

## **Judges' 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 Judges' 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/(Asset) from the beginning to the end of the measurement period,
- Calculation of the Net Pension Liability/(Asset) at the discount rate as well as discount rates 1% higher and lower than the discount rate,
- Schedule of Changes in Net Pension Liability/(Asset) and Related Ratios,
- Schedule of Employer Contributions,
- Schedule of Deferred Inflows and Outflows of Resources,
- Calculation of Pension Expense/(Income), and
- Calculation of Expected Return on Assets.

### Highlights

The reporting date for the State of Montana Judges' Retirement System (JRS) 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 results during this reporting period.

**BOARD SUMMARY**

	Measurement Date	
	6/30/2015	6/30/2014
Total Pension Liability	\$ 53,145,689	\$ 51,631,895
Plan Fiduciary Net Position	<u>87,106,507</u>	<u>84,222,842</u>
Net Pension Liability/(Asset)	\$ (33,960,818)	\$ (32,590,947)
Deferred Outflows	0	0
Deferred Inflows	<u>2,745,431</u>	<u>5,453,472</u>
Net Impact on Statement of Net Position	\$ (31,215,387)	\$ (27,137,475)
Pension Expense/(Income) (\$ Amount)	\$ (2,393,922)	\$ (1,929,776)
Pension Expense/(Income) (% of Pensionable Payroll)	(36.69%)	(30.37%)
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/(Asset) of (\$33,960,818) and Deferred Inflows of \$2,745,431. Consequently, the net impact on the employer's Statement of Net Position would be (\$31,215,387) 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/(Income) is (\$2,393,922) or (36.69%) of pensionable payroll. This amount is not expected to be the same as the employer's contribution to the Plan (\$1,683,990), but instead represents the change in the net impact on the employer's Statement of Net Position plus employer contributions [(\$31,215,387) - (\$27,137,475) + \$1,683,990]. A breakdown of the Pension Expense/(Income) 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 Judges' Retirement System (JRS). This report is for the use of JRS, 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 JRS.

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 JRS. 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.

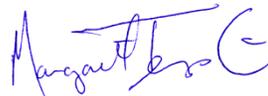
To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices that are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards 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 JRS 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.

<b>Table 2</b>			
<b>Projection of Total Pension Liability from Valuation to Measurement Date</b>			
<b>Discount Rate</b>	<b>6.75%</b>	<b>7.75%</b>	<b>8.75%</b>
<b>Valuation Total Pension Liability, 6/30/2014</b>			
Actives	\$ 19,594,415	\$ 17,558,438	\$ 15,798,172
Deferred Vested	318,072	265,257	222,793
Retirees	<u>35,560,292</u>	<u>32,776,109</u>	<u>30,360,517</u>
<b>Total</b>	<b>\$ 55,472,779</b>	<b>\$ 50,599,804</b>	<b>\$ 46,381,482</b>
<b>Service Cost, Beginning of Year</b>			
Service Cost Rate	28.75%	24.47%	20.94%
Expected Payroll During Year	\$ 6,754,908	\$ 6,754,908	\$ 6,754,908
Service Cost	\$ 1,942,036	\$ 1,652,926	\$ 1,414,478
<b>Benefit Payments</b>	<b>\$ (3,040,988)</b>	<b>\$ (3,040,988)</b>	<b>\$ (3,040,988)</b>
<b>Interest</b>	<b>\$ 3,774,543</b>	<b>\$ 3,933,947</b>	<b>\$ 4,051,893</b>
<b>Change in Benefits</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>Change in Assumptions</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>Other Significant Events</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>Total Pension Liability, 6/30/2015</b>	<b>\$ 58,148,370</b>	<b>\$ 53,145,689</b>	<b>\$ 48,806,865</b>

**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/(Asset) during the measurement year.

<b>Table 3</b>			
<b>Change in Net Pension Liability / (Asset)</b>			
	<b>Increase (Decrease)</b>		
	<b>Total Pension Liability</b>	<b>Plan Fiduciary Net Position</b>	<b>Net Pension Liability / (Asset)</b>
	<b>(a)</b>	<b>(b)</b>	<b>(a) - (b)</b>
<b>Balances at 6/30/2014</b>	<b>\$ 51,631,895</b>	<b>\$ 84,222,842</b>	<b>\$ (32,590,947)</b>
<b>Changes for the year:</b>			
Service Cost	1,652,926		1,652,926
Interest	3,933,947		3,933,947
Changes of Benefits	0		0
Differences between Expected and Actual Experience	(1,032,091)		(1,032,091)
Changes of Assumptions	0		0
Contributions - Employer		1,683,990	(1,683,990)
Contributions - Non-Employer		0	0
Contributions - Member		534,091	(534,091)
Net Investment Income		3,842,387	(3,842,387)
Benefit Payments	(3,040,988)	(3,040,988)	0
Administrative Expense		(135,815)	135,815
<b>Net Changes</b>	<b>1,513,794</b>	<b>2,883,665</b>	<b>(1,369,871)</b>
<b>Balances at 6/30/2015</b>	<b>\$ 53,145,689</b>	<b>\$ 87,106,507</b>	<b>\$ (33,960,818)</b>

There were no changes in benefits or changes in assumptions during the year. There was an actuarial experience gain during the year of approximately \$1.0 million.

Total contributions and investment income combined with favorable plan experience exceeded the Service Cost, interest cost, and administrative expenses, resulting in a decrease in the Net Pension Liability/(Asset) (NPL/NPA) of \$1,369,871. The NPL/NPA remaining as of June 30, 2015 is (\$33,960,818).

**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/NPA can be very significant for a relatively small change in the discount rate. The table below shows the sensitivity of the NPL/NPA to the discount rate.

<b>Table 4</b>			
<b>Sensitivity of Net Pension Liability / (Asset) to Changes in Discount Rate</b>			
<b>As of June 30, 2015</b>			
	<b>1% Decrease 6.75%</b>	<b>Discount Rate 7.75%</b>	<b>1% Increase 8.75%</b>
Total Pension Liability	\$ 58,148,370	\$ 53,145,689	\$ 48,806,865
Plan Fiduciary Net Position	<u>87,106,507</u>	<u>87,106,507</u>	<u>87,106,507</u>
Net Pension Liability / (Asset)	<u>\$ (28,958,137)</u>	<u>\$ (33,960,818)</u>	<u>\$ (38,299,642)</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	149.8%	163.9%	178.5%

A one percent decrease in the discount rate increases the TPL by approximately 9.4% and increases the NPL/NPA by approximately 14.7%. A one percent increase in the discount rate decreases the TPL by approximately 8.2% and decreases the NPL/NPA by approximately 12.8%.

**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/NPA and related ratios required by GASB for the two years since implementation.

<b>Table 5</b>		
<b>Schedule of Changes in Net Pension Liability / (Asset) and Related Ratios</b>		
	<b>FYE 2015</b>	<b>FYE 2014</b>
<b><u>Total Pension Liability</u></b>		
Service Cost - beginning of year	\$ 1,652,926	\$ 1,593,854
Interest (includes interest on service cost)	3,933,947	3,824,389
Changes of Benefit Terms	0	0
Differences between Expected and Actual Experience	(1,032,091)	0
Changes of Assumptions	0	0
Benefit Payments, including Refunds of Member Contributions	<u>(3,040,988)</u>	<u>(3,022,512)</u>
<b>Net Change in Total Pension Liability</b>	<b>\$ 1,513,794</b>	<b>\$ 2,395,731</b>
<b>Total Pension Liability - beginning</b>	<b><u>51,631,895</u></b>	<b><u>49,236,164</u></b>
<b>Total Pension Liability - ending</b>	<b><u>\$ 53,145,689</u></b>	<b><u>\$ 51,631,895</u></b>
<b><u>Plan Fiduciary Net Position</u></b>		
Contributions - Employer	\$ 1,683,990	\$ 1,651,483
Contributions - Non-Employer	0	0
Contributions - Member	534,091	481,461
Net Investment Income	3,842,387	12,420,597
Benefit Payments, including Refunds of Member Contributions	(3,040,988)	(3,022,512)
Administrative Expense	<u>(135,815)</u>	<u>(100,567)</u>
<b>Net Change in Plan Fiduciary Net Position</b>	<b>\$ 2,883,665</b>	<b>\$ 11,430,462</b>
<b>Plan Fiduciary Net Position - beginning</b>	<b><u>84,222,842</u></b>	<b><u>72,792,380</u></b>
<b>Plan Fiduciary Net Position - ending</b>	<b><u>\$ 87,106,507</u></b>	<b><u>\$ 84,222,842</u></b>
<b>Net Pension Liability / (Asset) - ending</b>	<b><u>\$ (33,960,818)</u></b>	<b><u>\$ (32,590,947)</u></b>
<b>Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</b>	163.90%	163.12%
<b>Pensionable Payroll</b>	\$ 6,524,569	\$ 6,354,763
<b>Net Pension Liability / (Asset) as a Percentage of Pensionable Payroll</b>	(520.51%)	(512.86%)

**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.

<b>Table 6</b> <b>Schedule of Employer Contributions</b> <i>Amounts in Thousands</i>		
	FYE 2015	FYE 2014
Actuarially Determined Contribution	\$ 0	\$ 0
Contributions in Relation to the Actuarially Determined Contribution		
Employer Contributions	\$ 1,684	\$ 1,651
Non-Employer Contributions	0	0
Total Contributions	\$ 1,684	\$ 1,651
<b>Contribution Deficiency/(Excess)</b>	<b>\$ (1,684)</b>	<b>\$ (1,651)</b>
Pensionable Payroll	\$ 6,525	\$ 6,355
Contributions as a Percentage of Pensionable Payroll	25.81%	25.98%

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%
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/(Income) 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 3.74 years<sup>1</sup> 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 \$1.0 million with approximately \$0.3 million of that recognized in the current year and will be recognized in each of 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 \$2.6 million. Approximately, \$0.5 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 \$5.5 million of which \$1.4 million was recognized as a reduction in Pension Expense/(Income) 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 Deferred Inflow of Resources as of June 30, 2015 of approximately \$2.7 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.

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<sup>1</sup> The average expected future working lifetime for 55 active members was 8.36 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	\$ 0	\$ 774,068
Changes in Assumptions	0	0
Net Difference between Projected and Actual		
Earnings on Pension Plan Investments	0	1,971,363
<b>Total</b>	<b><u>\$ 0</u></b>	<b><u>\$ 2,745,431</u></b>
Amounts reported as Deferred Outflows and (Deferred Inflows) of Resources will be recognized in Pension Expense/(Income) as follows:		
<b>Measurement year ended June 30:</b>		
2016	\$ (1,091,706)	
2017	(1,091,706)	
2018	(1,091,705)	
2019	529,686	
2020	0	
Future Year Deferrals	0	

**EMPLOYER REPORTING AMOUNTS**

The Pension Expense/(Income) 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/NPA plus the changes in deferred outflows and inflows plus employer and non-employer contributions. Alternatively, the Pension Expense/(Income) 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/(Income).

<b>Table 8</b>		
<b>Calculation of Pension Expense</b>		
	<b>Measurement Year Ending</b>	
	<b>2015</b>	<b>2014</b>
Change in Net Pension Liability / (Asset)	\$ (1,369,871)	\$ (9,034,731)
Change in Deferred Outflows	0	0
Change in Deferred Inflows	(2,708,041)	5,453,472
Non-Employer Contributions	0	0
Employer Contributions	<u>1,683,990</u>	<u>1,651,483</u>
<b>Pension Expense/(Income)</b>	<b>\$ (2,393,922)</b>	<b>\$ (1,929,776)</b>
<b>Pension Expense/(Income) as % of Pensionable</b>	<b>(36.69%)</b>	<b>(30.37%)</b>
<b>Operating Expenses</b>		
Service Cost	\$ 1,652,926	\$ 1,593,854
Employee Contributions	(534,091)	(481,461)
Administrative Expenses	<u>135,815</u>	<u>100,567</u>
Total	\$ 1,254,650	\$ 1,212,960
<b>Financing Expenses</b>		
Interest Cost	\$ 3,933,947	\$ 3,824,389
Expected Return on Assets	<u>(6,490,813)</u>	<u>(5,603,757)</u>
Total	\$ (2,556,866)	\$ (1,779,368)
<b>Changes</b>		
Benefit Changes	\$ 0	\$ 0
Recognition of Assumption Changes	0	0
Recognition of Liability (Gains)/Losses	(258,023)	0
Recognition of Investment (Gains)/Losses	<u>(833,683)</u>	<u>(1,363,368)</u>
Total	\$ (1,091,706)	\$ (1,363,368)
<b>Pension Expense/(Income)</b>	<b>\$ (2,393,922)</b>	<b>\$ (1,929,776)</b>

### 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/(Asset), Service Cost, contributions, and administrative expenses. The calculation of the expected return on assets is detailed below.

<b>Table 9</b> <b>Calculation of Expected Return on Assets</b> <b>For the Fiscal Year Ending June 30, 2015</b>		
Market Value of Assets - beginning of year	\$	84,222,842
Expected Return on Market Value	\$	6,527,270
Employee Contributions	\$	534,091
Non-Employer Contributions		0
Employer Contributions		1,683,990
Benefit Payments		(3,040,988)
Administrative Expenses		(135,815)
Net Cash Flow - during year	\$	(958,722)
Expected Return on Cash Flow Items	\$	(36,457)
<b>Expected Return on Assets</b>	<b>\$</b>	<b>6,490,813</b>

The final category is changes. This category will drive most of the volatility in Pension Expense/(Income) 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.<sup>2</sup>

**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.

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<sup>2</sup> 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/(Asset)**

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/(Income)**

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.

JUDGES' 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	\$ 6,755	\$ 0	\$ 6,755				\$ 534	\$ 1,684	\$ 0	\$ 2,218
2	6,251	774	7,025	7.0%	25.8%	8.2%	438	1,613	63	2,114
3	6,263	1,043	7,306	7.0%	25.8%	8.2%	438	1,616	85	2,140
4	5,818	1,780	7,598	7.0%	25.8%	8.2%	407	1,502	146	2,055
5	5,491	2,411	7,902	7.0%	25.8%	8.2%	384	1,417	197	1,999
6	5,445	2,773	8,218	7.0%	25.8%	8.2%	381	1,405	227	2,014
7	5,037	3,511	8,547	7.0%	25.8%	8.2%	353	1,300	288	1,940
8	4,235	4,654	8,889	7.0%	25.8%	8.2%	296	1,093	381	1,771
9	4,021	5,224	9,245	7.0%	25.8%	8.2%	281	1,038	428	1,747
10	3,681	5,933	9,614	7.0%	25.8%	8.2%	258	950	486	1,694
11	3,388	6,611	9,999	7.0%	25.8%	8.2%	237	875	541	1,653
12	3,312	7,087	10,399	7.0%	25.8%	8.2%	232	855	580	1,667
13	3,045	7,770	10,815	7.0%	25.8%	8.2%	213	786	636	1,635
14	2,802	8,446	11,247	7.0%	25.8%	8.2%	196	723	692	1,611
15	2,578	9,119	11,697	7.0%	25.8%	8.2%	180	665	747	1,593
16	2,234	9,931	12,165	7.0%	25.8%	8.2%	156	577	813	1,546
17	2,011	10,641	12,652	7.0%	25.8%	8.2%	141	519	871	1,531
18	1,515	11,642	13,158	7.0%	25.8%	8.2%	106	391	954	1,451
19	1,115	12,569	13,684	7.0%	25.8%	8.2%	78	288	1,029	1,395
20	1,098	13,133	14,232	7.0%	25.8%	8.2%	77	283	1,076	1,436
21	876	13,925	14,801	7.0%	25.8%	8.2%	61	226	1,140	1,428
22	736	14,656	15,393	7.0%	25.8%	8.2%	52	190	1,200	1,442
23	734	15,275	16,009	7.0%	25.8%	8.2%	51	189	1,251	1,492
24	731	15,918	16,649	7.0%	25.8%	8.2%	51	189	1,304	1,543
25	569	16,746	17,315	7.0%	25.8%	8.2%	40	147	1,372	1,558
26	434	17,574	18,007	7.0%	25.8%	8.2%	30	112	1,439	1,582
27	404	18,324	18,728	7.0%	25.8%	8.2%	28	104	1,501	1,633
28	395	19,082	19,477	7.0%	25.8%	8.2%	28	102	1,563	1,692
29	386	19,870	20,256	7.0%	25.8%	8.2%	27	100	1,627	1,754
30	353	20,713	21,066	7.0%	25.8%	8.2%	25	91	1,696	1,812
31	344	21,565	21,909	7.0%	25.8%	8.2%	24	89	1,766	1,879
32	182	22,603	22,785	7.0%	25.8%	8.2%	13	47	1,851	1,911
33	178	23,519	23,697	7.0%	25.8%	8.2%	12	46	1,926	1,984
34	172	24,472	24,644	7.0%	25.8%	8.2%	12	45	2,004	2,061
35	0	25,630	25,630			8.2%	0	0	2,099	2,099
36	0	26,655	26,655			8.2%	0	0	2,183	2,183
37	0	27,722	27,722			8.2%	0	0	2,270	2,270
38	0	28,831	28,831			8.2%	0	0	2,361	2,361
39	0	29,984	29,984			8.2%	0	0	2,456	2,456
40	0	31,183	31,183			8.2%	0	0	2,554	2,554
41	0	32,430	32,430			8.2%	0	0	2,656	2,656
42	0	33,728	33,728			8.2%	0	0	2,762	2,762
43	0	35,077	35,077			8.2%	0	0	2,873	2,873
44	0	36,480	36,480			8.2%	0	0	2,988	2,988
45	0	37,939	37,939			8.2%	0	0	3,107	3,107
46	0	39,457	39,457			8.2%	0	0	3,231	3,231
47	0	41,035	41,035			8.2%	0	0	3,361	3,361
48	0	42,676	42,676			8.2%	0	0	3,495	3,495
49	0	44,383	44,383			8.2%	0	0	3,635	3,635
50	0	46,159	46,159			8.2%	0	0	3,780	3,780
51	0	48,005	48,005			8.2%	0	0	3,932	3,932
52	0	49,925	49,925			8.2%	0	0	4,089	4,089
53	0	51,922	51,922			8.2%	0	0	4,252	4,252
54	0	53,999	53,999			8.2%	0	0	4,423	4,423
55	0	56,159	56,159			8.2%	0	0	4,599	4,599
56	0	58,405	58,405			8.2%	0	0	4,783	4,783
57	0	60,742	60,742			8.2%	0	0	4,975	4,975
58	0	63,171	63,171			8.2%	0	0	5,174	5,174
59	0	65,698	65,698			8.2%	0	0	5,381	5,381

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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	\$ 68,326	\$ 68,326			8.2%	\$ 0	\$ 0	\$ 5,596	\$ 5,596
61	0	71,059	71,059			8.2%	0	0	5,820	5,820
62	0	73,901	73,901			8.2%	0	0	6,053	6,053
63	0	76,858	76,858			8.2%	0	0	6,295	6,295
64	0	79,932	79,932			8.2%	0	0	6,546	6,546
65	0	83,129	83,129			8.2%	0	0	6,808	6,808
66	0	86,454	86,454			8.2%	0	0	7,081	7,081
67	0	89,912	89,912			8.2%	0	0	7,364	7,364
68	0	93,509	93,509			8.2%	0	0	7,658	7,658
69	0	97,249	97,249			8.2%	0	0	7,965	7,965
70	0	101,139	101,139			8.2%	0	0	8,283	8,283
71	0	105,185	105,185			8.2%	0	0	8,615	8,615
72	0	109,392	109,392			8.2%	0	0	8,959	8,959
73	0	113,768	113,768			8.2%	0	0	9,318	9,318
74	0	118,319	118,319			8.2%	0	0	9,690	9,690
75	0	123,051	123,051			8.2%	0	0	10,078	10,078
76	0	127,973	127,973			8.2%	0	0	10,481	10,481
77	0	133,092	133,092			8.2%	0	0	10,900	10,900
78	0	138,416	138,416			8.2%	0	0	11,336	11,336
79	0	143,953	143,953			8.2%	0	0	11,790	11,790
80	0	149,711	149,711			8.2%	0	0	12,261	12,261
81	0	155,699	155,699			8.2%	0	0	12,752	12,752
82	0	161,927	161,927			8.2%	0	0	13,262	13,262
83	0	168,404	168,404			8.2%	0	0	13,792	13,792
84	0	175,141	175,141			8.2%	0	0	14,344	14,344
85	0	182,146	182,146			8.2%	0	0	14,918	14,918
86	0	189,432	189,432			8.2%	0	0	15,514	15,514
87	0	197,009	197,009			8.2%	0	0	16,135	16,135
88	0	204,890	204,890			8.2%	0	0	16,780	16,780
89	0	213,085	213,085			8.2%	0	0	17,452	17,452
90	0	221,609	221,609			8.2%	0	0	18,150	18,150
91	0	230,473	230,473			8.2%	0	0	18,876	18,876
92	0	239,692	239,692			8.2%	0	0	19,631	19,631
93	0	249,280	249,280			8.2%	0	0	20,416	20,416
94	0	259,251	259,251			8.2%	0	0	21,233	21,233
95	0	269,621	269,621			8.2%	0	0	22,082	22,082
96	0	280,406	280,406			8.2%	0	0	22,965	22,965
97	0	291,622	291,622			8.2%	0	0	23,884	23,884
98	0	303,287	303,287			8.2%	0	0	24,839	24,839
99	0	315,418	315,418			8.2%	0	0	25,833	25,833
100	0	328,035	328,035			8.2%	0	0	26,866	26,866
101	0	341,156	341,156			8.2%	0	0	27,941	27,941
102	0	354,803	354,803			8.2%	0	0	29,058	29,058
103	0	368,995	368,995			8.2%	0	0	30,221	30,221
104	0	383,754	383,754			8.2%	0	0	31,429	31,429
105	0	399,105	399,105			8.2%	0	0	32,687	32,687
106	0	415,069	415,069			8.2%	0	0	33,994	33,994
107	0	431,672	431,672			8.2%	0	0	35,354	35,354
108	0	448,938	448,938			8.2%	0	0	36,768	36,768
109	0	466,896	466,896			8.2%	0	0	38,239	38,239

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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	\$ 84,223	\$ 2,218	\$ 3,041	\$ 136	\$ 3,842	\$ 87,107
2	87,107	2,114	3,510	11	6,697	92,397
3	92,397	2,140	3,816	11	7,097	97,807
4	97,807	2,055	4,050	11	7,504	103,304
5	103,304	1,999	4,113	12	7,925	109,104
6	109,104	2,014	4,277	12	8,369	115,197
7	115,197	1,940	4,741	13	8,821	121,204
8	121,204	1,771	4,883	13	9,274	127,353
9	127,353	1,747	5,119	13	9,741	133,709
10	133,709	1,694	5,335	14	10,223	140,277
11	140,277	1,653	5,385	14	10,729	147,260
12	147,260	1,667	5,563	15	11,264	154,614
13	154,614	1,635	5,715	15	11,827	162,346
14	162,346	1,611	5,848	15	12,420	170,514
15	170,514	1,593	6,014	16	13,046	179,123
16	179,123	1,546	6,094	16	13,708	188,268
17	188,268	1,531	6,396	17	14,405	197,792
18	197,792	1,451	6,551	17	15,134	207,809
19	207,809	1,395	6,445	17	15,913	218,655
20	218,655	1,436	6,392	17	16,757	230,439
21	230,439	1,428	6,283	16	17,674	243,241
22	243,241	1,442	6,085	16	18,674	257,256
23	257,256	1,492	5,876	15	19,770	272,627
24	272,627	1,543	5,744	15	20,968	289,380
25	289,380	1,558	5,579	14	22,274	307,619
26	307,619	1,582	5,323	14	23,698	327,562
27	327,562	1,633	5,056	13	25,255	349,381
28	349,381	1,692	4,766	12	26,960	373,255
29	373,255	1,754	4,480	12	28,823	399,340
30	399,340	1,812	4,200	11	30,858	427,800
31	427,800	1,879	4,027	10	33,072	458,714
32	458,714	1,911	3,743	10	35,480	492,353
33	492,353	1,984	3,465	9	38,101	528,964
34	528,964	2,061	3,323	9	40,946	568,640
35	568,640	2,099	3,045	8	44,033	611,719
36	611,719	2,183	2,786	7	47,385	658,494
37	658,494	2,270	2,536	7	51,023	709,244
38	709,244	2,361	2,286	6	54,969	764,282
39	764,282	2,456	2,058	5	59,247	823,921
40	823,921	2,554	1,844	5	63,881	888,507
41	888,507	2,656	1,645	4	68,898	958,411
42	958,411	2,762	1,461	4	74,326	1,034,035
43	1,034,035	2,873	1,292	3	80,198	1,115,810
44	1,115,810	2,988	1,138	3	86,546	1,204,202
45	1,204,202	3,107	999	3	93,406	1,299,713
46	1,299,713	3,231	874	2	100,817	1,402,885
47	1,402,885	3,361	762	2	108,822	1,514,304
48	1,514,304	3,495	662	2	117,466	1,634,601
49	1,634,601	3,635	573	1	126,798	1,764,460
50	1,764,460	3,780	492	1	136,871	1,904,618
51	1,904,618	3,932	420	1	147,741	2,055,869
52	2,055,869	4,089	356	1	159,472	2,219,073
53	2,219,073	4,252	298	1	172,129	2,395,155
54	2,395,155	4,423	247	1	185,783	2,585,113
55	2,585,113	4,599	203	1	200,513	2,790,023
56	2,790,023	4,783	164	0	216,402	3,011,044
57	3,011,044	4,975	131	0	233,540	3,249,428
58	3,249,428	5,174	103	0	252,023	3,506,522
59	3,506,522	5,381	80	0	271,957	3,783,779

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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	3,783,779	5,596	61	0	293,453	4,082,767
61	4,082,767	5,820	47	0	316,634	4,405,174
62	4,405,174	6,053	35	0	341,630	4,752,821
63	4,752,821	6,295	26	0	368,582	5,127,672
64	5,127,672	6,546	19	0	397,643	5,531,842
65	5,531,842	6,808	14	0	428,976	5,967,613
66	5,967,613	7,081	10	0	462,759	6,437,442
67	6,437,442	7,364	7	0	499,182	6,943,980
68	6,943,980	7,658	5	0	538,449	7,490,083
69	7,490,083	7,965	4	0	580,784	8,078,828
70	8,078,828	8,283	3	0	626,424	8,713,533
71	8,713,533	8,615	2	0	675,626	9,397,772
72	9,397,772	8,959	1	0	728,668	10,135,397
73	10,135,397	9,318	1	0	785,848	10,930,562
74	10,930,562	9,690	1	0	847,487	11,787,738
75	11,787,738	10,078	0	0	913,933	12,711,749
76	12,711,749	10,481	0	0	985,559	13,707,788
77	13,707,788	10,900	0	0	1,062,768	14,781,456
78	14,781,456	11,336	0	0	1,145,994	15,938,787
79	15,938,787	11,790	0	0	1,235,704	17,186,280
80	17,186,280	12,261	0	0	1,332,403	18,530,945
81	18,530,945	12,752	0	0	1,436,633	19,980,330
82	19,980,330	13,262	0	0	1,548,980	21,542,571
83	21,542,571	13,792	0	0	1,670,074	23,226,437
84	23,226,437	14,344	0	0	1,800,594	25,041,376
85	25,041,376	14,918	0	0	1,941,274	26,997,567
86	26,997,567	15,514	0	0	2,092,901	29,105,983
87	29,105,983	16,135	0	0	2,256,327	31,378,446
88	31,378,446	16,780	0	0	2,432,468	33,827,694
89	33,827,694	17,452	0	0	2,622,310	36,467,455
90	36,467,455	18,150	0	0	2,826,918	39,312,523
91	39,312,523	18,876	0	0	3,047,438	42,378,837
92	42,378,837	19,631	0	0	3,285,106	45,683,574
93	45,683,574	20,416	0	0	3,541,253	49,245,243
94	49,245,243	21,233	0	0	3,817,314	53,083,790
95	53,083,790	22,082	0	0	4,114,833	57,220,705
96	57,220,705	22,965	0	0	4,435,478	61,679,148
97	61,679,148	23,884	0	0	4,781,042	66,484,074
98	66,484,074	24,839	0	0	5,153,460	71,662,374
99	71,662,374	25,833	0	0	5,554,816	77,243,023
100	77,243,023	26,866	0	0	5,987,356	83,257,245
101	83,257,245	27,941	0	0	6,453,499	89,738,685
102	89,738,685	29,058	0	0	6,955,853	96,723,596
103	96,723,596	30,221	0	0	7,497,228	104,251,045
104	104,251,045	31,429	0	0	8,080,651	112,363,125
105	112,363,125	32,687	0	0	8,709,385	121,105,197
106	121,105,197	33,994	0	0	9,386,945	130,526,137
107	130,526,137	35,354	0	0	10,117,120	140,678,611
108	140,678,611	36,768	0	0	10,903,990	151,619,369
109	151,619,369	38,239	0	0	11,751,955	163,409,563

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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	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	\$ 84,223	\$ 3,041	\$ 3,041	\$ 0	\$ 2,822	\$ 0	\$ 2,822
2	87,107	3,510	3,510	0	3,024	0	3,024
3	92,397	3,816	3,816	0	3,051	0	3,051
4	97,807	4,050	4,050	0	3,004	0	3,004
5	103,304	4,113	4,113	0	2,832	0	2,832
6	109,104	4,277	4,277	0	2,733	0	2,733
7	115,197	4,741	4,741	0	2,812	0	2,812
8	121,204	4,883	4,883	0	2,688	0	2,688
9	127,353	5,119	5,119	0	2,615	0	2,615
10	133,709	5,335	5,335	0	2,529	0	2,529
11	140,277	5,385	5,385	0	2,369	0	2,369
12	147,260	5,563	5,563	0	2,271	0	2,271
13	154,614	5,715	5,715	0	2,166	0	2,166
14	162,346	5,848	5,848	0	2,057	0	2,057
15	170,514	6,014	6,014	0	1,963	0	1,963
16	179,123	6,094	6,094	0	1,846	0	1,846
17	188,268	6,396	6,396	0	1,798	0	1,798
18	197,792	6,551	6,551	0	1,709	0	1,709
19	207,809	6,445	6,445	0	1,561	0	1,561
20	218,655	6,392	6,392	0	1,436	0	1,436
21	230,439	6,283	6,283	0	1,310	0	1,310
22	243,241	6,085	6,085	0	1,178	0	1,178
23	257,256	5,876	5,876	0	1,055	0	1,055
24	272,627	5,744	5,744	0	958	0	958
25	289,380	5,579	5,579	0	863	0	863
26	307,619	5,323	5,323	0	764	0	764
27	327,562	5,056	5,056	0	674	0	674
28	349,381	4,766	4,766	0	589	0	589
29	373,255	4,480	4,480	0	514	0	514
30	399,340	4,200	4,200	0	447	0	447
31	427,800	4,027	4,027	0	398	0	398
32	458,714	3,743	3,743	0	343	0	343
33	492,353	3,465	3,465	0	295	0	295
34	528,964	3,323	3,323	0	263	0	263
35	568,640	3,045	3,045	0	223	0	223
36	611,719	2,786	2,786	0	190	0	190
37	658,494	2,536	2,536	0	160	0	160
38	709,244	2,286	2,286	0	134	0	134
39	764,282	2,058	2,058	0	112	0	112
40	823,921	1,844	1,844	0	93	0	93
41	888,507	1,645	1,645	0	77	0	77
42	958,411	1,461	1,461	0	64	0	64
43	1,034,035	1,292	1,292	0	52	0	52
44	1,115,810	1,138	1,138	0	43	0	43
45	1,204,202	999	999	0	35	0	35
46	1,299,713	874	874	0	28	0	28
47	1,402,885	762	762	0	23	0	23
48	1,514,304	662	662	0	18	0	18
49	1,634,601	573	573	0	15	0	15
50	1,764,460	492	492	0	12	0	12
51	1,904,618	420	420	0	9	0	9
52	2,055,869	356	356	0	7	0	7
53	2,219,073	298	298	0	6	0	6
54	2,395,155	247	247	0	4	0	4
55	2,585,113	203	203	0	3	0	3
56	2,790,023	164	164	0	3	0	3
57	3,011,044	131	131	0	2	0	2
58	3,249,428	103	103	0	1	0	1
59	3,506,522	80	80	0	1	0	1

JUDGES' 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	3,783,779	61	61	0	1	0	1
61	4,082,767	47	47	0	0	0	0
62	4,405,174	35	35	0	0	0	0
63	4,752,821	26	26	0	0	0	0
64	5,127,672	19	19	0	0	0	0
65	5,531,842	14	14	0	0	0	0
66	5,967,613	10	10	0	0	0	0
67	6,437,442	7	7	0	0	0	0
68	6,943,980	5	5	0	0	0	0
69	7,490,083	4	4	0	0	0	0
70	8,078,828	3	3	0	0	0	0
71	8,713,533	2	2	0	0	0	0
72	9,397,772	1	1	0	0	0	0
73	10,135,397	1	1	0	0	0	0
74	10,930,562	1	1	0	0	0	0
75	11,787,738	0	0	0	0	0	0
76	12,711,749	0	0	0	0	0	0
77	13,707,788	0	0	0	0	0	0
78	14,781,456	0	0	0	0	0	0
79	15,938,787	0	0	0	0	0	0
80	17,186,280	0	0	0	0	0	0
81	18,530,945	0	0	0	0	0	0
82	19,980,330	0	0	0	0	0	0
83	21,542,571	0	0	0	0	0	0
84	23,226,437	0	0	0	0	0	0
85	25,041,376	0	0	0	0	0	0
86	26,997,567	0	0	0	0	0	0
87	29,105,983	0	0	0	0	0	0
88	31,378,446	0	0	0	0	0	0
89	33,827,694	0	0	0	0	0	0
90	36,467,455	0	0	0	0	0	0
91	39,312,523	0	0	0	0	0	0
92	42,378,837	0	0	0	0	0	0
93	45,683,574	0	0	0	0	0	0
94	49,245,243	0	0	0	0	0	0
95	53,083,790	0	0	0	0	0	0
96	57,220,705	0	0	0	0	0	0
97	61,679,148	0	0	0	0	0	0
98	66,484,074	0	0	0	0	0	0
99	71,662,374	0	0	0	0	0	0
100	77,243,023	0	0	0	0	0	0
101	83,257,245	0	0	0	0	0	0
102	89,738,685	0	0	0	0	0	0
103	96,723,596	0	0	0	0	0	0
104	104,251,045	0	0	0	0	0	0
105	112,363,125	0	0	0	0	0	0
106	121,105,197	0	0	0	0	0	0
107	130,526,137	0	0	0	0	0	0
108	140,678,611	0	0	0	0	0	0
109	151,619,369	0	0	0	0	0	0
					\$ 58,256	\$ 0	\$ 58,256