

MONTANA STATE UNIVERSITY
GASB 68 Notes to the Financial Statements
For the Year Ended June 30, 2015

Pension Amounts Total for Employer – Employer’s proportion of TRS and PERS pension amounts combined – 74

	The employer’s proportionate share associated with TRS	The employer’s proportionate share associated with PERS	The employer’s Total Pension Amounts
Total Pension Liability	\$37,980,206	xxx	xxx
Fiduciary Net Position	\$26,721,292	xxx	xxx
Net Pension Liability	\$11,258,914	xxx	xxx
Deferred Outflows of Resources	\$3,923,160	xxx	xxx
Deferred Inflows of Resources	\$1,743,849	xxx	xxx
Pension Expense	\$2,144,510	xxx	xxx

The following disclosures (76-80) should be disclosed for each pension plan – TRS and PERS – 75

Net Pension Liability - 80a, 80b, 80c, 80d, 80e, 80f

In accordance with GASB Statement 68, Accounting and Financial Reporting for Pensions, employers are required to recognize and report certain amounts associated with their participation in the Montana Teachers’ Retirement System (TRS or the System). Statement 68 became effective June 30, 2015 and includes requirements to record and report their 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 System has a special funding situation in which the State of Montana is legally responsible for making contributions directly to TRS that are used to provide pension benefits to the retired members of TRS. Due to the existence of a special funding situation, employers are also required to report the portion of the State of Montana’s proportionate share of the collective Net Pension Liability that is associated with the employer.

	<u>Net Pension Liability</u> as of 6/30/13	<u>Net Pension</u> <u>Liability as of</u> 6/30/14	<u>Percent of</u> <u>Collective NPL</u>
MONTANA STATE UNIVERSITY Proportionate Share	\$13,013,874	\$11,258,914	0.7316%
State of Montana Proportionate Share associated with employer	<u>\$5,221,865</u>	<u>\$4,517,681</u>	<u>0.2936%</u>
Total	\$18,235,739	\$15,776,595	1.0252%

At June 30, 2015, the employer recorded a liability of \$11,258,914 for its proportionate share of the Net Pension Liability. The net pension liability was measured as of June 30, 2014, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of July 1, 2014. The employer's proportion of the net pension liability was based on the employer's contributions received by TRS during the measurement period July 1, 2013, through June 30, 2014, relative to the total employer contributions received from all of TRS' participating employers. At June 30, 2014, the employer's proportion was 0.7316 percent.

Changes in actuarial assumptions and methods: The following changes in assumptions or other inputs that affected the measurement of the Total Pension Liability have been made since the previous measurement date.

- 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 expensed 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.

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 – 80g, 80j

	<u>Pension Expense</u> <u>as of 6/30/14</u>
MONTANA STATE UNIVERSITY Proportionate Share	\$1,891,536
State of Montana Proportionate Share associated with the Employer	<u>\$252,974</u>
Total	\$2,144,510

At June 30, 2015, the employer recognized a Pension Expense of \$2,144,510 for its proportionate share of the TRS’ pension expense. The employer also recognized grant revenue of \$252,974 for the support provided by the State of Montana for its proportionate share of the pension expense that is associated with the employer.

Recognition of Beginning Deferred Outflow – GASB 71

At June 30, 2015, the employer recognized a beginning deferred outflow of resources for the employers FY 2014 contributions of \$5,825,806

Deferred Inflows and Outflows - 80h, 80i

At June 30, 2015, the employer reported its proportionate share of TRS' 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	\$111,377	\$0
Changes in actuarial assumptions	\$255,175	\$0
Difference between projected and actual investment earnings	\$0	\$1,743,849
Difference between actual and expected contributions	\$3,556,608	\$0
Changes in proportion	N/A	N/A
*Contributions paid to TRS subsequent to the measurement date - FY 2015 Contributions [to be entered by the entity]	\$6,085,647	
Total	\$10,008,807	\$1,743,849

*Amounts reported as deferred outflows of resources related to pensions resulting from the employer's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2016. 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:	Deferred Outflows of Resources (a)	Deferred Inflows of Resources (b)	Amount recognized in Pension Expense as an increase or (decrease) to Pension Expense (cccccccccccccc) – (b)
2016	\$1,307,720	\$435,962	\$871,758)
2017	\$1,307,720	\$435,962	\$871,758)
2018	\$1,307,720	\$435,962	\$871,758)
2019	\$0	\$435,962	(435,962)
2020	\$0	\$0	\$0
Thereafter	\$0	\$0	\$0

Plan Description – 76a

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 TRS Board is the governing body of the System and the TRS staff administers the 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 trs.mt.gov.

Summary of Benefits – 76b

Through June 30, 2013, all members enrolled in TRS participated in a single-tiered plan ("Tier One"). 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 (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 - $1.85\% \times \text{AFC} \times \text{years of creditable service}$ - for members retiring with at least 30 years of creditable service and at least 60 years of age (rather than $1.6667 \times \text{AFC} \times \text{years of creditable service}$)

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 calculated prior to July 1, 2013, was 1.5% of the benefit payable as of January 1st. Effective July 1, 2013, the GABA to be calculated for Tier One and Tier Two members 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. The legislative enactment that allows for reduction of the GABA for Tier One members is currently being litigated. A temporary restraining order requires continued calculation of the GABA at the full 1.5% rate for Tier One members pending resolution of the litigation.

Overview of Contributions – 76c

The System receives a portion of the total required statutory contributions directly from the State for all employers. The employers are considered to be in a special funding situation as defined

by GASB 68 and the State is treated as a non-employer contributing entity in TRS. The System receives 2.49% of reportable compensation from the State's general fund for School Districts and Other Employers. The System also receives 0.11% of reportable compensation from the State's general fund for State and University Employers. Finally, the State is also required to contribute \$25 million in perpetuity payable July 1st of each year.

MCA 19-20-605 requires each employer to contribute 9.85% of total compensation paid to all re-employed TRS retirees employed in a TRS reportable position. Pursuant to MCA 19-20-609, this amount shall increase by 1.00% for fiscal year 2014 and increase by 0.10% each fiscal year through 2024 until the total employer contribution is equal to 11.85% of re-employed retiree compensation.

The tables below show the history of legislated contributions for TRS members , employers and the State.

School District and Other Employers

	<u>Members</u>	<u>Employers</u>	<u>General fund</u>	<u>Total employee & employer</u>
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

	<u>Members</u>	<u>Employers</u>	<u>General fund</u>	<u>Total employee & employer</u>
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%

TRS Stand-Alone Statements – 76d

TRS' stand-alone financial statements, actuarial valuations and experience studies can be found online at <https://trs.mt.gov/TrsInfo/NewsAnnualReports>

Actuarial Assumptions - 77

The Total Pension Liability as of June 30, 2014, is based on the results of an actuarial valuation date of July 1, 2014. There were several significant assumptions and other inputs used to measure the total pension liability. The actuarial assumptions used in the July 1, 2014 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%
- Postretirement Benefit Increases 1.50%
(starting three years after retirement)
- Mortality among contributing members, service retired members, and beneficiaries
 - 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
 - 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.

*Total Wage Increases include 4.00% general wage increase assumption and 4.51% merit and longevity increases.

Discount Rate - 78a, 78b, 78d

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 Board's funding policy, which establishes the contractually required rates under Montana Code Annotated. In addition to the 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 2116. 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 - 78c, 78e, 78f

Asset Class	Target Asset Allocation	Real Rate of Return Arithmetic Basis
Broad US Equity	36.00%	4.80%
Broad International Equity	18.00%	6.05%
Private Equity	12.00%	8.50%
Intermediate Bonds	23.40%	1.50%
Core Real Estate	4.00%	4.50%
High Yield Bonds	2.60%	3.25%
Non-Core Real Estate	<u>4.00%</u>	7.50%
	<u>100.00%</u>	

The 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 timeframe. 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, 2014, is summarized in the above table.

Sensitivity Analysis – 78g

	1.0% Decrease (6.75%)	Current Discount Rate	1.0% Increase (8.75%)
The Employer's proportion of Net Pension Liability	\$15,642,213	\$11,258,914	\$7,555,701

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 – 79

The Teachers' Retirement System 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 of the Teachers' Retirement System (TRS) and additions to/deductions from TRS's fiduciary net position have been determined on the same accrual basis as they are reported by TRS. For this purpose, plan contributions are recognized as of employer payroll paid dates and benefit payments and refunds are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value. TRS adheres to all applicable Governmental Accounting Standards Board (GASB) statements.

TRS' stand-alone financial statements, actuarial valuations and experience studies can be found online at <https://trs.mt.gov/TrsInfo/NewsAnnualReports>

MONTANA STATE UNIVERSITY
Required Supplementary Information
Schedule of Proportionate Share of the Net Pension Liability
Teachers Retirement System of Montana
For the Year Ended June 30

	<u>2015</u>
Employer's proportion of the net pension liability	0.7316%
Employer's proportionate share of the net pension liability associated with the Employer	\$11,258,914
State of Montana's proportionate share of the net pension liability associated with the Employer	\$4,517,681
Total	\$15,776,595
Employer's covered-employee payroll	\$*
Employer's proportionate share of the net pension liability as a percentage of its covered-employee payroll	%*
Plan fiduciary net position as a percentage of the total pension liability	70.36%

*To be provided by the Employer and includes all payroll for Employer

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

**MONTANA STATE UNIVERSITY
 Required Supplementary Information
 Schedule of Contributions
 Teachers' Retirement System of Montana
 For the Year Ended June 30**

	<u>2015</u>
Contractually required contributions	\$6,085,647
Contributions in relation to the contractually required contributions	\$6,085,647
Contribution deficiency (excess)	
District's covered-employee payroll	\$ *
Contributions as a percentage of covered-employee payroll	%*

*To be provided by the Employer and includes all payroll for employer

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

MONTANA STATE UNIVERSITY
Notes to Required Supplementary Information
For the Year ended June 30, 2015

Changes of assumptions: The following changes in assumptions or other inputs that affected the measurement date have been made since the prior measurement date:

- 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 expensed 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.

Method and assumptions used in calculations of actuarially determined contributions: The actuarially determined contribution rates are determined on an annual basis for the fiscal year beginning July 1, 2014, determined as of June 30, 2014.

The following actuarial methods and assumptions were used to determine actuarial contribution rates reported in that schedule:

Actuarial cost method	Entry age
Amortization method	Level percentage of pay, open
Remaining amortization period	28 years
Asset valuation method	4-year smoothed market
Inflation	3.25 percent
Salary increase	4.00 to 8.51 percent, including inflation for Non-University Members and 5.00% for University Members;
Investment rate of return	7.75 percent, net of pension plan investment expense, and including inflation

MONTANA STATE UNIVERSITY
Sample Journal Entries

For Employer's Fiscal Year Ended June 30, 2015 (June 30, 2014 Measurement Date)

	<u>DR</u>	<u>CR</u>
Deferred outflows of resources – Employer contributions 7/1/2013 – 6/30/2014	5,825,806	
Net position – prior period adjustment		5,825,806
To record beginning deferred outflow of resources for FY14 contributions based on GASB 71		
Net position – prior period adjustment	13,013,874	
Proportionate share of beginning collective net pension liability		13,013,874
To record beginning proportionate share of net pension liability		
Deferred outflows of resources – Difference b/w Expected and Actual Experience	111,377	
Deferred outflows of resources – Change of Assumptions	255,175	
Deferred outflows/inflows of resources – Difference b/w Actual and Expected Contributions	3,556,608	\$0
Pension expense – Employer	1,891,536	
Deferred inflows of resources – Difference b/w Projected and Actual Investment Earnings		1,743,849
Proportionate share of beginning collective net pension liability	13,013,874	
Proportionate share of ending collective net pension liability		11,258,914
Deferred outflows of resources – Employer contributions 7/1/2013 – 6/30/2014	18,828,570	5,825,806
To record current year activity	18,828,570	18,828,570
Pension expense – Non-Employer Contributing Entity	252,974	
Revenue – State aid		252,974
To record pension expense and revenue for State support		
Deferred outflows of resources – District contributions 7/1/2014 – 6/30/2015	6,085,647	
Pension expense		6,085,647
To record deferred outflows of resources for contributions subsequent to measurement date		