

Montana Highway Patrol 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 the Government Accounting Standards Board Statements 67 and 68 for the Montana Highway Patrol Officers' Retirement System and the State of Montana. 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, and
- Calculation of Expected Return on Assets.

Highlights

The reporting date for the State of Montana Highway Patrol Officers' Retirement System (HPORS) 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. Senate Bill 238 (SB 238) was enacted during the 2015 legislative session, which established a Deferred Retirement Option Program (DROP) for eligible members and added approximately \$1.9 million to the Total Pension Liability. There were no other significant events between the valuation date and the measurement date. Therefore, the update procedures included the addition of Service Cost and interest cost offset by actual benefit payments and the additional liability associated with the benefit change.

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

BOARD SUMMARY

	Measurement Date	
	6/30/2015	6/30/2014
Total Pension Liability	\$ 192,965,823	\$ 183,133,145
Plan Fiduciary Net Position	<u>129,067,319</u>	<u>126,010,392</u>
Net Pension Liability	\$ 63,898,504	\$ 57,122,753
Deferred Outflows	(200,502)	0
Deferred Inflows	<u>3,019,794</u>	<u>8,213,555</u>
Net Impact on Statement of Net Position	\$ 66,717,796	\$ 65,336,308
Pension Expense (\$ Amount)	\$ 7,220,824	\$ 5,168,692
Pension Expense (% of Pensionable Payroll)	49.63%	36.53%
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 employer would report a total Net Pension Liability of \$63,898,504, Deferred Outflows of \$200,502 and Deferred Inflows of \$3,019,794. Consequently, the net impact on the employer's Statement of Net Position would be \$66,717,796 at the end of the reporting year. In addition, any contributions between the measurement date and the reporting date by the employer would be reported as deferred outflows to match the cash outflow reported.

For the measurement year ending June 30, 2015, the Pension Expense is \$7,220,824 or 49.63% of pensionable payroll. This amount is not expected to be the same as the employer's contribution to the Plan (\$5,839,336), but instead represents the change in the net impact on the employer's Statement of Net Position plus employer contributions [\$66,717,796 - \$65,336,308 + \$5,839,336]. A breakdown of the 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 Highway Patrol Officers' Retirement System (HPORS). This report is for the use of HPORS, the State of Montana, 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 HPORS.

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 HPORS. The Deferred Retirement Option Program (DROP) established with Senate Bill 238 during the 2015 legislative session is also included and described in the June 30, 2015 Actuarial Valuation Report. 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 assumptions; changes in assumptions; and, changes in plan provisions or applicable law.

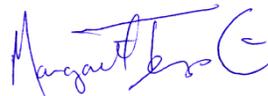
To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices that are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards 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 HPORS 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. During the projection period, Senate Bill 238 (SB 238) was passed which established a Deferred Retirement Option Program (DROP) for eligible members and added approximately \$1.9 million to the Total Pension Liability. There were no other 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	\$ 66,769,130	\$ 55,634,125	\$ 46,817,534
Deferred Vested	1,566,197	1,287,978	1,072,109
Retirees	140,339,442	126,478,378	114,930,119
Total	\$ 208,674,769	\$ 183,400,481	\$ 162,819,762
Service Cost, Beginning of Year			
Service Cost Rate	31.30%	24.46%	19.37%
Expected Payroll During Year	\$ 14,711,627	\$ 14,711,627	\$ 14,711,627
Service Cost	\$ 4,604,739	\$ 3,598,464	\$ 2,849,642
Benefit Payments	\$ (10,000,856)	\$ (10,000,856)	\$ (10,000,856)
Interest	\$ 14,064,349	\$ 14,112,116	\$ 14,067,709
Change in Benefits	\$ 1,698,819	\$ 1,855,618	\$ 1,959,736
Change in Assumptions	\$ 0	\$ 0	\$ 0
Other Significant Events	\$ 0	\$ 0	\$ 0
Total Pension Liability, 6/30/2015	\$ 219,041,820	\$ 192,965,823	\$ 171,695,993

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 (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 6/30/2014	\$ 183,133,145	\$ 126,010,392	\$ 57,122,753
Changes for the year:			
Service Cost	3,598,464		3,598,464
Interest	14,112,116		14,112,116
Changes of Benefits	1,855,618		1,855,618
Differences between Expected and Actual Experience	267,336		267,336
Changes of Assumptions	0		0
Contributions - Employer		5,839,336	(5,839,336)
Contributions - Non-Employer		0	0
Contributions - Member		1,624,327	(1,624,327)
Net Investment Income		5,738,373	(5,738,373)
Benefit Payments	(10,000,856)	(10,000,856)	0
Administrative Expense		(144,253)	144,253
Net Changes	9,832,678	3,056,927	6,775,751
Balances at 6/30/2015	\$ 192,965,823	\$ 129,067,319	\$ 63,898,504

There was an actuarial experience loss during the year of approximately \$0.3 million. In addition, there was a benefit change adding a Deferred Retirement Option Program (SB 238), which increased the Total Pension Liability by approximately \$1.9 million. There were no changes in assumptions during the year.

Service Cost, interest cost, and administrative expenses combined with unfavorable plan experience and the addition of a Deferred Retirement Option Program exceeded the total contributions and investment income, resulting in an increase in the Net Pension Liability (NPL) of \$6,775,751. The NPL remaining as of June 30, 2015, is \$63,898,504.

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 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	\$ 219,041,820	\$ 192,965,823	\$ 171,695,993
Plan Fiduciary Net Position	129,067,319	129,067,319	129,067,319
Net Pension Liability	<u>\$ 89,974,501</u>	<u>\$ 63,898,504</u>	<u>\$ 42,628,674</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	58.9%	66.9%	75.2%

A one percent decrease in the discount rate increases the TPL by approximately 13.5% and increases the NPL by approximately 40.8%. A one percent increase in the discount rate decreases the TPL by approximately 11.0% and decreases the NPL by approximately 33.3%.

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 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	\$ 3,598,464	\$ 3,464,399
Interest (includes interest on service cost)	14,112,116	13,517,924
Changes of Benefit Terms	1,855,618	0
Differences between Expected and Actual Experience	267,336	0
Changes of Assumptions	0	0
Benefit Payments, including Refunds of Member Contributions	<u>(10,000,856)</u>	<u>(9,443,007)</u>
Net Change in Total Pension Liability	\$ 9,832,678	\$ 7,539,316
Total Pension Liability - beginning	<u>183,133,145</u>	<u>175,593,829</u>
Total Pension Liability - ending	<u>\$ 192,965,823</u>	<u>\$ 183,133,145</u>
<u>Plan Fiduciary Net Position</u>		
Contributions - Employer	\$ 5,839,336	\$ 5,735,507
Contributions - Non-Employer	0	0
Contributions - Member	1,624,327	1,458,042
Net Investment Income	5,738,373	18,678,284
Benefit Payments, including Refunds of Member Contributions	<u>(10,000,856)</u>	<u>(9,443,007)</u>
Administrative Expense	<u>(144,253)</u>	<u>(109,140)</u>
Net Change in Plan Fiduciary Net Position	\$ 3,056,927	\$ 16,319,686
Plan Fiduciary Net Position - beginning	<u>126,010,392</u>	<u>109,690,706</u>
Plan Fiduciary Net Position - ending	<u>\$ 129,067,319</u>	<u>\$ 126,010,392</u>
Net Pension Liability - ending	<u>\$ 63,898,504</u>	<u>\$ 57,122,753</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	66.89%	68.81%
Pensionable Payroll	\$ 14,549,378	\$ 14,149,269
Net Pension Liability as a Percentage of Pensionable Payroll	439.18%	403.72%

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	\$ 5,706	\$ 6,121	
Contributions in Relation to the Actuarially Determined Contribution			
Employer Contributions	\$ 5,839	\$ 5,736	
Non-Employer Contributions	<u>0</u>	<u>0</u>	
Total Contributions	<u>\$ 5,839</u>	<u>\$ 5,736</u>	
Contribution Deficiency/(Excess)	<u>\$ (133)</u>	<u>\$ 385</u>	
Pensionable Payroll	\$ 14,549	\$ 14,149	
Contributions as a Percentage of Pensionable Payroll	40.13%	40.54%	

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 REPORTING AMOUNTS

The employer is required to implement GASB 68 for its reporting date of June 30, 2015. The amounts reported as of June 30, 2015 can be based on either a June 30, 2014 or June 30, 2015 measurement date. We understand the employer has 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 employer for its 2016 reporting.

The impact of experience gains or losses and assumption changes on the TPL are recognized in the 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 3.56 years¹ which was rounded to 4.00 years for recognition purposes. During the measurement year, there were no assumption changes. There was an experience loss of approximately \$0.3 million with approximately \$0.1 million of that recognized in the current year and in each of the next three years.

Benefit changes are recognized in the Pension Expense immediately, with no amounts deferred. The benefit change adding a Deferred Retirement Option Program increased the Total Pension Liability by \$1.9 million, all of which is recognized in the Pension Expense during the current year.

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 \$3.9 million. Approximately, \$0.8 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 \$8.2 million of which \$2.1 million was recognized as a reduction in Pension Expense in the current year.

Experience losses this year created a Deferred Outflow of Resources of approximately \$0.2 million. The combination of unrecognized investment losses this year along with unrecognized net investment gains from prior periods results in a Deferred Inflow of Resources as of June 30, 2015 of approximately \$3.0 million. The table on the following page summarizes the current balances of Deferred Outflows and Deferred Inflows of Resources along with the net recognition over future years.

¹ The average expected future working lifetime for 229 active members was 8.94 years.

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	\$ 200,502	\$ 0												
Changes in Assumptions	0	0												
Net Difference between Projected and Actual Earnings on Pension Plan Investments	0	3,019,794												
Total	<u>\$ 200,502</u>	<u>\$ 3,019,794</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="padding-right: 20px;">2016</td> <td style="text-align: right;">\$ (1,201,462)</td> </tr> <tr> <td>2017</td> <td style="text-align: right;">(1,201,462)</td> </tr> <tr> <td>2018</td> <td style="text-align: right;">(1,201,461)</td> </tr> <tr> <td>2019</td> <td style="text-align: right;">785,093</td> </tr> <tr> <td>2020</td> <td style="text-align: right;">0</td> </tr> <tr> <td>Future Year Deferrals</td> <td style="text-align: right;">0</td> </tr> </table>			2016	\$ (1,201,462)	2017	(1,201,462)	2018	(1,201,461)	2019	785,093	2020	0	Future Year Deferrals	0
2016	\$ (1,201,462)													
2017	(1,201,462)													
2018	(1,201,461)													
2019	785,093													
2020	0													
Future Year Deferrals	0													

EMPLOYER REPORTING AMOUNTS

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

Table 8		
Calculation of Pension Expense		
	Measurement Year Ending	
	2015	2014
Change in Net Pension Liability	\$ 6,775,751	\$ (8,780,370)
Change in Deferred Outflows	(200,502)	0
Change in Deferred Inflows	(5,193,761)	8,213,555
Non-Employer Contributions	0	0
Employer Contributions	<u>5,839,336</u>	<u>5,735,507</u>
Pension Expense	\$ 7,220,824	\$ 5,168,692
Pension Expense as % of Pensionable Payroll	49.63%	36.53%
Operating Expenses		
Service Cost	\$ 3,598,464	\$ 3,464,399
Employee Contributions	(1,624,327)	(1,458,042)
Administrative Expenses	<u>144,253</u>	<u>109,140</u>
Total	\$ 2,118,390	\$ 2,115,497
Financing Expenses		
Interest Cost	\$ 14,112,116	\$ 13,517,924
Expected Return on Assets	<u>(9,663,838)</u>	<u>(8,411,340)</u>
Total	\$ 4,448,278	\$ 5,106,584
Changes		
Benefit Changes	\$ 1,855,618	\$ 0
Recognition of Assumption Changes	0	0
Recognition of Liability (Gains)/Losses	66,834	0
Recognition of Investment (Gains)/Losses	<u>(1,268,296)</u>	<u>(2,053,389)</u>
Total	\$ 654,156	\$ (2,053,389)
Pension Expense	\$ 7,220,824	\$ 5,168,692

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 just 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	\$	126,010,392
Expected Return on Market Value	\$	9,765,805
Employee Contributions	\$	1,624,327
Non-Employer Contributions		0
Employer Contributions		5,839,336
Benefit Payments		(10,000,856)
Administrative Expenses		(144,253)
Net Cash Flow - during year	\$	(2,681,446)
Expected Return on Cash Flow Items	\$	(101,967)
Expected Return on Assets	\$	9,663,838

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.

**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. Covered-Employee Payroll

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

4. 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.

5. 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.

6. 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.

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. 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.

8. 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.

9. Pension Expense

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

10. Plan Fiduciary Net Position

The fair or market value of assets.

11. Reporting Date

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

12. 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.

13. 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 HIGHWAY PATROL 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 Rate (e)	Rate Available for Amortization (f)	Member Contributions for Current Employees (g) = (a) x (d)	Employer 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	14,712	0	14,712				\$ 1,624	\$ 5,839	\$ 0	\$ 7,464
2	14,437	863	15,300	12.1%	38.3%	26.9%	1,740	5,534	232	7,505
3	14,121	1,791	15,912	13.1%	38.3%	27.9%	1,843	5,413	500	7,755
4	13,824	2,725	16,549	13.1%	38.3%	27.9%	1,804	5,299	760	7,863
5	13,437	3,773	17,211	13.1%	38.3%	27.9%	1,754	5,150	1,053	7,957
6	13,073	4,826	17,899	13.1%	38.3%	27.9%	1,706	5,011	1,346	8,063
7	12,597	6,018	18,615	13.1%	38.3%	27.9%	1,644	4,828	1,679	8,151
8	12,260	7,099	19,359	13.1%	38.3%	27.9%	1,600	4,699	1,980	8,280
9	11,786	8,348	20,134	13.1%	38.3%	27.9%	1,538	4,518	2,329	8,384
10	11,019	9,921	20,939	13.1%	38.3%	27.9%	1,438	4,223	2,767	8,429
11	10,388	11,389	21,777	13.1%	38.3%	27.9%	1,356	3,982	3,177	8,514
12	9,754	12,894	22,648	13.1%	38.3%	27.9%	1,273	3,739	3,597	8,608
13	9,308	14,245	23,554	13.1%	38.3%	27.9%	1,215	3,568	3,974	8,756
14	8,817	15,678	24,496	13.1%	38.3%	27.9%	1,151	3,380	4,373	8,904
15	7,979	17,497	25,476	13.1%	38.3%	27.9%	1,041	3,058	4,881	8,980
16	7,287	19,208	26,495	13.1%	38.3%	27.9%	951	2,793	5,358	9,102
17	6,612	20,942	27,555	13.1%	38.3%	27.9%	863	2,535	5,842	9,239
18	6,093	22,564	28,657	13.1%	38.3%	27.9%	795	2,335	6,294	9,424
19	5,591	24,212	29,803	13.1%	38.3%	27.9%	730	2,143	6,754	9,626
20	5,063	25,932	30,995	13.1%	38.3%	27.9%	661	1,941	7,234	9,835
21	4,371	27,864	32,235	13.1%	38.3%	27.9%	570	1,675	7,773	10,018
22	3,680	29,844	33,524	13.1%	38.3%	27.9%	480	1,411	8,325	10,216
23	3,087	31,779	34,865	13.1%	38.3%	27.9%	403	1,183	8,864	10,450
24	2,575	33,685	36,260	13.1%	38.3%	27.9%	336	987	9,396	10,719
25	2,099	35,611	37,710	13.1%	38.3%	27.9%	274	805	9,933	11,012
26	1,740	37,479	39,219	13.1%	38.3%	27.9%	227	667	10,454	11,348
27	1,400	39,387	40,788	13.1%	38.3%	27.9%	183	537	10,987	11,706
28	1,107	41,312	42,419	13.1%	38.3%	27.9%	144	424	11,524	12,092
29	858	43,258	44,116	13.1%	38.3%	27.9%	112	329	12,066	12,507
30	647	45,233	45,880	13.1%	38.3%	27.9%	84	248	12,617	12,950
31	474	47,242	47,716	13.1%	38.3%	27.9%	62	182	13,178	13,421
32	353	49,271	49,624	13.1%	38.3%	27.9%	46	135	13,744	13,925
33	244	51,365	51,609	13.1%	38.3%	27.9%	32	94	14,328	14,453
34	163	53,510	53,674	13.1%	38.3%	27.9%	21	63	14,926	15,010
35	93	55,728	55,821	13.1%	38.3%	27.9%	12	36	15,545	15,592
36	57	57,997	58,053	13.1%	38.3%	27.9%	7	22	16,178	16,207
37	30	60,346	60,376	13.1%	38.3%	27.9%	4	11	16,833	16,848
38	14	62,777	62,791	13.1%	38.3%	27.9%	2	5	17,511	17,518
39	11	65,291	65,302	13.1%	38.3%	27.9%	1	4	18,212	18,218
40	0	67,914	67,914			27.9%	0	0	18,944	18,944
41	0	70,631	70,631			27.9%	0	0	19,702	19,702
42	0	73,456	73,456			27.9%	0	0	20,490	20,490
43	0	76,394	76,394			27.9%	0	0	21,310	21,310
44	0	79,450	79,450			27.9%	0	0	22,162	22,162
45	0	82,628	82,628			27.9%	0	0	23,048	23,048
46	0	85,933	85,933			27.9%	0	0	23,970	23,970
47	0	89,371	89,371			27.9%	0	0	24,929	24,929
48	0	92,945	92,945			27.9%	0	0	25,926	25,926
49	0	96,663	96,663			27.9%	0	0	26,963	26,963
50	0	100,530	100,530			27.9%	0	0	28,042	28,042
51	0	104,551	104,551			27.9%	0	0	29,164	29,164
52	0	108,733	108,733			27.9%	0	0	30,330	30,330
53	0	113,082	113,082			27.9%	0	0	31,543	31,543
54	0	117,606	117,606			27.9%	0	0	32,805	32,805
55	0	122,310	122,310			27.9%	0	0	34,117	34,117
56	0	127,202	127,202			27.9%	0	0	35,482	35,482
57	0	132,290	132,290			27.9%	0	0	36,901	36,901
58	0	137,582	137,582			27.9%	0	0	38,377	38,377
59	0	143,085	143,085			27.9%	0	0	39,912	39,912

MONTANA HIGHWAY PATROL 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 Rate (e)	Rate Available for Amortization (f)	Member Contributions for Current Employees (g) = (a) x (d)	Employer 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	148,808	148,808			27.9%	\$ 0	\$ 0	\$ 41,509	\$ 41,509
61	0	154,761	154,761			27.9%	0	0	43,169	43,169
62	0	160,951	160,951			27.9%	0	0	44,896	44,896
63	0	167,389	167,389			27.9%	0	0	46,692	46,692
64	0	174,085	174,085			27.9%	0	0	48,560	48,560
65	0	181,048	181,048			27.9%	0	0	50,502	50,502
66	0	188,290	188,290			27.9%	0	0	52,522	52,522
67	0	195,822	195,822			27.9%	0	0	54,623	54,623
68	0	203,655	203,655			27.9%	0	0	56,808	56,808
69	0	211,801	211,801			27.9%	0	0	59,080	59,080
70	0	220,273	220,273			27.9%	0	0	61,443	61,443
71	0	229,084	229,084			27.9%	0	0	63,901	63,901
72	0	238,247	238,247			27.9%	0	0	66,457	66,457
73	0	247,777	247,777			27.9%	0	0	69,115	69,115
74	0	257,688	257,688			27.9%	0	0	71,880	71,880
75	0	267,996	267,996			27.9%	0	0	74,755	74,755
76	0	278,716	278,716			27.9%	0	0	77,745	77,745
77	0	289,864	289,864			27.9%	0	0	80,855	80,855
78	0	301,459	301,459			27.9%	0	0	84,089	84,089
79	0	313,517	313,517			27.9%	0	0	87,453	87,453
80	0	326,058	326,058			27.9%	0	0	90,951	90,951
81	0	339,100	339,100			27.9%	0	0	94,589	94,589
82	0	352,664	352,664			27.9%	0	0	98,373	98,373
83	0	366,771	366,771			27.9%	0	0	102,308	102,308
84	0	381,441	381,441			27.9%	0	0	106,400	106,400
85	0	396,699	396,699			27.9%	0	0	110,656	110,656
86	0	412,567	412,567			27.9%	0	0	115,082	115,082
87	0	429,070	429,070			27.9%	0	0	119,685	119,685
88	0	446,233	446,233			27.9%	0	0	124,473	124,473
89	0	464,082	464,082			27.9%	0	0	129,452	129,452
90	0	482,645	482,645			27.9%	0	0	134,630	134,630
91	0	501,951	501,951			27.9%	0	0	140,015	140,015
92	0	522,029	522,029			27.9%	0	0	145,616	145,616
93	0	542,910	542,910			27.9%	0	0	151,440	151,440
94	0	564,626	564,626			27.9%	0	0	157,498	157,498
95	0	587,212	587,212			27.9%	0	0	163,798	163,798
96	0	610,700	610,700			27.9%	0	0	170,350	170,350
97	0	635,128	635,128			27.9%	0	0	177,164	177,164
98	0	660,533	660,533			27.9%	0	0	184,250	184,250
99	0	686,954	686,954			27.9%	0	0	191,620	191,620
100	0	714,433	714,433			27.9%	0	0	199,285	199,285
101	0	743,010	743,010			27.9%	0	0	207,256	207,256
102	0	772,730	772,730			27.9%	0	0	215,547	215,547
103	0	803,640	803,640			27.9%	0	0	224,168	224,168
104	0	835,785	835,785			27.9%	0	0	233,135	233,135
105	0	869,217	869,217			27.9%	0	0	242,461	242,461
106	0	903,985	903,985			27.9%	0	0	252,159	252,159
107	0	940,145	940,145			27.9%	0	0	262,245	262,245
108	0	977,750	977,750			27.9%	0	0	272,735	272,735
109	0	1,016,860	1,016,860			27.9%	0	0	283,645	283,645

MONTANA HIGHWAY PATROL 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	\$ 126,010	\$ 7,464	\$ 10,001	\$ 144	\$ 5,738	\$ 129,067
2	129,067	7,505	10,217	35	9,898	136,219
3	136,219	7,755	10,692	37	10,444	143,689
4	143,689	7,863	11,150	38	11,009	151,372
5	151,372	7,957	11,626	40	11,590	159,254
6	159,254	8,063	12,134	41	12,186	167,327
7	167,327	8,151	13,526	43	12,762	174,671
8	174,671	8,280	14,207	45	13,310	182,009
9	182,009	8,384	14,881	46	13,857	189,324
10	189,324	8,429	15,495	48	14,402	196,611
11	196,611	8,514	16,406	50	14,935	203,605
12	203,605	8,608	16,925	52	15,461	210,697
13	210,697	8,756	17,618	54	15,990	217,772
14	217,772	8,904	18,314	56	16,517	224,823
15	224,823	8,980	18,881	58	17,045	231,910
16	231,910	9,102	19,583	60	17,572	238,941
17	238,941	9,239	20,081	61	18,103	246,142
18	246,142	9,424	20,413	62	18,656	253,747
19	253,747	9,626	20,799	63	19,238	261,749
20	261,749	9,835	21,635	66	19,834	269,716
21	269,716	10,018	22,495	69	20,426	277,597
22	277,597	10,216	22,613	69	21,040	286,170
23	286,170	10,450	22,645	69	21,712	295,619
24	295,619	10,719	22,807	70	22,448	305,910
25	305,910	11,012	23,507	72	23,230	316,574
26	316,574	11,348	24,025	73	24,050	327,874
27	327,874	11,706	24,338	74	24,927	340,095
28	340,095	12,092	24,158	74	25,896	353,851
29	353,851	12,507	24,032	73	26,982	369,235
30	369,235	12,950	23,920	73	28,196	386,389
31	386,389	13,421	23,707	72	29,551	405,582
32	405,582	13,925	23,516	72	31,065	426,984
33	426,984	14,453	23,396	71	32,749	450,719
34	450,719	15,010	23,338	71	34,611	476,931
35	476,931	15,592	23,212	71	36,670	505,910
36	505,910	16,207	23,071	70	38,944	537,920
37	537,920	16,848	22,888	70	41,456	573,267
38	573,267	17,518	22,653	69	44,230	612,293
39	612,293	18,218	22,400	68	47,291	655,334
40	655,334	18,944	22,080	67	50,667	702,798
41	702,798	19,702	21,720	66	54,388	755,101
42	755,101	20,490	21,312	65	58,487	812,700
43	812,700	21,310	20,856	64	62,999	876,090
44	876,090	22,162	20,350	62	67,963	945,803
45	945,803	23,048	19,796	60	73,421	1,022,416
46	1,022,416	23,970	19,195	59	79,417	1,106,549
47	1,106,549	24,929	18,550	57	85,998	1,198,870
48	1,198,870	25,926	17,863	54	93,217	1,300,096
49	1,300,096	26,963	17,138	52	101,129	1,410,998
50	1,410,998	28,042	16,380	50	109,794	1,532,404
51	1,532,404	29,164	15,595	48	119,275	1,665,201
52	1,665,201	30,330	14,787	45	129,642	1,810,341
53	1,810,341	31,543	13,962	43	140,968	1,968,848
54	1,968,848	32,805	13,126	40	153,333	2,141,820
55	2,141,820	34,117	12,283	37	166,820	2,330,437
56	2,330,437	35,482	11,438	35	181,522	2,535,968
57	2,535,968	36,901	10,597	32	197,537	2,759,777
58	2,759,777	38,377	9,767	30	214,970	3,003,327
59	3,003,327	39,912	8,952	27	233,934	3,268,193



MONTANA HIGHWAY PATROL 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	\$ 3,268,193	\$ 41,509	\$ 8,159	\$ 25	\$ 254,552	\$ 3,556,070
61	3,556,070	43,169	7,393	23	276,955	3,868,779
62	3,868,779	44,896	6,661	20	301,284	4,208,277
63	4,208,277	46,692	5,966	18	327,689	4,576,674
64	4,576,674	48,560	5,314	16	356,336	4,976,239
65	4,976,239	50,502	4,709	14	387,399	5,409,417
66	5,409,417	52,522	4,153	13	421,069	5,878,843
67	5,878,843	54,623	3,647	11	457,548	6,387,356
68	6,387,356	56,808	3,191	10	497,059	6,938,021
69	6,938,021	59,080	2,785	8	539,837	7,534,145
70	7,534,145	61,443	2,423	7	586,140	8,179,299
71	8,179,299	63,901	2,105	6	636,245	8,877,334
72	8,877,334	66,457	1,829	6	690,451	9,632,407
73	9,632,407	69,115	1,589	5	749,079	10,449,007
74	10,449,007	71,880	1,383	4	812,479	11,331,979
75	11,331,979	74,755	1,196	4	881,025	12,286,559
76	12,286,559	77,745	1,034	3	955,125	13,318,393
77	13,318,393	80,855	894	3	1,035,216	14,433,567
78	14,433,567	84,089	770	2	1,121,770	15,638,654
79	15,638,654	87,453	661	2	1,215,296	16,940,739
80	16,940,739	90,951	568	2	1,316,344	18,347,465
81	18,347,465	94,589	486	1	1,425,507	19,867,074
82	19,867,074	98,373	414	1	1,543,423	21,508,454
83	21,508,454	102,308	352	1	1,670,782	23,281,191
84	23,281,191	106,400	297	1	1,808,327	25,195,620
85	25,195,620	110,656	249	1	1,956,859	27,262,885
86	27,262,885	115,082	208	1	2,117,242	29,495,001
87	29,495,001	119,685	172	1	2,290,407	31,904,921
88	31,904,921	124,473	141	0	2,477,359	34,506,612
89	34,506,612	129,452	114	0	2,679,181	37,315,130
90	37,315,130	134,630	91	0	2,897,039	40,346,707
91	40,346,707	140,015	72	0	3,132,191	43,618,841
92	43,618,841	145,616	57	0	3,385,995	47,150,395
93	47,150,395	151,440	44	0	3,659,913	50,961,703
94	50,961,703	157,498	34	0	3,955,520	55,074,687
95	55,074,687	163,798	26	0	4,274,516	59,512,975
96	59,512,975	170,350	20	0	4,618,733	64,302,037
97	64,302,037	177,164	15	0	4,990,144	69,469,330
98	69,469,330	184,250	11	0	5,390,879	75,044,449
99	75,044,449	191,620	8	0	5,823,231	81,059,292
100	81,059,292	199,285	6	0	6,289,673	87,548,244
101	87,548,244	207,256	4	0	6,792,870	94,548,367
102	94,548,367	215,547	3	0	7,335,695	102,099,605
103	102,099,605	224,168	2	0	7,921,244	110,245,015
104	110,245,015	233,135	1	0	8,552,854	119,031,003
105	119,031,003	242,461	1	0	9,234,123	128,507,586
106	128,507,586	252,159	1	0	9,968,927	138,728,671
107	138,728,671	262,245	0	0	10,761,444	149,752,361
108	149,752,361	272,735	0	0	11,616,179	161,641,275
109	161,641,275	283,645	0	0	12,537,985	174,462,904

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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 (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)
1	\$ 126,010	\$ 10,001	\$ 10,001	\$ 0	\$ 9,282	\$ 0	\$ 9,282
2	129,067	10,217	10,217	0	8,800	0	8,800
3	136,219	10,692	10,692	0	8,547	0	8,547
4	143,689	11,150	11,150	0	8,272	0	8,272
5	151,372	11,626	11,626	0	8,004	0	8,004
6	159,254	12,134	12,134	0	7,754	0	7,754
7	167,327	13,526	13,526	0	8,021	0	8,021
8	174,671	14,207	14,207	0	7,819	0	7,819
9	182,009	14,881	14,881	0	7,601	0	7,601
10	189,324	15,495	15,495	0	7,345	0	7,345
11	196,611	16,406	16,406	0	7,218	0	7,218
12	203,605	16,925	16,925	0	6,911	0	6,911
13	210,697	17,618	17,618	0	6,676	0	6,676
14	217,772	18,314	18,314	0	6,441	0	6,441
15	224,823	18,881	18,881	0	6,163	0	6,163
16	231,910	19,583	19,583	0	5,932	0	5,932
17	238,941	20,081	20,081	0	5,645	0	5,645
18	246,142	20,413	20,413	0	5,326	0	5,326
19	253,747	20,799	20,799	0	5,036	0	5,036
20	261,749	21,635	21,635	0	4,862	0	4,862
21	269,716	22,495	22,495	0	4,692	0	4,692
22	277,597	22,613	22,613	0	4,377	0	4,377
23	286,170	22,645	22,645	0	4,068	0	4,068
24	295,619	22,807	22,807	0	3,802	0	3,802
25	305,910	23,507	23,507	0	3,637	0	3,637
26	316,574	24,025	24,025	0	3,450	0	3,450
27	327,874	24,338	24,338	0	3,244	0	3,244
28	340,095	24,158	24,158	0	2,988	0	2,988
29	353,851	24,032	24,032	0	2,759	0	2,759
30	369,235	23,920	23,920	0	2,548	0	2,548
31	386,389	23,707	23,707	0	2,344	0	2,344
32	405,582	23,516	23,516	0	2,158	0	2,158
33	426,984	23,396	23,396	0	1,992	0	1,992
34	450,719	23,338	23,338	0	1,844	0	1,844
35	476,931	23,212	23,212	0	1,703	0	1,703
36	505,910	23,071	23,071	0	1,571	0	1,571
37	537,920	22,888	22,888	0	1,446	0	1,446
38	573,267	22,653	22,653	0	1,328	0	1,328
39	612,293	22,400	22,400	0	1,219	0	1,219
40	655,334	22,080	22,080	0	1,115	0	1,115
41	702,798	21,720	21,720	0	1,018	0	1,018
42	755,101	21,312	21,312	0	927	0	927
43	812,700	20,856	20,856	0	842	0	842
44	876,090	20,350	20,350	0	762	0	762
45	945,803	19,796	19,796	0	688	0	688
46	1,022,416	19,195	19,195	0	619	0	619
47	1,106,549	18,550	18,550	0	556	0	556
48	1,198,870	17,863	17,863	0	496	0	496
49	1,300,096	17,138	17,138	0	442	0	442
50	1,410,998	16,380	16,380	0	392	0	392
51	1,532,404	15,595	15,595	0	346	0	346
52	1,665,201	14,787	14,787	0	305	0	305
53	1,810,341	13,962	13,962	0	267	0	267
54	1,968,848	13,126	13,126	0	233	0	233
55	2,141,820	12,283	12,283	0	202	0	202
56	2,330,437	11,438	11,438	0	175	0	175
57	2,535,968	10,597	10,597	0	150	0	150
58	2,759,777	9,767	9,767	0	129	0	129
59	3,003,327	8,952	8,952	0	109	0	109

MONTANA HIGHWAY PATROL OFFCERS' 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 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	\$ 3,268,193	\$ 8,159	\$ 8,159	\$ 0	\$ 93	\$ 0	\$ 93
61	3,556,070	7,393	7,393	0	78	0	78
62	3,868,779	6,661	6,661	0	65	0	65
63	4,208,277	5,966	5,966	0	54	0	54
64	4,576,674	5,314	5,314	0	45	0	45
65	4,976,239	4,709	4,709	0	37	0	37
66	5,409,417	4,153	4,153	0	30	0	30
67	5,878,843	3,647	3,647	0	25	0	25
68	6,387,356	3,191	3,191	0	20	0	20
69	6,938,021	2,785	2,785	0	16	0	16
70	7,534,145	2,423	2,423	0	13	0	13
71	8,179,299	2,105	2,105	0	11	0	11
72	8,877,334	1,829	1,829	0	8	0	8
73	9,632,407	1,589	1,589	0	7	0	7
74	10,449,007	1,383	1,383	0	6	0	6
75	11,331,979	1,196	1,196	0	4	0	4
76	12,286,559	1,034	1,034	0	4	0	4
77	13,318,393	894	894	0	3	0	3
78	14,433,567	770	770	0	2	0	2
79	15,638,654	661	661	0	2	0	2
80	16,940,739	568	568	0	1	0	1
81	18,347,465	486	486	0	1	0	1
82	19,867,074	414	414	0	1	0	1
83	21,508,454	352	352	0	1	0	1
84	23,281,191	297	297	0	1	0	1
85	25,195,620	249	249	0	0	0	0
86	27,262,885	208	208	0	0	0	0
87	29,495,001	172	172	0	0	0	0
88	31,904,921	141	141	0	0	0	0
89	34,506,612	114	114	0	0	0	0
90	37,315,130	91	91	0	0	0	0
91	40,346,707	72	72	0	0	0	0
92	43,618,841	57	57	0	0	0	0
93	47,150,395	44	44	0	0	0	0
94	50,961,703	34	34	0	0	0	0
95	55,074,687	26	26	0	0	0	0
96	59,512,975	20	20	0	0	0	0
97	64,302,037	15	15	0	0	0	0
98	69,469,330	11	11	0	0	0	0
99	75,044,449	8	8	0	0	0	0
100	81,059,292	6	6	0	0	0	0
101	87,548,244	4	4	0	0	0	0
102	94,548,367	3	3	0	0	0	0
103	102,099,605	2	2	0	0	0	0
104	110,245,015	1	1	0	0	0	0
105	119,031,003	1	1	0	0	0	0
106	128,507,586	1	1	0	0	0	0
107	138,728,671	0	0	0	0	0	0
108	149,752,361	0	0	0	0	0	0
109	161,641,275	0	0	0	0	0	0
					\$ 203,129	\$ 0	\$ 203,129