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

Prepared as of June 30, 2013



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October 16, 2013

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 <u>annual actuarial valuation</u> 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 accrued liability amortization period beginning July 1, 2013. The results may not be applicable for other purposes.

The date of the valuation was June 30, 2013.

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 contribution rates 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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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,

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#### REPORT ON THE ANNUAL VALUATION OF THE SUPPLEMENTAL LEGISLATIVE RETIREMENT PLAN OF MISSISSIPPI PREPARED AS OF JUNE 30, 2013

## SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2013, 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, 2013. Based on the new 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.

VALUATION DATE		June 30, 2013	J	une 30, 2012
Active members included in valuation				
Number		175		175
Annual compensation	\$	6,695,359	\$	6,871,757
Retirees				
Number		188		173
Annual allowances	\$	1,121,404	\$	1,046,672
Assets				
Market related actuarial value	\$	13,554,000	\$	13,268,000
Market value	\$	14,374,000	\$	13,169,000
Unfunded accrued liability	\$	6,423,584	\$	6,268,604
Funded Ratio		67.8%		67.9%
Fiscal Year End		June 30, 2015	J	une 30, 2014
Employer contribution rate*				
Normal Cost**		2.82%		2.73%
Accrued liability		4.58		5.02
Total		7.40%		7.75%
Anticipated accrued liability payment period		39.6 years		30.0 years
Unfunded accrued liability based on				
Market value of assets		5,603,584	\$	6,367,604
Funded Ratio		72.0%		67.4%
Payment period		30.3 years		30.9 years

## SUMMARY OF PRINCIPAL RESULTS

\* A contribution rate of 8.10% of active member' compensation for the 2014/2015 fiscal year would be needed in order to keep the anticipated accrued liability payment within 30 years in accordance with GASB Statements 25 and 27.

<sup>\*\*</sup> Beginning with the June 30, 2013 valuation, estimated budgeted administrative expenses are included in the normal cost rate.



- 2. The valuation balance sheet showing the results of the valuation is given in Section III.
- 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 withdrawal rates have been revised to more closely reflect the actual experience of the System.
  - The post-retirement mortality tables have been changed.
  - The rates of salary increase were decreased by 0.25% to more closely reflect the actual experience of the System.
  - The investment return assumption was changed from net of all expenses to net of investment expenses only. Therefore, a budgeted administrative expense of 0.23% of payroll is included in the normal cost of the annual required contribution rate.
- 5. There were no changes to the benefit provisions since the last valuation.
- 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.
- Governmental Accounting Standards Board Statement No. 27 requires employers to expense pension costs at the actuarially required contribution level, which is based on a maximum 30 year accrued liability payment period.
- All amounts shown prior to the 2004/2005 fiscal year were developed and/or reported by the prior actuarial firm.



## Supplemental Legislative Retirement Plan of Mississippi

## Comparative Schedule\*

		Active Members				Retired Lives			Va (	luation Results (\$ thousands)	\$
Valuation Date June 30	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
2004	175	\$5,794	\$33,109	(7.9)%	106	1.7	\$480.3	8.3%	\$12,934	\$10,323	\$2,611
2005	175	6,530	37,315	12.7	114	1.5	582.6	8.9	13,402	10,634	2,768
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	(3.6)	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

\*All amounts prior to 2005 reported by prior actuarial firm. \*\*Excluding COLA for years prior to 2005



## 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, 2013 upon which the valuation was based. Detailed tabulations of the data are given in Schedule D.

## **Active Members**

				Gro	up Avera	ges
Employers	Number of Employers	Number	Payroll	Salary	Age	Benefit Service*
State Agencies	5	175	\$ 6,695,359	\$38,259	55.5	10.7

\* Eligibility service is 15.7 years.

Of the 175 active members, 106 are vested and 69 are non-vested.

#### **Retired Lives**

			Group Ave	erages
Type of Benefit Payment	No.	Annual Benefits	Benefit	Age
Retirement	150	\$900,782	\$6,005	70.6
Disability	2	13,811	6,906	60.8
Survivor	36	206,811	5,745	67.4
Total in SLRP	188	\$1,121,404	\$5,965	69.9

## **Deferred Vested/Inactive Lives**

Type of Member	No.	Deferred Benefits	Outstanding Balance
Deferred Vested – Benefit Included	50	\$183,452	N/A
Inactive	11	N/A	42,508
Total in SLRP	61	\$183,452	\$42,508



## 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, 2013 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2012. 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, 2013	J	UNE 30, 2012
ASSETS				
Current actuarial value of assets:				
Annuity Savings Account	\$	2,416,305	\$	2,104,606
Annuity Reserve		1,980,597		1,896,360
Employers' Accumulation Account		9,157,098		9,267,034
Total current assets	\$	13,554,000	\$	13,268,000
Future member contributions to Annuity Savings Account	\$	1,574,952	\$	1,842,114
Prospective contributions to Employer's Accumulation Account				
Normal contributions	\$	1,359,708	\$	1,676,324
Unfunded accrued liability contributions		6,423,584		6,268,604
Total prospective contributions	<u>\$</u>	7,783,292	<u>\$</u>	7,944,928
Total assets	<u>\$</u>	22,912,244	<u>\$</u>	23,055,042
LIABILITIE	S			
Present value of benefits payable on account of present retired members and beneficiaries	\$	11,908,884	\$	11,428,426
Present value of benefits payable on account of inactive members for service rendered before the valuation date		1,364,984		1,470,595
Present value of benefits payable on account of active members	<u>\$</u>	9,638,376	<u>\$</u>	10,156,021
Total liabilities	<u>\$</u>	22,912,244	<u>\$</u>	23,055,042



## BREAKDOWN OF TOTAL AND ACCRUED LIABILITIES AS OF JUNE 30, 2013

	Total Liability	Accrued Liability
Active Members		
Retirement	\$ 7,869,378	\$ 6,077,960
Death	632,101	420,831
Disability	220,917	36,564
Termination	 915,980	 168,361
Total	\$ 9,638,376	\$ 6,703,716
Retirees		
Retirement	\$ 9,866,538	\$ 9,866,538
Survivor	1,891,753	1,891,753
Disability	 150,593	 150,593
Total	\$ 11,908,884	\$ 11,908,884
Deferred Vested Members	1,279,968	1,279,968
Inactive Members	 <u>85,016</u>	 85,016
Total Actuarial Values	\$ 22,912,244	\$ 19,977,584
Actuarial Value of Assets		 13,554,000
Unfunded Actuarial Accrued Liability		\$ 6,423,584



## 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, 2013.

#### 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 \$2,416,305. The assets credited to the Annuity Reserve were \$1,980,597 and the assets credited to the Employer's Accumulation Account totaled \$9,157,098. Current actuarial assets as of the valuation date equaled the sum of these three funds, \$13,554,000. Future member contributions to the Annuity Savings Account were valued to be \$1,574,952. Prospective contributions to the Employer's Accumulation Account were calculated to be \$7,783,292 of which \$1,359,708 is attributable to service rendered after the valuation date (unfunded accrued liability contributions).

Therefore, the balance sheet shows the present value of current and future assets of the Plan to be \$22,912,244 as of June 30, 2013.

#### Total Liabilities

The present value of benefits payable on account of presently retired members and beneficiaries totaled \$11,908,884 as of the valuation date. The present value of future benefit payments on behalf of active members amounted to \$9,638,376. In addition, the present value of benefits for inactive members, due to service rendered before the valuation date, was calculated to be \$1,364,984.

Therefore, the balance sheet shows the present value for all prospective benefit payments under the Plan to be \$22,912,244 as of June 30, 2013.

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, 2013 valuation is 39.6 years, compared to 30.0 years for the last valuation.

The primary reasons for the increase in the amortization period are the continued recognition of the investment loss from the 2009 fiscal year and the investment loss for the 2012 fiscal year. In addition, since the overall payroll growth rate was less than expected, it has caused upward pressure on the contribution rate attributed to the unfunded accrued liability. This was offset by assumption changes that caused a gain in the unfunded accrued liability.



## 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, 2013 is shown below.

		<u>\$ Thousands</u>
(1)	UAAL* as of June 30, 2012	\$ 6,268.6
(2)	Total normal cost from last valuation	393.8
(3)	Total contributions	707.0
(4)	Interest accrual: (1) x .080 + [[(2) – (3)] x .0392]	 489.2
(5)	Expected UAAL before changes: $(1) + (2) - (3) + (4)$	\$ 6,444.6
(6)	Change due to plan amendments	0.0
(7)	Change due to actuarial assumptions or methods	 (190.3)
(8)	Expected UAAL after changes: (5) + (6) + (7)	\$ 6,254.3
(9)	Actual UAAL as of June 30, 2013	\$ 6,423.6
(10)	Gain/(loss): (8) – (9)	\$ (169.3)
(11)	Gain/(loss) as percent of actuarial accrued liabilities at start of year (\$19,536.6)	(0.9)%

\*Unfunded actuarial accrued liability.

Valuation Date June 30	Actuarial Gain/(Loss) as a % of Beginning Accrued Liabilities
2008	0.9%
2009	(3.0)
2010	(3.8)
2011	(6.1)
2012	(6.4)
2013	(0.9)



## 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 2014/2015 fiscal year.

Contribution for	2014/2015 Fiscal Year	2013/2014 Fiscal Year
Normal Cost:		
Service retirement benefits	4.20%	4.34%
Disability benefits	0.30	0.30
Survivor benefits	0.36	0.39
Total	4.86%	5.03%
Member Contributions:	3.00%	3.00%
Less future refunds	<u>(0.73)</u>	<u>(0.70)</u>
Available for benefits	2.27%	2.30%
Employer Normal Cost	2.59%	2.73%
Administrative Expense Load	0.23%	N/A
Unfunded Actuarial Accrued Liabilities	4 58	5.02
	4.50	0.02
Total Computed Employer Contribution Rate	7.40%	7.75%

\*Amortization period a year ago was 30.0 years.

The components of the change in the computed unfunded accrued liability amortization period from 30.0 years to 39.6 years are as follows:

Previously Reported Period	30.0 years
Change due to:	
Normal amortization	(1.0)
Actuarial experience	4.9
Assumption changes	(6.7)
Plan amendments	0.0
Method Change	0.0
Funding Policy Change	9.6
UAL contribution experience	2.8
Computed Period	39.6 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 an 8.00% investment return and salary increases of 4.25% each year in the future. Due to the new funding policy all future contribution rates are assumed to remain at 7.40% of payroll.



# Mississippi Supplemental Legislative Retirement Plan

## Twenty-five Year Cash Flow Projection

	Voluction	Market Value of		Projected	Expected		Market Value of
Vear	Payroll		Contributions	Payments	Return	Cash Flow	Assels Dalarice
<u>1001</u>	<u>1 ayron</u>	<u>oury r</u>	Contributions	<u>r aymento</u>	<u>IXClum</u>	<u>00311110w</u>	<u>30110 300</u>
2013	\$6,829,266	\$14,374,000	\$710,244	\$1,212,211	\$1,129,841	\$627,874	\$15,001,874
2014	7,119,510	15,001,874	740,429	1,253,945	1,179,609	666,093	15,667,968
2015	7,422,089	15,667,968	771,897	1,391,263	1,228,663	609,297	16,277,264
2016	7,737,528	16,277,264	804,703	1,523,762	1,273,419	554,360	16,831,624
2017	8,066,373	16,831,624	838,903	1,539,873	1,318,491	617,521	17,449,145
2018	8,409,194	17,449,145	874,556	1,548,294	1,368,982	695,244	18,144,389
2019	8,766,585	18,144,389	911,725	1,699,725	1,420,031	632,031	18,776,421
2020	9,139,165	18,776,421	950,473	1,782,969	1,468,814	636,318	19,412,738
2021	9,527,580	19,412,738	990,868	1,858,925	1,518,297	650,240	20,062,978
2022	9,932,502	20,062,978	1,032,980	1,910,857	1,569,923	692,046	20,755,024
2023	10,354,633	20,755,024	1,076,882	2,015,743	1,622,848	683,987	21,439,011
2024	10,794,705	21,439,011	1,122,649	2,090,993	1,676,387	708,043	22,147,054
2025	11,253,480	22,147,054	1,170,362	2,158,816	1,732,226	743,772	22,890,826
2026	11,731,753	22,890,826	1,220,102	2,185,547	1,792,648	827,203	23,718,029
2027	12,230,353	23,718,029	1,271,957	2,267,771	1,857,610	861,796	24,579,825
2028	12,750,143	24,579,825	1,326,015	2,314,547	1,926,845	938,313	25,518,138
2029	13,292,024	25,518,138	1,382,370	2,327,420	2,003,649	1,058,599	26,576,737
2030	13,856,935	26,576,737	1,441,121	2,319,374	2,091,009	1,212,756	27,789,493
2031	14,445,855	27,789,493	1,502,369	2,385,778	2,187,823	1,304,414	29,093,907
2032	15,059,804	29,093,907	1,566,220	2,427,617	2,293,057	1,431,660	30,525,567
2033	15,699,846	30,525,567	1,632,784	2,411,591	2,410,893	1,632,086	32,157,653
2034	16,367,089	32,157,653	1,702,177	2,379,303	2,545,527	1,868,401	34,026,054
2035	17,062,690	34,026,054	1,774,520	2,368,890	2,698,310	2,103,940	36,129,993
2036	17,787,854	36,129,993	1,849,937	2,384,278	2,869,026	2,334,685	38,464,678
2037	18,543,838	38,464,678	1,928,559	2,346,663	3,060,450	2,642,346	41,107,024

## **Mississippi Supplemental Legislative Retirement Plan**

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





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## SECTION VIII – SUPPLEMENTAL DISCLOSURE INFORMATION

 Statement Nos. 25 and 27 of the Governmental Accounting Standards Board (GASB) set forth certain items of information to be disclosed in the financial statements of the Plan and the employer. 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, 2013

GROUP	NUMBER		
Retired participants and beneficiaries currently receiving benefits	188		
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	61		
Active Participants	175		
Total	424		



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)
06/30/2004*	\$10,323,000	\$12,934,100	79.8%	\$2,611,100	\$5,794,099	45.1%
06/30/2005#	10,634,000	13,401,595	79.3	2,767,595	6,530,045	42.4
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

\* After change in benefit provisions.

# After change in actuarial assumptions.

As can be seen from the table above, the funded ratio has declined over the 10-year period. This is due in large part to the less than expected investment returns over the 10-year span. The open 30-year amortization period during the latter half of the time period contributed to the decline. However, estimated projection results using a fixed employer contribution rate of 7.40% of payroll shows improving funded ratios.



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 maximum allowable amortization period under GASB 27/27 is 30 years. As a result, the annual required contribution for accounting purposes is different than that for funding purposes. The accrued liability rate is based on amortization of the unfunded actuarial accrued liability of \$6,423,584 over a period of 30.0 years from the valuation date.

Annual Required Contribution (ARC)							
Valuation Date June 30	2013	2012					
For Fiscal Year	2014/2015	2013/2014					
Employer contribution rate							
Normal Cost*	2.82%	2.73%					
Accrued liability	<u>5.28</u>	<u>5.02</u>					
Total	8.10%	7.75%					
Anticipated accrued liability payment period	30.0 years	30.0 years					

Beginning with the June 30, 2013 valuation, estimated budgeted administrative expenses are included in \* the normal cost rate.

4. Additional information as of June 30, 2013 follows.

Valuation date	6/30/2013
Actuarial cost method	Entry age
Amortization method	Level percent open
Remaining amortization period	30.0 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return*	8.00%
Projected salary increases <sup>#</sup>	4.25%
Cost-of-living adjustments	3.00%
*Includes price inflation at	3.50%
# Includes wage inflation at	4.25%



Schedule of Employer Contributions
------------------------------------

Fiscal Year Ending June 30	Valuation date June 30	Annual Required	Percentage Contributed
2005	2003	\$366,766	100.0%
2006	2004	413,352	100.0
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	495,457	



# Solvency Tests (\$ in Thousands)

	Actua	rial Accrued Liabilitie		Portions of Accrued Liabilities Covered by Assets			
Valuation Date	(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)
0/00/0000	<b>\$</b> 2,424	<b>*</b> 4 <b>=</b> 0 <b>=</b>	<b>A5</b> 500	<b>\$40,400</b>	1000/	100.00/	00.40/
6/30/2003	\$2,121	\$4,567	\$5,532	\$10,196	100%	100.0%	63.4%
6/30/2004	2,030	6,395	4,509	10,323	100	100.0	42.1
6/30/2005	2,076	6,813	4,513	10,634	100	100.0	38.7
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	11,908	5,654	13,554	100	93.5	0.0



		Active Members						
Valuation Date	Number of Employers	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay			
2004	5	175	\$5,794,099	\$33,109	(7.9)%			
2005	5	175	6,530,045	37,315	12.7			
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	(3.6)			
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)			

## Schedule of Active Member Valuation Data

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

-	Fiscal Year Ended June 30									
Item	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Beginning of Year	85	106	114	122	126	138	141	142	147	173
Added	26	8	12	6	20	7	6	7	33	20
Removed	(5)	0	(4)	(2)	(8)	(4)	(5)	(2)	(7)	(5)
End of Year	106	114	122	126	138	141	142	147	173	188



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

Year Ending	2007	2008	2009	2010	2011	2012	2013
Beginning of Year	\$629,217	\$657,819	\$754,815	\$781,231	\$792,670	\$823,936	\$1,046,672
Added	17,973	107,569	33,316	36,400	30,133	230,576	77,003
Removed	(6,908)	(29,585)	(26,188)	(46,742)	(22,703)	(31,217)	(26,497)
Benefit increase due to annual COLA	17,537	19,012	19,288	21,781	23,836	23,377	24,226
Benefit increase due to plan amendments	0	0	0	0	0	0	0
End of Year	\$657,819	\$754,815	\$781,231	\$792,670	\$823,936	\$1,046,672	\$1,121,404



## 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, 2012 to June 30, 2013 Average Monthly Benefit Average Final Salary Number of Active Retirants		\$168.36 \$27,924.79 6	\$182.74 \$29,576.45 7	\$462.84 \$36,139.50 1	\$550.22 \$39,580.94 4		\$730.99 \$38,727.25 2		
July 1, 2011 to June 30, 2012 Average Monthly Benefit Average Final Salary Number of Active Retirants		\$193.84 \$33,827.49 10	\$404.90 \$43,765.24 6	\$429.73 \$36,045.25 3	\$675.67 \$38,900.81 4		\$731.32 \$38,644.58 3		\$1,237.30 \$57,275.51 7
July 1, 2010 to June 30, 2011 Average Monthly Benefit Average Final Salary Number of Active Retirants	\$103.60 \$33,200.00 1	\$260.72 \$34,762.00 1	\$108.90 \$19,188.49 1		\$305.17 \$36,781.59 2				\$369.01 \$27,287.00 2
July 1, 2009 to June 30, 2010 Average Monthly Benefit Average Final Salary Number of Active Retirants		\$129.62 \$29,883.00 3	\$516.63 \$48,826.77 1		\$759.42 \$45,504.00 1				\$1,295.33 \$36,180.57 1
July 1, 2008 to June 30, 2009 Average Monthly Benefit Average Final Salary Number of Active Retirants		\$194.61 \$29,237.33 3			\$547.11 \$37,853.25 1		\$833.23 \$39,683.00 1	\$411.03 \$41,404.00 1	\$338.62 \$34,997.00 1



## 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, 2007 to June 30, 2008 Average Monthly Benefit Average Final Salary Number of Active Retirants	\$117.04 \$32,858.75 2	\$226.10 \$34,938.88 2	\$354.03 \$36,171.88 4	\$446.95 \$40,512.11 7	\$513.00 \$32,188.50 1		\$654.58 \$32,547.92 3		\$922.68 \$44,455.75 1
July 1, 2006 to June 30, 2007 Average Monthly Benefit Average Final Salary Number of Active Retirants		\$189.08 \$27,519.25 3	\$256.47 \$34,758.63 2	\$264.75 \$22,041.60 1					
July 1, 2005 to June 30, 2006 Average Monthly Benefit Average Final Salary Number of Active Retirants		\$146.55 \$25,554.66 4	\$310.02 \$30,926.67 3	\$435.40 \$35,059.89 3					\$963.29 \$36,594.49 2
July 1, 2004 to June 30, 2005 Average Monthly Benefit Average Final Salary Number of Active Retirants		\$181.11 \$29,524.88 2	\$270.19 \$27,246.83 3	\$382.51 \$32,157.50 1	\$141.81 \$34,034.50 1	\$774.95 \$39,084.55 1			
July 1, 2003 to June 30, 2004 Average Monthly Benefit Average Final Salary Number of Active Retirants	\$89.25 \$29,452.38 2	\$744.00 \$30,298.88 2	\$351.21 \$29,231.13 2	\$407.83 \$30,666.48 7	\$549.98 \$36,900.94 5		\$675.25 \$49,614.16 4	\$822.08 \$41,404,.00 1	\$964.09 \$43,852.85 3



	(\$ thousands)							
	Valuation Date June 30:	2012	2013	2014	2015	2016	2017	
Α.	Actuarial Value Beginning of Year	\$13,606	\$13,268					
В.	Market Value End of Year	13,169	14,374					
C.	Market Value Beginning of Year	13,737	13,169					
D.	Cash Flow							
	D1. Contributions	696	707					
	D2. Other Revenue	0	0					
	D3. Benefit Payments	(1,293)	(1,207)					
	D4. Administrative Expenses	(10)	(10)					
	D5. Investment Expenses	(29)	(33)					
	D6. Net	(636)	(543)					
E.	Investment Income							
	E1. Market Total: BCD6.	68	1,748					
	E2. Assumed Rate	8.00%	8.00%					
	E3. Amount for Immediate Recognition	1,114	1,067					
	E4. Amount for Phased-In Recognition	(1,046)	681					
F.	Phased-In Recognition of Investment Income							
	F1. Current Year: 0.20*E4.	(209)	136					
	F2. First Prior Year	389	(209)	136				
	F3. Second Prior Year	131	389	(209)	136			
	F4. Third Prior Year	(685)	131	389	(209)	136		
	F5. Fourth Prior Year	(442)	(685)	131	389	(209)	136	
	F6. Total Recognized Investment Gain	(816)	(238)	447	316	(73)	136	
G.	Actuarial Value End of Year:							
	A.+D6.+E3.+F6.	\$13,268	\$13,554					
H.	Difference Between Market & Actuarial Values	\$(99)	\$820	\$373	\$57	\$130	\$(6)	

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

 H.
 Difference Between Market & Actuarial Values
 \$(99)
 \$820
 \$373
 \$57
 \$130
 \$(6)

 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, 2013 (\$ in Thousands)

		Market Value	Book Value	Actuarial Value
1.	Assets at June 30, 2012	\$13,169	\$11,663	\$13,268
2.	Contributions and Misc. Revenue	707	707	707
3.	Investment Increment	1,748	1,245	819
4.	Benefit Payments	(1,207)	(1,207)	(1,207)
5.	Expenses	(43)	(43)	(33)
6.	Assets at June 30, 2013 (1) + (2) + (3) + (4) + (5)	\$14,374	\$12,365	\$13,554
7.	Investment Increment/Mean Assets*	13.6%	10.9%	6.3%

\*Based on the approximation formula: I/[.5 x (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: 8.00% 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:

		Annual Rate of	
	Dea	ath	
Age	Male	Female	Disability*
20	.02%	.01%	.04%
25	.03	.02	.05
30	.04	.02	.07
35	.05	.03	.11
40	.08	.04	.17
45	.13	.06	.23
50	.24	.10	.30
55	.39	.15	.35
60	.60	.25	.40
65	.96	.43	
70	1.61	.72	

\* 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 75.

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

PRICE INFLATION: 3.50% per annum, compounded annually.

PAYROLL GROWTH: 4.25% per annum, compounded annually.

TIMING OF DECREMENTS AND PAY INCREASES: Middle of Year.

SALARY INCREASES: 4.25% 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-2000 Combined Mortality Table Projected to 2025 by Scale AA (set forward 2 years for males). The RP-2000 Disabled Mortality Table (set back 3 years for males and set forward 2 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. Mortality improvement is anticipated under this assumption as recent mortality experience shows actual deaths 7% greater than expected under the selected table.

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 8.00%). 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 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 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, 2013 as interpreted in preparing the actuarial valuation.

## DEFINITIONS

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

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

## EMPLOYER AND EMPLOYEE RATES OF CONTRIBUTION AND MAXIMUM COVERED EARNINGS



## BENEFITS

#### **Superannuation Retirement**

**Disability Retirement** 

Condition for Retirement

Amount of Allowance

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.

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.

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:

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:

Age at Disability	Duration
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 of 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 of 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 With each lump-sum amount, the base benefit. 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 that additional amount necessary to fund the benefits outlined above on a full actuarial reserve funding basis.



## SCHEDULE D

## DETAILED TABULATIONS OF THE DATA

## Retirants & Beneficiaries as of June 30, 2013 Tabulated by Year of Retirement

Year of Retirement	No.	Total Annual Benefits, excluding COLA	COLA	Total Annual Benefits	Average Monthly Total Benefit
2013	11	\$39,754	\$0	\$39,754	\$301
2012	34	228,805	163	228,968	561
2011	3	18,966	517	19,483	541
2010	5	14,860	768	15,628	260
2009	5	22,763	1,766	24,529	409
2008	20	103,878	13,549	117,427	489
2007	1	4,417	704	5,121	427
2006	2	8,868	1,602	10,470	436
2005	9	47,572	10,442	58,014	537
2004	21	126,305	33,627	159,932	635
2003	5	25,491	6,967	32,458	541
2002	3	11,259	3,594	14,853	413
2001	3	8,420	3,235	11,655	324
2000	20	86,158	36,258	122,416	510
1999	8	29,735	13,343	43,078	449
1998	2	11,179	5,070	16,249	677
1997	5	13,172	7,009	20,181	336
1996	7	22,670	13,561	36,231	431
1995	1	1,058	691	1,749	146
1994	2	4,686	3,291	7,977	332
1993	6	21,999	16,188	38,187	530
1992	14	52,329	40,494	92,823	553
1990	1	2,203	2,018	4,221	352
TOTAL	188	\$906,547	\$214,857	\$1,121,404	\$497



## Schedule of Retired Members by Type of Retirement

Amount of Monthly Benefit	Number of Rets.	Ret Type 1*	Ret Type 2*	Ret Type 3*
\$1 – \$100	11	10		1
101 – 200	34	27		7
201 – 300	38	29		9
301 – 400	40	31	1	8
401 – 500	18	14	1	3
501 – 600	7	3		4
601 – 700	14	13		1
701 – 800	7	7		
801 – 900	9	8		1
901 – 1,000	2	2		
Over 1,000	8	6		2
Totals	188	150	2	36

## Benefits Payable June 30, 2013

<u>\*Type of Retirement</u>
1 – Retirement for Age & Service
2 – Disability Retirement
3 – Survivor Payment



## Schedule of Retired Members by Type of Option

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	11	5		3				3	1				1
101 – 200	34	13	1	15				4		1			4
201 – 300	38	19		11	2		2	3		1			2
301 – 400	40	18	1	12			2	6		1	1		6
401 – 500	18	7	1	6			1	3				2	3
501 – 600	7	3		1				2		1	1		
601 – 700	14	4		7			1	2					1
701 – 800	7	4		2						1			2
801 – 900	9	5		1			1	2					1
901 – 1,000	2	1						1				1	1
Over 1,000	8	3		3	1			1					3
Totals	188	82	3	61	3	0	7	27	1	5	2	3	24

Option Selec	cted	
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

- -
- -
- Social Security Leveling\*\* Pop-Up Partial Lump Sum\*\* (Reflects reduced monthly benefit) -

\*\*Included in other options



## Supplemental Legislative Retirement Plan of Mississippi

## Retirant and Beneficiary Information June 30, 2013

Attained	Servic	e Retirement	Disabil	ity Retirement	Sur Be	vivors and neficiaries	Total	
Attained Age	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 20								
20 – 24								
25 – 29								
30 – 34								
35 – 39								
40 – 44					1	\$4,440	1	\$4,440
45 – 49	1	\$1,922			3	17,149	4	19,071
50 – 54	2	4,131			2	3,711	4	7,842
55 – 59	9	50,873	1	\$7,003	2	6,522	12	64,398
60 – 64	31	162,127	1	6,808	5	27,230	37	196,165
65 – 69	37	200,028			8	57,032	45	257,060
70 – 74	23	141,019			5	24,064	28	165,083
75 – 79	20	151,697			5	22,408	25	174,105
80 – 84	21	148,414			3	16,949	24	165,363
85 – 89	5	34,022			2	27,306	7	61,328
90 – 94	1	6,549					1	6,549
95								
96								
97								
98								
99								
100 & Over								
Totals	150	\$900,782	2	\$13,811	36	\$206,811	188	\$1,121,404

Average Age:69.9 yearsAverage Age at Retirement:62.5 years



## Supplemental Legislative Retirement Plan Of Mississippi

Total Active Member Data as of June 30, 2013 Tabulated by Attained Ages and Years of Service

			Totals						
Attained Age	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+	No.	Valuation Payroll
Under 20									
20 – 24 25 – 29									
30 – 34 35 – 39	5 9	1 6						6 15	\$177,640 612.890
40 – 44	15	4	2					21	736,450
45 – 49 50 – 54	8 9	4 8	2	2 1	4	1		16 23	613,253 941.881
55 – 59	5	6	2	2	5	1	1	22	878,116
60 61	2	1 2	1	1	2	2	1	7 5	218,766 202,506
62 63	1	3	1		1		2	8	302,103 201,409
64	4	2						6	231,142
65 66	1	2		1	2		1	4 7	161,725 278 360
67 68	•	-	1	3	3			4 4	153,129 148,728
69		1	1		5		1	3	107,377
70 & Over		5	1	2	7	3	1	19	729,884
Totals	60	50	12	12	25	7	9	175	\$6,695,359

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

Age:	55.5 years
Benefit Service:	10.7 years
Eligibility Service:	15.7 years
Annual Pay:	\$38,259



## SCHEDULE E

#### MISSISSIPPI SLRP ANALYSIS OF FINANCIAL EXPERIENCE

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

Type of Activity	\$ Gain (or Loss) For Year Ending 6/30/2013	\$ Gain (or Loss) For Year Ending 6/30/2012		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ 48.3	\$ 214.8		
<b>Disability Retirements.</b> If disability claims are less than assumed, there is a gain. If more claims, a loss.	12.0	12.6		
<b>Death-in Service Benefits.</b> If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(28.1)	10.9		
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	66.0	402.0		
<b>Pay Increases.</b> If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	284.5	234.3		
<b>New Members.</b> Additional unfunded accrued liability will produce a loss.	(24.6)	(314.3)		
<b>Investment Income.</b> If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(255.0)	(806.0)		
<b>Death After Retirement.</b> If retirants live longer than assumed, there is a loss. If not as long, a gain.	(19.0)	(327.2)		
<b>Other.</b> Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(253.4)	(626.3)		
Gain (or Loss) During Year From Financial Experience	\$ (169.3)	\$ (1,199.2)		
<b>Non-Recurring Items.</b> Adjustments for plan amendments, assumption changes, or method changes.	190.3	(0.0)		
Composite Gain (or Loss) During Year	<u>\$ 21.0</u>	<u>\$ (1,199.2)</u>		



## SCHEDULE F

#### GLOSSARY

<u>Actuarial Accrued Liability.</u> 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".

<u>Accrued Service</u>. The service credited under the plan which was rendered before the date of the actuarial valuation.

<u>Actuarial Assumptions.</u> 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.

<u>Actuarial Cost Method.</u> 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".

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

<u>Actuarial Present Value.</u> 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.

<u>Amortization.</u> 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.

<u>Experience Gain (Loss).</u> 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.

<u>Normal Cost.</u> 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.

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

<u>Unfunded Actuarial Accrued Liability.</u> The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability".

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