
## A COMPONENT UNIT OF THE STATE OF MONTANA
## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
## FISCAL YEAR ENDED JUNE 30, 2016

| | | 2016 |
|---|---|---|
| **Additions** | | |
| Contributions: | | |
| Employer | $ | 88,643,646 |
| Plan member | | 72,740,665 |
| Other | | 43,902,606 |
| **Total Contributions** | **$** | **205,286,917** |
| **Miscellaneous Income** | **$** | **29,123** |
| Investment Income: | | |
| Net Appreciation/(Depreciation) in Fair Value of Investments | $ | (84,549,668) |
| Investment Earnings | | 177,329,931 |
| Security Lending Income (Note B) | | 1,056,684 |
| Investment Income/(Loss) | | 93,836,947 |
| Less: Investment Expense | | (22,014,737) |
| Less: Security Lending Expense (Note B) | | (334,549) |
| **Net Investment Income/(Loss)** | | **71,487,661** |
| **Total Additions** | | **276,803,701** |
| | | |
| **Deductions** | | |
| Benefit Payments | $ | 320,810,259 |
| Withdrawals | | 5,086,816 |
| Administrative Expense | | 2,318,818 |
| OPEB Expense (Note G) | | 54,594 |
| Pension Expense (Note E) | | 88,255 |
| **Total Deductions** | **$** | **328,358,741** |
| | | |
| **Net Increase (Decrease) in Fiduciary Net Position** | **$** | **(51,555,040)** |
| | | |
| **Net Position Restricted for Pension Benefits Beginning of the Year** | $ | 3,708,385,838 |
| Prior Period Adjustment | | - |
| | | |
| **Net Position End of Year** | **$** | **3,656,830,798** |

*The accompanying Notes to the Financial Statements is an integral part of this financial statement.*

## TEACHERS' RETIREMENT SYSTEM A COMPONENT UNIT OF THE STATE OF MONTANA

## NOTES TO THE FINANCIAL STATEMENTS FISCAL YEARS ENDED JUNE 30, 2016

### NOTE A. DESCRIPTION OF THE PLAN

Teachers' Retirement System (TRS or the System) is a mandatory-participation multiple-employer cost-sharing defined-benefit public pension plan that provides retirement services to individuals employed as teachers, administrators, and in other professional and skilled positions employed in public education in Montana.

The Teachers' Retirement System Board (the Board) and staff administer the retirement system in conformity with the laws set forth in Title 19, chapter 20 of the Montana Code Annotated, and administrative rules set forth in Title 2, chapter 44 of the Administrative Rules of Montana. Additional information pertaining to membership, benefit structure, and prior years' actuarial valuations, as well as links to applicable statutes and administrative rules may be obtained by visiting the TRS web site at www.trs.mt.gov.

The Board is the governing body of the System. The System was established by the State of Montana in 1937 to provide retirement, death, and disability benefits to individuals employed as teachers, administrators, and in other professional and skilled positions employed in public education in Montana. TRS as an employer does not participate in the plan and acts only as the administrator of the plan.

### Board Composition

The Board consists of six members, all appointed by the Governor. Three Board members must be teaching professionals who, when appointed, are active members of TRS; at least one of the active members must be an active classroom teacher. One Board member must be a retired teacher who was a member of TRS at the time of retirement. Two Board members are appointed from the public at large. TRS Board members serve staggered five-year terms. Three Board members constitutes a quorum.

### Reporting Entities

At June 30, 2016, the number and type of reporting entities participating in the system were as follows:

| | |
|---|---|
| Local School Districts and Co-ops | 359 |
| Community Colleges | 3 |
| University System Units | 2 |
| State Agencies | 9 |
| **Total** | **373** |

### System Membership

At July 1, 2016, the date of the most recent actuarial valuation, system membership consisted of the following:

| | |
|---|---|
| Retirees and Beneficiaries Currently Receiving Benefits | 15,164 |
| Terminated Members: | |
| Vested | 1,704 |
| Non-vested | 12,888 |
| Active Plan Members: | |
| Full-Time | 12,769 |
| Part-Time | 6,279 |
| **Total Membership** | **48,804** |

### Summary of Benefits

Through June 30, 2013, all members enrolled in TRS participated in a single-tiered plan (Tier One). In the Tier One plan, employees with a minimum of 25 years of service or who have reached age 60 with 5 years of service are eligible to receive an annual retirement benefit equal to creditable service years divided by 60 times the average final compensation. Final compensation is the average of the highest three consecutive years of earned compensation. Benefits fully vest after 5 years of creditable service. Vested employees may retire at or after age 50 and receive reduced retirement benefits.
Beginning July 1, 2013, new members in TRS

participate in a second benefit tier (Tier Two), which differs from Tier One as follows:

- Tier Two uses a 5-year average final compensation (AFC) (as opposed to 3-year AFC in Tier One);
- Tier Two provides for unreduced service retirement benefits at age 60 with 5 years of creditable service or at age 55 with at least 30 years of creditable service (rather than at age 60 with 5 years of service or at any age with creditable service in 25 years in Tier One);
- Tier Two provides for early retirement benefits with 5 years of creditable service at age 55 (rather than age 50 in Tier One);
- Tier Two has a one percent higher normal employee contribution rate (though a temporary 1% supplemental employee contribution rate is also now currently in place for Tier One members), and
- Tier Two provides for an enhanced benefit calculation - 1.85% x AFC x years of creditable service — for members retiring with at least 30 years of creditable service and at least 60 years of age (rather than 1.6667 x AFC x years of creditable service).

A guaranteed annual benefit adjustment (GABA) is payable on January 1st of each calendar year for each retiree who has received at least 36 monthly retirement benefit payments prior to that date. The GABA is applicable to both Tier One and Tier Two members. The GABA is calculated at 1.5% of the benefit payable as of January 1st. For Tier Two members, the GABA to be calculated each year may vary from 0.5% to 1.5% based on the retirement system's funding status and the period required to amortize any unfunded accrued actuarial liability as determined in the prior actuarial valuation.

## Overview of Contributions

The TRS funding policy provides for monthly employee and employer contributions at rates specified by state law. Plan members, for the fiscal year ending June 30, 2016, were required to contribute 8.15% of their earned compensation. School district and community college employers were required to contribute 8.67% of earned compensation. The State's general fund contributes an additional 2.38% of earned compensation for school district and community college employers. University System and State Agency employers were required to contribute 11.05% of earned compensation. The State's general fund also contributes an additional 0.11% of total earned compensation of all TRS members. Each employer in the Montana University System contributes to TRS a supplemental employer contribution currently at a rate of 4.72% of the total compensation of employees participating in the Montana University System Retirement Program (MUS-RP).

Contribution rates for FY 2015, 2016, and 2017 for school district and community college employers are listed below.

| Fiscal Year | Members | Employers | General Fund | Total |
|---|---|---|---|---|
| July 1, 2014–June 30, 2015 | 8.15% | 8.57% | 2.49% | 19.21% |
| July 1, 2015–June 30, 2016 | 8.15% | 8.67% | 2.49% | 19.31% |
| July 1, 2016–June 30, 2017 | 8.15% | 8.77% | 2.49% | 19.41% |

Contribution rates for FY 2015, 2016, and 2017 for state agencies and university system employers are listed below.

| Fiscal Year | Members | Employers | General Fund | Total |
|---|---|---|---|---|
| July 1, 2014–June 30, 2015 | 8.15% | 10.95% | 0.11% | 19.21% |
| July 1, 2015–June 30, 2016 | 8.15% | 11.05% | 0.11% | 19.31% |
| July 1, 2016–June 30, 2017 | 8.15% | 11.15% | 0.11% | 19.41% |

Pursuant to §19-20-609, MCA, the employer contribution rate will increase by 0.10% each year beginning July 1, 2014 through fiscal year 2024

## BASIC FINANCIAL STATEMENTS

## NOTE B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### Basis of Accounting

TRS, a fiduciary component unit Pension Trust Fund of the State of Montana financial reporting entity, prepares its financial statements using the accrual basis of accounting. Employee and employer contributions are recognized as revenues in the period when due pursuant to statutory requirements and investment income is recognized when earned. Benefit and withdrawal payments are recorded in the period in which the liabilities are due and payable.

The System adheres to all applicable Governmental Accounting Standards Board (GASB) Statements.

GASB Statement No. 67 which was adopted during the year ended June 30, 2014, addresses accounting and financial reporting requirements for pension plans. The statement required changes in presentation of the financial statements, notes to the financial statements, and required supplementary information. Significant changes included an actuarial calculation of total and net pension liability. It also included comprehensive footnote disclosures regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures. The implementation of GASB Statement No. 67 did not significantly impact the accounting for accounts receivable and investment balances. The total pension liability, determined in accordance with GASB Statement No. 67, is presented in Note D.

GASB Statement No. 68 which was adopted during the year ended June 30, 2015, addresses accounting and financial reporting requirements for public pension plan employers. As an active employer in the Public Employees' Retirement System (PERS), TRS is required to comply with GASB Statement No. 68. The statement requires additional notes to the financial statements and required supplementary information. Significant changes include recording and reporting of pension amounts including: Net Pension Liability, Pension Expense, and Deferred Inflows and Outflows of resources. The GASB Statement No. 67 actuarial calculation of total and net pension liability for PERS was allocated to each employer of PERS based on the employer contributions. The allocated pension amounts, determined in accordance with GASB Statement No. 68, are presented in Note E.

### Prior Period Adjustments

Prior period adjustments relate to corrections of errors and changes in accounting policy from prior periods. There was no prior period adjustment for the fiscal year ended June 30, 2016.

### Compensated Absences

Compensated absences represent 100 percent of accrued vacation and 25 percent of accrued sick leave for TRS personnel. Compensated absences were recored as a liability of $175,277 at June 30, 2016.

### Investments

The Montana Board of Investments (BOI) manages the State's Unified Investment Program, which includes the TRS plan investments as required by §19-20-501, MCA. Per the Montana Constitution, Article VIII Section 13(3), investment of TRS assets shall be managed in a fiduciary capacity in the same manner that a prudent

expert acting in a fiduciary capacity and familiar with the circumstances would use in the conduct of an enterprise of a similar character with similar aims. Investments administered by BOI for TRS are subject to BOI's investment risk policies. Information on investment policies, investment activity, investment management fees, and a listing of specific investments owned by the pooled asset accounts can be obtained from the Board of Investments, P.O. Box 200126, Helena, MT 59620-0126. The BOI website can be found at investmentmt.com.

TRS investments include: Short-Term Investment Pool (STIP), Retirement Funds Bond Pool (RFBP), Montana Domestic Equity Pool (MDEP), Montana International Equity Pool (MTIP), Montana Private Equity Pool (MPEP), and Montana Real Estate Pool (MTRP).

Montana Domestic Equity Pool (MDEP)
The Montana Public Retirement Plans investment in the Montana Domestic Equity Pool (MDEP) will provide the Plans with exposure to a broad and diverse spectrum of equity-related securities across different industries and market capitalization ranges. Primarily, these equity investments will be managed by external asset managers that invest in the common shares of equity for entities that have their headquarters based in the United States and are traded on eligible U.S. exchanges. MDEP will be diversified across a number of investment portfolios and investment managers that will utilize either an active or an index focused investment strategy.

Montana International Equity Pool (MTIP)
The Montana Public Retirement Plans investment in the Montana International Equity Pool (MTIP) will provide the Plans with exposure to a broad and diverse spectrum of equity-related securities across different industries and market capitalization ranges. Primarily, these equity investments will be managed by external asset managers that invest in the common shares of equity for entities that have their headquarters based outside of the United States. MTIP will be diversified across a number of investment portfolios and investment managers that will utilize either an active or an index focused investment strategy.

Montana Private Equity Pool (MPEP)
The Montana Public Retirement Plans investment in the Montana Private Equity Pool (MPEP) will provide the Plans with exposure to a diverse spectrum of private investment opportunities across different industries, both within and outside the United States. Primarily, these investments will be private equity partnership interests, which may be direct limited partnerships or vehicles that primarily invest in direct limited partnerships, including fund-of-funds and secondary funds. MPEP will be diversified across a number of funds, vintage years, investment opportunities, and geographies.

Montana Real Estate Pool (MTRP)
The Montana Public Retirement Plans investment in the Montana Real Estate Pool (MTRP) will provide the Plans with exposure to a diverse spectrum of real estate related investment opportunities both within and outside the United States. Primarily, these investments will be made in an open-ended institutional commingled fund or a closed-ended private investment fund. MTRP will be diversified across a number of funds, vintage years, investment opportunities, and geographies.

Montana Retirement Funds Bond Pool (RFBP)
The Montana Public Retirement Plans investment in the Retirement Funds Bond Pool (RFBP) will provide the Plans with exposure to a broad and diverse spectrum of fixed income-related securities across different sectors, industries, credit ratings and maturities. These fixed income investments will be managed internally as well as by external asset managers utilizing an active investment strategy.

Short-Term Investment Pool (STIP)
The Montana Public Retirement Plans investment in the Short-Term Investment Pool (STIP) will provide the Plans with exposure to Cash related investments. STIP will be managed internally utilizing an active investment strategy.

**TRS Investment Portfolio**
**June 30, 2016**

| Investment | | Book Value | | Fair Value |
|---|---|---|---|---|
| Short-Term Investment Pool | $ | 97,160,326 | | 97,180,439 |
| Retirement Funds Bond Pool | | 770,732,231 | | 855,977,383 |
| MT Domestic Equities Pool | | 380,709,156 | | 1,367,756,297 |
| MT International Equities Pool | | 372,222,961 | | 559,611,260 |
| MT Private Equities Pool | | 177,915,055 | | 404,387,166 |
| MT Real Estate Pool | | 260,556,789 | | 334,933,589 |
| **Total** | **$** | **2,059,296,519** | **$** | **3,619,846,134** |

Pension Investment Pools

RFBP, MDEP, MTIP, MPEP, and MTRP are internal investment pools managed and administered under the direction of the Montana Board of Investments (BOI) as statutorily authorized by the Unified Investment Program. They are commingled internal investment pools, and only the retirement systems can participate in these pools. On a monthly basis, redemptions are processed by BOI in order to maintain required asset allocations and to provide liquidity for retirement benefits. The fair values of the investments in this category have been determined using the NAV per share (or its equivalent) of the investment. Refer to the fair value measurement note disclosures within BOI's annual financial statements for the underlying investments within the fair value hierarchy.

Short Term Investment Pool (STIP)

STIP is an external investment pool managed and administered under the direction of BOI as statutorily authorized by the Unified Investment Program. It is a commingled pool for investment purposes and participant requested redemptions from the pool are redeemed the next business day. The fair values of the investments in this category have been determined using the net asset value (NAV) per share (or its equivalent) of the investment. Refer to the fair value measurement note disclosures within BOI's annual financial statements for the underlying investments within the fair value hierarchy.

### Investments Measured at Fair Value

| Investments | 6/30/2016 | Fair Value Measurements Using "Quoted Prices in Active Markets for Identical Assets (Level 1)" | "Significant Other Observable Inputs (Level 2)" | "Significant Unobservable (Level 3)" |
|---|---|---|---|---|
| **Total Investments by fair value level** | $ - | $ - | $ - | $ - |
| Investments measured at the NAV | | | | |
| Retirement Funds Bond Pool (RFBP) | $ 855,977,383 | | | |
| Montana Domestic Equity Pool (MDEP) | 1,367,756,297 | | | |
| Montana International Equity Pool (MTIP) | 559,611,260 | | | |
| Montana Private Equity Pool (MPEP) | 404,387,166 | | | |
| Montana Real Estate Pool (MTRP) | 334,933,589 | | | |
| Short Term Investment Pool (STIP) | 97,180,439 | | | |
| **Total investments measured at the NAV** | **3,619,846,134** | | | |
| **Total investments measured at fair value** | **$ 3,619,846,134** | | | |

### Investments Measured at Net Asset Value

| Investments | "Fair Value" | Unfunded Commitments | Redemption Frequency (If Currently Eligible) | Redemption Notice Period |
|---|---|---|---|---|
| Retirement Funds Bond Pool (RFBP) | $ 855,977,383 | - | Monthly | 30 days |
| Montana Domestic Equity Pool (MDEP) | 1,367,756,297 | - | Monthly | 30 days |
| Montana International Equity Pool (MTIP) | 559,611,260 | - | Monthly | 30 days |
| Montana Private Equity Pool (MPEP) | 404,387,166 | - | Monthly | 30 days |
| Montana Real Estate Pool (MTRP) | 334,933,589 | - | Monthly | 30 days |
| Short Term Investment Pool (STIP) | 97,180,439 | - | Daily | 1 day |
| **Total investments measured at the NAV** | **$ 3,619,846,134** | | | |

Investment Risks

The investment risks for the pooled investments that TRS participates in are described in the following paragraphs. Investments are administered by BOI for TRS as part of the State of Montana's Unified Investment Program, and BOI is responsible for setting investment risk policies.

***Credit Risk*** – Credit risk is defined as the risk that an issuer or other counter-party to an investment will not fulfill its obligation. With the exception of U.S. Government securities, the fixed income instruments in the investment pools have credit risk as measured by major credit rating services.

***Custodial Credit Risk*** - Custodial credit risk is the risk that, in the event of the failure of the counter-party to a transaction, the BOI may not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. As of June 30, 2016, all the public securities as well as securities held by the separate public equity account managers were registered in the nominee name for the Montana Board of Investments and held

in the possession of the Board's custodial bank, State Street Bank.

***Concentration of Credit Risk*** – Concentration of credit risk is the risk of loss attributed to the magnitude of BOI's investment in a single issuer. Investments explicitly guaranteed by the U.S. Government are excluded from the concentration of credit risk requirement. In 2008, the U.S. government extended the explicit guarantee to certain government agencies such as Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (FHLMC-Freddie Mac). Given the explicit guarantee extension, the BOI had no concentration of credit risk exposure to Fannie Mae and Freddie Mac in either the Bond Pools or STIP.

***Bond Pools*** - The RFBP Core Internal Bond Portfolios Investment Policy Statement (IPS) provides for a 2% portfolio limit for dollar denominated debt obligations of domestic and foreign corporations (Yankee bonds) and a 3% portfolio limit in non-agency Mortgage Pass-through (MBS) securities. The four RFBP external managers are limited to debt obligations of domestic and foreign corporations up to 3% of portfolio assets per issuer.

STIP – The STIP Investment Policy limits concentration of credit risk exposure by limiting portfolio investment types to 3% in any issuer with the exception of US Treasury and US Agency securities as well as any repurchase agreements with a financial institution.

***Foreign Currency Risk*** – Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment Although the MTIP, RFBP, and MTRP do not have a formal policy to limit foreign currency risk, the MTIP policy provides for the "external managers to hedge currency in a defensive manner. The managers are not allowed to engage in currency speculation, such as over-hedging, reverse hedging, cross-hedging or other trading activity not specifically aimed at minimizing risk versus their benchmark or preserving the U.S. dollar value of investments. The managers' Investment Guidelines provide for currency hedging and emerging market limitations. At the Pool level, MTIP will be managed on an un-hedged basis." The MPEP policy does not address foreign currency risk, but identifies "country risk as including all of the risks associated with international alternative investments along with the political, economic and currency risks associated with investing outside of the United States."

***Interest Rate Risk*** – Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. In accordance with GASB Statement No. 40, the BOI uses effective duration as a measure of interest rate risk for the Bond Pool. Duration for two fixed income external managers must be within 25% of the established Index duration. MDEP domestic equity managers are allowed to maintain up to 5% of assets in short-term investments and index domestic equity managers are allowed to maintain up to 3% of assets in short-term investments and individual securities. MTIP international equity managers are allowed to maintain up to 5% of assets in short-term investments.

According to the STIP investment policy "the STIP portfolio will minimize interest rate risk by:

- structuring the investment portfolio so securities mature to meet cash requirements for ongoing operations thereby normally avoiding the need to sell securities on the open market prior to maturity;
- maintaining a dollar-weighted average portfolio maturity (WAM) of 60 days or less (for this purpose, the date to the next coupon reset date will be used for all floating or variable rate securities), and
- STIP will maintain a reserve account."

The TRS investments subject to credit and interest rate risk at June 30, 2016 are categorized in the following table:

| Investment | Fair Value 6/30/16 | Credit Quality Rating 6/30/16 | Effective Duration 6/30/16 |
|---|---|---|---|
| RFBP | 855,977,383 | NR | 5.38 yrs |
| STIP | 97,180,439 | NR | 0.11 yrs |

With the exception of the U.S. Government securities, the RFPB fixed income instruments have credit risk as measured by major credit rating services. Obligations of the U.S. Government or obligation explicitly guaranteed by the U.S. Government are not considered to have credit risk and do not require disclosure of credit quality. Although the RFBP investments have been rated by investment security type, RFBP as an external investment pool, has not been rated. STIP investments have also been rated by investment security type. However, STIP as an external investment pool, has not been rated.

MPEP, MTRP, MTIP, and RFBP include assets subject to foreign currency risk. TRS' position in these pools is approximately 36% at June 30, 2016. The Montana BOI MPEP and MTRP investments in EURO currency had a fair value of approximately $32,145,000 at June 30, 2016. The Montana BOI MTIP and RFBP had cash and securities with a foreign currency value of approximately $415,503,000 at June 30, 2016.

***Securities Lending*** – Under the provisions of state statutes, BOI is authorized to lend its securities and has contracted with the custodial bank to lend the BOI securities to broker-dealers and other entities with a simultaneous agreement to return the collateral for the same securities in the future. The custodial bank is required to maintain collateral equal to 102 percent of the fair value of domestic securities and 105 percent of the fair value of international securities while the securities are on loan. The BOI and the custodial bank split the earnings, 80/20% respectively, on security lending activities. The BOI retains all rights and risks of ownership during the loan period. At June 30, 2016, the BOI had no credit risk exposure to borrowers. The private equity and real estate pools do not participate in securities lending. There were no failures by any borrowers to return or pay distributions thereon during the period that resulted in a declaration and notice of Default of the Borrower.

## NOTE C. PROPERTY AND EQUIPMENT

Property and equipment consist of the amounts shown in the following table as of June 30, 2016. Assets under $5,000 are expensed in the year purchased. Assets valued at $5,000 or more are recorded at cost less straight-line depreciation over the estimated useful life of five to ten years. Assets valued at $100,000 or more are recorded at cost less straight-line depreciation over the estimated useful life of five to ten years. There were no significant leases as of June 30, 2016. As of June 30, 2016, TRS has completed several modules of its upgraded pension administration system project (M-Trust). The system upgrade is being implemented on a modular basis with all modules expected to be completed by December 1, 2016. The cost of implementing and upgrading the system as of June 30, 2016 is shown below and on the Basic Financial Statements in the Construction Work in Progress line item. The upgrade will be amortized once the project is complete. The Board approved a $2.7 million investment in the upgraded system in the spring of 2014.

| | | 2016 |
|---|---|---|
| Land and Buildings | $ | 193,844 |
| Less: Accumulated Depreciation | | (150,545) |
| Equipment | | 229,000 |
| Less: Accumulated Depreciation | | (177,354) |
| Construction Work in Progress | $ | 2,062,527 |
| Net Property and Equipment | $ | 2,157,472 |

## NOTE D. NET PENSION LIABILITY — TRS PLAN REPORTING

### Net Pension Liability — TRS Plan

| Fiscal Year Ending June, 30 2016 | | |
|---|---|---|
| Total Pension Liability | $ | 5,483,673,777 |
| Fiduciary Net Position | $ | 3,656,830,798 |
| Net Pension Liability | $ | 1,826,842,979 |
| Ratio of Fiduciary Net Position to Total Pension Liability | | 66.69% |

The net pension liability, the retirement system's total pension liability (TPL) determined in accordance with GASB No. 67 less the fiduciary net position (FNP), as of June 30, 2016, is as shown above. July 1, 2016 is the date of the actuarial valuation upon which the TPL is based. Roll forward procedures were not used.

Actuarial valuation of the ongoing System involves estimates of the reported amounts and assumptions about probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The most recent experience study was performed in the spring of 2014 for the five year period ending July 1, 2013. The Schedule of Net Pension Liability presents multi-year trend information about whether the plan's fiduciary net position is increasing or decreasing over time relative to the total pension liability. This schedule is presented in the Required Supplementary Information section.

### Summary of Actuarial Assumptions – TRS Plan

The TPL as of June 30, 2016, is based on the results of an actuarial valuation date of July 1, 2016. There were several significant assumptions and other inputs used to measure the total pension liability. The actuarial assumptions used in the July 1, 2016, valuation were based on the results of the last actuarial experience study, dated May 1, 2014. Among those assumptions were the following:

| | |
|---|---|
| Total Wage Increases* | 8.51% |
| Investment Return | 7.75% |
| Price Inflation | 3.25% |
| Growth in Membership | 0.00% |
| Post-retirement Benefit Increases (Starting Three Years After Retirement) | 1.50% |
| Interest on Member Accounts | 5.00% |

**Total Wage Increases include 4.00% general wage increase assumption and a range of 0.00% to 4.51% merit and longevity increases based on years of service.*

## Target Allocations – TRS Plan

| Asset Class | Target Asset Allocation (a) | Real Rate of Return Arithmetic Basis (b) | Long-Term Expected Portfolio Real Rate of Return* (a) x (b) |
|---|---|---|---|
| Broad US Equity | 36.00% | 4.80% | 1.73% |
| Broad International Equity | 18.00% | 6.05% | 1.09% |
| Private Equity | 12.00% | 8.50% | 1.02% |
| Intermediate Bonds | 23.40% | 1.50% | 0.35% |
| Core Real Estate | 4.00% | 4.50% | 0.18% |
| High Yield Bonds | 2.60% | 3.25% | 0.08% |
| Non-Core Real Estate | 4.00% | 7.50% | 0.30% |
| **Totals** | **100.00%** | | **4.75%** |
| | | Inflation | 3.25% |
| | | Expected Arithmetic Nominal Return | 8.00% |

**The long-term expected nominal rate of return above of 8.00% differs from the total TRS long-term rate of return assumption of 7.75%. The assumed rate is comprised of a 3.25% inflation rate and a real long-term expected rate of return of 4.50%.*

The assumed long-term expected return on pension plan assets is reviewed as part of the regular experience studies prepared every four years for the System. The most recent analysis, performed for the period covering fiscal years 2008 through 2013, is outlined in a report dated May 1, 2014. Several factors are considered in evaluating the long-term rate of return assumption, including long term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and, inflation) were developed by the investment consultant for each major asset class. These ranges were 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 then adding expected inflation. The capital market assumptions developed by the investment consultant are intended for use over a 10-year horizon and may not be useful in setting the long-term rate of return for funding pension plans which covers a longer time frame. The assumption is intended to be a long-term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years. Best estimates of arithmetic real rates of return for each major asset class included in the System's target asset allocation as of June 30, 2016, is summarized in the above table.

The discount rate (long-term rate of return assumption) used to measure the total pension liability was 7.75%. The projection of cash flows used to determine the discount rate assumed that contributions from participating plan members, employers, and non-employer contributing entities will be made based on the Board's funding policy, which establishes the contractually required rates under Montana State Code. These rates are shown in the following tables. In addition to these contributions the State general fund will contribute $25 million annually to the System payable July 1st of each year. Based on those assumptions, the System's fiduciary net position was projected to be adequate to make all the projected future benefit payments of current plan members through the year 2122. 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.

### History of Legislated Contributions – School District and Other Employers

by percent of covered payroll

| | Members | Employers | General Fund | Total Employee |
|---|---|---|---|---|
| Prior to July 1, 2007 | 7.15% | 7.47% | 0.11% | 14.73% |
| July 1, 2007 to June 30, 2009 | 7.15% | 7.47% | 2.11% | 16.73% |
| July 1, 2009 to June 30, 2013 | 7.15% | 7.47% | 2.49% | 17.11% |
| July 1, 2013 to June 30, 2014 | 8.15% | 8.47% | 2.49% | 19.11% |
| July 1, 2014 to June 30, 2015 | 8.15% | 8.57% | 2.49% | 19.21% |
| July 1, 2015 to June 30, 2016 | 8.15% | 8.67% | 2.49% | 19.31% |
| July 1, 2016 to June 30, 2017 | 8.15% | 8.77% | 2.49% | 19.41% |
| July 1, 2017 to June 30, 2018 | 8.15% | 8.87% | 2.49% | 19.51% |
| July 1, 2018 to June 30, 2019 | 8.15% | 8.97% | 2.49% | 19.61% |
| July 1, 2019 to June 30, 2020 | 8.15% | 9.07% | 2.49% | 19.71% |
| July 1, 2020 to June 30, 2021 | 8.15% | 9.17% | 2.49% | 19.81% |
| July 1, 2021 to June 30, 2022 | 8.15% | 9.27% | 2.49% | 19.91% |
| July 1, 2022 to June 30, 2023 | 8.15% | 9.37% | 2.49% | 20.01% |
| July 1, 2023 to June 30, 2024 | 8.15% | 9.47% | 2.49% | 20.11% |

### State and University Employers

| | Members | Employers | General Fund | Total |
|---|---|---|---|---|
| Prior to July 1, 2007 | 7.15% | 7.47% | 0.11% | 14.73% |
| July 1, 2007 to June 30, 2009 | 7.15% | 9.47% | 0.11% | 16.73% |
| July 1, 2009 to June 30, 2013 | 7.15% | 9.85% | 0.11% | 17.11% |
| July 1, 2013 to June 30, 2014 | 8.15% | 10.85% | 0.11% | 19.11% |
| July 1, 2014 to June 30, 2015 | 8.15% | 10.95% | 0.11% | 19.21% |
| July 1, 2015 to June 30, 2016 | 8.15% | 11.05% | 0.11% | 19.31% |
| July 1, 2016 to June 30, 2017 | 8.15% | 11.15% | 0.11% | 19.41% |
| July 1, 2017 to June 30, 2018 | 8.15% | 11.25% | 0.11% | 19.51% |
| July 1, 2018 to June 30, 2019 | 8.15% | 11.35% | 0.11% | 19.61% |
| July 1, 2019 to June 30, 2020 | 8.15% | 11.45% | 0.11% | 19.71% |
| July 1, 2020 to June 30, 2021 | 8.15% | 11.55% | 0.11% | 19.81% |
| July 1, 2021 to June 30, 2022 | 8.15% | 11.65% | 0.11% | 19.91% |
| July 1, 2022 to June 30, 2023 | 8.15% | 11.75% | 0.11% | 20.01% |
| July 1, 2023 to June 30, 2024 | 8.15% | 11.85% | 0.11% | 20.11% |

Pursuant to §19-20-609, MCA, the employer contribution rate will increase by 0.10% each year beginning July 1, 2014, through fiscal year 2024.

## Sensitivity Analysis – TRS Plan

| | 1.0% Decrease (6.75%) | Current Discount Rate | 1.0% Increase (8.75%) |
|---|---|---|---|
| Net Pension Liability | $ 2,451,115,994 | $ 1,826,842,979 | $ 1,301,274,168 |

In accordance with GASB 67 regarding the disclosure of the sensitivity of the net pension liability to changes in the discount rate, the above table presents the net pension liability calculated using the discount rate of 7.75%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1.00% lower (6.75%) or 1.00% higher (8.75%) than the current rate.

### Schedule of Investment Returns – TRS Plan

**TRS Plan Schedule of Investment Returns**

| | 2016* | 2015* | 2014* |
|---|---|---|---|
| Annual Money Weighted Rate Return, Net of Investment Expense | 1.986% | 4.618% | 17.18% |

**Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.*

The annual money-weighted rate of return on pension plan investments expresses investment performance, net of pension plan investment expense, adjusted for the changing amounts actually invested.

## NOTE E. NET PENSION LIABILITY – EMPLOYER REPORTING

In accordance with GASB Statement 68, Accounting and Financial Reporting for Pensions, TRS is required to recognize and report certain amounts associated with their participation in the Public Employees' Retirement System (PERS). Statement 68 became effective June 30, 2015, and includes requirements to record and report employers' proportionate share of the collective Net Pension Liability, Pension Expense, Deferred Inflows and Deferred Outflows of resources associated with pensions.

In accordance with Statement 68, the State of Montana has a funding situation that is not Special Funding whereby the State General Fund provides contributions from the Coal Severance Tax and interest. All employers are required to report the portion of Coal Severance Tax and interest attributable to the employer as grant revenue. However, since TRS does not receive any other contributions from the state as a result of being an employer of PERS, the State of Montana Proportionate share is $0 as seen below.

### Net Pension Liability – TRS as an Employer of PERS Plan

| | Net Pension Liability as of 6/30/16 | Net Pension Liability as of 6/30/15 | Percent of Collective NPL as 6/30/16 | Percent of Collective NPL as 6/30/15 | Change in Percent of Collective NPL |
|---|---|---|---|---|---|
| TRS Proportionate Share | $ 1,177,820 | $ 1,009,567 | 0.084258% | 0.081024% | 0.003234% |
| State of Montana Proportionate Share Associated with TRS | $ 0 | $ 0 | 0.000000% | 0.000000% | 0.000000% |
| **Total** | **$ 1,177,820** | **$ 1,009,567** | **0.084258%** | **0.081024%** | **0.003234%** |

At June 30, 2016, TRS recorded a liability of $1,177,820 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 (TPL) used to calculate the Net Pension Liability was determined by an actuarial valuation as of June 30, 2014, with update procedures to roll forward the TPL to the measurement date of June 30, 2015. TRS' proportion of the Net Pension Liability was based on the employer contributions received by PERS during the measurement period July 1, 2014, through June 30, 2015, relative to the total employer contributions received from all of PERS' participating employers. At June 30, 2016, the TRS' proportion was 0.084258 percent.

### Summary of Actuarial Assumptions – PERS Plan

*Changes in actuarial assumptions and methods*: There were no changes in assumptions or other inputs that affected the measurement of the Total Pension Liability.

*Changes in benefit terms*: There have been no changes in benefit terms since the previous measurement date.

*Changes in proportionate share*: There were no changes between the measurement date of the collective Net Pension Liability and the employer's reporting date that are expected to have a significant effect on the employer's proportionate share of the collective NPL.

### Pension Expense – TRS as an Employer of PERS Plan

| | | Pension Expense as of 6/30/16 |
|---|---|---|
| TRS Proportionate Share | $ | 59,989 |
| Proportionate Share of Coal Severance Tax Contributions Associated with TRS | $ | 28,266 |
| **Total** | **$** | **88,255** |

At June 30, 2016, TRS recognized a Pension Expense of $88,255 for its proportionate share of the PERS' pension expense. TRS also recognized grant revenue of $28,266 for the support provided by the State of Montana for the proportionate share of the Coal Severance Tax contributions made to PERS that are associated with TRS.

### Deferred Inflows and Outflows - TRS as an Employer of PERS Plan

At June 30, 2016, TRS reported its proportionate share of deferred outflows of resources and deferred inflows of resources related to TRS from the following sources:

| | | Deferred Outflows of Resources | | Deferred Inflows of Resources |
|---|---|---|---|---|
| Differences Between Expected and Actual Economic Experience | $ | 0 | $ | 7,126 |
| Changes in Actuarial Assumptions | $ | 0 | $ | 0 |
| Difference Between Projected and Actual Investment Earnings | $ | 0 | $ | 99,715 |
| Changes in Proportion and Differences Between TRS Contributions and Proportionate Share of Contributions | $ | 38,033 | $ | 3,520 |
| Changes in Proportion | | N/A | | N/A |
| *Contributions Paid to PERS Subsequent to the Measurement Date—FY 2016 Contributions | $ | 90,244 | $ | 0 |
| **Total** | **$** | **128,277** | **$** | **110,361** |

**Amounts reported as deferred outflows of resources related to pensions resulting from TRS's contributions in FY 2016 subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2017. Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense as follows:*

| Year Ended June 30: | Amount Recognized as an Increase (or Decrease) to Pension Expense in Future Years | |
|---|---|---|
| 2017 | $ | (32,979) |
| 2018 | $ | (32,979) |
| 2019 | $ | (32,304) |
| 2020 | $ | 25,934 |
| 2021 | | – |
| Thereafter | | – |

## Plan Description – PERS Plan

The PERS-Defined Benefit Retirement Plan (DBRP), administered by the Montana Public Employee Retirement Administration (MPERA), is a multiple-employer, cost-sharing plan established July 1, 1945, and governed by Title 19, chapters 2 and 3, MCA. This plan provides retirement benefits to covered employees of the State, local governments, certain employees of the Montana University System, and school districts.

All new members are initially members of the PERS-DBRP and have a 12-month window during which they may choose to remain in the PERS-DBRP or join the PERS-DCRP by filing an irrevocable election. Members may not be members of both the defined contribution and defined benefit retirement plans. All new members from the universities also have a third option to join the university system's Montana University System Retirement Program (MUS-RP). For members that choose to join the PERS-DCRP or the MUS-RP, a percentage of the employer contributions will be used to pay down the liability of the PERS-DBRP.

The PERS-DBRP provides retirement, disability, and death benefits to plan members and their beneficiaries. Benefits are established by state law and can only be amended by the Legislature. Benefits are based on eligibility, years of service, and highest average compensation. Member rights are vested after five years of service.

## Summary of Benefits – PERS Plan

### *Eligibility for Benefit*

**Service retirement:**

Hired prior to July 1, 2011:
- Age 60, 5 years of membership service;
- Age 65, regardless of membership service, or
- Any age, 30 years of membership service.

Hired on or after July 1, 2011:
- Age 65, 5 years of membership service;
- Age 70, regardless of membership service.

For PERS-DCRP Plan members are eligible for benefit at termination of service.

**Early retirement, actuarially reduced:**

Hired prior to July 1, 2011:
- Age 50, 5 years of membership service, or
- Any age, 25 years of membership service.

Hired on or after July 1, 2011:
- Age 55, 5 years of membership service.

### *Vesting*

Five years of membership service

For PERS-DCRP Plan members are vesting is immediate for participant's contributions and attributable income. Member's must have 5 years of membership to become eligible for the employer's contributions to individual accounts and attributable income.

### *Member's Highest Average Compensation (HAC)*

Hired prior to July 1, 2011 - highest average compensation during any consecutive 36 months;

Hired on or after July 1, 2011 - highest average compensation during any consecutive 60 months;

Hired on or after July 1, 2013 - 110% annual cap on compensation considered as part of a member's highest average compensation.

***Monthly Benefit Formula***

**Members hired prior to July 1, 2011:**

Less than 25 years of membership service:

- 1.785% of HAC per year of service credit;

25 years of membership service or more:

- 2% of HAC per year of service credit.

**Members hired on or after July 1, 2011:**

Less than 10 years of membership service:

- 1.5% of HAC per year of service credit.

10 years or more, but less than 30 years of membership service:

- 1.785% of HAC per year of service credit.

30 years or more of membership service:

- 2% of HAC per year of service credit.

For PERS-DCRP Plan member's benefit depend entirely on vesting and individual account balance. Various payout options are available, including: taxable lump-sum payouts, periodic payments, per member instructions and IRS permitted rollovers.

***Guaranteed Annual Benefit Adjustment (GABA)***

- GABA is 3% for members hired prior to July 1, 2007.
- GABA is 1.5% for members hired on or after July 1, 2007 After the member has completed 12 full months of retirement, the member's benefit increases by the applicable percentage (provided below) each January, inclusive of other adjustments to the member's benefit.

## Overview of Contributions – PERS Plan

Rates are specified by state law for periodic member and employer contributions and are a percentage of the member's compensation. Contributions are deducted from each member's salary and remitted by participating employers. The State legislature has the authority to establish and amend contribution rates to the plan. Member and employer contribution rates are shown in the table below.

1. Member contributions to the system of 7.9% are temporary and will be decreased to 6.9% on January 1, following actuary valuation results that show the amortization period has dropped below 25 years and would remain below 25 years following the reduction of both the additional employer and additional member contribution rates.

2. Employer contributions to the system:
   a. Effective July 1, 2014, following the 2013 Legislative Session, PERS-employer contributions increase an additional 0.1% a year and will continue over 10 years through 2024. The additional employer contributions including the 0.27% added in 2007 and 2009, will terminate on January 1, following an actuary valuation that shows the amortization period of the PERS-DBRP has dropped below 25 years and remains below the 25 years following the reduction of both the additional employer and member contributions rates.
   b. Effective July 1, 2013, employers are required to make contributions on working retirees' compensation. Member contributions for working retirees are not required.
   c. The portion of employer contributions allocated to the PCR are included in the employers reporting. The PCR was paid off effective March 2016, and the contributions previously directed to the PCR are now directed to member accounts.

3. Non-employer Contributions:
   a. Special Funding

i. The State contributes 0.1% of members' compensation on behalf of local government entities.
ii. The State contributes 0.37% of members' compensation on behalf of school district entities.

b. Not Special Funding
i. The State contributes a portion of Coal Severance Tax income and earnings from the Coal Trust Permanent Trust fund.

## Stand-Alone Statements – PERS Plan

The PERS financial information is reported in the Public Employees' Retirement Board's (PERB) Comprehensive Annual Financial Report for the fiscal year ended. It is available from the PERB at 100 North Park, PO Box 200131, Helena MT 59620-0131, 406-444-3154.

CAFR information including PERS stand-alone financial statements can be found on their website at http://mpera.mt.gov/annualReports.shtml.

The latest actuarial valuation and experience study can be found at their website at http://mpera.mt.gov/actuarialValuations.asp.

## Actuarial Assumptions – PERS Plan

The Total Pension Liability as of June 30, 2015, is based on the results of an actuarial valuation date of June 30, 2014, with update procedures to roll forward the TPL to June 30, 2015. There were several significant assumptions and other inputs used to measure the TPL. The actuarial assumptions used in the June 30, 2014, valuation were based on the results of the last actuarial experience study, dated June 2010, for the six year period July 1, 2003, to June 30, 2009. Among those assumptions were the following:

| | |
|---|---|
| General Wage Growth* | 4.00% |
| *Includes Inflation at | 3.00% |
| Merit Wage Increases | 0% to 6.00% |
| Investment Return | 7.75% |

Post-retirement Benefit Increases

3% for Members hired prior to July 1, 2007

1.5% for Members hired on or after July 1, 2007

After the member has completed 12 full months of retirement, the member's benefit increases by the applicable percentage (provided below) each January, inclusive of other adjustments to the member's benefit.

Mortality assumptions among contributing members, terminated vested members, service retired members and beneficiaries based on RP 2000 Combined Employee and Annuitant Mortality Tables projected to 2015 with scale AA.

Mortality assumptions among Disabled Retirees are based on RP 2000 Combined Employee and Annuitant Mortality Tables with no projections. No future mortality improvement is assumed.

## Discount Rate – PERS Plan

The discount rate used to measure the Total Pension Liability was 7.75%. The projection of cash flows used to determine the discount rate assumed that contributions from participating plan members, employers, and non-employer contributing entities will be made based on the PERS Board's funding policy, which establishes the contractually required rates under Montana Code Annotated. The State contributes 0.1% of salaries for local governments and 0.37% for school districts. In addition, the State contributes coal severance tax and interest money from the general fund. The interest is contributed monthly, and the severance tax is contributed quarterly. Based on those assumptions, the PERS' fiduciary net position was projected to be adequate to make all the projected future benefit payments of current plan members through the year 2123. 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. No municipal bond rate was incorporated in the discount rate.

## Target Allocations – PERS Plan

| Asset Class | Target Asset Allocation | Real Rate of Return Arithmetic Basis |
|---|---|---|
| Cash Equivalents | 2.00% | -0.25% |
| Domestic Equity | 36.00% | 4.55% |
| Foreign Equity | 18.00% | 6.10% |
| | 100.00% | |

| Asset Class | Target Asset Allocation | Real Rate of Return Arithmetic Basis |
|---|---|---|
| Fixed Income | 24.00% | 1.25% |
| Private Equity | 12.00% | 8.00% |
| Real Estate | 8.00% | 4.25% |
| | 100.00% | |

The long-term expected return on pension plan assets is reviewed as part of the regular experience studies prepared for the PERS. The most recent analysis, performed for the period covering fiscal years 2003 through 2009, is outlined in a report dated June 2010, which is located on the MPERA website. Several factors are considered in evaluating the long-term rate of return assumption including rates of return adopted by similar public sector systems, and by 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 by the investment consultant for each major asset class. These ranges were 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 then adding expected inflation. The assumption is intended to be a long term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years. Best estimates are presented as the arithmetic real rates of return for each major asset class included in the PERS target asset allocation as of June 30, 2015, is summarized in the Target Allocations - PERS Plan table on the previous page.

### Sensitivity Analysis – TRS as an Employer of PERS Plan

| | 1.0% Decrease (6.75%) | Current Discount Rate | 1.0% Increase (8.75%) |
|---|---|---|---|
| TRS' Proportion of Net Pension Liability | $ 1,815,944 | $ 1,177,820 | $ 638,940 |

In accordance with GASB 68 regarding the disclosure of the sensitivity of the net pension liability to changes in the discount rate, the above table presents the net pension liability calculated using the discount rate of 7.75%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1.00% lower (6.75%) or 1.00% higher (8.75%) than the current rate.

### Summary of Significant Accounting Policies – PERS Plan

The Montana Public Employee Retirement Administration (MPERA) prepares its financial statements using the accrual basis of accounting. For the purposes of measuring the Net Pension Liability, deferred inflows of resources and deferred outflows of resources related to pensions, Pension Expense, information about the fiduciary net position, and additions to/deductions from fiduciary net position have been determined on the same accrual basis as they are reported by MPERA. For this purpose, member contributions are recognized in the period in which contributions are due. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions. Revenues are recognized in the accounting period they are earned and become measurable. Benefit payments and refunds are recognized in the accounting period when due and payable in accordance with the benefit terms. Expenses are recognized in the period incurred. Investments are reported at fair value. MPERA adheres to all applicable Governmental Accounting Standards Board (GASB) statements.

## NOTE F. TRS PLAN CONTRIBUTIONS

The TRS funding policy provides for monthly employee and employer contributions at rates specified by state law. Plan members, for the fiscal year ending June 30, 2016, were required to contribute 8.15% of their earned compensation and the employer contribution rate for the fiscal year ending June 30, 2016, was 8.67% of earned compensation. For State

Agency and University System employers, the employer contribution rate was 11.05% of members' earned compensation.

The State's general fund contributed an additional 2.38% of earned compensation for school district and community college employers. In addition, the State's general fund contributed .11% of earned compensation for all TRS members. Each employer in the Montana University System contributed 4.72% of earned compensation for all employees participating in the Montana University System Retirement Program (MUS-RP).

The TRS actuary determines the actuarial implications of the funding requirement in annual actuarial valuations. The actuarial method used to determine the implications of the statutory funding level is the entry age actuarial cost method, with both normal cost and amortization of the accrued liability determined as a level percentage of earned compensation. Contribution rates consist of an amount for normal cost, the estimated amount necessary to finance benefits earned by the members during the current year, and an amount for amortization of the unfunded actuarial accrued liability.

Contributions made by employers and members were in accordance with actuarially computed funding requirements. Information with regard to contributions to the System, for the year ended June 30, 2016, is indicated in the Required Supplemental Information, Schedule of Employer Contributions.

## NOTE G. OTHER POST-EMPLOYMENT BENEFITS

### Plan Description

TRS employees and dependents are eligible to receive health care through the State Group Benefits Plan administered by the Montana Department of Administration (MDOA). In accordance with §2-18-704, MCA, the State provides optional post-employment medical, vision, and dental health care benefits for retirees and their dependents and beneficiaries that elect to continue coverage and pay administratively established premiums. Plan coverage is on a calendar year basis. For GASB 45 reporting, the State Group Benefits Plan is considered an agent multiple-employer plan, and TRS is considered to be a separate employer participating in the plan. Information about the State of Montana Other Post-employment Benefits (OPEB) can be obtained from the Department of Administration, State Financial Services Division, P.O. Box 200102, Helena, MT 59620-0102.

The OPEB plan allows retirees to participate, as a group, at a rate that does not cover all of the related costs. This results in the reporting of an "implied rate" subsidy in the related financial statements and footnotes. While this liability is disclosed for financial statement purposes, it does not represent a legal liability of TRS.

### Funding and Investment Policy

The contribution requirements of plan members are established and may be amended by the MDOA. The monthly premium for plan members ranges from $416 to $1,506 for calendar year 2016, depending on the medical plan selected, family coverage, and Medicare eligibility. The plan is financed on a pay-as-you-go basis. Therefore, there are no investment objectives of the OPEB plan.

## BASIC FINANCIAL STATEMENTS

### Annual OPEB Expense

The annual required contribution (ARC) is the OPEB expense that is actuarially determined in accordance with the parameters of GASB Statement No. 45. The OPEB expense represents a level of funding that, if paid on an ongoing basis, is projected to cover the normal cost each year and amortize any unfunded actuarial liabilities over a period not to exceed 30 years.

**Annual OPEB Expense**

| | TRS |
|---|---|
| Annual Required Contribution/OPEB Expense | $ 51,186 |
| Interest on Net OPEB Obligation | 15,799 |
| Amortization on Net OPEB Obligation | (12,392) |
| Annual OPEB Expense | 54,594 |
| Contributions Made | (13,564) |
| Increase in Net OPEB Obligation | 41,030 |
| Net OPEB Obligation – Beginning of Year | 286,574 |
| Net OPEB Obligation – End of Year | $ 327,604 |

The 2016 ARC is calculated for all the plan's employers and then allocated to each participating employer. The TRS 2016 ARC is $51,186. The 2016 ARC is equal to an annual amount required each year to fully fund the liability over 30 years. The amount of the estimated OPEB actuarial accrued liability was determined in accordance with GASB Statement 45. The liability is measured every two years by the actuary and as of December 31, 2015, the liability for TRS is estimated at $524,423. (The actuarial accrued liability is the present value of future retiree benefits and expenses.) For fiscal year 2016, the TRS allocated annual OPEB expense was $54,594. The TRS annual OPEB expense, the percentage of annual OPEB expense contributed to the plan, and the net OPEB obligation for 2016 and the five preceding years were as follows:

| Fiscal Year Ended | Annual OPEB Expense | Percent of Annual OPEB Expense Contributed | Net OPEB Obligation |
|---|---|---|---|
| 6/30/2011 | $ 62,837 | 27.9% | $ 134,832 |
| 6/30/2012 | $ 59,112 | 9.4% | $ 164,529 |
| 6/30/2013 | $ 59,793 | 12.0% | $ 194,444 |
| 6/30/2014 | $ 58,073 | 21.0% | $ 240,329 |
| 6/30/2015 | $ 64,400 | 28.2% | $ 286,574 |
| 6/30/2016 | $ 54,894 | 24.8% | $ 327,604 |

## OPEB Funded Status and Funding Progress

**Other Post-employment Benefits Plan Information Schedule of Funding Progress**
(all dollar amounts in thousands)

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) (b) | Unfunded (UAAL) (b-a) | Funded Ratio (a/b) | Annual Covered Payroll ( c ) | UAAL as % of Covered Payroll (b-a/c) |
|---|---|---|---|---|---|---|
| 12/31/2007 | - | $ 449,321 | $ 449,321 | 0% | $ 519,969 | 86.41% |
| 12/31/2009 | - | $ 357,664 | $ 357,664 | 0% | $ 526,794 | 67.89% |
| 12/31/2011 | - | $ 361,053 | $ 361,053 | 0% | $ 558,646 | 64.63% |
| 12/31/2013 | - | $ 493,412 | $ 493,412 | 0% | $ 828,985 | 59.52% |
| 12/31/2015 | - | $ 524,423 | $ 524,423 | 0% | $ 973,509 | 53.87% |

The funded status of the TRS allocation of the plan as of December 31, 2015, the most recent valuation date was as follows:

| | |
|---|---|
| Actuarial Accrued Liability (AAL) | $ 524,423 |
| Actuarial Value of Plan Assets | $ 0 |
| Unfunded Actuarial Accrued Liability (UAAL) | $ 524,423 |
| Funded Ratio (Actuarial Value of Plan Assets/AAL) | 0 |
| TRS Covered Payroll (Active Plan Members) | $ 973,509 |
| UAAL as a Percentage of Covered Payroll | 53.87% |

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. Actuarial calculations reflect a long-term perspective. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multi-year trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Projections of benefits for financial reporting progress are based on the substantive plan (the plan as understood by the employer and the plan members), and includes the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential effects of legal or contractual funding limitations on the pattern of cost sharing between the employer and plan members in the future.

## OPEB Plan Actuarial Methods and Assumptions

As of December 31, 2015, the TRS actuarially accrued liability (AAL) for benefits was $524,423 with no actuarial value of assets, resulting in an unfunded actuarial accrued liability (UAAL) of $524,423, and the ratio

of the UAAL to the covered payroll was 53.87%. The UAAL is being amortized as a level dollar amount over an open basis for 30 years.

In the December 31, 2015, actuarial valuation, the projected unit credit funding method was used for the State. The actuarial assumptions included a 4.25% discount rate and a 2.50% payroll growth rate (inflation rate). The assumed participation rate is 55% of future retirees. The projected annual healthcare cost trend rate is 3.4% (medical) and 10.8% (prescription drug) for 2015.

## NOTE H. PENDING LITIGATION

As of June 30, 2016, TRS had no pending litigation that would significantly affect the information presented in this financial report.

## TEACHERS' RETIREMENT SYSTEM
## A COMPONENT UNIT OF THE STATE OF MONTANA REQUIRED SUPPLEMENTARY INFORMATION AND NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

**Schedule of Changes in the Net Pension Liability – TRS Plan**

| | 2016* | 2015* | 2014* |
|---|---|---|---|
| **Total Pension Liability** | | | |
| Service Cost | $ 73,530,938 | $ 73,820,438 | $ 77,006,174 |
| Interest | 402,339,969 | 390,555,879 | 373,456,442 |
| Benefit Changes | - | - | – |
| Difference Between Expected and Actual Experience | (5,245,998) | 9,660,152 | 20,297,029 |
| Changes of Assumptions | (12,445,656)) | (4,670,553) | 46,502,421 |
| Benefit Payments | (320,810,259) | (303,675,300) | (285,182,358) |
| Refunds of Contributions | (5,086,816) | (5,368,359) | (4,788,688) |
| Net Change in Total Liability | 132,282,178 | 160,322,257 | 227,291,020 |
| Total Pension Liability Beginning | $ 5,351,391,599 | $ 5,191,069,342 | $ 4,963,778,322 |
| **Total Pension Liability Ending (a)** | **$ 5,483,673,777** | **$ 5,351,391,599** | **$ 5,191,069,342** |
| **Fiduciary Net Position** | | | |
| Contributions - Employer | $ 88,643,646 | $ 87,290,863 | $ 83,439,612 |
| Contributions - Member | 72,740,665 | 72,215,797 | 70,468,354 |
| Contributions - Non-Employer Contributing Entities | 43,902,606 | 43,389,534 | 64,923,320 |
| Miscellaneous Income | 29,123 | 27,297 | 6,000 |
| Net Investment Income | 71,487,661 | 165,684,953 | 540,277,362 |
| Benefit Payments | (320,810,259) | (303,675,300) | (285,182,358) |
| Administrative Expenses | (2,318,818) | (2,035,081) | (2,022,636) |
| Refund of Contributions | (5,086,816) | (5,368,359) | (4,788,688) |
| Other | (142,849) | (140,631) | (58,073) |
| Net Change in Fiduciary Net Position | (51,555,041) | 57,389,073 | 467,062,894 |
| Fiduciary Net Position - Beginning | 3,708,385,838 | 3,652,220,265 | 3,185,064,406 |
| Prior Period Adjustment | – | (1,223,501) | 92,965 |
| **Fiduciary Net Position - Ending (b)** | **$ 3,656,830,798** | **$ 3,708,385,838** | **$ 3,652,220,265** |
| **Net Pension Liability - Ending (a - b)** | **$ 1,826,842,979** | **$ 1,643,005,761** | **$ 1,538,849,077** |

**Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.*

## REQUIRED SUPPLEMENTARY INFORMATION AND NOTES

### Note to RSI - Schedule of Changes in the Net Pension Liability and Schedule of Net Pension Liability

The TPL contained in these schedules was provided by the Systems actuary, Cavanaugh Macdonald Consulting, LLC. The NPL is measured as the TPL less the amount of the FNP of the Retirement System.

**Schedule of the Net Pension Liability – TRS Plan**

| | 2016* | 2015* | 2014* |
|---|---|---|---|
| Total Pension Liability | $ 5,483,673,777 | $ 5,351,391,599 | $ 5,191,069,342 |
| Fiduciary Net Position | 3,656,830,798 | 3,708,385,838 | 3,652,220,265 |
| Net Pension Liability | $ 1,826,842,979 | $ 1,643,005,761 | $ 1,538,849,077 |
| Ratio of Fiduciary Net Position to Total Pension Liability | 66.69% | 69.30% | 70.36% |
| Covered – Employee Payroll | $ 795,920,906 | $ 768,718,699 | $ 750,604,063 |
| **Net Pension Liability as a Percentage of Covered-Employee Payroll** | **229.53%** | **213.73%** | **205.01%** |

**Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.*

**Schedule of Investment Returns – TRS Plan**

| | 2016* | 2015* | 2014* |
|---|---|---|---|
| Annual Money Weighted Rate Return, Net of Investment Expense | 1.986% | 4.618% | 17.18% |

**Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.*

## Schedule of Employer and Non-employer Contributing Entities Contributions – TRS Plan

| | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|---|---|---|---|---|
| Actuarially Determined Employer Contributions | $ 132,546,252 | $ 130,680,397 | $ 148,362,932 | $ 130,533,530 | $ 108,993,492 |
| Actual Contributions: | | | | | |
| Employers | 88,643,646 | 87,290,863 | 83,439,612 | 74,113,191 | 72,422,404 |
| Non-Employer Contributing Entities | $ 43,902,606 | $ 43,389,534 | $ 64,923,320 | $ 17,521,347 | $ 16,843,766 |
| **Total** | **$ 132,546,252** | **$ 130,680,397** | **$ 148,362,932** | **$ 91,634,538** | **$ 89,266,170** |
| Annual Contribution Deficiency/(Excess) | – | – | – | 38,898,992 | 19,727,322 |
| Covered -Employee Payroll | 795,920,906 | 768,718,699 | 750,604,063 | 742,608,987 | 735,586,961 |
| Actual Contributions as a Percentage of Covered-Employee Payroll | 16.65% | 17.00% | 19.77% | 12.34% | 12.14% |

| | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|
| Actuarially Determined Employer Contributions | $ 91,879,263 | $ 90,967,180 | $ 80,997,968 | $ 81,414,325 | $ 40,807,133 |
| Actual Contributions: | | | | | |
| Employers | 72,879,950 | 72,179,128 | 66,850,644 | 67,921,950 | 61,943,986 |
| Non-Employer Contributing Entities | $ 17,437,366 | $ 17,241,610 | $ 14,147,324 | $ 13,492,375 | $ 720,266 |
| **Total** | **$ 90,317,316** | **$ 89,420,738** | **$ 80,997,968** | **$ 81,414,325** | **$ 62,664,252** |
| Annual Contribution Deficiency/(Excess) | 1,561,947 | 1,546,442 | – | – | (21,857,119) |
| Covered -Employee Payroll | 746,694,434 | 747,037,330 | 683,235,462 | 657,435,444 | 664,100,000 |
| Actual Contributions as a Percentage of Covered-Employee Payroll | 12.10% | 11.97% | 11.86% | 12.38% | 9.44% |

## REQUIRED SUPPLEMENTARY INFORMATION AND NOTES

### Note to RSI - Schedule of Employer Contributions

The actuarially determined employer contributions and amount of those contributions actually made are presented in the schedule.

### Note to RSI - Actuarial Assumptions – TRS Plan

The information presented in the required supplementary schedules was used in the actuarial valuation for purposes of determining the actuarially determined contribution rate. The assumptions and methods used for this actuarial valuation were recommended by the actuary and adopted by the Board. Additional information as of the latest actuarial valuation follows.

### Note to RSI - Changes of Benefit Terms – TRS Plan

The following changes to the plan provision were made as identified:

The 2013 Montana Legislature passed HB 377, which provides additional revenue and creates a two-tier benefit structure. A Tier One Member is a person who first became a member before July 1, 2013, and has not withdrawn their member's account balance. A Tier Two Member is a person who first becomes a member on or after July 1, 2013, or after withdrawing their member's account balance, becomes a member again on or after July 1, 2013.

The GABA for Tier 1 members: permanent injunction limits application of the GABA reduction passed under HB 377.

The second tier benefit structure for members hired on or after July 1, 2013 is summarized below.

1. Final Average Compensation: average of earned compensation paid in five consecutive years of full-time service that yields the highest average.
2. Service Retirement: Eligible to receive a service retirement benefit if the member has been credited with at least five full years of creditable service and has attained the age of 60; or has been credited with 30 or more years of full-time or part-time creditable service and has attained age 55.
3. Early Retirement: Eligible to receive an early retirement allowance if a member is not eligible for service retirement, but has at least five years of creditable service and attained age 55.
4. Professional Retirement Option: if the member has been credited with 30 or more years of service and has attained the age of 60, the member is eligible for an enhanced allowance equal to 1.85% of average final compensation times all service at retirement. Otherwise, the multiplier used to calculate the retirement allowance will be equal to 1.67%.
5. Annual Contribution: 8.15% of member's earned compensation.
6. Supplemental Contribution Rate: On or after July 1, 2023, the TRS Board may require a supplemental contribution up to 0.5% if the following three conditions are met:
    a. The average funded ratio of the System based on the last three annual actuarial valuations is equal to or less than 80%, and
    b. The period necessary to amortize all liabilities of the System based on the latest annual actuarial valuation is greater than 20 years, and
    c. A State or employer contribution rate increase or a flat dollar contribution to the Retirement System Trust fund has been enacted that is equivalent to or greater than the supplemental

contribution rate imposed by the TRS Board.

7. Disability Retirement: A member will not be eligible for a disability retirement if the member is or will be eligible for a service retirement on the date of termination.
8. Guaranteed Annual Benefit Adjustment (GABA):
    a. If the most recent actuarial valuation shows that Retirement System liabilities are at least 90% funded and the provision of the increase is not projected to cause the System's liabilities to be less than 85% funded, the GABA may increase from the 0.5% floor up to 1.5%, as set by the Board.

HB 377 increased revenue from the members, employers, and the State by means of the following changes:

- An annual State contribution equal to $25 million paid to the System in monthly installments.
- A one-time contribution payable to the Retirement System by the trustees of a school district maintaining a retirement fund. The one-time contribution to the Retirement System shall be the amount earmarked as an operating reserve in excess of 20% of the adopted retirement fund budget for the fiscal year 2013. The amount received was $22 million in FY 2014.
- A 1% supplemental employer contribution, which will increase the current employer rates as follows:
    - School district contributions will increase from 7.47% to 8.47%.
    - Montana University System and State agency contributions will increase from 9.85% to 10.85%.
    - Supplemental employer contributions will increase by 0.1% each fiscal year for fiscal year 2014 through fiscal year 2024. For fiscal years beginning after June 30, 2024, the total supplemental employer contribution will be equal to 2%.
- Members hired prior to July 1, 2013, (Tier One) under HB 377 are required to contribute a supplemental contribution equal to an additional 1% of the member's earned compensation.
- Each employer is required to contribute 9.85% of total compensation paid to all re-employed TRS retirees employed in a TRS reportable position to the System.

## Note to RSI - Changes in Actuarial Assumptions and Methods – TRS Plan

The following changes to the actuarial assumptions were adopted in 2016:

- The normal cost method has been updated to align the calculation of the projected compensation and the total present value of plan benefits so that the normal cost rate reflects the most appropriate allocation of plan costs over future compensation.

The following changes to the actuarial assumptions were adopted in 2015:

- Correctly reflect the proportion of members that are assumed to take a refund of contributions upon termination and appropriately reflect the three year COLA deferral period for Tier 2 Members.
- The 0.63% load applied to the projected retirement benefits of the university members "to account for larger than average annual compensation increases observed in the years immediately preceding retirement" is not applied to benefits expected to be paid to university members on account of death, disability and termination (prior to retirement eligibility.
- The actuarial valuation was updated to reflect the assumed rate of retirement for university members at age 60 is 8.50% as stated in the actuarial valuation report.
- The actuarial valuation was updated to reflect the fact that vested terminations are only covered by the $500 death benefit for the one year following their termination and, once again when the terminated member commences their deferred retirement annuity (they are not covered during the deferral period). Additionally, only the portion of the terminated members that are assumed to "retain membership in the System" are covered by the $500 death benefit after termination.

## REQUIRED SUPPLEMENTARY INFORMATION AND NOTES

The following changes to the actuarial assumptions were adopted in 2014:

- Assumed rate of inflation was reduced from 3.50% to 3.25%.
- Payroll Growth Assumption was reduced from 4.50% to 4.00%.
- Assumed real wage growth was reduced from 1.00% to 0.75%.
- Investment return assumption was changed from net of investment and administrative expenses to net of investment expenses only.
- Mortality among contributing members, service retired members, and beneficiaries was updated to the following:
  - For Males: RP 2000 Healthy Annuitant Mortality Table for ages 50 and above and the RP 2000 Combined Healthy Annuitant Mortality Table for ages below 50, set back four years, with mortality improvements projected by Scale BB to 2018.
  - For Females: RP 2000 Healthy Annuitant Mortality Table for ages 50 and above and the RP 2000 Combined Healthy Annuitant Mortality Table for ages below 50, set back two years, with mortality improvements projected by Scale BB to 2018.

- Mortality among disabled members was updated to the following:
  - For Males: RP 2000 Disabled Mortality Table for Males, set forward one year, with mortality improvements projected by Scale BB to 2018.
  - For Females: RP 2000 Disabled Mortality Table for Females, set forward five years, with mortality improvements projected by Scale BB to 2018.

### Note to RSI - Method and Assumptions Used in Calculations of Actuarially Determined Contributions – TRS Plan

| | |
|---|---|
| Actuarial Cost Method | Entry Age |
| Amortization Method | Level Percentage of Pay, Open |
| Remaining Amortization Period | 24 years |
| Asset Valuation Method | 4-year Smoothed Market |
| Inflation | 3.25 Percent |
| Salary Increase | 4.00 – 8.51 Percent, Including Inflation for Non-University Members and 5.00 Percent for University Members; |
| Investment Rate of Return | 7.75 Percent, Net of Pension Plan Investment Expense, and Including Inflation |

**Schedule of Proportionate Share of the Net Pension Liability**
**TRS as Employer of PERS Plan**

| | | 2016 | | 2015 |
|---|---|---|---|---|
| TRS' Proportion of the Net Pension Liability | | 0.084258% | | 0.081024% |
| TRS' Proportionate Share of the Net Pension Liability | $ | 1,177,820 | $ | 1,009,567 |
| State of Montana's Proportionate Share of the Net Pension Liability Associated With the TRS | $ | 0 | $ | 0 |
| **Total NPL** | $ | 1,177,820 | $ | 1,009,567 |
| TRS' Covered-Employee Payroll | $ | 971,504 | $ | 905,963 |
| TRS' Proportionate Share of the Net Pension Liability as a Percentage of Its Covered-Employee Payroll | | 121.2% | | 111.4% |
| Fiduciary Net Position as a Percentage of the Total Pension Liability | | 78.4% | | 79.9% |

*The amounts presented above for each fiscal year were determined as of June 30th, the measurement date. Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.*

**Schedule of Contributions - TRS as Employer of PERS Plan**

| | | 2016 | | 2015 |
|---|---|---|---|---|
| Contractually Required Contributions | $ | 89,396 | $ | 82,288 |
| Contributions in Relation to the Contractually Required Contributions | $ | 89,396 | $ | 82,288 |
| Contribution Deficiency (Excess) | $ | 0 | $ | 0 |
| Employer's Covered-Employee Payroll | $ | 1,043,891 | $ | 971,504 |
| Contributions as a Percentage of Covered-Employee Payroll | | 8.56% | | 8.47% |

*The amounts presented above for each fiscal year were determined as of June 30th, the most recent fiscal year end. Schedule is intended to show information for 10 years. Additional years will be displayed as they become available*

## Note to RSI – PERS Plan

### Changes of Benefit Terms

The following changes to the plan provision were made as identified:

### 2013 Legislative Changes:

*Working Retirees* - House Bill 95

- The law requires employer contributions on working retiree compensation.
- Member contributions are not required.
- Working retiree limitations are not impacted. PERS working retirees may still work up to 960 hours a year, without impacting benefits.

## REQUIRED SUPPLEMENTARY INFORMATION AND NOTES

*Highest Average Compensation (HAC) Cap* - House Bill 97, effective July 1, 2013

- All PERS members hired on or after July 1, 2013, are subject to a 110% annual cap on compensation considered as part of a member's highest or final average compensation.
- All bonuses paid to PERS members on or after July 1, 2013, will not be treated as compensation for retirement purposes.

*House Bill 454 - Permanent Injunction Limits Application of the GABA Reduction passed under HB 454*

*Guaranteed Annual Benefit Adjustment (GABA)*

- After the member has completed 12 full months of retirement, the member's benefit increases by the applicable percentage (provided below) each January, inclusive of all other adjustments to the member's benefit.
- 3% for members hired prior to July 1, 2007.
- 1.5% for members hired on or after July 1, 2007, and before July 1, 2013.
- Members hired on or after July 1, 2013:
  a. 1.5% each year PERS is funded at or above 90%;
  b. 1.5% is reduced by 0.1% for each 2% PERS is funded below 90%, and
  c. 0% whenever the amortization period for PERS is 40 years or more.

**2015 Legislative Changes:**

*General Revisions* - House Bill 101, effective January 1, 2016

*Second Retirement Benefit*

1. Applies to PERS members who return to active service on or after January 1, 2016. Members who retire before January 1, 2016, return to PERS-covered employment and accumulate less than 2 years of service credit before retiring again:
   - refund of member's contributions from second employment plus regular interest (currently 0.25%);
   - no service credit for second employment;
   - start same benefit amount the month following termination, and
   - GABA starts again in the January immediately following second retirement.

2. For members who retire before January 1, 2016, return to PERS-covered employment and accumulate two or more years of service credit before retiring again:
   - member receives a recalculated retirement benefit based on laws in effect at second retirement, and
   - GABA starts in the January after receiving recalculated benefit for 12 months.

3. For members who retire on or after January 1, 2016, return to PERS-covered employment and accumulate less than 5 years of service credit before retiring again:
   - refund of member's contributions from second employment plus regular interest (currently 0.25%);
   - no service credit for second employment;
   - start same benefit amount the month following termination, and
   - GABA starts again in the January immediately following second retirement.

4. For members who retire on or after January 1, 2016, return to PERS-covered employment and accumulate five or more years of service credit before retiring again:

- member receives same retirement benefit as prior to return to service;
- member receives second retirement benefit for second period of service based on laws in effect at second retirement, and
- GABA starts on both benefits in January after member receives original and new benefit for 12 months.

*Employer Contributions and the Defined Contribution Plan*

The PCR was paid off effective March 2016 and the contributions of 2.37%, .47%, and the 1.0% increase previously directed to the PCR are now directed to the Defined Contribution or MUS-RP member's account.

**Changes in Actuarial Assumptions and Methods**

Method and assumptions used in calculations of actuarially determined contributions

The following addition to the actuarial assumptions was adopted in 2014 based upon implementation of GASB Statement 68:

| | |
|---|---|
| Admin Expense as % of Payroll | 0.27% |

The following changes were adopted in 2013 based on the 2013 Economic Experience study:

| | |
|---|---|
| General Wage Growth* | 4.00% |
| *Includes inflation at | 3.00% |
| Investment rate of return | 7.75%, net of pension plan investment expense, and including inflation |

The following Actuarial Assumptions are from the June 2010 Experience Study:

| | |
|---|---|
| General Wage Growth* | 4.25% |
| *Includes inflation at | 3.00% |
| Merit increase | 0% to 7.3% |
| Investment rate of return | 8.00%, net of pension plan investment expense, and including inflation |
| Asset valuation method | 4-year smoothed market |
| Actuarial cost method | Entry age |
| Amortization method | Level percentage of pay, open |

## REQUIRED SUPPLEMENTARY INFORMATION AND NOTES

### Other Post-employment Benefits Plan Information

**Schedule of Funding Progress**
(all dollar amounts in thousands)

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) (b) | Unfunded (UAAL) (b-a) | Funded Ratio (a/b) | Annual Covered Payroll (c) | UAAL as Percent of Covered Payroll (b-a/c) |
|---|---|---|---|---|---|---|
| 12/31/2007 | - | $ 449,321 | $ 449,321 | 0% | $ 519,969 | 86.41% |
| 12/31/2009 | - | $ 357,664 | $ 357,664 | 0% | $ 526,794 | 67.89% |
| 12/31/2011 | - | $ 361,053 | $ 361,053 | 0% | $ 558,646 | 64.63% |
| 12/31/2013 | - | $ 493,412 | $ 493,412 | 0% | $ 828,985 | 59.52% |
| 12/31/2015 | - | $ 524,423 | $ 524,423 | 0% | $ 973,509 | 53.87% |

### Note to RSI - OPEB

The funded status of the TRS allocation of the plan as of December 31, 2015, the most recent valuation date was as follows:

| | | |
|---|---|---|
| Actuarial Accrued Liability (AAL) | $ | 524,423 |
| Actuarial Value of Plan Assets | $ | 0 |
| Unfunded Actuarial Accrued Liability (UAAL) | $ | 524,423 |
| Funded Ratio (Actuarial Value Of Plan Assets/AAL) | | 0 |
| TRS Covered Payroll (Active Plan Members) | $ | 973,509 |
| UAAL as a Percentage of Covered Payroll | | 53.87% |

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. Actuarial calculations reflect a long-term perspective. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multi-year trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Projections of benefits for financial reporting progress are based on the substantive plan (the plan as understood by the employer and the plan members), and includes the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential effects of legal or contractual funding limitations on the pattern of cost sharing between the employer and plan members in the future.

# TEACHERS' RETIREMENT SYSTEM
# A COMPONENT UNIT OF THE STATE OF MONTANA
# SUPPORTING SCHEDULES / SUPPLEMENTARY INFORMATION
# FISCAL YEARS ENDED JUNE 30, 2016

## SCHEDULE OF ADMINISTRATIVE EXPENSES

Expenses for the administration of the plan, excluding compensated absences, depreciation and amortization are budgeted and approved by the TRS Board. The administrative costs of the TRS are financed through realized investment income. The expenses, less amortization of assets, may not exceed 1.5% of retirement benefits paid. Administrative expenses for the fiscal year ended June 30, 2016, were 0.75% of benefits paid. The administrative expenses by category are outlined below:

**Administrative Expenses**

| | | 2016 |
|---|---|---|
| Personnel Services: | | |
| Salaries | $ | 1,051,214 |
| Other Compensation | | 2,764 |
| Employee Benefits | | 298,058 |
| **Total Budgeted Personal Services** | **$** | **1,352,036** |
| | | |
| Operating Expenses: | | |
| Contracted Services | $ | 572,551 |
| Supplies and Material | | 61,918 |
| Communications | | 105,960 |
| Travel | | 28,201 |
| Rent | | 71,218 |
| Repair and Maintenance | | 35,518 |
| Other Expenses | | 62,150 |
| **Total Budgeted Operating Expenses** | **$** | **937,514** |
| | | |
| Non-Budgeted Expenses: | | |
| Compensated Absences | $ | 12,870 |
| Depreciation | | 16,398 |
| Amortization | | — |
| **Total Non-Budgeted Expenses** | **$** | **29,268** |
| | | |
| **Total Administrative Expenses** | **$** | **2,318,818** |

## SUPPLEMENTARY INFORMATION - SUPPORTING SCHEDULES

### SCHEDULE OF INVESTMENT EXPENSES

as of June 30, 2016

| Investment | BOI | Custodial Bank | External Managers | Other | Total |
|---|---|---|---|---|---|
| Short-Term Investment Pool | $ 22,960 | $ 8,761 | N/A | $ 103,603 | $ 135,324 |
| Retirement Funds Bond Pool | $ 281,162 | $ 68,554 | $ 467,719 | $ 3,681 | $ 821,116 |
| Montana Domestic Equity Pool | $ 276,006 | $ 245,957 | $ 3,256,309 | $ 1,218,351 | $ 4,996,624 |
| Montana International Pool | $ 247,061 | $ 89,515 | $ 1,297,810 | $ 176,579 | $ 1,810,965 |
| Montana Private Equity Pool | $ 400,305 | $ 19,393 | $ 6,391,081 | $ 2,629,674 | $ 9,440,452 |
| Montana Real Estate Pool | $ 250,223 | $ 15,484 | $ 3,974,964 | $ 569,586 | $ 4,810,257 |
| **Totals** | **$ 1,477,716** | **$ 447,664** | **$15,387,884** | **$4,701,473** | **$ 22,014,737** |

### SCHEDULE OF PAYMENTS TO CONSULTANTS

Costs included in the table below are a result of administrative expenses, as well as several costs associated with the M-Trust project (Intangible Assets - Capital Work in Progress) as of June 30, 2016.

| | 2016 |
|---|---|
| Actuarial Services | $ 209,452 |
| Project Consulting Services | 82,370 |
| Legal Services | 3,862 |
| Audit Services | 69,642 |
| Medical Evaluations | 375 |
| IT Contracts | 27,722 |
| Non-Project IT Services and Consulting | 49,583 |
| Project IT Services and Consulting | 543,390 |
| **Total Consultant Payments** | **$ 986,396** |

# Report on Internal Control and Compliance

LEGISLATIVE AUDIT DIVISION

Angus Maciver, Legislative Auditor
Deborah F. Butler, Legal Counsel

Deputy Legislative Auditors:
Cindy Jorgenson
Joe Murray



# 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*

The Legislative Audit Committee
of the Montana State Legislature:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to the financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position of the Teachers' Retirement System (system), prepared by the Teachers' Retirement Board (board), as of and for the year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise the system's basic financial statements, and have issued our report thereon dated December 8, 2016.

***Internal Control Over Financial Reporting***

In planning and performing our audit of the financial statements, we considered the board's internal control over financial reporting to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the board's internal control. Accordingly, we do not express an opinion on the effectiveness of the board's internal control.

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

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

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

***Purpose of this Report***

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

Respectfully submitted,

*/s/ Cindy Jorgenson*

Cindy Jorgenson, CPA
Deputy Legislative Auditor
Helena, MT

December 8, 2016

Teachers' Retirement Board

## Board Response

# TEACHERS' RETIREMENT SYSTEM

STEVE BULLOCK, GOVERNOR

www.trs.mt.gov

STATE OF MONTANA

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PO BOX 200139
HELENA, MONTANA 59620-0139

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December 21, 2016

RECEIVED
DEC 21 2016
LEGISLATIVE AUDIT DIV.

Angus Maciver, Legislative Auditor
Legislative Audit Division
Room 160, State Capitol
PO Box 201705
Helena MT 59620-1705

Dear Mr. Maciver:

Thank you for the opportunity to reply to the financial audit report of the Teachers' Retirement Board for the fiscal year ending June 30, 2016. The Teachers' Retirement Board appreciates the services provided by your staff in conducting the audit. As of July 1, 2016, the Teachers' Retirement System is 69.28% funded and can fully amortize any unfunded liabilities in 24 years compared to 67.46% funded and a 26 year amortization period the previous year.

We are pleased with the unmodified opinion on the financial statements for the fiscal year ending June 30, 2016 and I would like to thank Mr. Maciver and his staff (Shandell VanDonsel, Joseph Andriolo, Katie Majerus, Karen Simpson, Zakir Afridi and Amanda Sayler) for their professionalism and courtesy as they conducted the audit.

Sincerely,

Shawn J. Graham
Executive Director
Teachers' Retirement System