



**Cavanaugh Macdonald**  
CONSULTING, LLC

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**Report on the Annual Valuation of the  
Supplemental Legislative  
Retirement Plan of Mississippi**

**Prepared as of June 30, 2015**







# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

October 20, 2015

Board of Trustees  
Public Employees' Retirement System of Mississippi  
429 Mississippi Street  
Jackson, MS 39201-1005

Ladies and Gentlemen:

Presented in this report are the results of the annual actuarial valuation of the Supplemental Legislative Retirement Plan of Mississippi. The purpose of the valuation was to measure the Plan's funding progress and to determine the unfunded actuarial accrued liability amortization period beginning July 1, 2015. The results may not be applicable for other purposes.

The date of the valuation was June 30, 2015.

The valuation was based upon data, furnished by the Executive Director and the PERS staff, concerning active, inactive and retired members along with pertinent financial information. While not verifying data at the source, the actuary performed tests for consistency and reasonableness. The complete cooperation of the PERS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the presentation of results on page 1 and the comments on page 8.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board. We have reviewed the actuarial methods, including the asset valuation method, and continue to believe they are appropriate for the purpose of determining employer contribution levels.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

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Board of Trustees  
October 20, 2015  
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The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the plan, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the plan.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Edward A. Macdonald'.

Edward A. Macdonald, ASA, FCA, MAAA  
President

A handwritten signature in blue ink, appearing to read 'Edward J. Koebel'.

Edward J. Koebel, EA, FCA, MAAA  
Principal and Consulting Actuary

A handwritten signature in blue ink, appearing to read 'Jonathan T. Craven'.

Jonathan T. Craven, ASA, EA, FCA, MAAA  
Senior Actuary

EAM/EJK/JTC:kc





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**REPORT ON THE ANNUAL VALUATION OF THE  
SUPPLEMENTAL LEGISLATIVE RETIREMENT PLAN OF MISSISSIPPI  
PREPARED AS OF JUNE 30, 2015**

**SECTION I – SUMMARY OF PRINCIPAL RESULTS**

1. This report, prepared as of June 30, 2015, presents the results of the annual actuarial valuation of the Plan. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized below. The current valuation and reported benefits amount reflect any benefit increases granted to retirees as of July 1, 2015. Based on the funding policy adopted by the Board in 2012, the employer contribution rate is to be set at 7.40% of annual compensation and the amortization period calculated on an open basis.

**SUMMARY OF PRINCIPAL RESULTS**

VALUATION DATE	June 30, 2015	June 30, 2014
Active members included in valuation		
Number	174	175
Annual compensation	\$ 6,861,166	\$ 6,917,939
Retirees		
Number	185	187
Annual allowances	\$ 1,133,588	\$ 1,139,477
Assets		
Market related actuarial value	\$ 16,098,000	\$ 14,899,000
Market value	\$ 16,411,000	\$ 16,453,000
Unfunded actuarial accrued liability	\$ 5,115,446	\$ 5,340,757
Funded Ratio	75.9%	73.6%
<b>Fiscal Year End</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
Employer contribution rate		
Normal Cost*	2.71%	2.67%
Accrued liability	<u>4.69</u>	<u>4.73</u>
Total	7.40%	7.40%
Anticipated accrued liability payment period	23.6 years	25.0 years
Unfunded actuarial accrued liability based on		
Market value of assets	\$ 4,802,446	\$ 3,786,757
Funded Ratio	77.4%	81.3%
Payment period	21.4 years	15.2 years

\* Includes load for administrative expenses. See page 10 for more contribution rate detail.





2. The valuation balance sheet showing the results of the valuation is given in Section III.
3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains and losses during the valuation year are given in Section V and the rates of contribution payable by employers are given in Section VI.
4. The following changes in actuarial assumptions or methods were made since the last valuation:
  - The pre-retirement mortality rates and service retirement rates have been revised to more closely reflect the actual experience of the System.
  - The post-retirement mortality tables have been changed.
  - The price inflation assumption has been reduced from 3.50% to 3.00%. As the price inflation assumption is part of our building block approach to determining salary scale, the total salary scale was reduced accordingly at all service intervals.
  - The real rate of return net of investment expenses has been changed from 4.50% to 4.75%. Due to this change and the change in price inflation, the investment return assumption has been changed from 8.00% to 7.75%.
  - In addition, pension software enhancements allowed for more precise programming of some benefit provisions.
5. There were no changes to the benefit provisions since the last valuation.
6. Schedule A of this report presents the development of the actuarial value of assets. Schedule B details the actuarial assumptions and methods employed. Schedule C gives a summary of the benefit and contribution provisions of the plan.
7. The table on page 3 provides a ten-year history of some pertinent figures.
8. The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67) in June 2012 and is effective for plan years beginning after June 15, 2013, which is the year ending June 30, 2014 for the Retirement System. GASB 67 replaces GASB 25 for plans and a separate GASB 67 report will be prepared for the Board. For continuity and informational purposes, we have included GASB 25 results in Section VIII of this report.





Supplemental Legislative Retirement Plan of Mississippi

Comparative Schedule

Valuation Date June 30	Active Members				Retired Lives				Valuation Results (\$ thousands)		
	Number	Payroll (\$ thousands)	Average Salary	% increase from previous year	Number	Active/ Retired Ratio	Annual Benefits (\$ thousands)	Benefits as % of Payroll	Accrued Liability	Valuation Assets	UAAL
2006	173	\$6,354	\$36,726	(1.6)%	122	1.4	\$ 629.2	9.9%	\$14,064	\$11,620	\$2,444
2007	175	6,554	37,453	2.0	126	1.4	657.8	10.0	15,054	12,722	2,332
2008	175	6,753	38,588	3.0	138	1.3	754.8	11.2	15,615	13,412	2,203
2009	174	6,803	39,100	1.3	141	1.2	781.2	11.5	16,535	13,386	3,149
2010	175	6,605	37,743	(3.5)	142	1.2	792.7	12.0	17,081	13,241	3,840
2011	174	6,810	39,137	3.7	147	1.2	823.9	12.1	18,605	13,606	4,999
2012	175	6,872	39,267	0.3	173	1.0	1,046.7	15.2	19,537	13,268	6,269
2013	175	6,695	38,259	(2.6)	188	0.9	1,121.4	16.7	19,978	13,554	6,424
2014	175	6,918	39,531	3.3	187	0.9	1,139.5	16.5	20,240	14,899	5,341
2015	174	6,861	39,432	(0.3)	185	0.9	1,133.6	16.5	21,213	16,098	5,115





## **SECTION II – MEMBERSHIP DATA**

Data regarding the membership of the Plan for use as a basis for the valuation were furnished by the Plan's office. The following tables summarize the membership of the Plan as of June 30, 2015 upon which the valuation was based. Detailed tabulations of the data are given in Schedule D.

### **Active Members**

Employers	Number of Employers	Number	Payroll	Group Averages		
				Salary	Age	Benefit Service*
State Agencies	5	174	\$ 6,861,166	\$39,432	56.9	12.1

\* Eligibility service is 17.1 years.

Of the 174 active members, 103 are vested and 71 are non-vested.

### **Retired Lives**

Type of Benefit Payment	No.	Annual Benefits	Group Averages	
			Benefit	Age
Retirement	145	\$885,385	\$6,106	71.4
Disability	2	14,515	7,258	62.8
Survivor	38	233,688	6,150	71.1
Total in SLRP	185	\$1,133,588	\$6,128	71.3

### **Deferred Vested/Inactive Lives**

Type of Member	No.	Deferred Benefits	Outstanding Balance
Deferred Vested – Benefit Included	40	\$144,715	N/A
Inactive	11	N/A	\$40,433
Total in SLRP	51	\$144,715	\$40,433





### **SECTION III – VALUATION BALANCE SHEET**

The following valuation balance sheet shows the assets and liabilities of the retirement plan as of the current valuation date of June 30, 2015 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2014. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date. The development of the actuarial value of assets is presented in Schedule A.





**VALUATION BALANCE SHEET  
SHOWING THE ASSETS AND LIABILITIES OF THE  
SUPPLEMENTAL LEGISLATIVE RETIREMENT PLAN OF MISSISSIPPI**

	JUNE 30, 2015	JUNE 30, 2014
<b>ASSETS</b>		
Current actuarial value of assets:		
Annuity Savings Account	\$ 2,861,601	\$ 2,638,111
Annuity Reserve	2,157,189	2,189,526
Employers' Accumulation Account	<u>11,079,210</u>	<u>10,071,363</u>
Total current assets	\$ 16,098,000	\$ 14,899,000
 Future member contributions to Annuity Savings Account	 \$ 1,454,976	 \$ 1,506,944
 Prospective contributions to Employer's Accumulation Account		
Normal contributions	\$ 1,202,780	\$ 1,225,648
Unfunded actuarial accrued liability contributions	<u>5,115,446</u>	<u>5,340,757</u>
Total prospective contributions	<u>\$ 6,318,226</u>	<u>\$ 6,566,405</u>
Total assets	<u><u>\$ 23,871,202</u></u>	<u><u>\$ 22,972,349</u></u>
<b>LIABILITIES</b>		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 12,329,200	\$ 11,919,605
 Present value of benefits payable on account of inactive members for service rendered before the valuation date	 1,223,386	 1,274,209
 Present value of benefits payable on account of active members	 \$ 10,318,616	 \$ 9,778,535
Total liabilities	<u><u>\$ 23,871,202</u></u>	<u><u>\$ 22,972,349</u></u>





**BREAKDOWN OF TOTAL AND ACCRUED LIABILITIES  
AS OF JUNE 30, 2015**

	<b>Total Liability</b>	<b>Accrued Liability</b>
Active Members		
Retirement	\$ 8,710,974	\$ 7,001,561
Death	367,041	265,473
Disability	200,915	46,568
Termination	<u>1,039,683</u>	<u>347,258</u>
Total	\$ 10,318,616	\$ 7,660,860
Retirees		
Retirement	\$ 9,983,315	\$ 9,983,315
Survivor	2,191,947	2,191,947
Disability	<u>153,938</u>	<u>153,938</u>
Total	\$ 12,329,200	\$ 12,329,200
Deferred Vested Members	1,142,520	1,142,520
Inactive Members	<u>80,866</u>	<u>80,866</u>
Total Actuarial Values	\$ 23,871,202	\$ 21,213,446
Actuarial Value of Assets		<u>16,098,000</u>
Unfunded Actuarial Accrued Liability		\$ 5,115,446





#### **SECTION IV – COMMENTS ON VALUATION**

The valuation balance sheet gives the following information with respect to the funds of the Plan as of June 30, 2015.

##### **Total Assets**

The Annuity Savings Account is the fund to which are credited contributions made by members together with interest thereon. When a member retires, the amount of his or her accumulated contributions is transferred from the Annuity Savings Account to the Annuity Reserve. The Employer's Accumulation Account is the fund to which are credited employer contributions and investment income, and from which are paid all employer-provided benefits under the plan. The assets credited to the Annuity Savings Account as of the valuation date, which represent the accumulated contributions of members to that date, amounted to \$2,861,601. The assets credited to the Annuity Reserve were \$2,157,189 and the assets credited to the Employer's Accumulation Account totaled \$11,079,210. Current actuarial assets as of the valuation date equaled the sum of these three funds, \$16,098,000. Future member contributions to the Annuity Savings Account were valued to be \$1,454,976. Prospective contributions to the Employer's Accumulation Account were calculated to be \$6,318,226 of which \$1,202,780 is attributable to service rendered after the valuation date (normal contributions) and \$5,115,446 is attributable to service rendered before the valuation date (unfunded actuarial accrued liability contributions).

Therefore, the balance sheet shows the present value of current and future assets of the Plan to be \$23,871,202 as of June 30, 2015.

##### **Total Liabilities**

The present value of benefits payable on account of presently retired members and beneficiaries totaled \$12,329,200 as of the valuation date. The present value of future benefit payments on behalf of active members amounted to \$10,318,616. In addition, the present value of benefits for inactive members, due to service rendered before the valuation date, was calculated to be \$1,223,386.

Therefore, the balance sheet shows the present value for all prospective benefit payments under the Plan to be \$23,871,202 as of June 30, 2015.

Section 25-11-307(1) of State law requires that active members contribute 3.00% of annual compensation to the Plan.

Section 25-11-307(2) requires that the State contribute a certain percentage of the annual compensation of members to cover the normal contributions and a certain percentage to cover the accrued liability contributions of the Plan. These individual contribution percentages are established in accordance with an actuarial valuation. Based on the new funding policy adopted by the Board in October, 2012, the employer rate is set at 7.40% of annual compensation and the amortization period calculated on an open basis. Therefore, the amortization period for the June 30, 2015 valuation is 23.6 years, compared to 25.0 years for the last valuation.

The primary reason for the decrease in the amortization period is the recognition of the investment gains from three of the last five fiscal years. This was partially offset by payroll growth less than expected and assumption changes, causing upward pressure on the amortization period attributed to the unfunded actuarial accrued liability. Schedule E of this report has a detailed gain and loss analysis of actuarial liabilities.





## SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain/(loss) for the year ended June 30, 2015 is shown below.

	<u>\$ Thousands</u>
(1) UAAL* as of June 30, 2014	\$ 5,340.8
(2) Total normal cost from last valuation	376.3
(3) Total contributions	718.0
(4) Interest accrual: $[(1) + (2)] \times .08 - [(3) \times .04]$	<u>428.6</u>
(5) Expected UAAL before changes: $(1) + (2) - (3) + (4)$	\$ 5,427.7
(6) Change due to plan amendments	0.0
(7) Change due to actuarial assumptions or methods	<u>587.7</u>
(8) Expected UAAL after changes: $(5) + (6) + (7)$	\$ 6,015.4
(9) Actual UAAL as of June 30, 2015	\$ 5,115.4
(10) Gain/(loss): $(8) - (9)$	\$ 900.0
(11) Gain/(loss) as percent of actuarial accrued liabilities at start of year (\$20,239.8)	4.4%

\*Unfunded actuarial accrued liability.

Valuation Date June 30	Actuarial Gain/(Loss) as a % of Beginning Accrued Liabilities
2010	(3.8)%
2011	(6.1)
2012	(6.4)
2013	(0.9)
2014	6.3
2015	4.4





## **SECTION VI – REQUIRED CONTRIBUTION RATES**

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement Plan. The following table shows the rates of contribution payable by employers as determined from the present valuation for the 2016/2017 fiscal year and a comparison to the previous valuation results.

Contribution for	2016/2017 Fiscal Year	2015/2016 Fiscal Year
Normal Cost:		
Service retirement benefits	4.07%	4.08%
Disability benefits	0.25	0.29
Survivor benefits	<u>0.18</u>	<u>0.35</u>
Total	4.50%	4.72%
Member Contributions:	3.00%	3.00%
Less future refunds	<u>(0.98)</u>	<u>(0.72)</u>
Available for benefits	2.02%	2.28%
Employer Normal Cost	2.48%	2.44%
Administrative Expense Load	0.23%	0.23%
Unfunded Actuarial Accrued Liabilities (23.6 year level % of payroll amortization*)	4.69%	4.73%
Total Statutory Employer Contribution Rate	7.40%	7.40%

\*Amortization period a year ago was 25.0 years.

The components of the change in the computed unfunded actuarial accrued liability amortization period from 25.0 years to 23.6 years are as follows:

Previously Reported Period	25.0 years
Change due to:	
Normal amortization	(1.0)
Actuarial experience	(4.9)
Assumption changes	1.6
Plan amendments	0.0
Method Change	0.0
Payroll Growth experience	0.2
Computed Period	23.6 years





## **SECTION VII – CASH FLOW PROJECTION**

Regular actuarial valuations measure the Retirement Plan's present financial position and contributions adequacy by calculating and financing the liabilities created by the present benefit program. This process involves discounting to present values the future benefit payments on behalf of present active and retired members and their survivors. However, valuations do not produce information regarding future changes in the makeup of the covered group or the amounts of benefits to be paid or investment income to be received – actuarial projections do.

Whereas valuations provide a snapshot of the retirement plan as of a given date, projections provide a moving picture. Projected active and retired groups are developed from year to year by the application of assumptions regarding pre-retirement withdrawal from service, retirements, deaths, disabilities, and the addition of new members. Projected information regarding the retired life group leads to assumed future benefit payout. Combining future benefit payments with assumed contributions and expected investment earnings produces the net cash flow of the Plan each year, and thus end of year asset levels.

Projections are used for many purposes. Among them are (i) developing cash flow patterns for investment policy and asset mix consideration, (ii) exploring the effect of alternative assumptions about future experience, (iii) analyzing the impact on plan funding progress of changes in the workforce, and (iv) examining the potential effect of changes in benefits on plan financial activity.

Projection results are useful in demonstrating changing relationships among key elements affecting plan financial activity. For example: how benefits payable and plan assets will grow in future decades. Projections are not predictions of specific future events and do not provide numeric precision in absolute terms. For instance, cash flow projected to occur 10 years in the future will not be exact (except by coincidence), but understanding the changed relationship between future benefit payout and future investment income can be very useful.

The following projections assume a 7.75% investment return and salary increases of 3.75% each year in the future. Due to the funding policy adopted in 2012, all future contribution rates are assumed to remain at 7.40% of payroll.





# Mississippi Supplemental Legislative Retirement Plan

## Twenty-five Year Cash Flow Projection

Year	Valuation Payroll	Market Value of Assets Balance July 1	Contributions	Projected Benefit Payments*	Expected Investment Return	Cash Flow	Market Value of Assets Balance June 30
2015	\$7,118,460	\$16,411,000	\$740,320	\$1,399,599	\$1,246,305	\$587,027	\$16,998,027
2016	7,385,402	16,998,027	768,082	1,476,530	1,289,895	581,447	17,579,474
2017	7,662,355	17,579,474	796,885	1,491,048	1,335,510	641,347	18,220,821
2018	7,949,693	18,220,821	826,768	1,514,225	1,385,475	698,018	18,918,839
2019	8,247,806	18,918,839	857,772	1,648,432	1,435,572	644,912	19,563,751
2020	8,557,099	19,563,751	889,938	1,703,336	1,484,672	671,274	20,235,025
2021	8,877,990	20,235,025	923,311	1,768,448	1,535,465	690,328	20,925,353
2022	9,210,915	20,925,353	957,935	1,785,192	1,589,659	762,402	21,687,755
2023	9,556,324	21,687,755	993,858	1,925,714	1,644,692	712,835	22,400,590
2024	9,914,686	22,400,590	1,031,127	1,994,636	1,698,710	735,201	23,135,791
2025	10,286,487	23,135,791	1,069,795	1,987,792	1,757,451	839,454	23,975,245
2026	10,672,230	23,975,245	1,109,912	2,030,126	1,822,423	902,209	24,877,454
2027	11,072,439	24,877,454	1,151,534	2,137,595	1,889,793	903,732	25,781,186
2028	11,487,655	25,781,186	1,194,716	2,220,576	1,958,290	932,430	26,713,616
2029	11,918,442	26,713,616	1,239,518	2,208,730	2,032,748	1,063,536	27,777,152
2030	12,365,384	27,777,152	1,286,000	2,252,633	2,115,272	1,148,640	28,925,792
2031	12,829,086	28,925,792	1,334,225	2,328,807	2,203,209	1,208,627	30,134,418
2032	13,310,177	30,134,418	1,384,258	2,411,688	2,295,604	1,268,175	31,402,593
2033	13,809,309	31,402,593	1,436,168	2,369,556	2,397,532	1,464,145	32,866,737
2034	14,327,158	32,866,737	1,490,024	2,370,507	2,513,053	1,632,570	34,499,308
2035	14,864,426	34,499,308	1,545,900	2,399,458	2,640,621	1,787,063	36,286,370
2036	15,421,842	36,286,370	1,603,872	2,434,424	2,780,010	1,949,458	38,235,828
2037	16,000,161	38,235,828	1,664,017	2,374,028	2,935,764	2,225,752	40,461,581
2038	16,600,167	40,461,581	1,726,417	2,330,829	3,112,352	2,507,939	42,969,520
2039	17,222,673	42,969,520	1,791,158	2,319,083	3,309,681	2,781,756	45,751,276

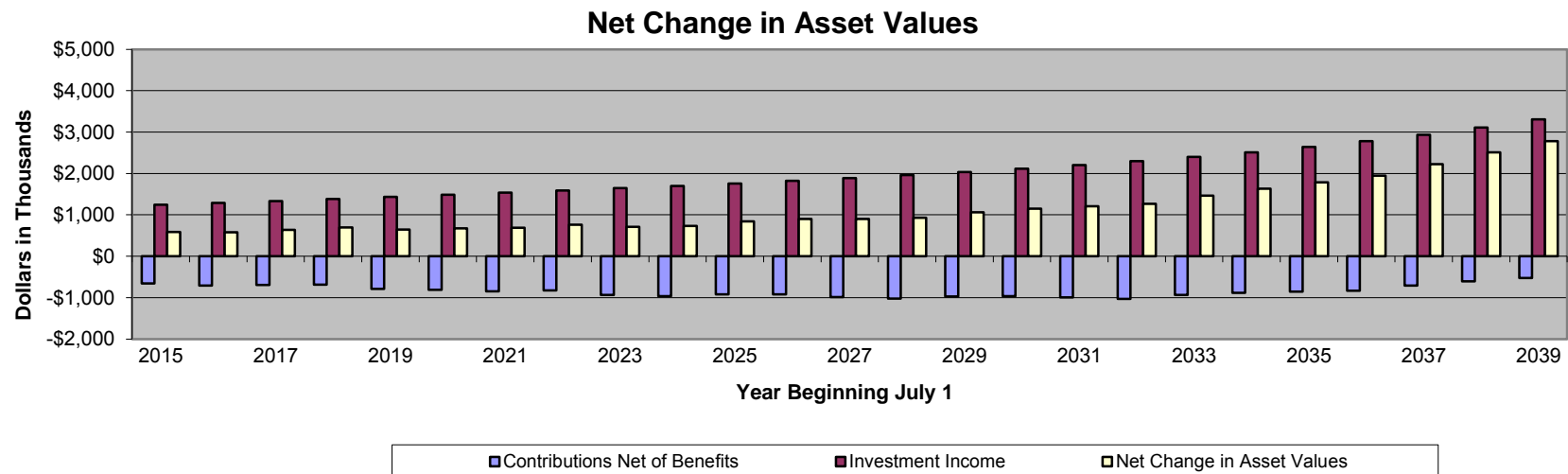
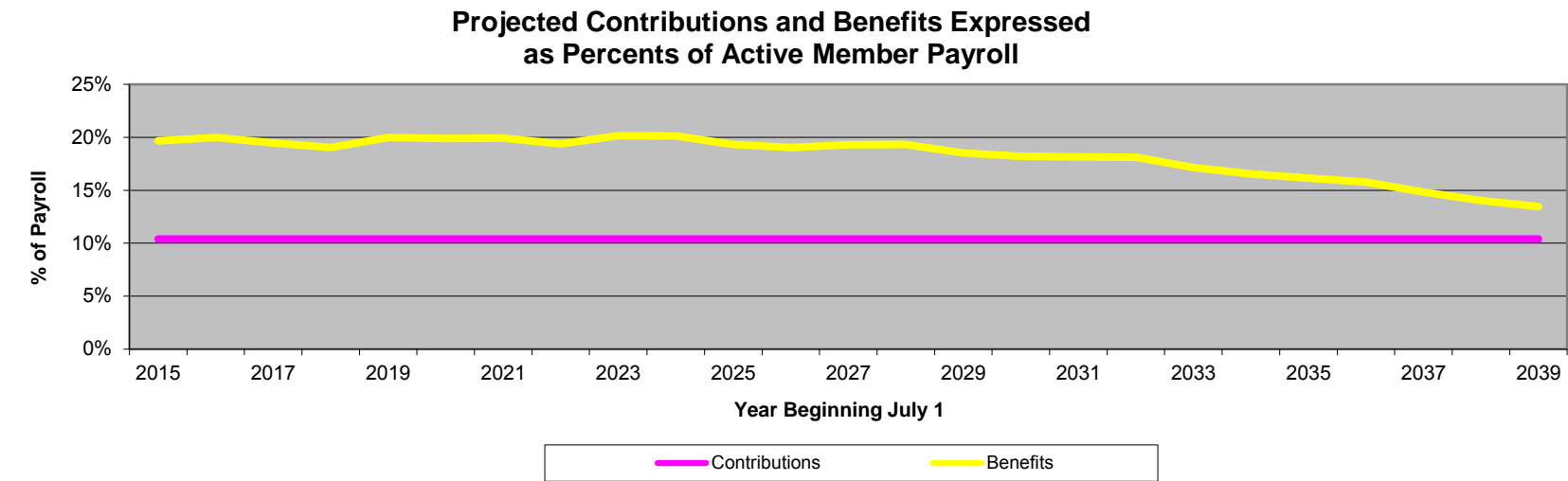
\* Includes expected administrative expenses.





# Mississippi Supplemental Legislative Retirement Plan

## Twenty-five Year Cash Flow Projection Based on Valuation Assumptions







## **SECTION VIII – SUPPLEMENTAL DISCLOSURE INFORMATION**

1. Governmental Accounting Standards Board (GASB) Statements No. 67 and 68 replaced Statement No. 25 and 27 for plan years beginning after June 15, 2013. The information required under the new GASB Statements will be issued in separate reports. The following supplemental disclosure information is provided for informational purposes only. One such item is a distribution of the number of employees by type of membership, as follows:

### **NUMBER OF ACTIVE AND RETIRED PARTICIPANTS AS OF JUNE 30, 2015**

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	185
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	51
Active Participants	<u>174</u>
Total	410





2. Another such item is the schedule of funding progress as shown below.

### SCHEDULE OF FUNDING PROGRESS

Plan Year Ended	(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability (AAL) Entry Age	(3) Percent Funded (1)/(2)	(4) Unfunded AAL (2) – (1)	(5) Annual Covered Payroll	(6) Unfunded AAL as a Percentage of Covered Payroll (4)/(5)
06/30/2006	\$11,620,000	\$14,063,614	82.6%	\$2,443,614	\$6,353,542	38.5%
06/30/2007	12,722,000	15,053,526	84.5	2,331,526	6,554,229	35.6
06/30/2008*	13,412,000	15,614,687	85.9	2,202,687	6,752,960	32.6
06/30/2009#	13,386,000	16,534,870	81.0	3,148,870	6,803,339	46.3
06/30/2010	13,241,000	17,081,278	77.5	3,840,278	6,605,037	58.1
06/30/2011#	13,606,000	18,605,301	73.1	4,999,301	6,809,770	73.4
06/30/2012	13,268,000	19,536,604	67.9	6,268,604	6,871,757	91.2
06/30/2013#	13,554,000	19,977,584	67.8	6,423,584	6,695,359	95.9
06/30/2014	14,899,000	20,239,757	73.6	5,340,757	6,917,939	77.2
06/30/2015#	16,098,000	21,213,446	75.9	5,115,446	6,861,166	74.6

\* After change in benefit provisions.

# After change in actuarial assumptions.





3. The annual required contribution (ARC) of the employer as a percentage of payroll, determined in accordance with the parameters of GASB 25/27, is shown below. The accrued liability rate is based on amortization of the unfunded actuarial accrued liability of \$5,115,446 over a period of 23.6 years from the valuation date.

Annual Required Contribution (ARC)		
Valuation Date June 30	2015	2014
For Fiscal Year	2016/2017	2015/2016
Employer contribution rate		
Normal Cost*	2.71%	2.67%
Accrued liability	<u>4.69</u>	<u>4.2573</u>
Total	7.40%	7.40%
Anticipated accrued liability payment period	23.6 years	25.0 years

\* Includes load for administrative expenses. See page 10 for more contribution rate detail.

4. Additional information as of June 30, 2015 follows.

Valuation date	6/30/2015
Actuarial cost method	Entry age
Amortization method	Level percent open
Remaining amortization period	23.6 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases#	3.75%
Cost-of-living adjustments	3.00%
*Includes price inflation at	3.00%
# Includes wage inflation at	3.75%





Schedule of Employer Contributions

Fiscal Year Ending June 30	Valuation date June 30	Annual Required Contribution	Percentage Contributed
2007	2005	\$422,511	100.0%
2008	2006	435,856	100.0
2009	2007	449,072	100.0
2010	2008	452,422	100.0
2011	2009	464,334	100.0
2012	2010	503,923	100.0
2013	2011	508,510	100.0
2014	2012	518,890	100.0
2015	2013	560,353	100.0
2016	2014	507,726	





Solvency Tests  
(\$ in Thousands)

Valuation Date	Actuarial Accrued Liabilities for				Portions of Accrued Liabilities Covered by Assets		
	(1) Accumulated Employee Contributions Including Allocated Investment Earnings	(2) Retirees and Beneficiaries Currently Receiving Benefits	(3) Active and Inactive Members Employer Financed Portion	Net Assets Available for Benefits	(1)	(2)	(3)
6/30/2006	\$2,061	\$7,230	\$4,773	\$11,620	100%	100.0%	48.8%
6/30/2007	2,301	7,378	5,375	12,722	100	100.0	56.6
6/30/2008	2,102	8,295	5,218	13,412	100	100.0	57.8
6/30/2009	2,327	8,756	5,452	13,386	100	100.0	42.2
6/30/2010	2,509	8,777	5,795	13,241	100	100.0	33.7
6/30/2011	2,642	8,734	7,229	13,606	100	100.0	30.8
6/30/2012	2,105	11,428	6,004	13,268	100	97.7	0.0
6/30/2013	2,416	11,909	5,652	13,554	100	93.5	0.0
6/30/2014	2,638	11,920	5,682	14,899	100	100.0	6.0
6/30/2015	2,862	12,329	6,023	16,098	100	100.0	15.1





### Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Number	Active Members		
			Annual Payroll	Annual Average Pay	% Increase in Average Pay
2006	5	173	\$6,353,542	\$36,726	(1.6)%
2007	5	175	6,554,229	37,453	2.0
2008	5	175	6,752,960	38,588	3.0
2009	5	174	6,803,339	39,100	1.3
2010	5	175	6,605,037	37,743	(3.5)
2011	5	174	6,809,770	39,137	3.7
2012	5	175	6,871,757	39,267	0.3
2013	5	175	6,695,359	38,259	(2.6)
2014	5	175	6,917,939	39,531	3.3
2015	5	174	6,861,166	39,432	(0.3)

### Schedule of Number of Retirants Added To and Removed From Rolls Last Ten Fiscal Years

Item	Fiscal Year Ended June 30									
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Beginning of Year	114	122	126	138	141	142	147	173	188	187
Added	12	6	20	7	6	7	33	20	6	8
Removed	(4)	(2)	(8)	(4)	(5)	(2)	(7)	(5)	(7)	(10)
End of Year	122	126	138	141	142	147	173	188	187	185





Schedule of Benefit Payments Added To and Removed From Rolls  
Last Seven Fiscal Years

Year Ending	2009	2010	2011	2012	2013	2014	2015
Beginning of Year	\$754,815	\$781,231	\$792,670	\$823,936	\$1,046,672	\$1,121,404	\$1,139,477
Added	33,316	36,400	30,133	230,576	77,003	32,688	58,303
Removed	(26,188)	(46,742)	(22,703)	(31,217)	(26,497)	(44,780)	(95,910)
Benefit increase due to annual COLA	19,288	21,781	23,836	23,377	24,226	30,165	31,718
Benefit increase due to plan amendments	0	0	0	0	0	0	0
End of Year	\$781,231	\$792,670	\$823,936	\$1,046,672	\$1,121,404	\$1,139,477	\$1,133,588





Schedule of Average Benefit Payments

Years of Credited Service									
	0-4	5-9	10-15	16-20	21-24	25	26-29	30	31+
July 1, 2014 to June 30, 2015									
Average Monthly Benefit		\$163.64	\$739.53	\$720.77		\$578.67			\$1,032.05
Average Final Salary		\$18,636.25	\$68,228.41	\$37,911.50		\$34,790.50			\$42,949.00
Number of Active Retirants		2	2	2		1			1
July 1, 2013 to June 30, 2014									
Average Monthly Benefit			\$345.04	\$490.81	\$472.60		\$579.73		
Average Final Salary			\$34,404.37	\$34,871.00	\$39,300.75		\$43,164.50		
Number of Active Retirants			2	2	1		1		
July 1, 2012 to June 30, 2013									
Average Monthly Benefit		\$168.36	\$182.74	\$462.84	\$550.22		\$730.99		
Average Final Salary		\$27,924.79	\$29,576.45	\$36,139.50	\$39,580.94		\$38,727.25		
Number of Active Retirants		6	7	1	4		2		
July 1, 2011 to June 30, 2012									
Average Monthly Benefit		\$193.84	\$404.90	\$429.73	\$675.67		\$731.32		\$1,237.30
Average Final Salary		\$33,827.49	\$43,765.24	\$36,045.25	\$38,900.81		\$38,644.58		\$57,275.51
Number of Active Retirants		10	6	3	4		3		7
July 1, 2010 to June 30, 2011									
Average Monthly Benefit	\$103.60	\$260.72	\$108.90		\$305.17				\$369.01
Average Final Salary	\$33,200.00	\$34,762.00	\$19,188.49		\$36,781.59				\$27,287.00
Number of Active Retirants	1	1	1		2				2





Schedule of Average Benefit Payments

	Years of Credited Service								
	0-4	5-9	10-15	16-20	21-24	25	26-29	30	31+
July 1, 2009 to June 30, 2010									
Average Monthly Benefit		\$129.62	\$516.63		\$759.42				\$1,295.33
Average Final Salary		\$29,883.00	\$48,826.77		\$45,504.00				\$36,180.57
Number of Active Retirants		3	1		1				1
July 1, 2008 to June 30, 2009									
Average Monthly Benefit		\$194.61			\$547.11		\$833.23	\$411.03	\$338.62
Average Final Salary		\$29,237.33			\$37,853.25		\$39,683.00	\$41,404.00	\$34,997.00
Number of Active Retirants		3			1		1	1	1
July 1, 2007 to June 30, 2008									
Average Monthly Benefit	\$117.04	\$226.10	\$354.03	\$446.95	\$513.00		\$654.58		\$922.68
Average Final Salary	\$32,858.75	\$34,938.88	\$36,171.88	\$40,512.11	\$32,188.50		\$32,547.92		\$44,455.75
Number of Active Retirants	2	2	4	7	1		3		1
July 1, 2006 to June 30, 2007									
Average Monthly Benefit		\$189.08	\$256.47	\$264.75					
Average Final Salary		\$27,519.25	\$34,758.63	\$22,041.60					
Number of Active Retirants		3	2	1					
July 1, 2005 to June 30, 2006									
Average Monthly Benefit		\$146.55	\$310.02	\$435.40					\$963.29
Average Final Salary		\$25,554.66	\$30,926.67	\$35,059.89					\$36,594.49
Number of Active Retirants		4	3	3					2





**SCHEDULE A**  
**Development of Actuarial Value of Assets**  
**(\$ thousands)**

Valuation Date June 30:	2014	2015	2016	2017	2018	2019
A. Actuarial Value Beginning of Year	\$13,554	\$14,899				
B. Market Value End of Year	16,453	16,411				
C. Market Value Beginning of Year	14,374	16,453				
D. Cash Flow						
D1. Contributions	722	718				
D2. Other Revenue	0	0				
D3. Benefit Payments	(1,238)	(1,257)				
D4. Administrative Expenses	(10)	(10)				
D5. Investment Expenses	<u>(55)</u>	<u>(58)</u>				
D6. Net	(581)	(607)				
E. Investment Income						
E1. Market Total: B.-C.-D6.	2,660	565				
E2. Assumed Rate	8.00%	8.00%				
E3. Amount for Immediate Recognition	1,184	1,352				
E4. Amount for Phased-In Recognition	1,476	( 787)				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	295	(157)				
F2. First Prior Year	136	295	(157)			
F3. Second Prior Year	(209)	136	295	(157)		
F4. Third Prior Year	389	(209)	136	295	(157)	
F5. Fourth Prior Year	<u>131</u>	<u>389</u>	<u>(209)</u>	<u>136</u>	<u>295</u>	<u>(157)</u>
F6. Total Recognized Investment Gain	742	454	65	274	138	(157)
G. Actuarial Value End of Year:						
A.+D6.+E3.+F6.	\$14,899	\$16,098				
H. Difference Between Market & Actuarial Values	\$1,554	\$ 313	\$248	\$(26)	\$(164)	\$(7)

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.





Asset Summary June 30, 2015 (\$ in Thousands)			
	Market Value	Book Value	Actuarial Value
1. Assets at June 30, 2014	\$16,453	\$12,559	\$14,899
2. Contributions and Misc. Revenue	718	718	718
3. Investment Increment	565	1,392	1,806
4. Benefit Payments	(1,257)	(1,257)	(1,257)
5. Expenses	(68)	(68)	(68)
6. Assets at June 30, 2015 (1) + (2) + (3) + (4) + (5)	\$16,411	\$13,344	\$16,098
7. Investment Increment/Mean Assets*	3.5%	11.4%	12.4%

\*Based on the approximation formula:  $I / [.5 \times (A + B - I)]$ , where

I = Investment increment  
A = Beginning of year asset value  
B = End of year asset value





## **SCHEDULE B**

### **STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS**

INTEREST RATE: 7.75% per annum, compounded annually (net of investment expenses only).

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed rates of separation from active service are as follows:

Age	Annual Rate of		
	Male	Female	Disability*
20	0.02%	0.01%	0.04%
25	0.03	0.01	0.05
30	0.03	0.01	0.07
35	0.03	0.01	0.11
40	0.04	0.01	0.17
45	0.05	0.02	0.23
50	0.09	0.04	0.30
55	0.15	0.06	0.35
60	0.24	0.08	0.40
65	0.41	0.12	0.00
70	0.69	0.20	0.00
75	1.12	0.34	0.00

\* 94% are presumed to be non-duty related, and 6% are assumed to be duty related.

WITHDRAWAL AND VESTING: 20% in an election year, none in a non-election year.

SERVICE RETIREMENT: 25% in an election year, none in a non-election year. All members are assumed to retire no later than age 80.

It is assumed that a member will be granted 2.5 years of service credit for unused leave at termination of employment.

PRICE INFLATION: 3.00% per annum, compounded annually.

PAYROLL GROWTH: 3.75% per annum, compounded annually.

ADMINISTRATIVE EXPENSES: 0.23% of payroll.

TIMING OF DECREMENTS AND PAY INCREASES: Middle of Year.

SALARY INCREASES: 3.75% per annum, for all ages.





**DEATH AFTER RETIREMENT:** The mortality table, for post-retirement mortality, used in evaluating allowances to be paid was the RP-2014 Healthy Annuitant Blue Collar Mortality Table Projected to 2016 by Scale BB (set forward 1 year for males). The RP-2014 Disabled Mortality Table (set forward 5 years for males and set forward 4 years for females) was used for the period after disability retirement. This assumption is used to measure the probabilities of each benefit payment being made after retirement.

**MARRIAGE ASSUMPTION:** 85% married with the husband three years older than his wife.

**VALUATION METHOD:** The valuation is prepared on the projected benefit basis, which is used to determine the present value of each member's expected benefit payable at retirement, disability or death. The calculations are based on the member's age, years of service, sex, compensation, expected future salary increases, and an assumed future interest earnings rate (currently 7.75%). The calculations consider the probability of a member's death or termination of employment prior to becoming eligible for a benefit and the probability of the member terminating with a service, disability, or survivor's benefit. The present value of the expected benefits payable to active members is added to the present value of the expected future payments to current benefit recipients to obtain the present value of all expected benefits payable to the present group of members and survivors.

The employer contributions required to support the benefits of SLRP are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made for pension benefits to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.

The unfunded actuarial accrued liability is determined by subtracting the current assets and the present value of prospective employer normal contributions and member contributions from the present value of expected benefits to be paid from the SLRP. The accrued liability contribution amortizes the balance of the unfunded actuarial accrued liability over a period of years from the valuation date.

**ASSET VALUATION METHOD:** Actuarial value, as developed in Schedule A. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.





## **SCHEDULE C**

### **SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS**

The following summary presents the main benefit and contribution provisions of the Plan in effect June 30, 2015 as interpreted in preparing the actuarial valuation.

#### **DEFINITIONS**

<b>Average Compensation</b>	Average annual covered earnings of an employee during the four highest years of service.
<b>Covered Earnings</b>	Gross salary not in excess of the maximum amount on which contributions were required.
<b>Fiscal Year</b>	Year commencing on July 1 and ending June 30.
<b>Eligibility Service</b>	Service while a contributing member of PERS plus additional service as described below. (OLD: Eligibility service” is all service in PERS, including that credited for SLRP service.)
<b>Credited Service</b>	Service while a contributing member of SLRP plus additional service as described below. (OLD: “Creditable service” includes only SLRP service.)
<b>Unused Sick and Vacation Leave</b>	Service credit is provided at no charge to members for unused sick and vacation time that has accrued at the time of retirement.
<b>Additional Service</b>	Additional service credit may be granted for service prior to July 1, 1989, including active duty military service.





The maximum covered earnings for employers and employees over the years are as follows:

EMPLOYER AND EMPLOYEE RATES OF CONTRIBUTION  
AND MAXIMUM COVERED EARNINGS

Fiscal Date From	Fiscal Date To	Employer Rate	Employee Rate	Maximum Covered Earnings
7/1/1989	6/30/1992	6.33%	3.00%	\$75,600
7/1/1992	6/30/2002	6.33	3.00	\$125,000
7/1/2002	6/30/2006	6.33	3.00	\$150,000
7/1/2006	6/30/2008	6.65	3.00	\$150,000
7/1/2008	6/30/2009	6.65	3.00	\$230,000
7/1/2009	12/31/2011	6.65	3.00	\$245,000
1/1/2012	6/30/2012	7.40	3.00	\$245,000
7/1/2012	6/30/2013	7.40	3.00	\$250,000
7/1/2013	6/30/2014	7.40	3.00	\$255,000
7/1/2014	6/30/2015	7.40	3.00	\$260,000
7/1/2015	6/30/2016	7.40	3.00	\$265,000





## BENEFITS

### Superannuation Retirement

#### Condition for Retirement

- (a) A retirement allowance is paid upon the request of any member who retires and has attained age 60 and completed at least eight years\* of membership service under PERS. A retirement allowance may also be paid upon the completion of at least 25 years of creditable service under PERS for members hired prior to July 1, 2011, or upon the completion of 30 years of creditable service for members hired on or after July 1, 2011.
- (b) Any member who withdraws from service prior to his or her attainment of age 60 and who has completed at least eight years\* of membership service under PERS is entitled to receive, in lieu of a refund of his or her accumulated contributions, a retirement allowance commencing at age 60.

#### Amount of Allowance

The annual retirement allowance payable to a member who retires under condition (a) above is equal to:

1. A member's annuity which is the actuarial equivalent of the member's accumulated contributions at the time of his or her retirement, plus
2. An employer's annuity which, together with the member's annuity, is equal to 1% of his or her average compensation for each of the first 25 years of creditable service plus 1.25% for each year of creditable service over 25 years.

The minimum allowance is \$60 per year of creditable service.

### Disability Retirement

#### Condition for Retirement

A retirement allowance is paid to a member who is totally and permanently disabled, as determined by the Board of Trustees, and has accumulated eight or more years\* of membership service under PERS.

\* four years for those who entered PERS before July 1, 2007.

#### Amount of Allowance

For those who were active members prior to July 1, 1992, and did not elect the benefit structure outlined below, the annual disability retirement allowance payable is equal to a superannuation retirement allowance if the member has attained age 60, otherwise it is equal to a superannuation retirement allowance calculated as follows:





1. A member's annuity equal to the actuarial equivalent of his or her accumulated contributions at the time of retirement, plus
2. An employer's annuity equal to the amount that would have been payable had the member continued in service to age 60.

For those who become active members after June 30, 1992, and for those who were active members prior to July 1, 1992, who so elected, the following benefits are payable:

1. A temporary allowance equal to the greater of (a) 20% of average compensation plus 5% for each dependent child up to a maximum of 2, or (b) the member's accrued allowance. This temporary allowance is paid for a period of time based on the member's age at disability, as follows:

<u>Age at Disability</u>	<u>Duration</u>
60 and earlier	to age 65
61	to age 66
62	to age 66
63	to age 67
64	to age 67
65	to age 68
66	to age 68
67	to age 69
68	to age 70
69 and later	one year

The minimum allowance is \$60 per year of service credit.

2. A deferred allowance commencing when the temporary allowance ceases equal to the greater of (a) the allowance the member would have received based on service to the termination age of the temporary allowance, but not more than 20% of average compensation, or (b) the member's accrued allowance.

The minimum allowance is \$60 per year of service credit.

Effective July 1, 2004, a temporary benefit can be paid out of a member's accumulated contribution balance while the member is awaiting a determination for eligibility for disability benefits. Future disability payments, if any, would be offset by advanced payments made from the member's accumulated contributions.





### **Accidental Disability Retirement**

#### Condition for Retirement

A retirement allowance is paid to a member who is totally and permanently disabled in the line of performance of duty.

#### Amount of Allowance

The annual accidental disability retirement allowance is equal to the allowance payable on disability retirement but not less than 25% of average compensation. There is no minimum benefit.

### **Accidental Death Benefit**

#### Condition for Benefit

A retirement allowance is paid to a spouse and/or dependent children upon the death of an active member in the line of performance of duty.

#### Amount of Allowance

The annual retirement allowance is equal to 25% of average compensation payable to the spouse and 12-1/2% of average compensation payable to one dependent child or 25% to two or more children until age 19 (23 if a full time student). There is no minimum benefit.

### **Ordinary Death Benefit**

#### Condition for Benefit

Upon the death of a member who has completed at least eight years\* of membership service, a benefit is payable, in lieu of a refund of the member's accumulated contributions, to his or her spouse, if said spouse has been married to the member for not less than one year.

\* four years for those who entered the system before July 1, 2007.

#### Amount of Allowance

The annual retirement allowance payable to the lawful spouse of a vested member who dies is equal to the greater of (i) the allowance that would have been payable had the member retired and elected Option 2, reduced by an actuarially determined factor based on the number of years the member lacked in qualifying for unreduced benefits, or (ii) a lifetime benefit equal to 20% of the deceased member's average compensation, but not less than \$25 per month.

In addition, a benefit is payable to dependent children until age 19 (23 if a full time student). The benefit is equal to the greater of 5% of average compensation or \$25 per month for each dependent child up to 3.

### **Return of Contributions**

Upon the withdrawal of a member without a retirement benefit, his or her contributions are returned to him or her, together with accumulated regular interest thereon.

Upon the death of a member before retirement, his or her contributions, together with the full accumulated regular interest thereon, are paid to his or her designated





beneficiary, if any, otherwise, to his or her estate provided no other survivor benefits are payable.

Interest is currently credited to the member's account at 3.50% per annum.

### **Normal Form of Benefit**

The normal form of benefit is an allowance payable during the life of the member with the provision that upon his or her death the excess of his or her total contributions at the time of retirement over the total retirement annuity paid to him or her will be paid to his or her designated beneficiary.

### **Optional Benefits**

A member upon retirement may elect to receive his or her allowance in one of the following forms which are computed to be actuarially equivalent to the applicable retirement allowance.

Option 1. Reduced allowance with the provision that if the pensioner dies before he receives the value of the member's annuity as it was at the time of retirement, the balance shall be paid to his or her beneficiary.

Option 2. Upon his or her death, his or her reduced retirement allowance shall be continued throughout the life of, and paid to, his or her beneficiary.

Option 3. Upon his or her death, 50% of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary and the other 50% of his or her reduced retirement allowance to some other designated beneficiary.

Option 4. Upon his or her death, 75% of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary.

Option 4A. Upon his or her death, 50% of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary.

Option 4B. A reduced retirement allowance shall be continued throughout the life of the pensioner, but with the further guarantee of payment to the pensioner or his or her beneficiary for a specified number of years certain.

Option 4C. A member may elect any option with the added provision that the member shall receive, so far as possible, the same total amount annually (considering both SLRP and Social Security benefits) before and after the earliest age at which the member becomes eligible for a Social Security benefit. This option was only available to those who retired prior to July 1, 2004.





A member who elects Option 2, Option 4 or Option 4A at retirement may revert to the normal form of benefit if the designated beneficiary predeceases the retired member or if the member divorces the designated beneficiary.

A member who elects the normal form of benefit or Option 1 at retirement may select Option 2, Option 4 or Option 4A to provide beneficiary protection to a new spouse if married at retirement.

A member who has at least 28 years of creditable service\* under PERS can select a partial lump-sum option at retirement. Under this option, the retiree has the option of taking a partial lump-sum distribution equal to either 12, 24, or 36 times the base maximum monthly benefit. With each lump-sum amount, the base maximum monthly benefit will be actuarially reduced. A member selecting the partial lump-sum option may also select any of the regular options except Option 1, the prorated single-life annuity, and Option 4-C, the Social Security leveling provision. The benefit is then calculated using the new reduced maximum benefit as a starting point in applying the appropriate option factors for the reduction.

\*or at least age 63 with four years of membership service for those who entered PERS before July 1, 2007.

#### **Post-Retirement Adjustments In Allowances**

The allowances of retired members are adjusted annually by an amount equal to (a) 3% of the annual retirement allowance for each full fiscal year of retirement prior to the year in which the member reaches age 55, plus (b) 3% compounded for each year thereafter beginning with the fiscal year in which the member turns age 55.

A prorated portion of the annual adjustment will be paid to the member, beneficiary, or estate of any member or beneficiary who is receiving the annual adjustment in a lump sum, but whose benefits are terminated between July 1 and December 1.





## CONTRIBUTIONS

Members currently contribute 3.00% of covered earnings. The employer contributes 7.40% of covered earnings.





**SCHEDULE D**

**DETAILED TABULATIONS OF THE DATA**

Retirants & Beneficiaries as of June 30, 2015  
Tabulated by Year of Retirement

Year of Retirement	No.	Total Annual Benefits, excluding COLA	COLA	Total Annual Benefits	Average Monthly Total Benefit
2015	2	\$17,397	\$0	\$17,397	\$725
2014	5	27,100	0	27,100	452
2013	13	52,382	1,571	53,953	346
2012	33	227,590	12,568	240,158	606
2011	3	18,965	1,703	20,668	574
2010	5	14,860	1,712	16,572	276
2009	5	22,763	3,261	26,024	434
2008	19	92,805	18,485	111,290	488
2007	1	4,417	1,016	5,433	453
2006	1	5,429	1,448	6,877	573
2005	7	23,729	6,735	30,464	363
2004	19	94,411	32,768	127,179	558
2003	5	25,491	8,874	34,365	573
2002	3	11,259	4,490	15,749	437
2001	3	8,420	3,945	12,365	343
2000	17	82,225	41,673	123,898	607
1999	8	29,735	15,933	45,668	476
1998	2	11,179	6,014	17,193	716
1997	5	13,173	8,189	21,362	356
1996	6	19,659	13,651	33,310	463
1995	1	1,058	798	1,856	155
1994	2	4,686	3,777	8,463	353
1993	6	22,860	18,475	41,335	574
1992	13	48,198	42,233	90,431	580
1990	1	2,203	2,275	4,478	373
<b>TOTAL</b>	<b>185</b>	<b>\$881,994</b>	<b>\$251,594</b>	<b>\$1,133,588</b>	<b>\$511</b>





## Schedule of Retired Members by Type of Retirement

Benefits Payable June 30, 2015

Amount of Monthly Benefit	Number of Rets.	Ret Type 1*	Ret Type 2*	Ret Type 3*
\$1 – \$100	12	11		1
101 – 200	31	26		5
201 – 300	36	28		8
301 – 400	40	30	1	9
401 – 500	21	13	1	7
501 – 600	8	4		4
601 – 700	14	13		1
701 – 800	5	5		
801 – 900	8	7		1
901 – 1,000	1	1		
Over 1,000	9	7		2
Totals	185	145	2	38

\*Type of Retirement

1 – Retirement for Age & Service

2 – Disability Retirement

3 – Survivor Payment





# Schedule of Retired Members by Type of Option

Benefits Payable June 30, 2015

Amount of Monthly Benefit	Number of Rets.	Life	Option 1	Option 2	Option 3	Option 4	Option 4A	Option 4B	Option 4C**	Option 5	PLSO** 1 Year	PLSO** 2 Years	PLSO** 3 Years
\$1 – \$100	12	5		4				3	1				1
101 – 200	31	14	1	15				1					4
201 – 300	36	17		10	2	1	2	3		1			2
301 – 400	40	18	1	11			2	7		1	1		6
401 – 500	21	11	1	5			1	3				2	4
501 – 600	8	3		1	1			2		1	1		1
601 – 700	14	4		7			1	2					1
701 – 800	5	2		2						1			1
801 – 900	8	5		1				2					1
901 – 1,000	1							1				1	
Over 1,000	9	4		3	1			1					3
Totals	185	83	3	59	4	1	6	25	1	4	2	3	24

## Option Selected

Life	-	Return of Contributions
Opt. 1	-	Return of Member's Annuity
Opt. 2	-	100% Survivorship
Opt. 3	-	50%/50% Dual Survivorship
Opt. 4	-	75% Survivorship
Opt. 4A	-	50% Survivorship
Opt. 4B	-	Years Certain & Life
Opt. 4C	-	Social Security Leveling**
Opt. 5	-	Pop-Up
PLSO	-	Partial Lump Sum** (Reflects reduced monthly benefit)

\*\*Included in other options





**Supplemental Legislative Retirement Plan of Mississippi**

**Retirant and Beneficiary Information June 30, 2015**

Attained Age	Service Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 20								
20 – 24								
25 – 29								
30 – 34								
35 – 39								
40 – 44								
45 – 49	1	\$1,979			4	\$22,904	5	\$24,883
50 – 54	2	15,158					2	15,158
55 – 59	8	39,693			2	9,922	10	49,615
60 – 64	25	115,235	1	\$7,378	5	27,664	31	150,277
65 – 69	31	146,386	1	7,137	5	46,067	37	199,590
70 – 74	27	202,818			6	23,500	33	226,318
75 – 79	25	151,887			5	27,692	30	179,579
80 – 84	19	146,751			9	53,661	28	200,412
85 – 89	6	58,530			2	22,278	8	80,808
90 – 94	1	6,948					1	6,948
95								
96								
97								
98								
99								
100 & Over								
Totals	145	\$885,385	2	\$14,515	38	\$233,688	185	\$1,133,588

Average Age: 71.3 years

Average Age at Retirement: 62.2 years





# Supplemental Legislative Retirement Plan Of Mississippi

Total Active Member Data as of June 30, 2015  
Tabulated by Attained Ages and Years of Service

Attained Age	Years of Service to Valuation Date							Totals	
	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+	No.	Valuation Payroll
Under 20									
20 – 24	1							1	\$38,049
25 – 29									
30 – 34	2	1						3	112,239
35 – 39	8	3	1					12	459,118
40 – 44	11	5	2	2				20	789,409
45 – 49	14	4	1	2				21	777,364
50 – 54	11	3	3	1	2			20	829,607
55 – 59	4	3	5	2	5		2	21	845,445
60				2	1		1	4	162,714
61	3			1	1			5	207,989
62	2		1		2		1	6	238,078
63		2		2			1	5	206,451
64	1	2	1	1	1		2	8	312,019
65		1		1	1		1	4	145,347
66	4	1	1					6	236,397
67	1	1	1				1	4	165,385
68		2	1		3		1	7	283,483
69				2	1			3	120,062
70 & Over		3	4	4	9	1	3	24	932,010
Totals	62	31	21	20	26	1	13	174	\$6,861,166

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 56.9 years  
Benefit Service: 12.1 years  
Eligibility Service: 17.1 years  
Annual Pay: \$39,432





# **SCHEDULE E**

## **MISSISSIPPI SLRP ANALYSIS OF FINANCIAL EXPERIENCE**

### **Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (\$ Thousands)**

<b>Type of Activity</b>	<b>\$ Gain (or Loss) For Year Ending 6/30/2015</b>	<b>\$ Gain (or Loss) For Year Ending 6/30/2014</b>
<b>Age &amp; Service Retirements.</b> If members retire at older ages, there is a gain. If younger ages, a loss.	\$ 45.4	\$ 16.6
<b>Disability Retirements.</b> If disability claims are less than assumed, there is a gain. If more claims, a loss.	9.6	11.2
<b>Death-in Service Benefits.</b> If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(8.8)	8.7
<b>Withdrawal From Employment.</b> If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0.0	5.1
<b>Pay Increases.</b> If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	201.0	116.9
<b>New Members.</b> Additional unfunded actuarial accrued liability will produce a loss.	0.0	0.0
<b>Investment Income.</b> If there is a greater investment income than assumed, there is a gain. If less income, a loss.	578.0	808.0
<b>Death After Retirement.</b> If retirants live longer than assumed, there is a loss. If not as long, a gain.	248.9	133.2
<b>Other.</b> Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, etc.	<u>(174.1)</u>	<u>150.3</u>
<b>Gain (or Loss) During Year From Financial Experience</b>	\$ 900.0	\$ 1,250.0
<b>Non-Recurring Items.</b> Adjustments for plan amendments, software changes, assumption changes, or method changes.	<u>(587.7)</u>	<u>0.0</u>
<b>Composite Gain (or Loss) During Year</b>	<u>\$ 312.3</u>	<u>\$ 1,250.0</u>





## **SCHEDULE F**

### **GLOSSARY**

**Actuarial Accrued Liability.** The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as “accrued liability” or “past service liability”.

**Accrued Service.** The service credited under the plan which was rendered before the date of the actuarial valuation.

**Actuarial Assumptions.** Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

**Actuarial Cost Method.** A mathematical budgeting procedure for allocating the dollar amount of the “actuarial present value of future plan benefits” between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the “actuarial funding method”.

**Actuarial Equivalent.** A series of payments is called on actuarial equivalent of another series of payments if the two series have the same actuarial present value.

**Actuarial Present Value.** The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Amortization.** Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

**Experience Gain (Loss).** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

**Normal Cost.** The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as “current service cost”. Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

**Reserve Account.** An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

**Unfunded Actuarial Accrued Liability.** The difference between the actuarial accrued liability and valuation assets.

**Valuation Assets.** The value of current plan assets recognized for valuation purposes. Generally based on book value plus a portion of unrealized appreciation or depreciation.