



Montana Municipal Police Officers' Retirement System of the State of Montana

**GASB 67 and 68 Report
as of June 30, 2015**

Produced by Cheiron

December 2015

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BOARD SUMMARY

The purpose of this report is to provide accounting and financial disclosure information under Government Accounting Standards Board Statements 67 and 68 for the Montana Municipal Police Officers' Retirement System, participating employers, and the State of Montana as a non-employer contributing entity in a special funding situation. This information includes:

- Determination of the discount rate,
- Projection of the Total Pension Liability from the actuarial valuation date to the measurement date,
- Changes in the Net Pension Liability from the beginning to the end of the measurement period,
- Calculation of the Net Pension Liability at the discount rate as well as discount rates 1% higher and lower than the discount rate,
- Schedule of Changes in Net Pension Liability and Related Ratios,
- Schedule of Employer Contributions,
- Schedule of Deferred Inflows and Outflows of Resources,
- Calculation of Pension Expense,
- Calculation of Expected Return on Assets, and
- Calculation of Employer and the State of Montana Proportionate Shares and Reporting Amounts.

Highlights

The reporting date for the State of Montana Municipal Police Officers' Retirement System (MPORS) is June 30, 2015. Measurements as of the reporting date are based on the fair value of assets as of June 30, 2015 and the Total Pension Liability as of an actuarial valuation date of June 30, 2014 updated to June 30, 2015. There were no significant events between the valuation date and the measurement date so the update procedures only included the addition of Service Cost and interest cost offset by actual benefit payments.

The table on the next page provides a summary of the key collective results during this reporting period.

BOARD SUMMARY

Table 1
Summary of Results

	Measurement Date	
	6/30/2015	6/30/2014
Total Pension Liability	\$ 500,477,550	\$ 476,322,263
Plan Fiduciary Net Position	<u>335,056,825</u>	<u>319,186,360</u>
Net Pension Liability	\$ 165,420,725	\$ 157,135,903
Deferred Outflows	0	0
Deferred Inflows	<u>7,725,246</u>	<u>19,292,128</u>
Net Impact on Statement of Net Position	\$ 173,145,971	\$ 176,428,031
Pension Expense (\$ Amount)	\$ 16,780,693	\$ 16,902,335
Pension Expense (% of Pensionable Payroll)	36.69%	38.05%
Discount Rate	7.75%	7.75%

* Throughout this report, pensionable payroll will be used rather than Covered-Employee Payroll as defined by GASB, and described in Appendix A.

As of the end of the reporting year, the employers and the State would report a total Net Pension Liability of \$165,420,725 and Deferred Inflows of \$7,725,246. Consequently, the collective net impact on the employers' and State's Statement of Net Position would be \$173,145,971 at the end of the reporting year. In addition, any contributions between the measurement date and the reporting date by each employer and the State would be reported as deferred outflows to match the cash outflow reported.

For the measurement year ending June 30, 2015, the collective Pension Expense is \$16,780,693 or 36.69% of pensionable payroll. This amount is not expected to be the same as the employers' and State's contribution to the Plan (\$20,062,753), but instead represents the change in the net impact on the employers' and State's Statement of Net Position plus employer and State contributions [\$173,145,971 - \$176,428,031 + \$20,062,753]. A breakdown of the collective Pension Expense is shown later in this report.

CERTIFICATION

The purpose of this report is to provide accounting and financial reporting information under GASB 67 and 68 for the State of Montana Municipal Police Officers' Retirement System (MPORS). This report is for the use of MPORS, the State of Montana as a non-employer contributing entity, participating employers, and their auditors in preparing financial reports in accordance with applicable law and accounting requirements. This report is not appropriate for other purposes, including the measurement of funding requirements for MPORS.

In preparing our report, we relied on information (some oral and some written) supplied by Montana Public Employee Retirement Administration (MPERA). This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

The membership data, actuarial assumptions, and plan provisions are the same as were described in the June 30, 2014 Actuarial Valuation Report for MPORS. Rationale for the actuarial assumptions can be found in the June 30, 2015 Actuarial Valuation Report.

Future reporting requirements may differ significantly from the current reporting requirements presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law.

To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices that are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

This report was prepared for MPORS for the purposes described herein and for the use by the Plan auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

Sincerely,
Cheiron



Stephen T. McElhaney, FSA, FCA, MAAA
Principal Consulting Actuary



Margaret Tempkin, FSA, MAAA
Principal Consulting Actuary

DETERMINATION OF DISCOUNT RATE

The discount rate as of June 30, 2015 is 7.75% which is the assumed long-term expected rate of return on System investments. Projections of the System's fiduciary net position have indicated that it is expected to be sufficient to make projected benefit payments for current Plan members following the procedures described in paragraphs 39 - 45 of GASB Statement 67. The results of these projections are included within this report in Appendix B.

PROJECTION OF TOTAL PENSION LIABILITY

The Total Pension Liability (TPL) at the end of the measurement year, June 30, 2015, is measured as of a valuation date of June 30, 2014 and projected to June 30, 2015. There were no significant events during the projection period of which we are aware. Because the TPL shown in the prior report was measured as of June 30, 2013 and projected to June 30, 2014, it will not match the amounts measured as of June 30, 2014 that are shown in this exhibit.

The table below shows the projection of the TPL at discount rates equal to the rate used for disclosure along with plus and minus one percent from the rate used for disclosure. TPL and Service Cost have been determined using the Entry Age Actuarial Cost Method as described in paragraph 46 of GASB Statement 67.

Table 2			
Projection of Total Pension Liability from Valuation to Measurement Date			
Discount Rate	6.75%	7.75%	8.75%
Valuation Total Pension Liability, 6/30/2014			
Actives	\$ 220,491,862	\$ 188,392,739	\$ 158,129,105
Deferred Vested	11,414,290	9,609,641	8,210,266
Retirees	<u>307,410,978</u>	<u>276,305,573</u>	<u>250,412,788</u>
Total	\$ 539,317,130	\$ 474,307,953	\$ 416,752,159
Service Cost, Beginning of Year			
Service Cost Rate	32.58%	25.65%	20.49%
Expected Payroll During Year	\$ 47,107,859	\$ 47,107,859	\$ 47,107,859
Service Cost	\$ 15,347,740	\$ 12,083,166	\$ 9,652,400
Benefit Payments	\$ (22,743,995)	\$ (22,743,995)	\$ (22,743,995)
Interest	\$ 36,684,803	\$ 36,830,426	\$ 36,336,213
Change in Benefits	\$ 0	\$ 0	\$ 0
Change in Assumptions	\$ 0	\$ 0	\$ 0
Other Significant Events	\$ 0	\$ 0	\$ 0
Total Pension Liability, 6/30/2015	\$ 568,605,678	\$ 500,477,550	\$ 439,996,777

NOTE DISCLOSURES

The table below shows the changes in the Total Pension Liability, the Plan Fiduciary Net Position (i.e., fair value of System assets), and the Net Pension Liability during the measurement year.

Table 3			
Change in Net Pension Liability			
	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a) - (b)
Balances at 6/30/2014	\$ 476,322,263	\$ 319,186,360	\$ 157,135,903
Changes for the year:			
Service Cost	12,083,166		12,083,166
Interest	36,830,426		36,830,426
Changes of Benefits	0		0
Differences between Expected and Actual Experience	(2,014,310)		(2,014,310)
Changes of Assumptions	0		0
Contributions - Employer		6,629,915	(6,629,915)
Contributions - Non-Employer		13,432,838	(13,432,838)
Contributions - Member		4,291,826	(4,291,826)
Net Investment Income		14,471,898	(14,471,898)
Benefit Payments	(22,743,995)	(22,743,995)	0
Administrative Expense		(212,017)	212,017
Net Changes	24,155,287	15,870,465	8,284,822
Balances at 6/30/2015	\$ 500,477,550	\$ 335,056,825	\$ 165,420,725

There were no changes in benefits or changes in assumptions during the year. There was an actuarial experience gain during the year of approximately \$2.0 million.

The Service Cost, interest cost, and administrative expenses exceeded the total contributions and investment income combined with the favorable plan experience, resulting in an increase in the collective Net Pension Liability (NPL) of \$8,284,822. The collective NPL remaining as of June 30, 2015 is \$165,420,725.

NOTE DISCLOSURES

Changes in the discount rate affect the measurement of the TPL. Lower discount rates produce a higher TPL and higher discount rates produce a lower TPL. Because the discount rate does not affect the measurement of assets, the percentage change in the NPL can be very significant for a relatively small change in the discount rate. The table below shows the sensitivity of the collective NPL to the discount rate.

Table 4			
Sensitivity of Net Pension Liability to Changes in Discount Rate			
As of June 30, 2015			
	1% Decrease 6.75%	Discount Rate 7.75%	1% Increase 8.75%
Total Pension Liability	\$ 568,605,678	\$ 500,477,550	\$ 439,996,777
Plan Fiduciary Net Position	<u>335,056,825</u>	<u>335,056,825</u>	<u>335,056,825</u>
Net Pension Liability	<u>\$ 233,548,853</u>	<u>\$ 165,420,725</u>	<u>\$ 104,939,952</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	58.9%	66.9%	76.1%

A one percent decrease in the discount rate increases the TPL by approximately 13.6% and increases the collective NPL by approximately 41.2%. A one percent increase in the discount rate decreases the TPL by approximately 12.1% and decreases the collective NPL by approximately 36.6%.

REQUIRED SUPPLEMENTARY INFORMATION

The schedules of Required Supplementary Information generally start with information as of the implementation of GASB 67, and eventually will build up to 10 years of information. The schedule below shows the changes in collective NPL and related ratios required by GASB for the two years since implementation.

Table 5		
Schedule of Changes in Net Pension Liability and Related Ratios		
	FYE 2015	FYE 2014
<u>Total Pension Liability</u>		
Service Cost - beginning of year	\$ 12,083,166	\$ 11,794,994
Interest (includes interest on service cost)	36,830,426	35,011,854
Changes of Benefit Terms	0	0
Differences between Expected and Actual Experience	(2,014,310)	0
Changes of Assumptions	0	0
Benefit Payments, including Refunds of Member Contributions	<u>(22,743,995)</u>	<u>(20,527,874)</u>
Net Change in Total Pension Liability	\$ 24,155,287	\$ 26,278,974
Total Pension Liability - beginning	<u>476,322,263</u>	<u>450,043,289</u>
Total Pension Liability - ending	<u>\$ 500,477,550</u>	<u>\$ 476,322,263</u>
<u>Plan Fiduciary Net Position</u>		
Contributions - Employer	\$ 6,629,915	\$ 6,459,488
Contributions - Non-Employer	13,432,838	13,048,938
Contributions - Member	4,291,826	4,133,021
Net Investment Income	14,471,898	45,230,427
Benefit Payments, including Refunds of Member Contributions	(22,743,995)	(20,527,874)
Administrative Expense	<u>(212,017)</u>	<u>(166,807)</u>
Net Change in Plan Fiduciary Net Position	\$ 15,870,465	\$ 48,177,193
Plan Fiduciary Net Position - beginning	<u>319,186,360</u>	<u>271,009,167</u>
Plan Fiduciary Net Position - ending	<u>\$ 335,056,825</u>	<u>\$ 319,186,360</u>
Net Pension Liability - ending	<u>\$ 165,420,725</u>	<u>\$ 157,135,903</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	66.95%	67.01%
Pensionable Payroll	\$ 45,736,127	\$ 44,426,617
Net Pension Liability as a Percentage of Pensionable Payroll	361.69%	353.70%

REQUIRED SUPPLEMENTARY INFORMATION

If an Actuarially Determined Contribution is calculated, the following schedule is required. An Actuarially Determined Contribution is a contribution amount determined in accordance with Actuarial Standards of Practice.

Table 6			
Schedule of Employer Contributions			
<i>Amounts in Thousands</i>			
	FYE 2015	FYE 2014	
Actuarially Determined Contribution	\$ 17,229	\$ 17,922	
Contributions in Relation to the Actuarially Determined Contribution			
Employer Contributions	\$ 6,630	\$ 6,459	
Non-Employer Contributions	<u>13,433</u>	<u>13,049</u>	
Total Contributions	<u>\$ 20,063</u>	<u>\$ 19,508</u>	
Contribution Deficiency/(Excess)	<u>\$ (2,834)</u>	<u>\$ (1,586)</u>	
Pensionable Payroll	\$ 45,736	\$ 44,427	
Contributions as a Percentage of Pensionable Payroll	43.87%	43.91%	

The following notes summarize the key methods and assumptions used to determine the Actuarially Determined Contribution for FYE 2015.

Valuation Date:	June 30, 2014
Timing:	Actuarially determined contribution rates are calculated based on the actuarial valuation just prior to the beginning of the plan year
Actuarial cost method:	Entry Age
Amortization method:	Level percentage of payroll, open
Remaining amortization period:	30 years
Amortization growth rate:	4.00%
Asset valuation method:	4-year smoothed market
Inflation:	3.00%
Salary increases:	4.00% plus merit/seniority increases where applicable
Investment rate of return:	7.75%, net of investment expenses
Mortality (healthy):	Sex distinct RP-2000 Combined Mortality projected to 2015 using Scale AA

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2015 can be found in the June 30, 2014 actuarial valuation report.

EMPLOYER AND NON-EMPLOYER REPORTING AMOUNTS

The participating employers are required to implement GASB 68 for their reporting date of June 30, 2015. The amounts reported as of their fiscal year end (their reporting date) must be based on a measurement date up to 12 months prior to their reporting date. For employers with a reporting date of June 30, their 2015 disclosures can be based on either a June 30, 2014 or June 30, 2015 measurement date. We understand the employers and the State have elected to use the 2014 measurement date for their 2015 reporting date. As a result, the schedules in this section will be used by the employers and the State for their 2016 reporting.

Because MPORS is a cost-sharing multiple-employer pension plan, each employer participating in MPORS must reflect a portion of the collective Net Pension Liability, Pension Expense and Deferred Outflows and Inflows in their financial statements. This section develops the collective amounts that are allocated to participating employers.

The impact of experience gains or losses and assumption changes on the TPL are recognized in the collective Pension Expense over the average expected remaining service life of all active and inactive members of the Plan, determined as of the beginning of the measurement period. As of June 30, 2014, this average was 4.26 years¹, which was rounded to 4.00 years for recognition purposes. During the measurement year, there were no assumption changes. There was an experience gain of approximately \$2.0 million with approximately \$0.5 million of that was recognized in the current year and will be recognized over the next three years.

The impact of investment gains or losses is recognized over a period of five years. During the measurement year, there was an investment loss of approximately \$10.3 million. Approximately \$2.1 million of that was recognized in the current year and will be recognized in each of the next four years. Unrecognized investment gains from prior periods were approximately \$19.3 million of which \$4.8 million was recognized as a reduction in the collective Pension Expense in the current year.

The combination of unrecognized investment losses and experience gains this year along with unrecognized net investment gains from prior periods results in a collective Deferred Inflow of Resources as of June 30, 2015 of approximately \$7.7 million. The table on the following page summarizes the current balances of collective Deferred Outflows and Deferred Inflows of Resources along with the net recognition over future years.

¹ The average expected future working lifetime for 743 active members was 9.21 years.

EMPLOYER AND NON-EMPLOYER REPORTING AMOUNTS

Table 7														
Schedule of Deferred Inflows and Outflows of Resources														
As of June 30, 2015														
	Deferred Outflows of Resources	Deferred Inflows of Resources												
Differences between Expected and Actual Experience	\$ 0	\$ 1,510,732												
Changes in Assumptions	0	0												
Net Difference between Projected and Actual														
Earnings on Pension Plan Investments	0	6,214,514												
Total	<u>\$ 0</u>	<u>\$ 7,725,246</u>												
<p>Amounts reported as Deferred Outflows and (Deferred Inflows) of Resources will be recognized in Pension Expense as follows:</p> <p style="text-align: center;">Measurement year ended June 30:</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;">2016</td> <td style="text-align: right;">\$ (3,262,964)</td> </tr> <tr> <td style="text-align: right;">2017</td> <td style="text-align: right;">(3,262,964)</td> </tr> <tr> <td style="text-align: right;">2018</td> <td style="text-align: right;">(3,262,962)</td> </tr> <tr> <td style="text-align: right;">2019</td> <td style="text-align: right;">2,063,644</td> </tr> <tr> <td style="text-align: right;">2020</td> <td style="text-align: right;">0</td> </tr> <tr> <td style="text-align: right;">Future Year Deferrals</td> <td style="text-align: right;">0</td> </tr> </table>			2016	\$ (3,262,964)	2017	(3,262,964)	2018	(3,262,962)	2019	2,063,644	2020	0	Future Year Deferrals	0
2016	\$ (3,262,964)													
2017	(3,262,964)													
2018	(3,262,962)													
2019	2,063,644													
2020	0													
Future Year Deferrals	0													

EMPLOYER AND NON-EMPLOYER REPORTING AMOUNTS

The collective Pension Expense recognized in aggregate by the participating employers of the Plan can be calculated two different ways. First, it is the change in the amounts reported on the employers' Statement of Net Position that relate to the Plan and are not attributable to employer contributions. That is, it is the change in collective NPL plus the changes in collective deferred outflows and inflows plus employer and non-employer contributions. Alternatively, the collective Pension Expense can be calculated by its individual components.

While GASB does not require or suggest the organization of the individual components shown in the table below, we believe it helps to understand the level and volatility of the collective Pension Expense.

Table 8		
Calculation of Pension Expense		
	Measurement Year Ending	
	2015	2014
Change in Net Pension Liability	\$ 8,284,822	\$ (21,898,219)
Change in Deferred Outflows	0	0
Change in Deferred Inflows	(11,566,882)	19,292,128
Non-Employer Contributions	13,432,838	13,048,938
Employer Contributions	<u>6,629,915</u>	<u>6,459,488</u>
Pension Expense	\$ 16,780,693	\$ 16,902,335
Pension Expense as % of Pensionable Payroll	36.69%	38.05%
Operating Expenses		
Service Cost	\$ 12,083,166	\$ 11,794,994
Employee Contributions	(4,291,826)	(4,133,021)
Administrative Expenses	<u>212,017</u>	<u>166,807</u>
Total	\$ 8,003,357	\$ 7,828,780
Financing Expenses		
Interest Cost	\$ 36,830,426	\$ 35,011,854
Expected Return on Assets	<u>(24,790,126)</u>	<u>(21,115,267)</u>
Total	\$ 12,040,300	\$ 13,896,587
Changes		
Benefit Changes	\$ 0	\$ 0
Recognition of Assumption Changes	0	0
Recognition of Liability (Gains)/Losses	(503,578)	0
Recognition of Investment (Gains)/Losses	<u>(2,759,386)</u>	<u>(4,823,032)</u>
Total	\$ (3,262,964)	\$ (4,823,032)
Pension Expense	\$ 16,780,693	\$ 16,902,335

EMPLOYER AND NON-EMPLOYER REPORTING AMOUNTS

First, there are components that we refer to as operating expenses. These items are directly attributable to the operation of the Plan during the measurement year. Service Cost less employee contributions represents the increase in the employer-provided benefits attributable to the year, and administrative expenses are the cost of operating the Plan for the year.

Second, there are the financing expenses: the interest on the Total Pension Liability less the expected return on assets. Since the discount rate is equal to the long-term expected return on assets, the financing expense is the interest on the Net Pension Liability, Service Cost, contributions, and administrative expenses. The calculation of the expected return on assets is detailed below.

Table 9 Calculation of Expected Return on Assets For the Fiscal Year Ending June 30, 2015	
Market Value of Assets - beginning of year	\$ 319,186,360
Expected Return on Market Value	\$ 24,736,943
Employee Contributions	\$ 4,291,826
Non-Employer Contributions	13,432,838
Employer Contributions	6,629,915
Benefit Payments	(22,743,995)
Administrative Expenses	(212,017)
Net Cash Flow - during year	\$ 1,398,567
Expected Return on Cash Flow Items	\$ 53,183
Expected Return on Assets	\$ 24,790,126

The final category is changes. This category will drive most of the volatility in Pension Expense from year to year. It includes any changes in benefits made during the year and the recognized amounts due to assumption changes, gains, or losses on the TPL, and investment gains or losses.

Proportionate Shares

Because the System is a Cost-Sharing Pension Plan, each employer participating in the Plan must reflect a portion of the collective Net Pension Liability, Pension Expense, and Deferred Outflows and Inflows of Resources in their financial statements. GASB 68 requires that the Proportionate Share for each employer be determined based on the “employer’s projected long-term contribution effort to the pension plan...as compared to the total projected long-term contribution effort by all employers and all non-employer contributing entities”.

EMPLOYER AND NON-EMPLOYER REPORTING AMOUNTS

Also, a non-employer entity, the State of Montana, contributes to the Plan based upon the pensionable payroll of active plan members, which under GASB 68 constitutes a Special Funding Situation. The State also must reflect a share of the collective Net Pension Liability and Deferred Outflows and Inflows. The State will also record an amount of Support Expense which is allocated to each employer as Support Revenue.

The schedule provided in Appendix C includes the Proportionate Shares for each employer and for the State as a non-employer contributing entity, reflecting a methodology that allocates the NPL, Pension Expense, and Deferred Outflows and Inflows based on the proportion of the total contribution made by each employer and the State during the preceding plan year. The following information is presented:

- Contribution rates and actual contributions paid for the year ended June 30, 2015
- Proportionate Shares of Net Pension Liability as of June 30, 2014 for each employer and for the State
- Proportionate Shares of Net Pension Liability as of June 30, 2015 for each employer and for the State
- Employer Pension Expense and Support Revenue for the measurement year ending June 30, 2015
- Allocation of Deferred Outflows and Deferred Inflows as of June 30, 2015
- Recognition of Deferred Outflows and Deferred Inflows for future fiscal years
- Sensitivity of Net Pension Liability for discount rates 1% below and 1% above the assumed discount rate of 7.75%, shown for each employer and for the State
- Schedule of each employer's Proportionate Share of the Net Pension Liability as a percentage of its pensionable payroll
- Schedule of employer contributions

It is expected that the information provided for each employer, together with information about the System as a whole from the June 30, 2015 Comprehensive Annual Financial Report of the Public Employees Retirement Board, will be sufficient for employers to prepare disclosures for their financial reports.

**APPENDIX A
GLOSSARY OF TERMS**

1. Actuarially Determined Contribution

A target or recommended contribution for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

2. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

3. Cost-Sharing Pension Plan

A multiple-employer plan in which the pension obligations to the employers of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.

4. Covered-Employee Payroll

The payroll of employees that are provided with pensions through the pension plan.²

5. Deferred Inflow of Resources

An acquisition of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience gains on the Total Pension Liability, assumption changes reducing the Total Pension Liability, or investment gains that are recognized in future reporting periods.

6. Deferred Outflow of Resources

A consumption of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience losses on the Total Pension Liability, assumption changes increasing the Total Pension Liability or investment losses that are recognized in future reporting periods.

² This payroll includes all pay to employees, whether or not included in pensionable pay. MPERA has advised that Covered-Employee Payroll is not available. Therefore, pensionable payroll has been used throughout this report.

**APPENDIX A
GLOSSARY OF TERMS**

7. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB 67 and 68 calculations. Under this method, the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Service Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the Total Pension Liability.

8. Measurement Date

The date as of which the Total Pension Liability and Plan Fiduciary Net Position are measured. The Total Pension Liability may be projected from the Actuarial Valuation Date to the Measurement Date. The Measurement Date must be the same as the Reporting Date for the Plan.

9. Net Pension Liability

The liability of employers and non-employer contributing entities for employees for benefits provided through a defined benefit pension plan. It is calculated as the Total Pension Liability less the Plan Fiduciary Net Position.

10. Pension Expense

The economic cost of pensions that an entity recognizes during a reporting period.

11. Plan Fiduciary Net Position

The fair or market value of assets.

12. Proportionate Share

The portion of the Net Pension Liability, Deferred Inflows and Deferred Outflows allocated to each employer and non-employer contributing entity in a Cost-Sharing Pension Plan, based on the employer's share of the projected long-term contribution effort.

13. Reporting Date

The last day of the Plan or employer's fiscal year.

**APPENDIX A
GLOSSARY OF TERMS**

14. Service Cost

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB 67 and 68. The Service Cost is the normal cost calculated under the entry age actuarial cost method.

15. Special Funding Situation

Circumstances in which a non-employer entity is legally responsible for making contributions directly to a pension plan that is used to provide pensions to the employees of another entity and either (i) the amount of such contributions is not dependent upon one or more events or circumstances unrelated to pensions, or (ii) the non-employer entity is the only entity with a legal obligation to make contributions directly to the pension plan.

16. Support Expense

The amount of Pension Expense allocated to a non-employer contributing entity.

17. Support Revenue

The amount of revenue recognized by each employer based upon its share of the non-employer contributing entity's Support Expense.

18. Total Pension Liability

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB 67 and 68. The Total Pension Liability is the actuarial liability calculated under the Entry Age Actuarial Cost Method.

MONTANA MUNICIPAL POLICE OFFICERS' RETIREMENT SYSTEM
GASB 67 AND 68 REPORTING FOR JUNE 30, 2015 MEASUREMENT DATE

APPENDIX B
DEVELOPMENT OF DISCOUNT RATE

Table 1 - Projection of Contributions
Amounts in Thousands, Projections Commence June 30, 2014, Actual Amounts Shown for Year 1 (except Payroll)
* Total pensionable payroll increases 4.00% per year

Year	Projected Pensionable Payroll			Projected Rates			Projected Contributions			
	Payroll for Current Employees (a)	Payroll for Future Employees (b)	Total Employee Payroll * (c) = (a) + (b)	Employee Rate (d)	Employer and State Rate (e)	Rate Available for Amortization (f)	Member Contributions for Current Employees (g) = (a) x (d)	Employer and State Contributions for Current Employees (h) = (a) x (e)	Contributions Related to Payroll of Future Employees (i) = (b) x (f)	Total Contributions (j) = (g) + (h) + (i)
1	43,096	0	43,096				\$ 4,292	\$ 20,063	\$ 0	\$ 24,355
2	41,578	3,242	44,820	9.0%	43.8%	26.9%	3,742	18,203	873	22,818
3	40,317	6,296	46,613	9.0%	43.8%	26.9%	3,629	17,651	1,695	22,975
4	39,103	9,374	48,477	9.0%	43.8%	26.9%	3,519	17,119	2,524	23,163
5	37,909	12,507	50,416	9.0%	43.8%	26.9%	3,412	16,597	3,368	23,377
6	36,659	15,774	52,433	9.0%	43.8%	26.9%	3,299	16,050	4,248	23,597
7	35,409	19,121	54,530	9.0%	43.8%	26.9%	3,187	15,502	5,149	23,838
8	34,245	22,467	56,712	9.0%	43.8%	26.9%	3,082	14,992	6,050	24,125
9	32,950	26,029	58,980	9.0%	43.8%	26.9%	2,966	14,426	7,010	24,401
10	31,510	29,829	61,339	9.0%	43.8%	26.9%	2,836	13,795	8,033	24,664
11	30,170	33,623	63,793	9.0%	43.8%	26.9%	2,715	13,208	9,055	24,978
12	28,910	37,435	66,344	9.0%	43.8%	26.9%	2,602	12,657	10,081	25,340
13	27,728	41,270	68,998	9.0%	43.8%	26.9%	2,496	12,139	11,114	25,749
14	26,185	45,573	71,758	9.0%	43.8%	26.9%	2,357	11,464	12,273	26,093
15	24,276	50,353	74,628	9.0%	43.8%	26.9%	2,185	10,628	13,560	26,373
16	22,060	55,554	77,614	9.0%	43.8%	26.9%	1,985	9,658	14,961	26,604
17	19,549	61,170	80,718	9.0%	43.8%	26.9%	1,759	8,558	16,473	26,791
18	16,532	67,415	83,947	9.0%	43.8%	26.9%	1,488	7,238	18,155	26,880
19	14,116	73,188	87,305	9.0%	43.8%	26.9%	1,270	6,180	19,710	27,160
20	11,598	79,199	90,797	9.0%	43.8%	26.9%	1,044	5,078	21,328	27,450
21	8,912	85,516	94,429	9.0%	43.8%	26.9%	802	3,902	23,030	27,734
22	6,548	91,658	98,206	9.0%	43.8%	26.9%	589	2,867	24,684	28,139
23	4,859	97,275	102,134	9.0%	43.8%	26.9%	437	2,127	26,196	28,761
24	3,648	102,572	106,220	9.0%	43.8%	26.9%	328	1,597	27,623	29,548
25	2,805	107,663	110,468	9.0%	43.8%	26.9%	252	1,228	28,994	30,474
26	2,187	112,700	114,887	9.0%	43.8%	26.9%	197	957	30,350	31,504
27	1,723	117,760	119,483	9.0%	43.8%	26.9%	155	754	31,713	32,622
28	1,393	122,869	124,262	9.0%	43.8%	26.9%	125	610	33,089	33,824
29	1,119	128,113	129,232	9.0%	43.8%	26.9%	101	490	34,501	35,092
30	879	133,523	134,402	9.0%	43.8%	26.9%	79	385	35,958	36,422
31	683	139,095	139,778	9.0%	43.8%	26.9%	61	299	37,458	37,819
32	510	144,859	145,369	9.0%	43.8%	26.9%	46	223	39,011	39,280
33	362	150,822	151,184	9.0%	43.8%	26.9%	33	158	40,616	40,807
34	263	156,968	157,231	9.0%	43.8%	26.9%	24	115	42,272	42,410
35	184	163,336	163,520	9.0%	43.8%	26.9%	17	81	43,986	44,084
36	125	169,936	170,061	9.0%	43.8%	26.9%	11	55	45,764	45,830
37	81	176,783	176,863	9.0%	43.8%	26.9%	7	35	47,608	47,650
38	43	183,895	183,938	9.0%	43.8%	26.9%	4	19	49,523	49,546
39	26	191,269	191,295	9.0%	43.8%	26.9%	2	11	51,509	51,523
40	15	198,932	198,947	9.0%	43.8%	26.9%	1	7	53,572	53,580
41	6	206,899	206,905	9.0%	43.8%	26.9%	1	3	55,718	55,721
42	4	215,177	215,181	9.0%	43.8%	26.9%	0	2	57,947	57,949
43	3	223,786	223,789	9.0%	43.8%	26.9%	0	1	60,266	60,267
44	1	232,739	232,740	9.0%	43.8%	26.9%	0	1	62,677	62,677
45	1	242,049	242,050	9.0%	43.8%	26.9%	0	0	65,184	65,184
46	1	251,731	251,732	9.0%	43.8%	26.9%	0	0	67,792	67,792
47	0	261,801	261,801				0	0	70,503	70,503
48	0	272,273	272,273				0	0	73,323	73,323
49	0	283,164	283,164				0	0	76,256	76,256
50	0	294,491	294,491				0	0	79,306	79,306
51	0	306,270	306,270				0	0	82,479	82,479
52	0	318,521	318,521				0	0	85,778	85,778
53	0	331,262	331,262				0	0	89,209	89,209
54	0	344,512	344,512				0	0	92,777	92,777
55	0	358,293	358,293				0	0	96,488	96,488
56	0	372,625	372,625				0	0	100,348	100,348
57	0	387,530	387,530				0	0	104,362	104,362
58	0	403,031	403,031				0	0	108,536	108,536
59	0	419,152	419,152				0	0	112,878	112,878

MONTANA MUNICIPAL POLICE OFFICERS' RETIREMENT SYSTEM
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APPENDIX B
DEVELOPMENT OF DISCOUNT RATE

Table 1 - Projection of Contributions Continued
Amounts in Thousands, Projections Commence June 30, 2014, Actual Amounts Shown for Year 1 (except Payroll)
* Total pensionable payroll increases 4.00% per year

Year	Projected Pensionable Payroll			Projected Rates			Projected Contributions				
	Payroll for Current Employees (a)	Payroll for Future Employees (b)	Total Employee Payroll * (c) = (a) + (b)	Employee Rate (d)	Employer and State Rate (e)	Rate Available for Amortization (f)	Member Contributions for Current Employees (g) = (a) x (d)	Employer and State Contributions for Current Employees (h) = (a) x (e)	Contributions Related to Payroll of Future Employees (i) = (b) x (f)	Total Contributions (j) = (g) + (h) + (i)	
60	0	435,918	435,918			26.9%	\$ 0	\$ 0	\$ 117,393	\$ 117,393	
61	0	453,355	453,355			26.9%	0	0	122,088	122,088	
62	0	471,489	471,489			26.9%	0	0	126,972	126,972	
63	0	490,349	490,349			26.9%	0	0	132,051	132,051	
64	0	509,962	509,962			26.9%	0	0	137,333	137,333	
65	0	530,361	530,361			26.9%	0	0	142,826	142,826	
66	0	551,575	551,575			26.9%	0	0	148,539	148,539	
67	0	573,638	573,638			26.9%	0	0	154,481	154,481	
68	0	596,584	596,584			26.9%	0	0	160,660	160,660	
69	0	620,447	620,447			26.9%	0	0	167,086	167,086	
70	0	645,265	645,265			26.9%	0	0	173,770	173,770	
71	0	671,076	671,076			26.9%	0	0	180,721	180,721	
72	0	697,919	697,919			26.9%	0	0	187,950	187,950	
73	0	725,836	725,836			26.9%	0	0	195,468	195,468	
74	0	754,869	754,869			26.9%	0	0	203,286	203,286	
75	0	785,064	785,064			26.9%	0	0	211,418	211,418	
76	0	816,466	816,466			26.9%	0	0	219,874	219,874	
77	0	849,125	849,125			26.9%	0	0	228,669	228,669	
78	0	883,090	883,090			26.9%	0	0	237,816	237,816	
79	0	918,414	918,414			26.9%	0	0	247,329	247,329	
80	0	955,150	955,150			26.9%	0	0	257,222	257,222	
81	0	993,356	993,356			26.9%	0	0	267,511	267,511	
82	0	1,033,090	1,033,090			26.9%	0	0	278,211	278,211	
83	0	1,074,414	1,074,414			26.9%	0	0	289,340	289,340	
84	0	1,117,391	1,117,391			26.9%	0	0	300,913	300,913	
85	0	1,162,086	1,162,086			26.9%	0	0	312,950	312,950	
86	0	1,208,570	1,208,570			26.9%	0	0	325,468	325,468	
87	0	1,256,912	1,256,912			26.9%	0	0	338,487	338,487	
88	0	1,307,189	1,307,189			26.9%	0	0	352,026	352,026	
89	0	1,359,477	1,359,477			26.9%	0	0	366,107	366,107	
90	0	1,413,856	1,413,856			26.9%	0	0	380,751	380,751	
91	0	1,470,410	1,470,410			26.9%	0	0	395,981	395,981	
92	0	1,529,226	1,529,226			26.9%	0	0	411,821	411,821	
93	0	1,590,395	1,590,395			26.9%	0	0	428,293	428,293	
94	0	1,654,011	1,654,011			26.9%	0	0	445,425	445,425	
95	0	1,720,172	1,720,172			26.9%	0	0	463,242	463,242	
96	0	1,788,978	1,788,978			26.9%	0	0	481,772	481,772	
97	0	1,860,538	1,860,538			26.9%	0	0	501,043	501,043	
98	0	1,934,959	1,934,959			26.9%	0	0	521,084	521,084	
99	0	2,012,357	2,012,357			26.9%	0	0	541,928	541,928	
100	0	2,092,852	2,092,852			26.9%	0	0	563,605	563,605	
101	0	2,176,566	2,176,566			26.9%	0	0	586,149	586,149	
102	0	2,263,628	2,263,628			26.9%	0	0	609,595	609,595	
103	0	2,354,173	2,354,173			26.9%	0	0	633,979	633,979	
104	0	2,448,340	2,448,340			26.9%	0	0	659,338	659,338	
105	0	2,546,274	2,546,274			26.9%	0	0	685,712	685,712	
106	0	2,648,125	2,648,125			26.9%	0	0	713,140	713,140	
107	0	2,754,050	2,754,050			26.9%	0	0	741,666	741,666	
108	0	2,864,212	2,864,212			26.9%	0	0	771,332	771,332	
109	0	2,978,781	2,978,781			26.9%	0	0	802,186	802,186	

MONTANA MUNICIPAL POLICE OFFICERS' RETIREMENT SYSTEM
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APPENDIX B
DEVELOPMENT OF DISCOUNT RATE

Table 2 - Projection of the Pension Plan's Fiduciary Net Position
Amounts in Thousands, Projections Commence June 30, 2014, Actual Amounts Shown for Year 1
* From Table 1 - Projection of Contributions, column (j)

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions * (b)	Projected Benefit Payments (c)	Projected Administrative Expense (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
1	\$ 319,186	\$ 24,355	\$ 22,744	\$ 212	\$ 14,472	\$ 335,057
2	335,057	22,818	23,526	90	25,937	360,196
3	360,196	22,975	24,571	93	27,851	386,357
4	386,357	23,163	25,643	97	29,845	413,625
5	413,625	23,377	26,749	101	31,924	442,076
6	442,076	23,597	30,782	105	33,984	468,770
7	468,770	23,838	32,060	109	36,013	496,452
8	496,452	24,125	33,896	113	38,099	524,666
9	524,666	24,401	35,573	118	40,232	553,609
10	553,609	24,664	37,783	123	42,401	582,768
11	582,768	24,978	39,900	128	44,592	612,312
12	612,312	25,340	41,701	133	46,827	642,644
13	642,644	25,749	44,056	138	49,103	673,302
14	673,302	26,093	46,182	144	51,412	704,481
15	704,481	26,373	48,156	149	53,763	736,312
16	736,312	26,604	50,678	155	56,143	768,225
17	768,225	26,791	52,726	161	58,545	800,674
18	800,674	26,880	55,685	168	60,950	832,652
19	832,652	27,160	58,745	175	63,323	864,215
20	864,215	27,450	62,212	182	65,648	894,920
21	894,920	27,734	65,033	189	67,931	925,362
22	925,362	28,139	67,913	196	70,196	955,588
23	955,588	28,761	69,527	201	72,500	987,121
24	987,121	29,548	71,459	207	74,900	1,019,904
25	1,019,904	30,474	73,255	212	77,408	1,054,318
26	1,054,318	31,504	74,478	215	80,067	1,091,197
27	1,091,197	32,622	74,527	216	82,966	1,132,042
28	1,132,042	33,824	74,568	216	86,176	1,177,258
29	1,177,258	35,092	74,932	217	89,714	1,226,915
30	1,226,915	36,422	75,072	217	93,608	1,281,655
31	1,281,655	37,819	75,197	217	97,899	1,341,958
32	1,341,958	39,280	75,439	218	102,618	1,408,200
33	1,408,200	40,807	75,756	219	107,798	1,480,830
34	1,480,830	42,410	75,991	220	113,479	1,560,508
35	1,560,508	44,084	76,121	220	119,713	1,647,963
36	1,647,963	45,830	76,160	220	126,555	1,743,968
37	1,743,968	47,650	76,096	220	134,067	1,849,370
38	1,849,370	49,546	75,901	220	142,316	1,965,111
39	1,965,111	51,523	75,577	219	151,373	2,092,211
40	2,092,211	53,580	75,117	217	161,319	2,231,776
41	2,231,776	55,721	74,500	215	172,240	2,385,022
42	2,385,022	57,949	73,725	213	184,231	2,553,265
43	2,553,265	60,267	72,779	210	197,394	2,737,936
44	2,737,936	62,677	71,653	207	211,841	2,940,594
45	2,940,594	65,184	70,343	203	227,692	3,162,924
46	3,162,924	67,792	68,849	199	245,079	3,406,747
47	3,406,747	70,503	67,169	194	264,142	3,674,029
48	3,674,029	73,323	65,311	189	285,035	3,966,888
49	3,966,888	76,256	63,284	183	307,920	4,287,597
50	4,287,597	79,306	61,102	177	332,974	4,638,598
51	4,638,598	82,479	58,779	170	360,386	5,022,514
52	5,022,514	85,778	56,330	163	390,358	5,442,157
53	5,442,157	89,209	53,771	156	423,109	5,900,548
54	5,900,548	92,777	51,116	148	458,871	6,400,933
55	6,400,933	96,488	48,377	140	497,897	6,946,801
56	6,946,801	100,348	45,569	132	540,455	7,541,903
57	7,541,903	104,362	42,702	124	586,838	8,190,276
58	8,190,276	108,536	39,791	115	637,356	8,896,263
59	8,896,263	112,878	36,849	107	692,347	9,664,533

MONTANA MUNICIPAL POLICE OFFICERS' RETIREMENT SYSTEM
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APPENDIX B
DEVELOPMENT OF DISCOUNT RATE

Table 2 - Projection of the Pension Plan's Fiduciary Net Position Continued
Amounts in Thousands, Projections Commence June 30, 2014, Actual Amounts Shown for Year 1
* From Table 1 - Projection of Contributions, column (j)

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions* (b)	Projected Benefit Payments (c)	Projected Administrative Expense (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
60	\$ 9,664,533	\$ 117,393	\$ 33,895	\$ 98	\$ 752,173	\$ 10,500,105
61	10,500,105	122,088	30,951	90	817,220	11,408,373
62	11,408,373	126,972	28,043	81	887,908	12,395,129
63	12,395,129	132,051	25,199	73	964,683	13,466,591
64	13,466,591	137,333	22,448	65	1,048,027	14,629,438
65	14,629,438	142,826	19,818	57	1,138,457	15,890,846
66	15,890,846	148,539	17,338	50	1,236,528	17,258,525
67	17,258,525	154,481	15,030	43	1,342,837	18,740,770
68	18,740,770	160,660	12,912	37	1,458,027	20,346,507
69	20,346,507	167,086	10,997	32	1,582,789	22,085,353
70	22,085,353	173,770	9,288	27	1,717,869	23,967,678
71	23,967,678	180,721	7,783	23	1,864,070	26,004,664
72	26,004,664	187,950	6,476	19	2,022,262	28,208,380
73	28,208,380	195,468	5,354	15	2,193,378	30,591,857
74	30,591,857	203,286	4,401	13	2,378,431	33,169,161
75	33,169,161	211,418	3,592	10	2,578,513	35,955,489
76	35,955,489	219,874	2,918	8	2,794,800	38,967,237
77	38,967,237	228,669	2,360	7	3,028,566	42,222,106
78	42,222,106	237,816	1,900	5	3,281,184	45,739,200
79	45,739,200	247,329	1,525	4	3,554,135	49,539,135
80	49,539,135	257,222	1,219	4	3,849,018	53,644,153
81	53,644,153	267,511	969	3	4,167,557	58,078,249
82	58,078,249	278,211	768	2	4,511,615	62,867,304
83	62,867,304	289,340	606	2	4,883,196	68,039,232
84	68,039,232	300,913	476	1	5,284,465	73,624,132
85	73,624,132	312,950	372	1	5,717,757	79,654,466
86	79,654,466	325,468	289	1	6,185,587	86,165,230
87	86,165,230	338,487	220	1	6,690,669	93,194,164
88	93,194,164	352,026	167	0	7,235,928	100,781,951
89	100,781,951	366,107	125	0	7,824,518	108,972,452
90	108,972,452	380,751	92	0	8,459,840	117,812,951
91	117,812,951	395,981	67	0	9,145,559	127,354,424
92	127,354,424	411,821	49	0	9,885,626	137,651,822
93	137,651,822	428,293	34	0	10,684,302	148,764,382
94	148,764,382	445,425	24	0	11,546,177	160,755,960
95	160,755,960	463,242	17	0	12,476,202	173,695,388
96	173,695,388	481,772	11	0	13,479,712	187,656,861
97	187,656,861	501,043	7	0	14,562,460	202,720,356
98	202,720,356	521,084	5	0	15,730,643	218,972,078
99	218,972,078	541,928	3	0	16,990,944	236,504,946
100	236,504,946	563,605	2	0	18,350,565	255,419,115
101	255,419,115	586,149	1	0	19,817,271	275,822,534
102	275,822,534	609,595	1	0	21,399,427	297,831,555
103	297,831,555	633,979	0	0	23,106,054	321,571,588
104	321,571,588	659,338	0	0	24,946,871	347,177,796
105	347,177,796	685,712	0	0	26,932,355	374,795,862
106	374,795,862	713,140	0	0	29,073,798	404,582,800
107	404,582,800	741,666	0	0	31,383,370	436,707,836
108	436,707,836	771,332	0	0	33,874,189	471,353,357
109	471,353,357	802,186	0	0	36,560,390	508,715,933

MONTANA MUNICIPAL POLICE OFFICERS' RETIREMENT SYSTEM
 GASB 67 AND 68 REPORTING FOR JUNE 30, 2015 MEASUREMENT DATE

APPENDIX B
DEVELOPMENT OF DISCOUNT RATE

Table 3 - Actuarial Present Values of Projected Benefit Payments

Amounts in Thousands, Projections Commence June 30, 2014, Actual Amounts Shown for Year 1

* From Table 2 - Projection of the Pension Plan's Fiduciary Net Position, column (a)

** From Table 2 - Projection of the Pension Plan's Fiduciary Net Position, column (c)

Year	Projected Beginning Fiduciary Net Position *	Projected Benefit Payments for Current Plan Participants **	"Funded" Portion of Benefit Payments (d) = (c) if (b) >= (c)	"Unfunded" Portion of Benefit Payments (e) = (c) - (d)	Present Value of "Funded" Benefit Payments (f) = (d) / (1+ 7.75%)^(a)	Present Value of "Unfunded" Benefit Payments (g) = (e) / (1+3.80%)^(a)	Present Value of Benefit Payments Using the Single Discount Rate (h) = (c) / (1+ 7.75%)^(a)
(a)	(b)	(c)	(d) = (c) if (b) >= (c)	(e) = (c) - (d)	(f) = (d) / (1+ 7.75%)^(a)	(g) = (e) / (1+3.80%)^(a)	(h) = (c) / (1+ 7.75%)^(a)
1	\$ 319,186	\$ 22,744	\$ 22,744	\$ 0	\$ 21,108	\$ 0	\$ 21,108
2	335,057	23,526	23,526	0	20,264	0	20,264
3	360,196	24,571	24,571	0	19,641	0	19,641
4	386,357	25,643	25,643	0	19,024	0	19,024
5	413,625	26,749	26,749	0	18,417	0	18,417
6	442,076	30,782	30,782	0	19,669	0	19,669
7	468,770	32,060	32,060	0	19,012	0	19,012
8	496,452	33,896	33,896	0	18,656	0	18,656
9	524,666	35,573	35,573	0	18,170	0	18,170
10	553,609	37,783	37,783	0	17,911	0	17,911
11	582,768	39,900	39,900	0	17,554	0	17,554
12	612,312	41,701	41,701	0	17,027	0	17,027
13	642,644	44,056	44,056	0	16,695	0	16,695
14	673,302	46,182	46,182	0	16,242	0	16,242
15	704,481	48,156	48,156	0	15,718	0	15,718
16	736,312	50,678	50,678	0	15,351	0	15,351
17	768,225	52,726	52,726	0	14,823	0	14,823
18	800,674	55,685	55,685	0	14,529	0	14,529
19	832,652	58,745	58,745	0	14,225	0	14,225
20	864,215	62,212	62,212	0	13,981	0	13,981
21	894,920	65,033	65,033	0	13,563	0	13,563
22	925,362	67,913	67,913	0	13,145	0	13,145
23	955,588	69,527	69,527	0	12,490	0	12,490
24	987,121	71,459	71,459	0	11,914	0	11,914
25	1,019,904	73,255	73,255	0	11,335	0	11,335
26	1,054,318	74,478	74,478	0	10,695	0	10,695
27	1,091,197	74,527	74,527	0	9,932	0	9,932
28	1,132,042	74,568	74,568	0	9,223	0	9,223
29	1,177,258	74,932	74,932	0	8,601	0	8,601
30	1,226,915	75,072	75,072	0	7,998	0	7,998
31	1,281,655	75,197	75,197	0	7,435	0	7,435
32	1,341,958	75,439	75,439	0	6,922	0	6,922
33	1,408,200	75,756	75,756	0	6,451	0	6,451
34	1,480,830	75,991	75,991	0	6,006	0	6,006
35	1,560,508	76,121	76,121	0	5,583	0	5,583
36	1,647,963	76,160	76,160	0	5,184	0	5,184
37	1,743,968	76,096	76,096	0	4,808	0	4,808
38	1,849,370	75,901	75,901	0	4,450	0	4,450
39	1,965,111	75,577	75,577	0	4,113	0	4,113
40	2,092,211	75,117	75,117	0	3,794	0	3,794
41	2,231,776	74,500	74,500	0	3,492	0	3,492
42	2,385,022	73,725	73,725	0	3,207	0	3,207
43	2,553,265	72,779	72,779	0	2,938	0	2,938
44	2,737,936	71,653	71,653	0	2,685	0	2,685
45	2,940,594	70,343	70,343	0	2,446	0	2,446
46	3,162,924	68,849	68,849	0	2,222	0	2,222
47	3,406,747	67,169	67,169	0	2,012	0	2,012
48	3,674,029	65,311	65,311	0	1,815	0	1,815
49	3,966,888	63,284	63,284	0	1,632	0	1,632
50	4,287,597	61,102	61,102	0	1,463	0	1,463
51	4,638,598	58,779	58,779	0	1,306	0	1,306
52	5,022,514	56,330	56,330	0	1,162	0	1,162
53	5,442,157	53,771	53,771	0	1,029	0	1,029
54	5,900,548	51,116	51,116	0	908	0	908
55	6,400,933	48,377	48,377	0	797	0	797
56	6,946,801	45,569	45,569	0	697	0	697
57	7,541,903	42,702	42,702	0	606	0	606
58	8,190,276	39,791	39,791	0	524	0	524
59	8,896,263	36,849	36,849	0	451	0	451

MONTANA MUNICIPAL POLICE OFFICERS' RETIREMENT SYSTEM
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APPENDIX B
DEVELOPMENT OF DISCOUNT RATE

Table 3 - Actuarial Present Values of Projected Benefit Payments Continued
Amounts in Thousands, Projections Commence June 30, 2014, Actual Amounts Shown for Year 1
* From Table 2 - Projection of the Pension Plan's Fiduciary Net Position, column (a)
** From Table 2 - Projection of the Pension Plan's Fiduciary Net Position, column (c)

Year (a)	Projected Beginning Fiduciary Net Position * (b)	Projected Benefit Payments for current plan participants ** (c)	"Funded" Portion of Benefit Payments (d) = (c) if (b) >= (c)	"Unfunded" Portion of Benefit Payments (e) = (c) - (d)	Present Value of "Funded" Benefit Payments (f) = (d) / (1+ 7.75%)^(a)	Present Value of "Unfunded" Benefit Payments (g) = (e) / (1+3.80%)^(a)	Present Value of Benefit Payments Using the Single Discount Rate (h) = (c) / (1+ 7.75%)^(a)
60	\$ 9,664,533	\$ 33,895	\$ 33,895	\$ 0	\$ 385	\$ 0	\$ 385
61	10,500,105	30,951	30,951	0	326	0	326
62	11,408,373	28,043	28,043	0	274	0	274
63	12,395,129	25,199	25,199	0	229	0	229
64	13,466,591	22,448	22,448	0	189	0	189
65	14,629,438	19,818	19,818	0	155	0	155
66	15,890,846	17,338	17,338	0	126	0	126
67	17,258,525	15,030	15,030	0	101	0	101
68	18,740,770	12,912	12,912	0	81	0	81
69	20,346,507	10,997	10,997	0	64	0	64
70	22,085,353	9,288	9,288	0	50	0	50
71	23,967,678	7,783	7,783	0	39	0	39
72	26,004,664	6,476	6,476	0	30	0	30
73	28,208,380	5,354	5,354	0	23	0	23
74	30,591,857	4,401	4,401	0	18	0	18
75	33,169,161	3,592	3,592	0	13	0	13
76	35,955,489	2,918	2,918	0	10	0	10
77	38,967,237	2,360	2,360	0	8	0	8
78	42,222,106	1,900	1,900	0	6	0	6
79	45,739,200	1,525	1,525	0	4	0	4
80	49,539,135	1,219	1,219	0	3	0	3
81	53,644,153	969	969	0	2	0	2
82	58,078,249	768	768	0	2	0	2
83	62,867,304	606	606	0	1	0	1
84	68,039,232	476	476	0	1	0	1
85	73,624,132	372	372	0	1	0	1
86	79,654,466	289	289	0	0	0	0
87	86,165,230	220	220	0	0	0	0
88	93,194,164	167	167	0	0	0	0
89	100,781,951	125	125	0	0	0	0
90	108,972,452	92	92	0	0	0	0
91	117,812,951	67	67	0	0	0	0
92	127,354,424	49	49	0	0	0	0
93	137,651,822	34	34	0	0	0	0
94	148,764,382	24	24	0	0	0	0
95	160,755,960	17	17	0	0	0	0
96	173,695,388	11	11	0	0	0	0
97	187,656,861	7	7	0	0	0	0
98	202,720,356	5	5	0	0	0	0
99	218,972,078	3	3	0	0	0	0
100	236,504,946	2	2	0	0	0	0
101	255,419,115	1	1	0	0	0	0
102	275,822,534	1	1	0	0	0	0
103	297,831,555	0	0	0	0	0	0
104	321,571,588	0	0	0	0	0	0
105	347,177,796	0	0	0	0	0	0
106	374,795,862	0	0	0	0	0	0
107	404,582,800	0	0	0	0	0	0
108	436,707,836	0	0	0	0	0	0
109	471,353,357	0	0	0	0	0	0
					\$ 545,190	\$ 0	\$ 545,190

MONTANA MUNICIPAL POLICE OFFICERS' RETIREMENT SYSTEM
 GASB 67 AND 68 REPORTING FOR JUNE 30, 2015 MEASUREMENT DATE

APPENDIX C
EMPLOYER AND NON-EMPLOYER PROPORTIONATE SHARE ALLOCATIONS

<i>MPORS - Cost Sharing Plan w/ a Special Funding Situation</i>				Contributions				
				for Fiscal Year Ending June 30, 2015				
				Member Rate	Employer Rate	State Rate	Employer Contribution	State Contribution
Total Before Working Retiree Contributions and Adjustments							\$ 6,590,575.92	\$ 13,432,700.57
Due to Working Retiree Contributions and Adjustments							\$ 39,339.07	\$ 137.45
Total							\$ 6,629,914.99	\$ 13,432,838.02
State as Special Funding Entity								
Employers								
ANACONDA-DEER LODGE COUNT	PG0301			9.000%	14.410%	29.370%	\$ 128,758.65	\$ 260,877.25
CITY OF BILLINGS	PG0305	-	PN0305	9.000%	14.410%	29.370%	\$ 1,414,341.34	\$ 2,865,589.98
CITY OF BOZEMAN	PG0306			9.000%	14.410%	29.370%	\$ 596,790.67	\$ 1,209,154.63
BUTTE-SILVER BOW	PG0307	-	PN0307	9.000%	14.410%	29.370%	\$ 406,545.38	\$ 823,699.59
CITY OF COLUMBIA FALLS	PG0314			9.000%	14.410%	29.370%	\$ 59,330.96	\$ 120,210.16
CITY OF CUT BANK	PG0317			9.000%	14.410%	29.370%	\$ 42,338.38	\$ 85,781.58
CITY OF DILLON	PG0321			9.000%	14.410%	29.370%	\$ 48,140.15	\$ 97,536.53
CITY OF BAKER	PG0322			9.000%	14.410%	29.370%	\$ 37,405.44	\$ 75,786.98
CITY OF BELGRADE	PG0323			9.000%	14.410%	29.370%	\$ 103,262.94	\$ 209,220.54
CITY OF EAST HELENA	PG0325			9.000%	14.410%	29.370%	\$ 31,242.80	\$ 63,300.88
CITY OF GLASGOW	PG0332			9.000%	14.410%	29.370%	\$ 71,319.01	\$ 144,499.09
CITY OF GLENDIVE	PG0333			9.000%	14.410%	29.370%	\$ 59,867.93	\$ 121,298.12
CITY OF GREAT FALLS	PG0334			9.000%	14.410%	29.370%	\$ 843,146.62	\$ 1,708,295.20
CITY OF HAMILTON	PG0337			9.000%	14.410%	29.370%	\$ 82,094.34	\$ 166,330.95
CITY OF HAVRE	PG0339			9.000%	14.410%	29.370%	\$ 114,452.87	\$ 231,892.40
CITY OF HELENA	PG0340			9.000%	14.410%	29.370%	\$ 470,449.87	\$ 953,176.15
CITY OF KALISPELL	PG0343			9.000%	14.410%	29.370%	\$ 306,049.73	\$ 620,085.85
CITY OF LAUREL	PG0345			9.000%	14.410%	29.370%	\$ 79,247.99	\$ 160,563.97
CITY OF LEWISTOWN	PG0347			9.000%	14.410%	29.370%	\$ 83,399.57	\$ 168,975.45
CITY OF LIBBY	PG0348			9.000%	14.410%	29.370%	\$ 31,452.99	\$ 63,726.74
CITY OF LIVINGSTON	PG0349			9.000%	14.410%	29.370%	\$ 87,770.85	\$ 177,832.09
CITY OF MILES CITY	PG0353			9.000%	14.410%	29.370%	\$ 103,443.82	\$ 209,587.01
CITY OF MISSOULA	PG0354	-	PN0354	9.000%	14.410%	29.370%	\$ 1,070,709.73	\$ 2,169,359.69
CITY OF TROY	PG0356			9.000%	14.410%	29.370%	\$ 15,274.24	\$ 30,947.07
CITY OF PLAINS	PG0358			9.000%	14.410%	29.370%	\$ 19,865.21	\$ 40,248.81
CITY OF POLSON	PG0360			9.000%	14.410%	29.370%	\$ 55,755.59	\$ 112,966.13
CITY OF POPLAR	PG0361			9.000%	14.410%	29.370%	\$ 10,116.46	\$ 20,496.90
CITY OF WHITEFISH	PG0376			9.000%	14.410%	29.370%	\$ 125,044.78	\$ 253,352.62
CITY OF WOLF POINT	PG0378			9.000%	14.410%	29.370%	\$ 40,633.39	\$ 82,327.11
CITY OF THOMPSON FALLS	PG0379			9.000%	14.410%	29.370%	\$ 16,391.47	\$ 33,210.68
CITY OF RED LODGE	PG0385			9.000%	14.410%	29.370%	\$ 47,443.39	\$ 96,124.82
TOWN OF WEST YELLOWSTONE	PG9073			9.000%	14.410%	29.370%	\$ 27,828.43	\$ 56,383.05

MONTANA MUNICIPAL POLICE OFFICERS' RETIREMENT SYSTEM
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APPENDIX C
EMPLOYER AND NON-EMPLOYER PROPORTIONATE SHARE ALLOCATIONS

<i>MPORS - Cost Sharing Plan w/ a Special Funding Situation</i>				Net Pension Liability as of June 30, 2014			
				Net Pension Liability - Employer	Employer Proportion based on Employer Contributions	Net Pension Liability - State	State Proportion based on State Contributions
Total Before Working Retiree Contributions and Adjustments				\$ 157,135,903.02	100.000000%	\$ 105,106,206.67	99.999999%
Due to Working Retiree Contributions and Adjustments							
Total				\$ 157,135,903.02	100.000000%	\$ 105,106,206.67	99.999999%
State as Special Funding Entity				\$ 105,106,206.66	66.888728%		
Employers							
ANACONDA-DEER LODGE COUNT	PG0301			\$ 1,080,471.73	0.687603%	\$ 2,182,681.99	2.076644%
CITY OF BILLINGS	PG0305	PN0305		\$ 11,275,364.85	7.175550%	\$ 22,777,584.99	21.671018%
CITY OF BOZEMAN	PG0306			\$ 4,746,932.65	3.020909%	\$ 9,589,371.45	9.123506%
BUTTE-SILVER BOW	PG0307	PN0307		\$ 3,105,835.34	1.976528%	\$ 6,274,158.70	5.969351%
CITY OF COLUMBIA FALLS	PG0314			\$ 455,415.86	0.289823%	\$ 919,994.59	0.875300%
CITY OF CUT BANK	PG0317			\$ 313,168.37	0.199298%	\$ 632,637.58	0.601903%
CITY OF DILLON	PG0321			\$ 386,154.66	0.245746%	\$ 780,078.47	0.742181%
CITY OF BAKER	PG0322			\$ 250,831.29	0.159627%	\$ 506,709.13	0.482092%
CITY OF BELGRADE	PG0323			\$ 852,414.66	0.542470%	\$ 1,721,979.46	1.638323%
CITY OF EAST HELENA	PG0325			\$ 245,305.79	0.156111%	\$ 495,547.07	0.471473%
CITY OF GLASGOW	PG0332			\$ 554,423.17	0.352830%	\$ 1,120,001.16	1.065590%
CITY OF GLENDIVE	PG0333			\$ 437,312.76	0.278302%	\$ 883,424.08	0.840506%
CITY OF GREAT FALLS	PG0334			\$ 6,822,497.71	4.341782%	\$ 13,782,261.11	13.112700%
CITY OF HAMILTON	PG0337			\$ 610,180.80	0.388314%	\$ 1,232,638.27	1.172755%
CITY OF HAVRE	PG0339			\$ 931,418.91	0.592747%	\$ 1,881,577.49	1.790168%
CITY OF HELENA	PG0340			\$ 3,589,338.11	2.284225%	\$ 7,250,892.15	6.898634%
CITY OF KALISPELL	PG0343			\$ 2,359,961.94	1.501860%	\$ 4,767,405.30	4.535798%
CITY OF LAUREL	PG0345			\$ 698,364.35	0.444433%	\$ 1,410,779.36	1.342242%
CITY OF LEWISTOWN	PG0347			\$ 719,594.31	0.457944%	\$ 1,453,666.50	1.383045%
CITY OF LIBBY	PG0348			\$ 255,910.70	0.162859%	\$ 516,970.10	0.491855%
CITY OF LIVINGSTON	PG0349			\$ 723,175.30	0.460223%	\$ 1,460,900.65	1.389928%
CITY OF MILES CITY	PG0353			\$ 838,806.69	0.533810%	\$ 1,694,489.73	1.612169%
CITY OF MISSOULA	PG0354	PN0354		\$ 8,105,541.12	5.158300%	\$ 16,374,162.11	15.578682%
CITY OF TROY	PG0356			\$ 96,790.96	0.061597%	\$ 195,529.16	0.186030%
CITY OF PLAINS	PG0358			\$ 162,446.20	0.103379%	\$ 328,160.63	0.312218%
CITY OF POLSON	PG0360			\$ 212,969.19	0.135532%	\$ 430,223.20	0.409322%
CITY OF POPLAR	PG0361			\$ 144,531.75	0.091979%	\$ 291,971.51	0.277787%
CITY OF WHITEFISH	PG0376			\$ 946,627.05	0.602426%	\$ 1,912,299.76	1.819398%
CITY OF WOLF POINT	PG0378			\$ 325,077.75	0.206877%	\$ 656,695.97	0.624793%
CITY OF THOMPSON FALLS	PG0379			\$ 118,572.51	0.075459%	\$ 239,530.52	0.227894%
CITY OF RED LODGE	PG0385			\$ 324,446.90	0.206475%	\$ 655,421.54	0.623580%
TOWN OF WEST YELLOWSTONE	PG9073			\$ 339,812.98	0.216254%	\$ 686,462.94	0.653114%

MONTANA MUNICIPAL POLICE OFFICERS' RETIREMENT SYSTEM
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APPENDIX C
EMPLOYER AND NON-EMPLOYER PROPORTIONATE SHARE ALLOCATIONS

MPORS - Cost Sharing Plan w/ a Special Funding Situation				Net Pension Liability as of June 30, 2015			
				Net Pension Liability - Employer	Employer Proportion based on Employer Contributions	Net Pension Liability - State	State Proportion based on State Contributions
Total Before Working Retiree Contributions and Adjustments				\$ 165,420,725.00	100.000000%	\$ 110,755,976.65	100.000000%
Due to Working Retiree Contributions and Adjustments							
Total				\$ 165,420,725.00	100.000000%	\$ 110,755,976.65	100.000000%
State as Special Funding Entity				\$ 110,755,976.66	66.954111%		
Employers							
ANACONDA-DEER LODGE COUNT	PG0301			\$ 1,061,636.42	0.641780%	\$ 2,150,976.18	1.942086%
CITY OF BILLINGS	PG0305	-	PN0305	\$ 11,661,478.85	7.049588%	\$ 23,627,264.50	21.332722%
CITY OF BOZEMAN	PG0306			\$ 4,920,638.02	2.974620%	\$ 9,969,680.40	9.001483%
BUTTE-SILVER BOW	PG0307	-	PN0307	\$ 3,352,034.06	2.026369%	\$ 6,791,539.69	6.131985%
CITY OF COLUMBIA FALLS	PG0314			\$ 489,193.60	0.295727%	\$ 991,152.70	0.894898%
CITY OF CUT BANK	PG0317			\$ 349,086.96	0.211030%	\$ 707,283.35	0.638596%
CITY OF DILLON	PG0321			\$ 396,923.52	0.239948%	\$ 804,204.86	0.726105%
CITY OF BAKER	PG0322			\$ 308,414.05	0.186442%	\$ 624,876.22	0.564192%
CITY OF BELGRADE	PG0323			\$ 851,420.06	0.514700%	\$ 1,725,058.04	1.557530%
CITY OF EAST HELENA	PG0325			\$ 257,602.07	0.155725%	\$ 521,926.25	0.471240%
CITY OF GLASGOW	PG0332			\$ 588,037.06	0.355480%	\$ 1,191,418.96	1.075715%
CITY OF GLENDIVE	PG0333			\$ 493,621.01	0.298403%	\$ 1,000,123.11	0.902997%
CITY OF GREAT FALLS	PG0334			\$ 6,951,883.68	4.202547%	\$ 14,085,177.16	12.717307%
CITY OF HAMILTON	PG0337			\$ 676,881.44	0.409188%	\$ 1,371,426.26	1.238241%
CITY OF HAVRE	PG0339			\$ 943,682.89	0.570474%	\$ 1,911,991.29	1.726310%
CITY OF HELENA	PG0340			\$ 3,878,937.18	2.344892%	\$ 7,859,095.39	7.095866%
CITY OF KALISPELL	PG0343			\$ 2,523,430.77	1.525462%	\$ 5,112,710.64	4.616194%
CITY OF LAUREL	PG0345			\$ 653,412.82	0.395001%	\$ 1,323,876.55	1.195309%
CITY OF LEWISTOWN	PG0347			\$ 687,643.28	0.415694%	\$ 1,393,230.60	1.257928%
CITY OF LIBBY	PG0348			\$ 259,335.12	0.156773%	\$ 525,437.54	0.474410%
CITY OF LIVINGSTON	PG0349			\$ 723,685.21	0.437482%	\$ 1,466,255.07	1.323861%
CITY OF MILES CITY	PG0353			\$ 852,911.45	0.515601%	\$ 1,728,079.65	1.560259%
CITY OF MISSOULA	PG0354	-	PN0354	\$ 8,828,179.25	5.336804%	\$ 17,886,730.33	16.149675%
CITY OF TROY	PG0356			\$ 125,938.64	0.076132%	\$ 255,163.72	0.230384%
CITY OF PLAINS	PG0358			\$ 163,791.95	0.099015%	\$ 331,858.11	0.299630%
CITY OF POLSON	PG0360			\$ 459,714.08	0.277906%	\$ 931,424.47	0.840970%
CITY OF POPLAR	PG0361			\$ 83,411.89	0.050424%	\$ 169,000.34	0.152588%
CITY OF WHITEFISH	PG0376			\$ 1,031,014.94	0.623268%	\$ 2,088,934.36	1.886069%
CITY OF WOLF POINT	PG0378			\$ 335,029.04	0.202531%	\$ 678,800.67	0.612879%
CITY OF THOMPSON FALLS	PG0379			\$ 135,150.39	0.081701%	\$ 273,827.56	0.247235%
CITY OF RED LODGE	PG0385			\$ 391,178.62	0.236475%	\$ 792,565.08	0.715596%
TOWN OF WEST YELLOWSTONE	PG9073			\$ 229,450.02	0.138707%	\$ 464,887.60	0.419740%

MONTANA MUNICIPAL POLICE OFFICERS' RETIREMENT SYSTEM
 GASB 67 AND 68 REPORTING FOR JUNE 30, 2015 MEASUREMENT DATE

APPENDIX C
EMPLOYER AND NON-EMPLOYER PROPORTIONATE SHARE ALLOCATIONS

MPORS - Cost Sharing Plan w/ a Special Funding Situation				Pension Expense	
				for Fiscal Year Ending June 30, 2015	
				Employer Pension Expense (includes Support Revenue)	Support Revenue provided by the State
Total Before Working Retiree Contributions and Adjustments				\$ 16,780,693.03	\$ 11,264,202.65
Due to Working Retiree Contributions and Adjustments					
Total				\$ 16,780,693.03	\$ 11,264,202.65
State as Special Funding Entity					
Employers					
ANACONDA-DEER LODGE COUNT	PG0301			\$ 306,244.05	\$ 218,760.49
CITY OF BILLINGS	PG0305	PN0305		\$ 3,530,372.53	\$ 2,402,961.03
CITY OF BOZEMAN	PG0306			\$ 1,492,690.46	\$ 1,013,945.28
BUTTE-SILVER BOW	PG0307	PN0307		\$ 1,052,741.19	\$ 690,719.20
CITY OF COLUMBIA FALLS	PG0314			\$ 153,032.19	\$ 100,803.09
CITY OF CUT BANK	PG0317			\$ 112,519.64	\$ 71,932.76
CITY OF DILLON	PG0321			\$ 119,497.65	\$ 81,789.96
CITY OF BAKER	PG0322			\$ 106,665.41	\$ 63,551.72
CITY OF BELGRADE	PG0323			\$ 249,565.08	\$ 175,443.38
CITY OF EAST HELENA	PG0325			\$ 79,043.30	\$ 53,081.41
CITY OF GLASGOW	PG0332			\$ 181,991.24	\$ 121,170.75
CITY OF GLENDIVE	PG0333			\$ 160,655.56	\$ 101,715.41
CITY OF GREAT FALLS	PG0334			\$ 2,076,307.47	\$ 1,432,503.19
CITY OF HAMILTON	PG0337			\$ 217,349.35	\$ 139,478.01
CITY OF HAVRE	PG0339			\$ 280,360.66	\$ 194,455.04
CITY OF HELENA	PG0340			\$ 1,219,540.01	\$ 799,292.70
CITY OF KALISPELL	PG0343			\$ 786,370.65	\$ 519,977.43
CITY OF LAUREL	PG0345			\$ 179,122.59	\$ 134,642.07
CITY OF LEWISTOWN	PG0347			\$ 192,816.46	\$ 141,695.57
CITY OF LIBBY	PG0348			\$ 77,061.58	\$ 53,438.51
CITY OF LIVINGSTON	PG0349			\$ 212,504.33	\$ 149,122.37
CITY OF MILES CITY	PG0353			\$ 254,241.00	\$ 175,750.69
CITY OF MISSOULA	PG0354	PN0354		\$ 2,793,417.41	\$ 1,819,132.12
CITY OF TROY	PG0356			\$ 45,137.53	\$ 25,950.89
CITY OF PLAINS	PG0358			\$ 48,441.54	\$ 33,750.93
CITY OF POLSON	PG0360			\$ 204,160.08	\$ 94,728.56
CITY OF POPLAR	PG0361			\$ 7,320.78	\$ 17,187.82
CITY OF WHITEFISH	PG0376			\$ 326,232.45	\$ 212,450.66
CITY OF WOLF POINT	PG0378			\$ 101,105.58	\$ 69,035.99
CITY OF THOMPSON FALLS	PG0379			\$ 44,312.40	\$ 27,849.05
CITY OF RED LODGE	PG0385			\$ 133,520.24	\$ 80,606.16
TOWN OF WEST YELLOWSTONE	PG9073			\$ 36,352.62	\$ 47,280.41

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APPENDIX C
EMPLOYER AND NON-EMPLOYER PROPORTIONATE SHARE ALLOCATIONS

MPORS - Cost Sharing Plan w/ a Special Funding Situation				Deferred Outflows					
				Actual vs. Expected Experience	Changes of Assumptions	Actual vs. Expected Investment Earnings	Total Collective Deferred Outflows	Changes in Proportionate Shares	Employer contributions subsequent to the measurement date - # to be inserted by each employer
Total Before Working Retiree Contributions and Adjustments				\$ -	\$ -	\$ -	\$ -	\$ 899,870.26	
Due to Working Retiree Contributions and Adjustments									
Total				\$ -	\$ -	\$ -	\$ -	\$ 899,870.26	
State as Special Funding Entity				\$ -	\$ -	\$ -	\$ -	\$ 86,516.19	
Employers									
ANACONDA-DEER LODGE COUNT - PG0301				\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF BILLINGS - PG0305	- PN0305			\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF BOZEMAN - PG0306				\$ -	\$ -	\$ -	\$ -	\$ -	#
BUTTE-SILVER BOW - PG0307	- PN0307			\$ -	\$ -	\$ -	\$ -	\$ 65,949.76	#
CITY OF COLUMBIA FALLS - PG0314				\$ -	\$ -	\$ -	\$ -	\$ 7,812.22	#
CITY OF CUT BANK - PG0317				\$ -	\$ -	\$ -	\$ -	\$ 15,523.88	#
CITY OF DILLON - PG0321				\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF BAKER - PG0322				\$ -	\$ -	\$ -	\$ -	\$ 35,482.20	#
CITY OF BELGRADE - PG0323				\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF EAST HELENA - PG0325				\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF GLASGOW - PG0332				\$ -	\$ -	\$ -	\$ -	\$ 3,505.60	#
CITY OF GLENDIVE - PG0333				\$ -	\$ -	\$ -	\$ -	\$ 26,597.99	#
CITY OF GREAT FALLS - PG0334				\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF HAMILTON - PG0337				\$ -	\$ -	\$ -	\$ -	\$ 27,620.37	#
CITY OF HAVRE - PG0339				\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF HELENA - PG0340				\$ -	\$ -	\$ -	\$ -	\$ 80,274.62	#
CITY OF KALISPELL - PG0343				\$ -	\$ -	\$ -	\$ -	\$ 31,230.22	#
CITY OF LAUREL - PG0345				\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF LEWISTOWN - PG0347				\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF LIBBY - PG0348				\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF LIVINGSTON - PG0349				\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF MILES CITY - PG0353				\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF MISSOULA - PG0354	- PN0354			\$ -	\$ -	\$ -	\$ -	\$ 236,197.96	#
CITY OF TROY - PG0356				\$ -	\$ -	\$ -	\$ -	\$ 19,233.32	#
CITY OF PLAINS - PG0358				\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF POLSON - PG0360				\$ -	\$ -	\$ -	\$ -	\$ 188,390.91	#
CITY OF POPLAR - PG0361				\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF WHITEFISH - PG0376				\$ -	\$ -	\$ -	\$ -	\$ 27,579.16	#
CITY OF WOLF POINT - PG0378				\$ -	\$ -	\$ -	\$ -	\$ -	#
CITY OF THOMPSON FALLS - PG0379				\$ -	\$ -	\$ -	\$ -	\$ 8,260.04	#
CITY OF RED LODGE - PG0385				\$ -	\$ -	\$ -	\$ -	\$ 39,695.82	#
TOWN OF WEST YELLOWSTONE - PG9073				\$ -	\$ -	\$ -	\$ -	\$ -	#

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APPENDIX C
EMPLOYER AND NON-EMPLOYER PROPORTIONATE SHARE ALLOCATIONS

<i>MPORS - Cost Sharing Plan w/ a Special Funding Situation</i>				Deferred Inflows						
				Actual vs. Expected Experience	Changes of Assumptions	Actual vs. Expected Investment Earnings	Total Collective Deferred Inflows	Changes in Proportionate Shares	Employer contributions subsequent to the measurement date	
Total Before Working Retiree Contributions and Adjustments				\$ 1,510,731.99	\$ -	\$ 6,214,514.00	\$ 7,725,245.99	\$ 899,870.27	\$ -	
Due to Working Retiree Contributions and Adjustments										
Total				\$ 1,510,731.99	\$ -	\$ 6,214,514.00	\$ 7,725,245.99	\$ 899,870.27	\$ -	
State as Special Funding Entity				\$ 1,011,497.19	\$ -	\$ 4,160,872.63	\$ 5,172,369.82	\$ -		
Employers										
ANACONDA-DEER LODGE COUNT - PG0301				\$ 9,695.57	\$ -	\$ 39,883.48	\$ 49,579.05	\$ 60,634.49	\$ -	
CITY OF BILLINGS - PG0305		PN0305		\$ 106,500.38	\$ -	\$ 438,097.61	\$ 544,597.99	\$ 166,674.42	\$ -	
CITY OF BOZEMAN - PG0306				\$ 44,938.54	\$ -	\$ 184,858.18	\$ 229,796.72	\$ 61,250.05	\$ -	
BUTTE-SILVER BOW - PG0307		PN0307		\$ 30,613.00	\$ -	\$ 125,928.98	\$ 156,541.98	\$ -	\$ -	
CITY OF COLUMBIA FALLS - PG0314				\$ 4,467.64	\$ -	\$ 18,377.99	\$ 22,845.63	\$ -	\$ -	
CITY OF CUT BANK - PG0317				\$ 3,188.09	\$ -	\$ 13,114.47	\$ 16,302.56	\$ -	\$ -	
CITY OF DILLON - PG0321				\$ 3,624.97	\$ -	\$ 14,911.59	\$ 18,536.56	\$ 7,671.68	\$ -	
CITY OF BAKER - PG0322				\$ 2,816.64	\$ -	\$ 11,586.48	\$ 14,403.12	\$ -	\$ -	
CITY OF BELGRADE - PG0323				\$ 7,775.73	\$ -	\$ 31,986.09	\$ 39,761.82	\$ 36,745.48	\$ -	
CITY OF EAST HELENA - PG0325				\$ 2,352.59	\$ -	\$ 9,677.58	\$ 12,030.17	\$ 509.71	\$ -	
CITY OF GLASGOW - PG0332				\$ 5,370.35	\$ -	\$ 22,091.33	\$ 27,461.68	\$ -	\$ -	
CITY OF GLENDIVE - PG0333				\$ 4,508.08	\$ -	\$ 18,544.32	\$ 23,052.40	\$ -	\$ -	
CITY OF GREAT FALLS - PG0334				\$ 63,489.22	\$ -	\$ 261,167.87	\$ 324,657.09	\$ 184,236.66	\$ -	
CITY OF HAMILTON - PG0337				\$ 6,181.73	\$ -	\$ 25,429.03	\$ 31,610.76	\$ -	\$ -	
CITY OF HAVRE - PG0339				\$ 8,618.34	\$ -	\$ 35,452.21	\$ 44,070.55	\$ 29,471.81	\$ -	
CITY OF HELENA - PG0340				\$ 35,425.03	\$ -	\$ 145,723.64	\$ 181,148.67	\$ -	\$ -	
CITY OF KALISPELL - PG0343				\$ 23,045.65	\$ -	\$ 94,800.07	\$ 117,845.72	\$ -	\$ -	
CITY OF LAUREL - PG0345				\$ 5,967.40	\$ -	\$ 24,547.37	\$ 30,514.77	\$ 65,409.94	\$ -	
CITY OF LEWISTOWN - PG0347				\$ 6,280.02	\$ -	\$ 25,833.33	\$ 32,113.35	\$ 55,906.12	\$ -	
CITY OF LIBBY - PG0348				\$ 2,368.42	\$ -	\$ 9,742.68	\$ 12,111.10	\$ 8,053.62	\$ -	
CITY OF LIVINGSTON - PG0349				\$ 6,609.17	\$ -	\$ 27,187.35	\$ 33,796.52	\$ 30,091.44	\$ -	
CITY OF MILES CITY - PG0353				\$ 7,789.35	\$ -	\$ 32,042.12	\$ 39,831.47	\$ 24,093.51	\$ -	
CITY OF MISSOULA - PG0354		PN0354		\$ 80,624.80	\$ -	\$ 331,656.41	\$ 412,281.21	\$ -	\$ -	
CITY OF TROY - PG0356				\$ 1,150.16	\$ -	\$ 4,731.25	\$ 5,881.41	\$ -	\$ -	
CITY OF PLAINS - PG0358				\$ 1,495.86	\$ -	\$ 6,153.32	\$ 7,649.18	\$ 5,774.57	\$ -	
CITY OF POLSON - PG0360				\$ 4,198.41	\$ -	\$ 17,270.51	\$ 21,468.92	\$ -	\$ -	
CITY OF POPLAR - PG0361				\$ 761.77	\$ -	\$ 3,133.61	\$ 3,895.38	\$ 54,985.65	\$ -	
CITY OF WHITEFISH - PG0376				\$ 9,415.91	\$ -	\$ 38,733.10	\$ 48,149.01	\$ -	\$ -	
CITY OF WOLF POINT - PG0378				\$ 3,059.71	\$ -	\$ 12,586.35	\$ 15,646.06	\$ 5,749.79	\$ -	
CITY OF THOMPSON FALLS - PG0379				\$ 1,234.28	\$ -	\$ 5,077.32	\$ 6,311.60	\$ -	\$ -	
CITY OF RED LODGE - PG0385				\$ 3,572.50	\$ -	\$ 14,695.77	\$ 18,268.27	\$ -	\$ -	
TOWN OF WEST YELLOWSTONE - PG9073				\$ 2,095.49	\$ -	\$ 8,619.96	\$ 10,715.45	\$ 102,611.33	\$ -	

MONTANA MUNICIPAL POLICE OFFICERS' RETIREMENT SYSTEM
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APPENDIX C
EMPLOYER AND NON-EMPLOYER PROPORTIONATE SHARE ALLOCATIONS

MPORS - Cost Sharing Plan w/ a Special Funding Situation	Recognition of Deferred Outflows and (Deferred Inflows) for Fiscal Year Ending June 30,					
	2016	2017	2018	2019	2020	Future Year Deferrals
Total Before Working Retiree Contributions and Adjustments	\$ (3,262,963.99)	\$ (3,262,963.99)	\$ (3,262,961.96)	\$ 2,063,644.00	\$ -	\$ -
Due to Working Retiree Contributions and Adjustments						
Total	\$ (3,262,963.99)	\$ (3,262,963.99)	\$ (3,262,961.96)	\$ 2,063,644.00	\$ -	\$ -
State as Special Funding Entity	\$ (2,155,849.83)	\$ (2,155,849.83)	\$ (2,155,848.49)	\$ 1,381,694.50	\$ -	\$ -
Employers						
ANACONDA-DEER LODGE COUNT - PG0301	\$ (41,152.53)	\$ (41,152.53)	\$ (41,152.52)	\$ 13,244.05	\$ -	\$ -
CITY OF BILLINGS - PG0305 - PN0305	\$ (285,583.64)	\$ (285,583.64)	\$ (285,583.50)	\$ 145,478.39	\$ -	\$ -
CITY OF BOZEMAN - PG0306	\$ (117,477.46)	\$ (117,477.46)	\$ (117,477.40)	\$ 61,385.57	\$ -	\$ -
BUTTE-SILVER BOW - PG0307 - PN0307	\$ (44,136.43)	\$ (44,136.43)	\$ (44,136.39)	\$ 41,817.04	\$ -	\$ -
CITY OF COLUMBIA FALLS - PG0314	\$ (7,045.39)	\$ (7,045.39)	\$ (7,045.38)	\$ 6,102.75	\$ -	\$ -
CITY OF CUT BANK - PG0317	\$ (1,711.20)	\$ (1,711.20)	\$ (1,711.19)	\$ 4,354.90	\$ -	\$ -
CITY OF DILLON - PG0321	\$ (10,386.64)	\$ (10,386.64)	\$ (10,386.64)	\$ 4,951.67	\$ -	\$ -
CITY OF BAKER - PG0322	\$ 5,743.86	\$ 5,743.86	\$ 5,743.86	\$ 3,847.50	\$ -	\$ -
CITY OF BELGRADE - PG0323	\$ (29,042.96)	\$ (29,042.96)	\$ (29,042.95)	\$ 10,621.57	\$ -	\$ -
CITY OF EAST HELENA - PG0325	\$ (5,251.17)	\$ (5,251.17)	\$ (5,251.16)	\$ 3,213.62	\$ -	\$ -
CITY OF GLASGOW - PG0332	\$ (10,430.64)	\$ (10,430.64)	\$ (10,430.63)	\$ 7,335.84	\$ -	\$ -
CITY OF GLENDIVE - PG0333	\$ (870.80)	\$ (870.80)	\$ (870.79)	\$ 6,157.98	\$ -	\$ -
CITY OF GREAT FALLS - PG0334	\$ (198,539.82)	\$ (198,539.82)	\$ (198,539.73)	\$ 86,725.61	\$ -	\$ -
CITY OF HAMILTON - PG0337	\$ (4,144.86)	\$ (4,144.86)	\$ (4,144.85)	\$ 8,444.18	\$ -	\$ -
CITY OF HAVRE - PG0339	\$ (28,438.31)	\$ (28,438.31)	\$ (28,438.30)	\$ 11,772.56	\$ -	\$ -
CITY OF HELENA - PG0340	\$ (49,754.77)	\$ (49,754.77)	\$ (49,754.73)	\$ 48,390.22	\$ -	\$ -
CITY OF KALISPELL - PG0343	\$ (39,365.21)	\$ (39,365.21)	\$ (39,365.18)	\$ 31,480.11	\$ -	\$ -
CITY OF LAUREL - PG0345	\$ (34,692.04)	\$ (34,692.04)	\$ (34,692.03)	\$ 8,151.41	\$ -	\$ -
CITY OF LEWISTOWN - PG0347	\$ (32,199.30)	\$ (32,199.30)	\$ (32,199.29)	\$ 8,578.43	\$ -	\$ -
CITY OF LIBBY - PG0348	\$ (7,799.99)	\$ (7,799.99)	\$ (7,799.98)	\$ 3,235.24	\$ -	\$ -
CITY OF LIVINGSTON - PG0349	\$ (24,305.35)	\$ (24,305.35)	\$ (24,305.34)	\$ 9,028.06	\$ -	\$ -
CITY OF MILES CITY - PG0353	\$ (24,855.05)	\$ (24,855.05)	\$ (24,855.04)	\$ 10,640.18	\$ -	\$ -
CITY OF MISSOULA - PG0354 - PN0354	\$ (95,405.33)	\$ (95,405.33)	\$ (95,405.22)	\$ 110,132.63	\$ -	\$ -
CITY OF TROY - PG0356	\$ 3,926.94	\$ 3,926.94	\$ 3,926.94	\$ 1,571.10	\$ -	\$ -
CITY OF PLAINS - PG0358	\$ (5,155.69)	\$ (5,155.69)	\$ (5,155.69)	\$ 2,043.32	\$ -	\$ -
CITY OF POLSON - PG0360	\$ 53,729.00	\$ 53,729.00	\$ 53,729.00	\$ 5,734.99	\$ -	\$ -
CITY OF POPLAR - PG0361	\$ (19,973.87)	\$ (19,973.87)	\$ (19,973.87)	\$ 1,040.57	\$ -	\$ -
CITY OF WHITEFISH - PG0376	\$ (11,143.97)	\$ (11,143.97)	\$ (11,143.95)	\$ 12,862.04	\$ -	\$ -
CITY OF WOLF POINT - PG0378	\$ (8,525.13)	\$ (8,525.13)	\$ (8,525.12)	\$ 4,179.53	\$ -	\$ -
CITY OF THOMPSON FALLS - PG0379	\$ 87.47	\$ 87.47	\$ 87.48	\$ 1,686.02	\$ -	\$ -
CITY OF RED LODGE - PG0385	\$ 5,515.85	\$ 5,515.85	\$ 5,515.85	\$ 4,880.00	\$ -	\$ -
TOWN OF WEST YELLOWSTONE - PG9073	\$ (38,729.73)	\$ (38,729.73)	\$ (38,729.73)	\$ 2,862.42	\$ -	\$ -

MONTANA MUNICIPAL POLICE OFFICERS' RETIREMENT SYSTEM
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APPENDIX C
EMPLOYER AND NON-EMPLOYER PROPORTIONATE SHARE ALLOCATIONS

<i>MPORS - Cost Sharing Plan w/ a Special Funding Situation</i>	Sensitivity of Employer's Proportionate Share of the Net Pension Liability as of June 30, 2015		
	1% Decrease 6.75%	Discount Rate 7.75%	1% Increase 8.75%
Total Before Working Retiree Contributions and Adjustments	\$ 233,548,853.01	\$ 165,420,725.00	\$ 104,939,951.98
Due to Working Retiree Contributions and Adjustments			
Total	\$ 233,548,853.01	\$ 165,420,725.00	\$ 104,939,951.98
State as Special Funding Entity	\$ 156,370,559.44	\$ 110,755,976.66	\$ 70,261,612.47
Employers			
ANACONDA-DEER LODGE COUNT - PG0301	\$ 1,498,868.82	\$ 1,061,636.42	\$ 673,483.17
CITY OF BILLINGS - PG0305 - PN0305	\$ 16,464,230.88	\$ 11,661,478.85	\$ 7,397,833.80
CITY OF BOZEMAN - PG0306	\$ 6,947,190.97	\$ 4,920,638.02	\$ 3,121,564.83
BUTTE-SILVER BOW - PG0307 - PN0307	\$ 4,732,561.24	\$ 3,352,034.06	\$ 2,126,470.51
CITY OF COLUMBIA FALLS - PG0314	\$ 690,666.81	\$ 489,193.60	\$ 310,335.68
CITY OF CUT BANK - PG0317	\$ 492,857.59	\$ 349,086.96	\$ 221,454.53
CITY OF DILLON - PG0321	\$ 560,395.52	\$ 396,923.52	\$ 251,801.19
CITY OF BAKER - PG0322	\$ 435,433.64	\$ 308,414.05	\$ 195,652.37
CITY OF BELGRADE - PG0323	\$ 1,202,075.37	\$ 851,420.06	\$ 540,125.67
CITY OF EAST HELENA - PG0325	\$ 363,694.86	\$ 257,602.07	\$ 163,418.15
CITY OF GLASGOW - PG0332	\$ 830,218.71	\$ 588,037.06	\$ 373,040.20
CITY OF GLENDIVE - PG0333	\$ 696,917.64	\$ 493,621.01	\$ 313,144.35
CITY OF GREAT FALLS - PG0334	\$ 9,815,000.26	\$ 6,951,883.68	\$ 4,410,150.78
CITY OF HAMILTON - PG0337	\$ 955,653.44	\$ 676,881.44	\$ 429,401.49
CITY OF HAVRE - PG0339	\$ 1,332,336.42	\$ 943,682.89	\$ 598,655.56
CITY OF HELENA - PG0340	\$ 5,476,468.13	\$ 3,878,937.18	\$ 2,460,728.43
CITY OF KALISPELL - PG0343	\$ 3,562,699.66	\$ 2,523,430.77	\$ 1,600,819.39
CITY OF LAUREL - PG0345	\$ 922,519.32	\$ 653,412.82	\$ 414,513.42
CITY OF LEWISTOWN - PG0347	\$ 970,847.52	\$ 687,643.28	\$ 436,228.61
CITY OF LIBBY - PG0348	\$ 366,141.66	\$ 259,335.12	\$ 164,517.56
CITY OF LIVINGSTON - PG0349	\$ 1,021,733.23	\$ 723,685.21	\$ 459,092.97
CITY OF MILES CITY - PG0353	\$ 1,204,180.98	\$ 852,911.45	\$ 541,071.78
CITY OF MISSOULA - PG0354 - PN0354	\$ 12,464,043.65	\$ 8,828,179.25	\$ 5,600,439.16
CITY OF TROY - PG0356	\$ 177,806.17	\$ 125,938.64	\$ 79,893.22
CITY OF PLAINS - PG0358	\$ 231,249.27	\$ 163,791.95	\$ 103,906.69
CITY OF POLSON - PG0360	\$ 649,046.22	\$ 459,714.08	\$ 291,634.40
CITY OF POPLAR - PG0361	\$ 117,764.88	\$ 83,411.89	\$ 52,915.01
CITY OF WHITEFISH - PG0376	\$ 1,455,635.97	\$ 1,031,014.94	\$ 654,057.46
CITY OF WOLF POINT - PG0378	\$ 473,009.94	\$ 335,029.04	\$ 212,536.43
CITY OF THOMPSON FALLS - PG0379	\$ 190,811.75	\$ 135,150.39	\$ 85,736.99
CITY OF RED LODGE - PG0385	\$ 552,284.59	\$ 391,178.62	\$ 248,156.72
TOWN OF WEST YELLOWSTONE - PG9073	\$ 323,948.46	\$ 229,450.02	\$ 145,558.99

MONTANA MUNICIPAL POLICE OFFICERS' RETIREMENT SYSTEM
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APPENDIX C
EMPLOYER AND NON-EMPLOYER PROPORTIONATE SHARE ALLOCATIONS

MPORS - Cost Sharing Plan w/ a Special Funding Situation				Schedule of Employer's Proportionate Share of the Net Pension Liability as of June 30, 2015					
				Net Pension Liability - Employer	Net Pension Liability - State	Total	Employer's Pensionable Payroll	Employer's Proportionate Share as % Pensionable Payroll	Plan Fiduciary Net Position as a % of Total Pension Liability
Total Before Working Retiree Contributions and Adjustments				\$ 54,664,748.34	\$ 110,755,976.65	\$ 165,420,724.99	\$ 45,736,127.24		
Due to Working Retiree Contributions and Adjustments									
Total				\$ 54,664,748.34	\$ 110,755,976.65	\$ 165,420,724.99	\$ 45,736,127.24		
State as Special Funding Entity									
Employers									
ANACONDA-DEER LODGE COUNT	PG0301			\$ 1,061,636.42	\$ 2,150,976.18	\$ 3,212,612.60	\$ 888,234.88	119.522%	66.9%
CITY OF BILLINGS	PG0305	- PN0305		\$ 11,661,478.85	\$ 23,627,264.50	\$ 35,288,743.35	\$ 9,756,760.86	119.522%	66.9%
CITY OF BOZEMAN	PG0306			\$ 4,920,638.02	\$ 9,969,680.40	\$ 14,890,318.42	\$ 4,116,929.71	119.522%	66.9%
BUTTE-SILVER BOW	PG0307	- PN0307		\$ 3,352,034.06	\$ 6,791,539.69	\$ 10,143,573.75	\$ 2,804,532.39	119.522%	66.9%
CITY OF COLUMBIA FALLS	PG0314			\$ 489,193.60	\$ 991,152.70	\$ 1,480,346.30	\$ 409,291.57	119.522%	66.9%
CITY OF CUT BANK	PG0317			\$ 349,086.96	\$ 707,283.35	\$ 1,056,370.31	\$ 292,069.11	119.522%	66.9%
CITY OF DILLON	PG0321			\$ 396,923.52	\$ 804,204.86	\$ 1,201,128.38	\$ 332,092.39	119.522%	66.9%
CITY OF BAKER	PG0322			\$ 308,414.05	\$ 624,876.22	\$ 933,290.27	\$ 258,039.51	119.522%	66.9%
CITY OF BELGRADE	PG0323			\$ 851,420.06	\$ 1,725,058.04	\$ 2,576,478.10	\$ 712,354.09	119.522%	66.9%
CITY OF EAST HELENA	PG0325			\$ 257,602.07	\$ 521,926.25	\$ 779,528.32	\$ 215,526.83	119.522%	66.9%
CITY OF GLASGOW	PG0332			\$ 588,037.06	\$ 1,191,418.96	\$ 1,779,456.02	\$ 491,990.51	119.522%	66.9%
CITY OF GLENDIVE	PG0333			\$ 493,621.01	\$ 1,000,123.11	\$ 1,493,744.12	\$ 412,995.85	119.522%	66.9%
CITY OF GREAT FALLS	PG0334			\$ 6,951,883.68	\$ 14,085,177.16	\$ 21,037,060.84	\$ 5,816,403.55	119.522%	66.9%
CITY OF HAMILTON	PG0337			\$ 676,881.44	\$ 1,371,426.26	\$ 2,048,307.70	\$ 566,323.61	119.522%	66.9%
CITY OF HAVRE	PG0339			\$ 943,682.89	\$ 1,911,991.29	\$ 2,855,674.18	\$ 789,547.25	119.522%	66.9%
CITY OF HELENA	PG0340			\$ 3,878,937.18	\$ 7,859,095.39	\$ 11,738,032.57	\$ 3,245,374.17	119.522%	66.9%
CITY OF KALISPELL	PG0343			\$ 2,523,430.77	\$ 5,112,710.64	\$ 7,636,141.41	\$ 2,111,268.31	119.522%	66.9%
CITY OF LAUREL	PG0345			\$ 653,412.82	\$ 1,323,876.55	\$ 1,977,289.37	\$ 546,688.20	119.522%	66.9%
CITY OF LEWISTOWN	PG0347			\$ 687,643.28	\$ 1,393,230.60	\$ 2,080,873.88	\$ 575,327.63	119.522%	66.9%
CITY OF LIBBY	PG0348			\$ 259,335.12	\$ 525,437.54	\$ 784,772.66	\$ 216,976.79	119.522%	66.9%
CITY OF LIVINGSTON	PG0349			\$ 723,685.21	\$ 1,466,255.07	\$ 2,189,940.28	\$ 605,482.72	119.522%	66.9%
CITY OF MILES CITY	PG0353			\$ 852,911.45	\$ 1,728,079.65	\$ 2,580,991.10	\$ 713,601.87	119.522%	66.9%
CITY OF MISSOULA	PG0354	- PN0354		\$ 8,828,179.25	\$ 17,886,730.33	\$ 26,714,909.58	\$ 7,386,235.95	119.522%	66.9%
CITY OF TROY	PG0356			\$ 125,938.64	\$ 255,163.72	\$ 381,102.36	\$ 105,368.57	119.522%	66.9%
CITY OF PLAINS	PG0358			\$ 163,791.95	\$ 331,858.11	\$ 495,650.06	\$ 137,039.16	119.522%	66.9%
CITY OF POLSON	PG0360			\$ 459,714.08	\$ 931,424.47	\$ 1,391,138.55	\$ 384,627.08	119.522%	66.9%
CITY OF POPLAR	PG0361			\$ 83,411.89	\$ 169,000.34	\$ 252,412.23	\$ 69,787.84	119.522%	66.9%
CITY OF WHITEFISH	PG0376			\$ 1,031,014.94	\$ 2,088,934.36	\$ 3,119,949.30	\$ 862,615.00	119.522%	66.9%
CITY OF WOLF POINT	PG0378			\$ 335,029.04	\$ 678,800.67	\$ 1,013,829.71	\$ 280,307.34	119.522%	66.9%
CITY OF THOMPSON FALLS	PG0379			\$ 135,150.39	\$ 273,827.56	\$ 408,977.95	\$ 113,075.71	119.522%	66.9%
CITY OF RED LODGE	PG0385			\$ 391,178.62	\$ 792,565.08	\$ 1,183,743.70	\$ 327,285.79	119.522%	66.9%
TOWN OF WEST YELLOWSTONE	PG9073			\$ 229,450.02	\$ 464,887.60	\$ 694,337.62	\$ 191,973.00	119.522%	66.9%

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APPENDIX C
EMPLOYER AND NON-EMPLOYER PROPORTIONATE SHARE ALLOCATIONS

MPORS - Cost Sharing Plan w/ a Special Funding Situation				Schedule of Employer Contributions as of June 30, 2015				
				Contractually Required Contribution	Contributions in Relation to the Contractually Required Contribution	Contribution Deficiency (Excess)	Employer's Pensionable Payroll	Contributions as % Pensionable Payroll
Total Before Working Retiree Contributions and Adjustments				\$ 6,590,575.92	\$ 6,590,575.92	\$ -	\$ 45,736,127.24	
Due to Working Retiree Contributions and Adjustments				\$ 39,339.07	\$ 39,339.07	\$ -		
Total				\$ 6,629,914.99	\$ 6,629,914.99	\$ -	\$ 45,736,127.24	
State as Special Funding Entity								
Employers								
ANACONDA-DEER LODGE COUNT	PG0301			\$ 128,758.65	\$ 128,758.65	\$ -	\$ 888,234.88	14.496%
CITY OF BILLINGS	PG0305	PN0305		\$ 1,414,341.34	\$ 1,414,341.34	\$ -	\$ 9,756,760.86	14.496%
CITY OF BOZEMAN	PG0306			\$ 596,790.67	\$ 596,790.67	\$ -	\$ 4,116,929.71	14.496%
BUTTE-SILVER BOW	PG0307	PN0307		\$ 406,545.38	\$ 406,545.38	\$ -	\$ 2,804,532.39	14.496%
CITY OF COLUMBIA FALLS	PG0314			\$ 59,330.96	\$ 59,330.96	\$ -	\$ 409,291.57	14.496%
CITY OF CUT BANK	PG0317			\$ 42,338.38	\$ 42,338.38	\$ -	\$ 292,069.11	14.496%
CITY OF DILLON	PG0321			\$ 48,140.15	\$ 48,140.15	\$ -	\$ 332,092.39	14.496%
CITY OF BAKER	PG0322			\$ 37,405.44	\$ 37,405.44	\$ -	\$ 258,039.51	14.496%
CITY OF BELGRADE	PG0323			\$ 103,262.94	\$ 103,262.94	\$ -	\$ 712,354.09	14.496%
CITY OF EAST HELENA	PG0325			\$ 31,242.80	\$ 31,242.80	\$ -	\$ 215,526.83	14.496%
CITY OF GLASGOW	PG0332			\$ 71,319.01	\$ 71,319.01	\$ -	\$ 491,990.51	14.496%
CITY OF GLENDIVE	PG0333			\$ 59,867.93	\$ 59,867.93	\$ -	\$ 412,995.85	14.496%
CITY OF GREAT FALLS	PG0334			\$ 843,146.62	\$ 843,146.62	\$ -	\$ 5,816,403.55	14.496%
CITY OF HAMILTON	PG0337			\$ 82,094.34	\$ 82,094.34	\$ -	\$ 566,323.61	14.496%
CITY OF HAVRE	PG0339			\$ 114,452.87	\$ 114,452.87	\$ -	\$ 789,547.25	14.496%
CITY OF HELENA	PG0340			\$ 470,449.87	\$ 470,449.87	\$ -	\$ 3,245,374.17	14.496%
CITY OF KALISPELL	PG0343			\$ 306,049.73	\$ 306,049.73	\$ -	\$ 2,111,268.31	14.496%
CITY OF LAUREL	PG0345			\$ 79,247.99	\$ 79,247.99	\$ -	\$ 546,688.20	14.496%
CITY OF LEWISTOWN	PG0347			\$ 83,399.57	\$ 83,399.57	\$ -	\$ 575,327.63	14.496%
CITY OF LIBBY	PG0348			\$ 31,452.99	\$ 31,452.99	\$ -	\$ 216,976.79	14.496%
CITY OF LIVINGSTON	PG0349			\$ 87,770.85	\$ 87,770.85	\$ -	\$ 605,482.72	14.496%
CITY OF MILES CITY	PG0353			\$ 103,443.82	\$ 103,443.82	\$ -	\$ 713,601.87	14.496%
CITY OF MISSOULA	PG0354	PN0354		\$ 1,070,709.73	\$ 1,070,709.73	\$ -	\$ 7,386,235.95	14.496%
CITY OF TROY	PG0356			\$ 15,274.24	\$ 15,274.24	\$ -	\$ 105,368.57	14.496%
CITY OF PLAINS	PG0358			\$ 19,865.21	\$ 19,865.21	\$ -	\$ 137,039.16	14.496%
CITY OF POLSON	PG0360			\$ 55,755.59	\$ 55,755.59	\$ -	\$ 384,627.08	14.496%
CITY OF POPLAR	PG0361			\$ 10,116.46	\$ 10,116.46	\$ -	\$ 69,787.84	14.496%
CITY OF WHITEFISH	PG0376			\$ 125,044.78	\$ 125,044.78	\$ -	\$ 862,615.00	14.496%
CITY OF WOLF POINT	PG0378			\$ 40,633.39	\$ 40,633.39	\$ -	\$ 280,307.34	14.496%
CITY OF THOMPSON FALLS	PG0379			\$ 16,391.47	\$ 16,391.47	\$ -	\$ 113,075.71	14.496%
CITY OF RED LODGE	PG0385			\$ 47,443.39	\$ 47,443.39	\$ -	\$ 327,285.79	14.496%
TOWN OF WEST YELLOWSTONE	PG9073			\$ 27,828.43	\$ 27,828.43	\$ -	\$ 191,973.00	14.496%