

The experience and dedication you deserve



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

Prepared as of June 30, 2011





The experience and dedication you deserve

October 18, 2011

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

### 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, 2011. The results may not be applicable for other purposes.

The date of the valuation was June 30, 2011.

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 9.

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.



Board of Trustees October 18, 2011 Page 2

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,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA Chief Executive Officer

Thong Cavarage

TJC/EJK:kc

S:\Mississippi SLRP\Valuation\2011\SLRP Valuation Report 2011.doc

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

Edward & World



### TABLE OF CONTENTS

<u>Section</u>	<u>ltem</u>	<u>Page No.</u>
1	Summary of Principal Results	1
ĪI	Membership Data	5
III	Valuation Balance Sheet	6
IV	Comments on Valuation	9
V	Derivation of Experience Gains and Losses	10
VI	Required Contribution Rates	11
VII	Cash Flow Projection	12
VIII	Supplemental Disclosure Information	15
Schedule		
Α	Development of Actuarial Value of Assets	24
В	Statement of Actuarial Assumptions and Methods	26
С	Summary of Main Benefit and Contribution Provisions	28
D	Detailed Tabulations of the Data	36
Е	Analysis of Financial Experience	41
F	Glossary	42



### REPORT ON THE ANNUAL VALUATION OF THE SUPPLEMENTAL LEGISLATIVE RETIREMENT PLAN OF MISSISSIPPI PREPARED AS OF JUNE 30, 2011

### SECTION I – SUMMARY OF PRINCIPAL RESULTS

This report, prepared as of June 30, 2011, 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, 2011. We recommend the contribution rate remain at 7.40% of active members' compensation for the 2012/2013 fiscal year in order to keep the anticipated accrued liability payment period within 30 years in accordance with GASB Statements 25 and 27.

### **SUMMARY OF PRINCIPAL RESULTS**

VALUATION DATE	J	une 30, 2011	June 30, 2010	
Active members included in valuation				
Number		174		175
Annual compensation	\$	6,809,770	\$	6,605,037
Retirees				
Number		147		142
Annual allowances	\$	823,936	\$	792,670
Assets				
Market related actuarial value	\$	13,606,000	\$	13,241,000
Market value	\$	13,737,000	\$	11,079,000
Unfunded accrued liability	\$	4,999,301	\$	3,840,278
Funded Ratio		73.1%		77.5%
Recommended employer contribution rate				50
Normal		2.56%		4.18%
Accrued liability		4.84		3.22
Total		7.40%		7.40%
Anticipated accrued liability payment period		22.3 years		29.7 years
Unfunded accrued liability based on				
Market value of assets	\$	4,868,301	\$	6,002,278
Funded Ratio		73.8%		64.9%
Payment period		21.4 years		Infinite



- 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.
- The following changes to the actuarial assumptions were made since the last valuation.
  - The post-retirement mortality table used for disability retirements has been changed.
- 5. The following changes to the benefit provisions were made since the last valuation:
  - Section 25-11-115 was amended to add Option 4, the 75 percent joint and survivor annuity,
     effective January 1, 2011.
  - Section 25-11-115 (3) and (4) were amended to add Option 4, the 75 percent joint and survivor annuity, to the "pop-up" and "pop-down" provisions, respectively, effective July 1, 2011.
  - Section 25-11-115 was amended to provide that, for members who retire effective on or after
    July 1, 2012, the actuarial equivalent factor used to compute the reduced retirement allowance
    at retirement or upon any subsequent recalculation of benefit shall be the factor for the age of
    the retiree and his or her beneficiary at the time of retirement or at the time an election for
    recalculation of benefits is made.
  - Section 25-11-111 was amended to establish 30 years as the number of years of creditable service required for retirement regardless of age for persons who become members of the System on or after July 1, 2011.
  - Section 25-11-115 was amended to establish 33 years as the number of years of creditable service required to select a partial lump sum option for persons who become members of the System on or after July 1, 2011.
- 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 4 provides a ten-year history of some pertinent figures.
- 8. The valuation results are developed based upon the current employer contribution rate of 7.40% of payroll. 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.



### 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, 2011 upon which the valuation was based. Detailed tabulations of the data are given in Schedule D.

### **Active Members**

that his pale	A A A	A. C. Office	71 111		Gro	up Avera	ges
Employers	Number of Employers	Number		Payroll	Salary	Age	Benefit Service*
State Agencies	5	174	\$	6,809,770	\$39,137	57.7	13.1

<sup>\*</sup> Eligibility service is 18.1 years.

Of the 175 active members, 134 are vested and 41 are non-vested.

### **Retired Lives**

	1 May 1		Group Ave	erages
Type of Benefit Payment	No.	Annual Benefits	Benefit	Age
Retirement	118	\$665,252	\$5,638	70.7
Disability	2	13,148	6,574	58.8
Survivor	27	145,536	5,390	63.9
Total in SLRP	147	\$823,936	\$5,605	69.3

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

Type of Member	No.	Deferred Benefits	Outstanding Balance
Deferred Vested – Benefit Included	46	\$130,461	N/A
Deferred Vested – Missing Benefit	4	N/A	\$50,035
Inactive	10	N/A	22,372
Total in SLRP	60	\$130,461	\$72,407



### 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, 2011 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2010. 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

	Jı	JNE 30, 2011	JU	NE 30, 2010
ASSETS	3			
Current actuarial value of assets:				
Annuity Savings Account	\$	2,641,603	\$	2,509,183
Annuity Reserve		1,274,341		1,233,305
Employers' Accumulation Account		9,690,056		9,498,512
Total current assets	\$	13,606,000	\$	13,241,000
Future member contributions to Annuity Savings Account	\$	1,419,812	\$	1,528,527
Prospective contributions to Employer's Accumulation Account				
Normal contributions	\$	1,211,573	\$	2,129,747
Unfunded accrued liability contributions		4,999,301		3,840,278
Total prospective contributions	\$	6,210,874	\$	5,970,025
Total assets	<u>\$</u>	21,236,686	<u>\$</u>	20,739,552
LIABILITI	ES			
Present value of benefits payable on account of present retired members and beneficiaries	\$	8,734,254	\$	8,777,175
Present value of benefits payable on account of inactive members for service rendered before the valuation date		1,076,196		986,461
Present value of benefits payable on account of active members	<u>\$</u>	11,426,236	<u>\$</u>	10,975,91 <u>6</u>
Total liabilities	\$	21,236,686	\$	20,739,552



### BREAKDOWN OF TOTAL AND ACCRUED LIABILITIES AS OF JUNE 30, 2011

		Total Liability		Accrued Liability
Active Members				
Retirement	\$	9,785,224	\$	8,118,897
Death		664,893		462,216
Disability		208,797		38,649
Termination		767,322	7.	175,089
Total	\$	11,426,236	\$	8,794,851
Retirees				
Retirement	\$	7,310,204	\$	7,310,204
Survivor		1,275,470		1,275,470
Disability		148,580		148,580
Total	\$	8,734,254	\$	8,734,254
Deferred Vested Members		931,382		931,382
Inactive Members	_	144,814		144,814
Total Actuarial Values	\$	21,236,686	\$	18,605,301
Actuarial Value of Assets			:=	13,606,000
Unfunded Actuarial Accrued Liability			\$	4,999,301



### 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, 2011.

### 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 \$2,641,603. The assets credited to the Annuity Reserve were \$1,274,341 and the assets credited to the Employer's Accumulation Account totaled \$9,690,056. Current actuarial assets as of the valuation date equaled the sum of these three funds, \$13,606,000. Future member contributions to the Annuity Savings Account were valued to be \$1,419,812. Prospective contributions to the Employer's Accumulation Account were calculated to be \$6,210,874 of which \$1,211,573 is attributable to service rendered after the valuation date (normal contributions) and \$4,999,301 is attributable to service rendered before 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 \$21,236,686 as of June 30, 2011.

### Total Liabilities

The present value of benefits payable on account of presently retired members and beneficiaries totaled \$8,734,254 as of the valuation date. The present value of future benefit payments on behalf of active members amounted to \$11,426,236. In addition, the present value of benefits for inactive members, due to service rendered before the valuation date, was calculated to be \$1,076,196.

Therefore, the balance sheet shows the present value for all prospective benefit payments under the Plan to be \$21,236,686 as of June 30, 2011.

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. We recommend the sum of these normal and accrued liability contributions remain at 7.40% of the annual compensation of all members.

The primary reason for the stability in the employer contribution rate is the change in the eligibility service for active members to include additional PERS service coupled with a reduction in the amortization period for the unfunded accrued liability. The change in eligibility service recognition reduced the normal contribution rate from 4.18% to 2.56%.



### 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, 2011 is shown below.

		\$ Thousands
(1)	UAAL* as of June 30, 2010	\$ 3,840.3
(2)	Total normal cost from last valuation	276.1
(3)	Total employer and employee contributions	457.0
(4)	Interest accrual: (1) x .080 + [[(2) - (3)] x .0392]	300.1
(5)	Expected UAAL before changes: $(1) + (2) - (3) + (4)$	3,959.5
(6)	Change due to plan amendments	0.0
(7)	Change due to actuarial assumptions or methods	4.2
(8)	Expected UAAL after changes: (5) + (6) + (7)	3,963.7
(9)	Actual UAAL as of June 30, 2011	4,999.3
(10)	Gain/(loss): (8) – (9)	\$ (1,035.6)
(11)	Gain/(loss) as percent of actuarial accrued liabilities at start of year (\$17,081.3)	(6.1)%

<sup>\*</sup>Unfunded actuarial accrued liability.

Valuation Date June 30	Actuarial Gain/(Loss) as a % of Beginning Accrued Liabilities
2006	0.3%
2007	1.0
2008	0.9
2009	(3.0)
2010	(3.8)
2011	(6.1)



### 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 2012/2013 fiscal year.

Contribution for	2012/2013 Fiscal Year	2011/2012 Fiscal Year
Normal Cost:		
Service retirement benefits	4.08%	6.27%
Disability benefits	0.29	0.31
Survivor benefits	0.38	0.53
Total	4.75%	7.11%
Member Contributions:	3.00%	3.00%
Less future refunds	<u>(0.81)</u>	(0.07)
Available for benefits	2.19%	2.93%
Employer Normal Cost	2.56%	4.18%
Unfunded Actuarial Accrued Liabilities (22.3 year level % of payroll amortization*)	4.84	3.22
Total Computed Employer Contribution Rate	7.40%	7.40%

<sup>\*</sup>Amortization period a year ago was 29.7 years.

The components of the change in the computed Employer Contribution Rate are as follows:

Previously Reported Employer Rate 7.40%	
Change due to:	
Actuarial experience	(0.03)
Assumption changes	0.03
Plan amendments	0.00
Method change	0.00
Computed Employer Rate	7.40%



### 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% investment return and salary increases of 4.25% each year in the future. In addition, the employer and employee contribution rates are assumed to remain at the 2011 valuation results for all years beginning in 2012 fiscal year.



# Mississippi Supplemental Legislative Retirement Plan



ojection
Flow Pr
ar Cash
y-five Ye
Twent

	Market Value of		Projected	Expected		Market Value of
Assets	Assets Balance	Contributions	Benefit Payments	Investment Return	Cach Flow	Assets Balance
3	, A	Contribution	ayiiciiis			
\$13	\$13,737,000	\$722,380	\$1,070,330	\$1,085,042	\$737,092	\$14,474,092
4	14,474,092	753,082	1,170,440	1,141,233	723,875	15,197,967
15	15,197,967	785,088	1,223,594	1,198,297	759,791	15,957,758
15,	15,957,758	818,454	1,276,621	1,258,294	800,127	16,757,885
16,	6,757,885	853,238	1,403,859	1,318,606	767,985	17,525,870
17,	17,525,870	889,501	1,518,069	1,376,927	748,359	18,274,229
18,2	18,274,229	927,304	1,546,472	1,437,172	818,004	19,092,233
19,0	19,092,233	966,715	1,571,007	1,503,207	898,915	19,991,148
19,9	19,991,148	1,007,800	1,713,296	1,571,072	865,576	20,856,723
20,8	20,856,723	1,050,632	1,810,729	1,638,134	878,037	21,734,760
21,7;	21,734,760	1,095,284	1,875,320	1,707,579	927,543	22,662,304
22,6	22,662,304	1,141,833	1,920,943	1,781,820	1,002,710	23,665,014
23,6	23,665,014	1,190,361	2,022,272	1,859,925	1,028,014	24,693,027
24,6	24,693,027	1,240,952	2,068,015	1,942,360	1,115,297	25,808,324
25,8	25,808,324	1,293,692	2,111,446	2,031,956	1,214,202	27,022,526
27,0	27,022,526	1,348,674	2,143,739	2,129,999	1,334,934	28,357,460
28,3	28,357,460	1,405,993	2,202,547	2,236,735	1,440,181	29,797,641
29,	29,797,641	1,465,747	2,231,319	2,353,188	1,587,616	31,385,257
31,3	31,385,257	1,528,042	2,226,604	2,482,878	1,784,316	33,169,574
33,	33,169,574	1,592,983	2,211,408	2,628,829	2,010,404	35,179,977
35,	35,179,977	1,660,685	2,261,850	2,790,352	2,189,187	37,369,164
37,3	37,369,164	1,731,264	2,277,158	2,967,697	2,421,803	39,790,967
39,	39,790,967	1,804,843	2,248,722	3,165,522	2,721,643	42,512,611
42,	42,512,611	1,881,549	2,207,537	3,387,969	3,061,981	45,574,592
45.5	45,574,592	1,961,515	2,194,948	3,636,630	3,403,197	48,977,789

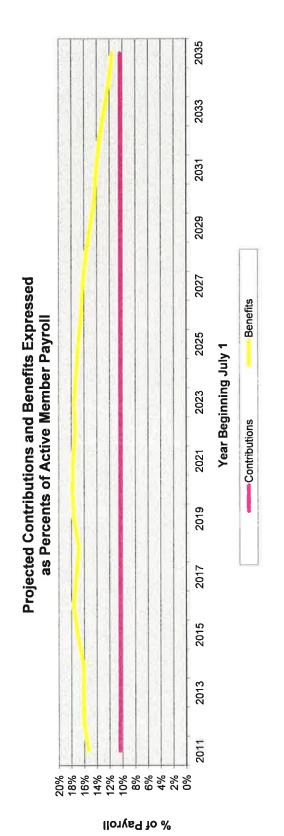
□Net Change in Asset Values

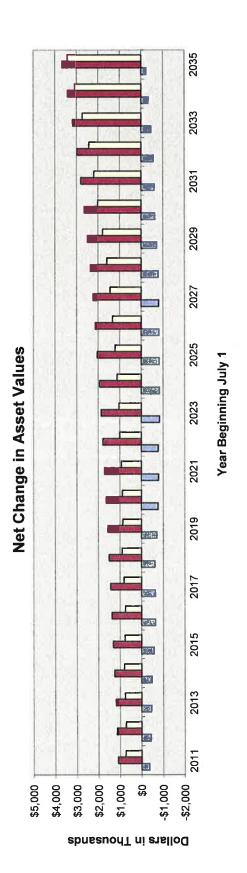
Investment Income

**BContributions Net of Benefits** 



### Twenty-five Year Cash Flow Projection Based on Valuation Assumptions Mississippi Supplemental Legislative Retirement Plan







### 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, 2011

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	147
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	60
Active Participants Total	<u>174</u> 381



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)
06/30/2002*	\$9,730,000	\$11,328,039	85.9%	\$1,598,039	\$5,988,135	26.7%
06/30/2003	10,196,000	12,219,519	83.4	2,023,519	6,288,514	32.2
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

<sup>\*</sup> After change in benefit provisions.

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.

<sup>#</sup> 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 \$4,999,301 over a period of 29.4 years from the valuation date.

Annual Required Co	ntribution (ARC)	The Mark Town
Valuation Date June 30	2011	2010
For Fiscal Year	2012/2013	2011/2012
UAL Payment Period (years)	22.3	29.7
Annual Required Contribution % of Payroll	7.40%	7.40%

4. Additional information as of June 30, 2011 follows.

Valuation date	6/30/2011
Actuarial cost method	Entry age
Amortization method	Level percent open
Remaining amortization period	22.3 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return*	8.00%
Projected salary increases <sup>#</sup>	4.50%
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 Contribution	Percentage Contributed
2003	2001	\$379,049	100.0%
2004	2002	398,063	100.0
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	



Solvency Tests (\$ in Thousands)

	(3)	67.2%	63.4	42.1	38.7	48.8	56.6	57.8	42.2	33.7	30.8
Portions of Accrued Liabilities Covered by Assets	(2)	100%	100	100	100	100	100	100	100	100	100
i e	(1)	100%	100	100	100	100	100	100	100	100	100
	Net Assets Available for Benefits	\$9,730	10,196	10,323	10,634	11,620	12,722	13,412	13,386	13,241	13,606
es for	(3) Active and Inactive Members Employer Financed	\$4,876	5,532	4,509	4,513	4,773	5,375	5,218	5,452	5,795	7,229
Actuarial Accrued Liabilities for	(2) Retirees and Beneficiaries Currently Receiving Benefits	\$4,576	4,567	6,395	6,813	7,230	7,378	8,295	8,756	8,777	8,734
Actuari	(1) Accumulated Employee Contributions Including Allocated Investment Earnings	\$1,876	2,121	2,030	2,076	2,061	2,301	2,102	2,327	2,509	2,642
	Valuation Date	6/30/2002	6/30/2003	6/30/2004	6/30/2005	6/30/2006	6/30/2007	6/30/2008	6/30/2009	6/30/2010	6/30/2011



### Schedule of Active Member Valuation Data

			Active M	lembers	
Valuation Date	Number of Employers	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
2002	5	175	\$5,988,135	\$34,218	0.8%
2003	5	175	6,288,514	35,934	5.0
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

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

- Y	. 15 e <sup>rr</sup>	Will II was		F C	iscal Year E	nded June 3	30	AT IN IP	WEI G	Y LITE
Item	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Beginning of Year	84	86	85	106	114	122	126	138	141	142
Added	6	1	26	8	12	6	20	7	6	7
Removed	(4)	(2)	(5)	0	(4)	(2)	(8)	(4)	(5)	(2)
End of Year	86	85	106	114	122	126	138	141	142	147





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

Year Ending	2005	2006	2007	2008	2009	2010	2011	
Beginning of Year	\$480,314	\$582,565	\$629,217	\$657,819	\$754,815	\$781,231	\$792,670	_
Added	30,412	57,341	17,973	107,569	33,316	36,400	30,133	_
Removed	0	(26,559)	(6,908)	(29,585)	(26,188)	(46,742)	(22,703)	
Benefit increase due to annual COLA	71,839	15,870	17,537	19,012	19,288	21,781	23,836	
Benefit increase due to plan amendments	0	0	0	0	0	0	0	
End of Year	\$582,565	\$629,217	\$657,819	\$754,815	\$781,231	\$792,670	\$823,936	_
								_



### Schedule of Average Benefit Payments

	0-4	5-9	10-15	Years o	Years of Credited Service 21-24	26-29	30	31+
July 1, 2010 to June 30, 2011 Average Monthly Benefit Average Final Salary Number of Active Retirants	\$103.60 \$33,200.00	\$260.72 \$34,762.00	\$108.90 \$19,188.49		\$305.17 \$36,781.59 2			\$369.01 \$27,287.00
July 1, 2009 to June 30, 2010 Average Monthly Benefit Average Final Salary Number of Active Retirants		\$129.62 \$29,883.00	\$516.63 \$48,826.77		\$759.42 \$45,504.00			\$1,295.33 \$36,180.57
July 1, 2008 to June 30, 2009 Average Monthly Benefit Average Final Salary Number of Active Retirants		\$194.61 \$29,237.33			\$547.11 \$37,853.25 1	\$833.23 \$39,683.00	\$411.03 \$41,404.00	\$338.62 \$34,997.00
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
July 1, 2006 to June 30, 2007 Average Monthly Benefit Average Final Salary Number of Active Retirants		\$189.08 \$27,519.25	\$256.47 \$34,758.63 2	\$264.75 \$22,041.60				



### Schedule of Average Benefit Payments

				Years o	Years of Credited Service	8			
	0.4	5-9	10-15	16-20	21-24	25	26-29	30	31+
July 1, 2005 to June 30, 2006 Average Monthly Benefit Average Final Salary Number of Active Retirants		\$146.55 \$25,554.66	\$310.02 \$30,926.67 3	\$435.40 \$35,059.89					\$963.29 \$36,594.49
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	\$382.51 \$32,157.50	\$141.81 \$34,034.50	\$774.95 \$39,084.55			
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	\$822.08 \$41,404,.00	\$964.09 \$43,852.85
July 1, 2002 to June 30, 2003 Average Monthly Benefit Average Final Salary Number of Active Retirants					\$513.00 \$32,188.50				
July 1, 2001 to June 30, 2002 Average Monthly Benefit Average Final Salary Number of Active Retirants			\$282.43 \$25,732.75	\$324.43 \$24,477.44	\$537.68 \$41,331.98				



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

			(a monsalius)				
	Valuation Date June 30:	2010	2011	2012	2013	2014	2015
∢	. Actuarial Value Beginning of Year	\$13,386	\$13,241				
B.	3. Market Value End of Year	11,079	13,737				
S	C. Market Value Beginning of Year	9,832	11,079				
	D. Cash Flow						
	D1. Contributions	648	663				
	D2. Other Revenue	0	0				
	D3. Benefit Payments	(824)	(828)				
	D4. Administrative Expenses	(6)	(6)				
_	D5. Investment Expenses	(22)	(28)				
	D6. Net	(207)	(202)				
ш	Investment Income						
	E1. Market Total: BCD6.	1,454	2,860				
	E2. Assumed Rate	8.00%	8.00%				
	E3. Amount for Immediate Recognition	801	917				
_	E4. Amount for Phased-In Recognition	653	1,943				
ш	F. Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	131	389				
-	F2. First Prior Year	(685)	131	389			
_	F3. Second Prior Year	(442)	(685)	131	389		
	F4. Third Prior Year	257	(442)	(685)	131	389	
_	F5. Fourth Prior Year	0	257	(442)	(685)	131	389
	F6. Total Recognized Investment Gain	(739)	(350)	(607)	(165)	520	389
<u></u>	G. Actuarial Value End of Year:						
	A.+D6.+E3.+F6.	\$13,241	\$13,606				
工	H. Difference Between Market & Actuarial Values	\$(2,162)	\$131	\$738	\$903	\$383	\$(6)
Ĕ	The Activated Valuation of Accete recognise accumed investment income (line F3) fully each year. Differences between actual and accumed investment income fline F4) are observed in outer a closed 5 year period	me (line E3) fully each yes	Differences hotween	in pamisse pue leito	aul) amont income	Town or hosed in over	a closed 5 year period

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 is less than 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 rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.



			Asset Summary June 30, 2011 (\$ in Thousands)	
		Market Value	Book Value	Actuarial Value
1.	Assets at June 30, 2010	\$11,079	\$10,718	\$13,241
2.	Contributions and Misc. Revenue	663	663	663
3.	Investment Increment	2,860	1,321	567
4.	Benefit Payments	(828)	(828)	(828)
5.	Expenses	(37)	(37)	(37)
6.	Assets at June 30, 2011 (1) + (2) + (3) + (4) + (5)	\$13,737	\$11,837	\$13,606
7.	Investment Increment/Mean Assets*	26.1%	12.4%	4.3%

\*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: 8.00% per annum, compounded annually (net after all expenses).

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed rates of separation

from active service are as follows:

		Annual Rate of	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	De	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	

<sup>94%</sup> are presumed to be non-duty related, and 6% are assumed to be duty related.

WITHDRAWAL AND VESTING: 15% 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: 4.50% per annum, for all ages. The merit and seniority component is 0.25% and the wage inflation component is 4.25%.

DEATH AFTER RETIREMENT: The mortality table, for post-retirement mortality, used in evaluating allowances to be paid was the 1994 Group Annuity Mortality Table. The RP-2000 Disabled Mortality Table (set back 2 years for males and set forward 3 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 15% 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, 2011 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:

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

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		7.40	\$245,000	3.00	\$245,000



### 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:

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	<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 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 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 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, 2011 Tabulated by Year of Retirement

Year of Retirement	No.	Total Annual Benefits excluding COLA	COLA	Total Annual Benefits	Average Monthly Total Benefit
2011	1	\$1,307	\$0	\$1,307	\$109
2010	5	14,860	0	14,860	248
2009	5	22,763	359	23,122	385
2008	21	106,877	7,051	113,928	452
2007	1 1	4,417	409	4,826	402
2006	2	8,868	1,000	9,868	411
2005	10	50,265	7,580	57,845	482
2004	21	126,305	24,427	150,732	598
2003	6	27,192	5,478	32,670	454
2002	4	15,148	3,786	18,934	394
2001	3	8,420	2,566	10,986	305
2000	18	86,158	29,249	115,407	534
1999	8	29,735	10,902	40,637	423
1998	2	11,179	4,183	15,362	640
1997	5	13,173	5,895	19,068	318
1996	7	22,670	11,481	34,151	407
1995	1 1	1,058	591	1,649	137
1994	2	4,686	2,834	7,520	313
1993	9	33,553	21,575	55,128	510
1992	15	54,879	37,078	91,957	511
1991	1	2,203	1,776	3,979	332
TOTAL	147	\$645,716	\$178,220	\$823,936	\$467



### Schedule of Retired Members by Type of Retirement Benefits Payable June 30, 2011

Amount of Monthly Benefit	Number of Rets	Ret Type 1*	Ret Type 2*	Ret Type 3*
\$1 – \$100	10	9		1
101 – 200	21	17		4
201 – 300	36	28		8
301 – 400	39	30	1	8
401 – 500	12	8	1	3
501 – 600	6	4		2
601 – 700	9	9		
701 – 800	4	4		
801 – 900	6	6		
901 – 1,000	1	1		
Over 1,000	3	2		1
Totals	147	118	2	27

- \*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, 2011

PLSO** 3 Years	~	2	-	9	2		-	_	-	~	_	17
PLSO** 2 Years					2							2
PLSO** 1 Year				_		_						2
Option 5		-	-	~		~		-				2
Option 4C**	-											<b>←</b>
Option 4B	င		က	თ	_	2	7		2		-	23
Option 4A			~	7	_				-			S
Option 4												0
Option 3			2									2
Option 2	2	10	10	10	ო	7	4	-	_		-	44
Option 1		_	_	-								8
Life	5	თ	18	16	7	~	ဗ	2	7	_	_	65
Number of Rets.	10	21	36	39	12	ဖ	O	4	9	-	က	147
Amount of Monthly Benefit	\$1-\$100	101 - 200	201 - 300	301 – 400	401 - 500	501 - 600	601 - 700	701 - 800	801 - 900	901 - 1,000	Over 1,000	Totals

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

\*\*Included in other options



### Supplemental Legislative Retirement Plan of Mississippi

### Retirant and Beneficiary Information June 30, 2011

0 the in a sl	Service	e Retirement	Disabili	ty Retirement		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					1	\$2,010	1	\$2,010
40 – 44					3	15,877	3	15,877
45 – 49					1	5,890	1	5,890
50 – 54	3	\$13,017			1	4,362	4	17,379
55 – 59	9	83,823	1	\$6,650	3	16,811	13	107,284
60 – 64	22	88,864	1	6,498	5	23,790	28	119,152
65 – 69	25	129,580			3	13,055	28	142,635
70 – 74	19	88,531			2	11,229	21	99,760
75 – 79	22	131,054			5	23,663	27	154,717
80 – 84	12	105,926			2	11,988	14	117,914
85 – 89	5	18,284			1	16,861	6	35,145
90 – 94	1	6,173					1	6,173
95								
96								
97								
98								
99								
100 & Over								
Totals	118	\$665,252	2	\$13,148	27	\$145,536	147	\$823,936

69.3 years 61.4 years

Average Age: Average Age at Retirement:



### Supplemental Legislative Retirement Plan Of Mississippi

### Total Active Member Data as of June 30, 2011 Tabulated by Attained Ages and Years of Service

			Years of Se	ervice to Val	uation Date				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	1							1	\$37,839
30 – 34	5	4						9	306,176
35 – 39	5	3	2	1				11	432,415
40 – 44	6	1		1				8	305,246
45 – 49	7	6	2	4				19	731,943
50 – 54	3	3	3	6		1		16	615,929
55 – 59	2	7	2	9	1	3	2	26	1,088,870
60	4	1	1	1			2	9	347,254
61	1	1	2	1			1	6	234,375
62	1	1		1				3	111,950
63 64	2	1	1	1	1	2		8	314,986
04	2	2	1	3			1	9	355,169
65			2	3				5	202,110
66		1		3			1	5	198,746
67	2		1		1		1	5	185,873
68	ľ						1	1	100,249
69		3		3				6	220,682
70 & Over	2	3	4	7	6	2	3	27	1,019,958
Totals	43	37	21	44	9	8	12	174	\$6,809,770

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

Age: 57.7 years
Benefit Service: 13.1 years
Eligibility Service: 18.1 years

Annual Pay: \$39,137



### 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 6/30/2011	\$ Gain (or Loss) For Year Ending 6/30/2010
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ 21.4	\$ 11.0
<b>Disability Retirements.</b> If disability claims are less than assumed, there is a gain. If more claims, a loss.	10.8	10.9
<b>Death-in Service Benefits.</b> If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(9.2)	7.7
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	59.7	41.3
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	21.1	344.1
New Members. Additional unfunded accrued liability will produce a loss.	(19.8)	(2.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(523.0)	(1,023.0)
<b>Death After Retirement.</b> If retirants live longer than assumed, there is a loss. If not as long, a gain.	(106.4)	117.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(490.2)	(135.1)
Gain (or Loss) During Year From Financial Experience	\$ (1,035.6)	\$ (628.0)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, or method changes.	(4.2)	0.0
Composite Gain (or Loss) During Year	\$ (1,039.8)	\$ (628.0)



### 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.

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.

<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.

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.

<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.

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.

<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.