

Report on the Annual Valuation of the Public Employees' Retirement System of Mississippi

Prepared as of June 30, 2009



November 6, 2009

The experience and dedication you deserve

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 Public Employees' Retirement System of Mississippi. The purpose of the valuation was to measure the System's funding progress and to determine the unfunded accrued liability amortization period beginning July 1, 2009.

The date of the valuation was June 30, 2009.

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. The complete cooperation of the PERS staff in furnishing materials requested is hereby acknowledged with appreciation.

<u>Your attention is directed particularly</u> to the presentation of contribution rates on page 1 and the comments on page 7.

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.

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 November 6, 2009 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 system, and on actuarial assumptions that are, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

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

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Edward J. Koebel, FCA, EA, MAAA Senior Actuary

Edward J. Woebel

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TABLE OF CONTENTS

<u>Section</u>	<u>ltem</u>		Page No.	
I		Summary of Principal Results		1
II		Membership Data		4
III		Valuation Balance Sheet		5
IV		Comments on Valuation		7
V		Derivation of Experience Gains and Losses		8
VI		Required Contribution Rates		9
VII		Cash Flow Projection		10
VIII		Supplemental Disclosure Information		13
<u>Schedule</u>				
Α		Development of Actuarial Value of Assets		22
В		Statement of Actuarial Assumptions and Methods		24
С		Summary of Main Benefit and Contribution Provisions		27
D		Detailed Tabulations of the Data		33
Е		Analysis of Financial Experience		37
F		Glossary		38



REPORT ON THE ANNUAL VALUATION OF THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF MISSISSIPPI PREPARED AS OF JUNE 30, 2009

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2009, presents the results of the annual actuarial valuation of the System. 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 benefit amounts reflect the benefit increases granted to retirees as of July 1, 2009. We recommend an increase in the contribution rate from 12.00% to 13.56% of active members' compensation for the 2010/2011 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	June 30, 2009	June 30, 2008	
Active members included in valuation			
Number	167,122	165,733	
Annual compensation	\$ 5,831,863,534	\$ 5,544,704,937	
Retirees			
Number	76,143	73,540	
Annual allowances	\$ 1,395,939,879	\$ 1,305,908,320	
Assets			
Market related actuarial value	\$ 20,597,581,000	\$ 20,814,720,000	
Market value	\$ 15,134,487,000	\$ 19,251,069,000	
Unfunded accrued liability	\$ 9,996,964,694	\$ 7,719,973,880	
Recommended employer contribution rate			
Normal	4.13%	4.02%	
Accrued liability	9.43	<u>7.98</u>	
Total	13.56%	12.00%	
Anticipated accrued liability payment period	30.0 years	29.4 years	
Unfunded accrued liability based on			
market value of assets	\$ 15,460,058,694	\$ 9,283,624,880	
Payment Period	Infinite	43.5 years	



- 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 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 were made in the actuarial assumptions since the last valuation:
 - The withdrawal rates, pre-retirement mortality rates, disability rates, and retirement rates have been revised to more closely reflect the actual experience of the System.
 - The post-retirement mortality table used for service retirements and dependents of deceased pensioners has been changed from the 1983 Group Annuity Mortality Table, set forward one year for women, to the 1994 Group Annuity Mortality Table.
 - The rates of salary increase for service periods on or after 13 years were lowered.
 - The assumption for wage inflation has been changed from 4.00% to 4.25% and the assumption for price inflation has been changed from 3.75% to 3.50%.
- 5. The following changes were made in the benefit provisions or actuarial methods since the last valuation:
 - The maximum reportable earned compensation was increased from \$230,000 to \$245,000 to coincide with the compensation limit set pursuant to Section 401(a)(17) of the Internal Revenue Code.
 - The 20% corridor around the market value of assets used to develop the actuarial value of assets was eliminated.
- 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 the following page 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.



Public Employees' Retirement System of Mississippi

Comparative Schedule*

	Active Members			Retired Lives			Valuation Results (\$ millions)				
Valuation Date June 30	_Number_	Payroll _(\$ millions) _	Average _ Salary	% increase from previous year	_Number_	Active/ Retired Ratio	Annual Benefits** (\$ millions)	Benefits as % of Payroll	Accrued Liability	Valuation Assets	UAAL _
2000	151,790	\$4,091	\$26,949	7.9%	51,080	3.0	\$527.6	12.9%	\$18,052	\$14,899	\$3,153
2001	151,080	4,112	27,219	1.0	53,665	2.8	581.2	14.1	18,495	16,192	2,303
2002	152,148	4,221	27,740	1.9	56,705	2.7	656.5	15.6	20,180	16,823	3,357
2003	154,872	4,432	28,615	3.2	59,447	2.6	715.1	16.1	21,486	16,980	4,506
2004	156,353	4,617	29,531	3.2	62,407	2.5	778.6	16.9	22,847	17,103	5,744
2005	157,101	4,786	30,466	3.2	63,939	2.5	1,022.0	21.4	23,727	17,181	6,546
2006	158,091	4,972	31,450	3.2	66,757	2.4	1,117.2	22.5	24,928	18,321	6,607
2007	162,804	5,196	31,917	1.5	70,756	2.3	1,214.4	23.4	26,863	19,792	7,071
2008	165,733	5,545	33,456	4.8	73,540	2.3	1,305.9	23.6	28,535	20,815	7,720
2009	167,122	5,832	34,896	4.3	76,143	2.2	1,395.9	23.9	30,595	20,598	9,997

^{*}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 System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2009 upon which the valuation was based. Detailed tabulations of the data are given in Schedule D.

Active Members

				Gr	oup Avera	ages
Employers	Number of Employers	Number	Payroll	Salary	Age*	Service*
State Agencies	114	34,465	\$ 1,163,244,414	\$33,751	44.0	10.3
State Universities	9	18,081	817,776,512	45,229	43.4	9.5
Public Schools	150	67,174	2,271,339,222	33,813	44.2	10.3
Community/Junior Colleges	15	6,195	276,080,789	44,565	46.5	11.3
Counties	82	14,884	449,615,953	30,208	46.3	8.7
Municipalities	279	18,913	595,859,163	31,505	43.0	9.2
Other Political Subdivisions	211	7,410	257,947,481	34,811	43.4	7.5
Total in PERS	866	167,122	\$ 5,831,863,534	\$34,896	44.2	9.8

^{*}Years

The total number of active members includes 109,235 vested members (38,316 State employees and 70,919 employees of other entities), and 57,887 non-vested members (20,425 State and 37,462 others).

Retired Lives

			Group Ave	erages
Type of Benefit Payment	No.	Annual Benefits	Benefit	Age*
Retirement	61,466	\$ 1,199,194,571	\$19,510	69.8
Disability	5,257	80,117,118	15,240	60.1
Survivor	9,420	116,628,190	12,381	65.0
Total in PERS	76,143	\$1,395,939,879	18,333	68.5

^{*}Years

The total retired lives include 27,117 from State employment and 49,026 from other employment.

This valuation also includes 126,524 inactive members (40,250 State and 86,274 others; 18,038 vested and 108,486 non-vested.)



SECTION III – VALUATION BALANCE SHEET

The following valuation balance sheet shows the assets and liabilities of the retirement system as of the current valuation date of June 30, 2009 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2008. 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 PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF MISSISSIPPI

	JUNE 30, 2009	JUNE 30, 2008
ASSETS	s	
Current actuarial value of assets:		
Annuity Savings Account	\$ 4,235,466,036	\$ 3,991,804,456
Annuity Reserve	2,904,307,316	2,691,758,847
Employers' Accumulation Account	13,457,807,648	14,131,156,697
Total current assets	\$ 20,597,581,000	\$ 20,814,720,000
Future member contributions to Annuity Savings Account	\$ 3,257,549,985	\$ 3,230,270,674
Prospective contributions to Employer's Accumulation Account		
Normal contributions	\$ 1,855,680,198	\$ 1,789,732,947
Unfunded accrued liability contributions	9,996,964,694	7,719,973,880
Total prospective contributions	<u>\$ 11,852,644,892</u>	<u>\$ 9,509,706,827</u>
Total assets	\$ 35,707,775,877	<u>\$ 33,554,697,501</u>
LIABILITI	ES	
Present value of benefits payable on account of present retired members and beneficiaries	\$ 15,665,712,114	\$ 14,306,528,473
Present value of benefits payable on account of active members	19,134,696,371	18,399,105,442
Present value of benefits payable on account of inactive members for service rendered before the valuation date	907,367,392	849,063,586
Total liabilities	\$ 35,707,775,877	<u>\$ 33,554,697,501</u>



SECTION IV - COMMENTS ON VALUATION

The valuation balance sheet gives the following information with respect to the funds of the System as of June 30, 2009.

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 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 \$4,235,466,036. The assets credited to the Annuity Reserve were \$2,904,307,316 and the assets credited to the Employer's Accumulation Account totaled \$13,457,807,648. Current actuarial assets as of the valuation date equaled the sum of these three funds, \$20,597,581,000. Future member contributions to the Annuity Savings Account were valued to be \$3,257,549,985. Prospective contributions to the Employer's Accumulation Account were calculated to be \$11,852,644,892, of which \$1,855,680,198 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 System to be \$35,707,775,877 as of June 30, 2009.

Total Liabilities

The present value of benefits payable on account of presently retired members and beneficiaries totaled \$15,665,712,114 as of the valuation date. The present value of future benefit payments on behalf of active members amounted to \$19,134,696,371. In addition, the present value of benefits for inactive members, due to service rendered before the valuation date, was calculated to be \$907,367,392.

Therefore, the balance sheet shows the present value for all prospective benefit payments under the System to be \$35,707,775,877 as of June 30, 2009.

Section 25-11-123(a)(1) of State law requires that active members contribute 7.25% of annual compensation to the System.

Section 25-11-123(c) 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 System. These individual contribution percentages are established in accordance with an actuarial valuation. We recommend the sum of these normal and accrued liability contributions increase from 12.00% to 13.56% of the annual compensation of all members. The amortization period of the unfunded accrued liability of the System is therefore calculated on an open-ended basis.



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, 2009 is shown below.

		\$ millions
(1)	UAAL* as of June 30, 2008	\$ 7,720.0
(2)	Normal cost from last valuation	222.9
(3)	Actual employer contributions	713.6
(4)	Interest accrual: (1) x .080 + [[(2) - (3)] x .0392]	598.4
(5)	Expected UAAL before changes: $(1) + (2) - (3) + (4)$	7,827.7
(6)	Change due to plan amendments	1.1
(7)	Change due to new actuarial assumptions or methods	331.5
(8)	Expected UAAL after changes: (5) + (6) + (7)	8,160.3
(9)	Actual UAAL as of June 30, 2009	9,997.0
(10)	Gain/(loss): (8) - (9)	\$ (1,836.7)
(11)	Gain/(loss) as percent of actuarial accrued liabilities at start of year (\$28,534.7)	(6.4)%

^{*}Unfunded actuarial accrued liability.

Valuation Date June 30	Actuarial Gain/(Loss) as a % of Beginning Accrued Liabilities
2004	(5.4)%
2005	(3.0)
2006	(1.7)
2007	0.8
2008	(2.1)
2009	(6.4)



SECTION VI - REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following table shows the rates of contribution payable by employers as determined from the present valuation for the 2010/2011 fiscal year.

Contribution for	Contributions Expressed as Percents of Payroll
Normal Cost:	
Service retirement benefits	10.12%
Disability benefits	0.42
Survivor benefits	<u>0.12</u>
Total	10.66%
Member Contributions:	7.25%
Less future refunds	(.72)
Available for benefits	6.53%
Employer Normal Cost	4.13%
Unfunded Actuarial Accrued Liabilities (30.0 year level % of payroll amortization*)	9.43%
Total Computed Employer Contribution Rate	13.56%

^{*}Amortization period a year ago was 29.4 years.

The components of the change in the computed unfunded accrued liability amortization period from 29.4 years to 30.0 years are as follows:

Previous Reported Period	29.4 years
Change due to:	
Normal amortization	(1.0)
Actuarial experience	0.6
Assumption changes	0.8
Plan amendments	0.0
Method Change	0.0
UAL contribution experience	<u>0.2</u>
Computed Period	30.0 years



SECTION VII - CASH FLOW PROJECTION

Regular actuarial valuations measure the Retirement System'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 system 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 System 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 system funding progress of changes in the workforce, and (iv) examining the potential effect of changes in benefits on system financial activity.

Projection results are useful in demonstrating changing relationships among key elements affecting system financial activity. For example: how benefits payable and system 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.

Public Employees' Retirement System of Mississippi



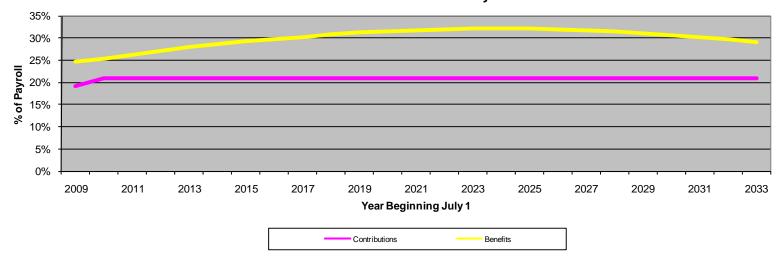
Twenty-five Year Cash Flow Projection

Year Beginning <u>July 1</u>	Valuation <u>Payroll</u>	Market Value of Assets Balance <u>July 1</u>	<u>Contributions</u>	Projected Benefit <u>Payments</u>	Expected Investment <u>Return</u>	<u>Cash Flow</u>	Market Value of Assets Balance June 30	Year Ending <u>June 30</u>
2009	5,948,500,805	15,134,487,000	1,145,086,405	1,463,824,090	1,198,009,453	879,271,768	16,013,758,768	2010
2010	6,186,440,837	16,013,758,768	1,287,398,338	1,563,964,015	1,270,038,074	993,472,397	17,007,231,165	2011
2011	6,433,898,470	17,007,231,165	1,338,894,272	1,680,692,759	1,346,906,554	1,005,108,067	18,012,339,232	2012
2012	6,691,254,409	18,012,339,232	1,392,450,043	1,807,355,748	1,424,390,910	1,009,485,205	19,021,824,437	2013
2013	6,958,904,585	19,021,824,437	1,448,148,044	1,939,964,740	1,502,073,287	1,010,256,591	20,032,081,028	2014
2014	7,237,260,768	20,032,081,028	1,506,073,966	2,070,876,400	1,579,974,385	1,015,171,951	21,047,252,979	2015
2015	7,526,751,199	21,047,252,979	1,566,316,925	2,196,144,348	1,658,587,141	1,028,759,718	22,076,012,697	2016
2016	7,827,821,247	22,076,012,697	1,628,969,602	2,322,425,482	1,738,342,781	1,044,886,901	23,120,899,598	2017
2017	8,140,934,097	23,120,899,598	1,694,128,386	2,461,402,499	1,818,981,003	1,051,706,890	24,172,606,488	2018
2018	8,466,571,461	24,172,606,488	1,761,893,521	2,602,987,063	1,900,164,777	1,059,071,235	25,231,677,724	2019
2019	8,805,234,319	25,231,677,724	1,832,369,262	2,744,862,110	1,982,034,504	1,069,541,656	26,301,219,380	2020
2020	9,157,443,692	26,301,219,380	1,905,664,032	2,886,615,546	2,064,859,490	1,083,907,976	27,385,127,355	2021
2021	9,523,741,440	27,385,127,355	1,981,890,594	3,028,148,573	2,148,959,869	1,102,701,890	28,487,829,246	2022
2022	9,904,691,098	28,487,829,246	2,061,166,217	3,168,188,185	2,234,745,461	1,127,723,493	29,615,552,739	2023
2023	10,300,878,742	29,615,552,739	2,143,612,866	3,305,511,749	2,322,768,264	1,160,869,381	30,776,422,119	2024
2024	10,712,913,892	30,776,422,119	2,229,357,381	3,441,157,146	2,413,641,779	1,201,842,014	31,978,264,133	2025
2025	11,141,430,448	31,978,264,133	2,318,531,676	3,572,256,226	2,508,112,149	1,254,387,599	33,232,651,732	2026
2026	11,587,087,666	33,232,651,732	2,411,272,943	3,698,622,071	2,607,118,173	1,319,769,045	34,552,420,778	2027
2027	12,050,571,173	34,552,420,778	2,507,723,861	3,820,230,910	2,711,693,380	1,399,186,331	35,951,607,109	2028
2028	12,532,594,020	35,951,607,109	2,608,032,816	3,937,810,165	2,822,937,475	1,493,160,126	37,444,767,234	2029
2029	13,033,897,781	37,444,767,234	2,712,354,128	4,052,682,228	2,941,968,255	1,601,640,155	39,046,407,389	2030
2030	13,555,253,692	39,046,407,389	2,820,848,293	4,162,294,688	3,070,054,735	1,728,608,340	40,775,015,730	2031
2031	14,097,463,840	40,775,015,730	2,933,682,225	4,265,094,150	3,208,744,781	1,877,332,856	42,652,348,586	2032
2032	14,661,362,394	42,652,348,586	3,051,029,514	4,360,052,971	3,359,826,949	2,050,803,492	44,703,152,078	2033
2033	15,247,816,890	44,703,152,078	3,173,070,695	4,446,977,159	3,525,295,908	2,251,389,444	46,954,541,521	2034

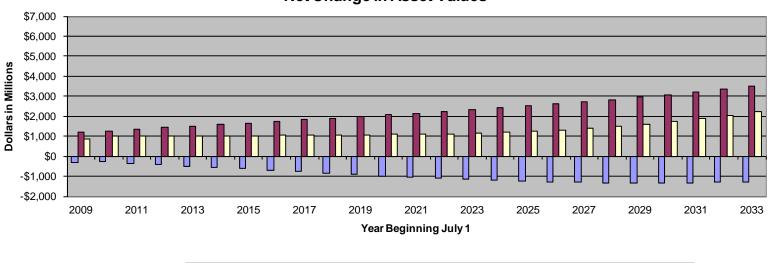


Public Employees' Retirement System of Mississippi 25 Year Cash Flow Projection Based on Valuation Assumptions

Projected Contributions and Benefits Expressed as Percents of Active Member Payroll



Net Change in Asset Values



■Investment Income

■ Net Change in Asset Values

■Contributions Net of Benefits



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 System 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, 2009

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	76,143
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	126,524
Active Participants	<u>167,122</u>
Total	369,789



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

SCHEDULE OF FUNDING PROGRESS (\$ Thousands)

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)
06/30/00*	\$14,899,074	\$18,052,096	82.5%	\$3,153,022	\$4,090,596	77.1%
06/30/01*#	16,191,631	18,494,207	87.5	2,302,576	4,112,238	56.0
06/30/02*	16,823,185	20,180,347	83.4	3,357,162	4,220,539	79.5
06/30/03#	16,979,457	21,485,838	79.0	4,506,381	4,431,600	101.7
06/30/04*	17,103,285	22,847,260	74.9	5,743,975	4,617,273	124.4
06/30/05#	17,180,705	23,727,098	72.4	6,546,393	4,786,280	136.8
06/30/06	18,321,063	24,928,464	73.5	6,607,401	4,971,974	132.9
06/30/07#	19,791,564	26,862,636	73.7	7,071,072	5,196,295	136.1
06/30/08*	20,814,720	28,534,694	72.9	7,719,974	5,544,705	139.2
06/30/09*#	20,597,581	30,594,546	67.3	9,996,965	5,831,864	171.4

Note: All amounts prior to June 30, 2005 reported by prior actuarial firm.

After change in benefit provisions. After change in actuarial assumptions. #



3. The annual required contribution (ARC) of the employer as a percentage of payroll, determined in accordance with the parameters of GASB 25/27, is shown below. The accrued liability rate is based on amortization of the unfunded actuarial accrued liability of \$9,996,964,694 over a 30.0 year period from the valuation date.

Annual Required Contribution (ARC)								
Valuation Date June 30 2009 2008								
For Fiscal Year	2010/2011	2009/2010						
UAL Payment Period (years)	30.0	29.4						
Annual Required Contribution % of Payroll	13.56%	12.00%						

4. Additional information as of June 30, 2009 follows.

Valuation date	6/30/09
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#	4.5% – 15.0%
*Includes price inflation at	3.50%
*Includes wage inflation at	4.25%
Cost of living adjustments	3.00%

.



Schedule of Employer Contributions

Fiscal Year Ending June 30	Valuation date June 30	Annual Required Contribution	Percentage Contributed
2001	1999	\$398,833,149	100%
2002	2000	400,943,179	100
2003	2001	411,502,537	100
2004	2002	432,080,954	100
2005	2003	482,966,753	100
2006	2004	514,525,143	100
2007	2005	621,496,708	90
2008	2006	636,546,125	97
2009	2007	657,047,535	100
2010	2008	699,823,624	



Solvency Tests (\$ in Thousands)

	Actua	arial Accrued Liabili	ties for				
	(1) Accumulated Employee Contributions Including Allocated	(2) Retirees and Beneficiaries Currently	(3) Active and Inactive Members Employer Financed	Net Assets		Portions of Accrued Liabilities Covered by Assets	
Valuation Date	Investment Earnings	Receiving Benefits	Portion	Available for Benefits	(1)	(2)	(3)
6/30/00	\$2,992,726	\$7,227,395	\$7,831,975	\$14,899,074	100%	100%	59.7%
6/30/01	3,061,697	7,856,268	7,576,242	16,191,631	100	100	69.6
6/30/02	3,221,756	8,913,895	8,044,696	16,823,185	100	100	58.3
6/30/03	3,400,765	9,758,473	8,326,600	16,979,457	100	100	45.9
6/30/04	3,571,428	10,657,920	8,617,912	17,103,285	100	100	33.3
6/30/05	3,819,498	11,260,642	8,646,958	17,180,705	100	100	24.3
6/30/06	3,955,066	12,228,330	8,745,068	18,321,063	100	100	24.4
6/30/07	3,788,781	13,342,531	9,731,324	19,791,564	100	100	27.3
6/30/08	3,991,804	14,306,528	10,236,362	20,814,720	100	100	24.6
6/30/09	4,235,466	15,665,712	10,693,368	20,597,581	100	100	6.5



Schedule of Active Member Valuation Data

		Active Members						
Valuation Date	Number of Employers	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay			
2000	847	151,790	\$4,090,596,398	\$26,949	7.9%			
2001	863	151,080	4,112,237,738	27,219	1.0			
2002	866	152,148	4,220,538,845	27,740	1.9			
2003	871	154,872	4,431,599,526	28,615	3.2			
2004	880	156,353	4,617,272,973	29,531	3.2			
2005	861	157,101	4,786,280,398	30,466	3.2			
2006	861	158,091	4,971,973,661	31,450	3.2			
2007	861	162,804	5,196,294,899	31,917	1.5			
2008	863	165,733	5,544,704,937	33,456	4.8			
2009	866	167,122	5,831,863,534	34,896	4.3			

Schedule of Retirants Added to and Removed From Rolls Last Ten Fiscal Years

	Fiscal Year Ended June 30									
Item	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Beginning of Year	48,766	51,080	53,665	56,705	59,447	62,407	63,939	66,757	70,756	73,540
Added	4,313	4,584	5,138	4,857	5,174	4,610	5,360	6,218	5,335	4,965
Removed	(1,999)	(1,999)	(2,098)	(2,115)	(2,214)	(3,078)	(2,542)	(2,219)	(2,551)	(2,362)
End of Year	51,080	53,665	56,705	59,447	62,407	63,939	66,757	70,756	73,540	76,143



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

Year Ending	2003	2004	2005	2006	2007	2008	2009
Beginning of Year	\$656,547,390 76,047,174	\$715,099,701 82,912,445	\$778,636,196 74,999,488	\$1,022,022,560 92,495,367	\$1,117,210,600 97,985,045	\$1,214,384,863 93,694,780	\$1,305,908,320 87,403,913
Removed Benefit increase	(17,494,863)	(19,375,950)	(25,851,732)	(26,749,850)	(31,700,099)	(35,621,113)	(33,633,667)
due to annual COLA	N/A	N/A	194,238,608	28,442,523	30,889,317	33,449,790	36,261,313
Benefit increase due to plan amendments	0	0	0	0	0	0	0
End of Year	\$715,099,701	\$778,636,196	\$1,022,022,560	\$1,117,210,600	\$1,214,384,863	\$1,305,908,320	\$1,395,939,879



Schedule of Average Benefit Payments

	Years of Credited Service								
	0-4	5-9	10-14	15-19	20-24	25	26-29	30	31+
July 1, 2008 to June 30, 2009									
Average Monthly Benefit	\$395.82	\$373.84	\$581.94	\$874.55	\$1,314.05	\$1,672.61	\$1,865.25	\$2,115.68	\$2,821.82
Average Final Salary	\$26,414	\$26,280	\$29,481	\$32,707	\$37,865	\$42,352	\$45,058	\$47,003	\$53,867
Number of Active Retirants	192	703	669	572	535	378	732	223	961
July 1, 2007 to June 30, 2008									
Average Monthly Benefit	\$400.20	\$382.62	\$586.58	\$900.09	\$1,221.01	\$1,738.22	\$1,844.70	\$2,070.82	\$2,726.23
Average Final Salary	\$25,527	\$25,618	\$28,649	\$33,139	\$36,537	\$44,534	\$45,142	\$48,053	\$53,245
Number of Active Retirants	201	690	703	614	586	386	855	226	1,074
July 1, 2006 to June 30, 2007									
Average Monthly Benefit	\$411.52	\$369.97	\$536.43	\$817.54	\$1,113,79	\$1.671.02	\$1.761.30	\$2,127.34	\$2,615.87
Average Final Salary	\$22,554	\$24,146	\$27,269	\$30,518	\$34,644	\$42,366	\$43,541	\$47,398	\$51,466
Number of Active Retirants	340	986	827	747	684	381	917	251	1,085
July 1, 2005 to June 30, 2006									
Average Monthly Benefit	\$489.98	\$331.00	\$492.09	\$765.75	\$1,137.28	\$1,574.92	\$1,729.20	\$1,942.37	\$2,380.21
Average Final Salary	\$21,672	\$22,459	\$25,293	\$29,138	\$33,142	\$38,998	\$41,558	\$43,360	\$46,793
Number of Active Retirants	121	671	692	632	627	358	973	217	1,069
July 1, 2004 to June 30, 2005									
Average Monthly Benefit	\$478.93	\$354.32	\$556.04	\$872.26	\$1,239.41	\$1,569.12	\$1,683.54	\$1,878.27	\$2,382.38
Average Monthly Benefit Average Final Salary	\$22,862	\$22,656	\$24,775	\$29,619	\$34,563	\$38,437	\$40,090	\$41,687	\$46,505
Number of Active Retirants	108	543	φ <u>ν</u> ,775	Ψ23,013 516	ψ5 1 ,303	296	φ+0,050 853	223	φτο,303 984
		0.0		0.0					



Schedule of Average Benefit Payments

				Years	of Credited Serv	ice			
	0-4	5-9	10-15	16-20	21-24	25	26-29	30	31+
July 1, 2003 to June 30, 2004 Average Monthly Benefit Average Final Salary Number of Active Retirants	\$380.68 \$21,732 202	\$354.90 \$23,875 651	\$584.96 \$26,052 738	\$821.55 \$29,035 535	\$1,068.15 \$30,841 368	\$1,605.52 \$38,021 496	\$1,709.53 \$40,186 862	\$1,871.84 \$41,374 274	\$2,437.30 \$47,014 1,048
July 1, 2002 to June 30, 2003 Average Monthly Benefit Average Final Salary Number of Active Retirants	\$429.80 \$21,698 157	\$355.18 \$21,817 535	\$526.23 \$25,046 732	\$787.32 \$26,377 507	\$1,052.00 \$28,859 327	\$1,502.35 \$36,308 459	\$1,657.46 \$38,977 868	\$1,739.17 \$38,459 236	\$2,328.86 \$44,883 1,036
July 1, 2001 to June 30, 2002 Average Monthly Benefit Average Final Salary Number of Active Retirants	\$330.83 \$15,636 234	\$302.81 \$18,981 653	\$494.46 \$22,674 743	\$732.10 \$26,147 507	\$1,038.00 \$28,479 402	\$1,500.85 \$35,591 402	\$1,551.53 \$36,779 854	\$1,727.10 \$38,801 244	\$2,147.68 \$42,421 1,099
July 1, 2000 to June 30, 2001 Average Monthly Benefit Average Final Salary Number of Active Retirants	\$284.55 \$18,107 117	\$313.67 \$19,827 418	\$471.15 \$21,900 623	\$731.04 \$24,910 456	\$1,021.25 \$27,921 354	\$1,324.77 \$32,937 391	\$1,529.02 \$36,110 833	\$1,678.21 \$37,850 287	\$2,131.09 \$42,329 1,105
July 1, 1999 to June 30, 2000 Average Monthly Benefit Average Final Salary Number of Active Retirants	\$328.36 \$17,800 144	\$298.90 \$19,195 491	\$447.08 \$21,859 571	\$628.27 \$23,447 519	\$941.69 \$27,265 515	\$1,305.57 \$32,354 394	\$1,520.20 \$34,786 692	\$1,782.05 \$37,244 207	\$2,260.55 \$40,862 780



SCHEDULE A

Development of Actuarial Value of Assets (\$ thousands)

	Valuation Date June 30:	2008	2009	2010	2011	2012	2013
A.	Actuarial Value Beginning of Year	\$19,791,564	\$20,814,720				
В.	Market Value End of Year	19,251,069	15,134,487				
C.	Market Value Beginning of Year	21,353,016	19,251,069				
D.	Cash Flow						
	D1. Contributions	1,100,308	1,147,650				
	D2. Other Revenue	0	0				
	D3. Benefit Payments	(1,465,925)	(1,535,550)				
	D4. Administrative Expenses	(11,078)	(11,823)				
	D5. Investment Expenses	(35,719)	(25,937)				
	D6. Net	(412,414)	(425,660)				
E.	Investment Income						
	E1. Market Total: BCD6.	(1,689,533)	(3,690,922)				
	E2. Assumed Rate	8.00%	8.00%				
	E3. Amount for Immediate Recognition	1,728,892	1,550,034				
	E4. Amount for Phased-In Recognition	(3,418,425)	(5,240,956)				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.20*E4.	(683,685)	(1,048,191)				
	F2. First Prior Year	390,363	(683,685)	(1,048,191)			
	F3. Second Prior Year	0	390,363	(683,685)	(1,048,191)		
	F4. Third Prior Year	0	0	390,363	(683,685)	(1,048,191)	
	F5. Fourth Prior Year	0	0	0	<u>390,363</u>	(683,685)	(1,048,191)
	F6. Total Recognized Investment Gain	(293,322)	(1,341,513)	(1,341,513)	(1,341,513)	(1,731,876)	(1,048,191)
G.	Actuarial Value End of Year:						
	A.+D6.+E3.+F6.	\$20,814,720	\$20,597,581				
H.	Difference Between Market & Actuarial Values	\$(1,563,651)	\$(5,463,094)	\$(4,121,581)	\$(2,780,068)	\$(1,048,192)	\$(1)

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, 2009 (\$ in Thousands)	
		Market Value	Book Value	Actuarial Value
1.	Assets at June 30, 2008	\$19,251,069	\$17,269,609	\$20,814,720
2.	Contributions and Misc. Revenue	1,147,650	1,147,650	1,147,650
3.	Investment Increment	(3,716,859)	(1,142,193)	182,584
4.	Benefit Payments	(1,535,550)	(1,535,550)	(1,535,550)
5.	Administrative Expenses	(11,823)	(11,823)	(11,823)
6.	Assets at June 30, 2009 (1) + (2) + (3) + (4) + (5)	\$15,134,487	\$15,727,693	\$20,597,581
7.	Investment Increment/Mean Assets*	(19.51)%	(6.69)%	0.89%

*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 after investment expenses).

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

			Annual F	Rates of		
	Withdrawal a	and Vesting*	Dea	ıth**	Disab	ility**
Age	Male	Female	Male	Female	Male	Female
20	20.0%	20.0%	.01%	.00%	.01%	.01%
25	15.5	15.0	.02	.01	.02	.01
30	11.0	11.0	.02	.01	.02	.02
35	9.5	9.0	.03	.01	.05	.03
40	7.0	6.5	.04	.02	.12	.08
45	6.0	5.5	.06	.02	.23	.13
50	6.0	5.5	.08	.04	.29	.21
55	6.0	5.5	.11	.06	.52	.32
60	6.0	5.5	.22	.09	.40	.30
65	6.0	5.5	.36	.16		
70	6.0	5.5	.61	.27		
74	6.0	5.5	.90	.47		

Annual Rates of Service Retirements									
	М	ale	Fer	nale					
Age	Under 25 Years of Service	25 Years of Service and Over	Under 25 Years of Service	25 Years of Service and Over					
45		13.0%		11.0%					
50		13.0		11.0					
55		15.0		18.0					
60	11.0%	15.0	13.0%	20.0					
62	19.0	30.0	18.0	30.0					
65	20.0	28.0	25.0	38.0					
70	17.0	20.0	19.0	25.0					
75	100.0	100.0	100.0	100.0					

<sup>For all ages, rates of 35% for 1st year of employment and 21% for 2nd year.
94% are presumed to be non-duty related, and 6% are assumed to be duty related.</sup>



SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

		Annual Rates of	
Service	Merit & Seniority	Base (Economy)	Increase Next Year
0	10.75%	4.25%	15.00%
1	10.75	4.25	15.00
2	10.75	4.25	15.00
3	1.25	4.25	5.50
4	1.25	4.25	5.50
5	1.25	4.25	5.50
10	0.75	4.25	5.00
15	0.75	4.25	5.00
20	0.75	4.25	5.00
25	0.75	4.25	5.00
30	0.25	4.25	4.50
35	0.25	4.25	4.50

PAYROLL GROWTH: 4.25% per annum, compounded annually.

PRICE INFLATION: 3.50% per annum, compounded annually.

DEATH AFTER RETIREMENT: The mortality table, for post-retirement mortality, used in evaluating allowances to be paid is the 1994 Group Annuity Mortality Table. Special tables are used for the period after disability retirement. This assumption is used to measure the probabilities of each benefit payment being made after retirement.

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

UNUSED SICK LEAVE: 0.75 years at retirement.

VALUATION METHOD: Entry age normal cost method. Entry age is established on an individual basis.



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 System in effect June 30, 2008, as interpreted in preparing the actuarial valuation. As used in the summary, "average compensation" means the average annual covered earnings of an employee during the four highest years of service. "Covered earnings" means gross salary not in excess of the maximum amount on which contributions were required. "Fiscal year" means a year commencing on July 1 and ending June 30. 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
2/1/53	6/30/58	2.50%	\$6,000	4.00%	\$4,800*
7/1/58	6/30/60	2.50	9,000	4.00	7,800*
7/1/60	6/30/66	2.50	15,000	4.00	13,800*
7/1/66	6/30/68	3.00	15,000	4.50	13,800*
7/1/68	3/31/71	4.50	15,000	4.50	15,000
4/1/71	6/30/73	4.50	35,000	4.50	35,000
7/1/73	6/30/76	5.85	35,000	5.00	35,000
7/1/76	6/30/77	7.00	35,000	5.00	35,000
7/1/77	6/30/78	7.50	35,000	5.50	35,000
7/1/78	6/30/80	8.00	35,000	5.50	35,000
7/1/80	6/30/81	8.00	53,000	5.50	53,000
7/1/81	12/31/83	8.75	53,000	6.00	53,000
1/1/84	6/30/88	8.75	63,000	6.00	63,000
7/1/88	6/30/89	8.75	75,600	6.00	75,600
7/1/89	12/31/89	8.75	75,600	6.50	75,600
1/1/90	6/30/91	9.75	75,600	6.50	75,600
7/1/91	6/30/92	9.75	75,600	7.25	75,600
7/1/92	6/30/02	9.75	125,000	7.25	125,000
7/1/02	6/30/05	9.75	150,000	7.25	150,000
7/1/05	6/30/06	10.75	150,000	7.25	150,000
7/1/06	6/30/07	11.30	150,000	7.25	150,000
7/1/07	6/30/08	11.85	150,000	7.25	150,000
7/1/08	6/30/09	11.85	230,000	7.25	230,000
7/1/09	6/30/10	12.00	245,000	7.25	245,000

^{*}From February 1, 1953 through June 30, 1968 the first \$100 in monthly earnings or \$1,200 in annual earnings were not covered earnings for the employee.



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 creditable service, or has completed at least 25 years of creditable service.

- (b) Any member who withdraws from service prior to his attainment of age 60 and who has completed at least eight years* of creditable service is entitled to receive, in lieu of a refund of his accumulated contributions, a retirement allowance commencing at age 60.
- (c) Upon the death of a member who has completed at least eight years* of creditable service, a benefit is payable, in lieu of a refund of the member's accumulated contributions, to his 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.

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

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

The minimum allowance is \$120 for each year of creditable service

The annual retirement allowance payable to the spouse of a member who dies under condition (c) above is equal to the greater of (i) the allowance that would have been payable had the member retired and elected Option 2, reduced by 3% per year for each year the member lacked in qualifying for unreduced retirement benefits, or (ii) a benefit equal to the greater of 20% of average compensation or \$50 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 10% of average compensation or \$50 per month for each dependent child up to 3.

Amount of Allowance



Disability Retirement

Condition for Retirement

Amount of Allowance

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 creditable service.

* four years for those who entered the system 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 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) 40% of average compensation plus 10% 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 \$120 per year of creditable service.



 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 40% of average compensation, or (b) the member's accrued allowance.

The minimum allowance is \$120 per year of creditable service.

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

Amount of Allowance

Accidental Death Benefit

Condition for Benefit

Amount of Allowance

Return of Contributions

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

The annual accidental disability retirement allowance is equal to the allowance payable on disability retirement but not less than 50% of average compensation. There is no minimum 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.

The annual retirement allowance is equal to 50% of average compensation payable to the spouse and 25% of average compensation payable to one dependent child or 50% to two or more children until age 19 (23 if a full time student). There is no minimum benefit.

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

Upon the death of a member before retirement, his contributions, together with the full accumulated regular interest thereon, are paid to his designated beneficiary, if any, otherwise, to his estate provided no other survivor benefits are payable.



Normal Form of Benefit

Optional Benefits

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

A member upon retirement may elect to receive his 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 beneficiary or estate.

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

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

Option 4A. Upon his death, 50% of his 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, his beneficiary or his estate 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 PERS 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.

If a member elects either Option 2 or Option 4A there is an added provision that in the event the designated beneficiary predeceases the member, the retirement allowance payable to the member after the designated beneficiary's death shall be equal to the retirement allowance which would have been payable had the member not elected the option.



A member who has at least 28 years of creditable service* 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 service for those who entered the system 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; provided, however, that the annual adjustment will not be less than 4% of the annual retirement allowance for each full fiscal year in retirement through June 30, 1998.

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.



SCHEDULE D DETAILED TABULATIONS OF THE DATA

Retirants & Beneficiaries as of June 30, 2009 Tabulated by Year of Retirement

		Total Annual			Average
Year of		Benefits,		Total	Monthly Total
Retirement	No.	excluding COLA	COLA	Annual Benefits	Benefit
2009	2,199	\$39,777,473	\$19,341	\$39,796,814	\$1,508
2008	4,878	90,244,497	257,303	90,501,800	1,546
2007	4,459	79,134,236	2,181,935	81,316,171	1,520
2006	4,613	78,650,382	4,579,107	83,229,489	1,504
2005	4,365	71,578,324	6,383,332	77,961,656	1,488
2004	4,489	77,110,641	9,321,686	86,432,327	1,605
2003	4,067	66,177,318	10,116,962	76,294,280	1,563
2002	4,186	67,731,602	12,652,882	80,384,484	1,600
2001	4,138	64,093,429	14,243,770	78,337,199	1,578
2000	3,582	57,613,212	14,949,772	72,562,984	1,688
1999	2,830	42,051,196	12,427,488	54,478,684	1,604
1998	2,847	41,284,333	13,785,174	55,069,507	1,612
1997	2,786	36,781,009	13,851,386	50,632,395	1,514
1996	3,007	41,629,880	17,403,438	59,033,318	1,636
1995	2,380	29,930,261	13,801,625	43,731,886	1,531
1994	2,242	26,514,874	13,255,730	39,770,604	1,478
1993	2,186	24,752,210	13,543,968	38,296,178	1,460
1992	2,602	32,821,073	19,492,505	52,313,578	1,675
1991	2,093	23,863,612	15,297,394	39,161,006	1,559
1990	1,700	18,548,678	12,803,161	31,351,839	1,537
1989	1,375	12,708,656	9,400,961	22,109,617	1,340
1988	1,125	10,039,556	7,958,171	17,997,727	1,333
1987	923	7,795,517	6,586,386	14,381,903	1,298
1986	1,791	18,245,128	16,911,167	35,156,295	1,636
1985	840	7,294,903	6,930,405	14,225,308	1,411
1984	779	6,187,395	6,234,586	12,421,981	1,329
1983	586	4,130,212	4,400,443	8,530,655	1,213
1982	534	3,643,470	4,123,817	7,767,287	1,212
1981	555	3,485,867	4,140,714	7,626,581	1,145
1980	413	2,578,653	3,205,806	5,784,459	1,167
1979	269	1,629,986	2,156,939	3,786,925	1,173
1978	262	1,322,706	1,818,590	3,141,296	999
1977	207	1,091,124	1,587,465	2,678,589	1,078
1976	229	1,078,836	1,634,641	2,713,477	987
1975	149	649,910	1,046,813	1,696,723	949
1974 & Prior	457	1,827,882	3,436,975	5,264,857	960
Totals	76,143	\$1,093,998,041	\$301,941,838	\$1,395,939,879	\$1,528



Schedule of Retired Members by Type of Benefit

Benefits Payable June 30, 2009

Amount of Monthly Benefit**	Number of Rets.	Ret. Type 1*	Ret. Type 2*	Ret. Type 3*	Life	Option 1	Option 2	Option 3	Option 4A	Option 4B	Option 4C	Option 5	PLSO 1 Year	PLSO 2 Years	PLSO 3 Years
\$1-\$100	2,400	1,906	12	482	1,705	79	329	8	30	238	6	11	51	32	359
101-200	5,688	4,191	126	1,371	4,131	242	652	18	82	494	25	69	89	59	362
201-300	5,554	3,949	296	1,309	4,133	226	564	10	106	449	39	66	73	49	267
301-400	4,812	3,350	371	1,091	3,455	217	544	20	109	420	60	47	66	63	233
401-500	4,286	3,028	405	853	3,065	189	521	8	141	313	72	49	65	63	199
501-600	3,645	2,586	417	642	2,536	151	471	14	116	311	89	46	75	52	185
601-700	3,294	2,384	393	517	2,279	149	428	10	133	250	136	45	66	51	143
701-800	3,145	2,299	396	450	2,131	173	387	10	166	203	171	75	47	42	150
801-900	2,985	2,272	339	374	1,949	158	433	7	172	222	189	44	66	46	194
901-1,000	2,892	2,236	315	341	1,887	121	420	14	153	226	197	71	67	32	189
Over 1,000	37,442	33,265	2,187	1,990	22,528	1,535	6,394	155	3,472	2,930	2,116	428	1,314	1,194	5,826
Totals	76,143	61,466	5,257	9,420	49,799	3,240	11,143	274	4,680	6,056	3,100	951	1,979	1,683	8,107

*Type of Retirement

1 – Retirement for Age & Service

2 - Disability Retirement

3 – Survivor Payment

Option Selected

Return of Contributions Life Return of Member's Annuity Opt. 1

Opt. 2 100% Survivorship

Opt. 3 50%/50% Dual Survivorship

50% Survivorship Opt. 4A Years Certain & Life Opt. 4B Opt. 4C Social Security Leveling**

Opt. 5 Pop-Up

PLSO

Partial Lump Sum Option** (Reflects reduced benefit)

^{**}Included in other options



Public Employees' Retirement System of Mississippi

Retirant and Beneficiary Information June 30, 2009 Tabulated by Attained Ages

	Service Retirement		Disab	ility Retirement	Survivors	and Beneficiaries	Total		
Attained Age		Annual		Annual		Annual		Annual	
	No.	Benefits	No.	Benefits	No.	Benefits	No.	Benefits	
Under 20					623	\$2,285,045	623	\$2,285,045	
20 – 24					187	\$937,559	187	\$937,559	
25 – 29			3	\$31,775	86	\$742,601	89	\$774,376	
30 – 34			28	\$302,044	74	\$706,905	102	\$1,008,949	
35 – 39	2	\$12,772	94	\$1,282,273	173	\$1,591,202	269	\$2,886,247	
40 – 44	19	\$377,987	184	\$3,286,157	210	\$1,883,165	413	\$5,547,309	
45 – 49	516	\$10,968,236	453	\$7,971,425	350	\$3,061,498	1,319	\$22,001,159	
50 – 54	2,467	\$59,058,601	772	\$13,626,808	525	\$5,840,657	3,764	\$78,526,066	
55 – 59	5,748	\$154,204,194	1,092	\$17,912,050	709	\$8,870,778	7,549	\$180,987,022	
60 – 64	11,938	\$259,161,034	1,155	\$17,575,581	886	\$12,119,370	13,979	\$288,855,985	
65 – 69	12,967	\$245,820,801	682	\$9,317,025	1,011	\$13,995,512	14,660	\$269,133,338	
70 – 74	10,184	\$181,371,374	451	\$5,171,184	1,117	\$15,933,452	11,752	\$202,476,010	
75 – 79	7,721	\$133,964,872	186	\$2,078,542	1,228	\$17,496,694	9,135	\$153,540,108	
80 – 84	5,508	\$89,343,486	93	\$959,763	1,138	\$16,295,317	6,739	\$106,598,566	
85 – 89	2,891	\$43,974,788	49	\$466,604	719	\$10,267,053	3,659	\$54,708,445	
90 – 94	1,136	\$16,320,566	12	\$110,928	299	\$3,501,557	1,447	\$19,933,051	
95	113	\$1,613,741	2	\$19,212	27	\$403,203	142	\$2,036,156	
96	84	\$917,979			23	\$293,829	107	\$1,211,808	
97	60	\$706,973	1	\$5,747	11	\$125,035	72	\$837,755	
98	31	\$340,398			11	\$117,916	42	\$458,314	
99	34	\$431,925			6	\$59,613	40	\$491,538	
100 & Over	47	\$604,844			7	\$100,229	54	\$705,073	
Totals	61,466	\$1,199,194,571	5,257	\$80,117,118	9,420	\$116,628,190	76,143	\$1,395,939,879	

Average Age: 68.5 years



Public Employees' Retirement System of Mississippi

Total Active Members as of June 30, 2009 Tabulated by Attained Ages and Years of Service

		Years of S	Service to Valu	ation Date				Totals	
Attained Age									Valuation
	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+	No.	Payroll
Under 20	341	3						344	\$4,678,105
20 – 24	6,950	105	3					7,058	159,293,989
25 – 29	13,814	3,459	76	3				17,352	510,263,092
30 – 34	9,250	7,230	2,117	40				18,637	615,191,941
35 – 39	8,390	5,632	5,099	1,984	84			21,189	734,794,251
33 33	0,550	3,032	3,033	1,504	04			21,100	754,754,251
40 – 44	6,820	4,706	3,905	3,897	1,766	71		21,165	737,727,439
45 – 49	6,245	4,740	3,964	3,259	3,701	1,603	62	23,574	847,477,138
50 – 54	5,243	4,119	3,583	3,393	3,228	2,476	1,265	23,307	880,463,380
55 – 59	3,875	3,339	2,828	2,789	2,792	1,690	1,979	19,292	761,616,888
60	550	506	448	436	422	261	332	2,955	117,961,811
61	533	481	450	397	385	250	277	2,773	110,330,408
62	439	423	391	313	321	195	248	2,330	93,271,940
63	266	284	231	192	165	107	159	1,404	53,711,819
64	247	254	186	146	127	93	136	1,189	45,269,660
65	166	176	144	113	94	71	97	861	35,236,533
66	150	155	109	107	84	43	81	729	27,770,825
67	123	119	105	58	60	33	52	550	19,077,056
68	96	104	71	52	54	31	40	448	14,574,483
69	80	87	68	49	35	23	37	379	12,749,398
70 & Over	325	324	269	207	164	103	194	1,586	50,403,378
Totals	63,902	36,246	24,047	17,435	13,482	7,050	4,960	167,122	\$5,831,863,534

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

Age: 44.2 years Service: 9.8 years Annual Pay: \$34,896



SCHEDULE E

MISSISSIPPI PERS ANALYSIS OF FINANCIAL EXPERIENCE

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

Type of Activity	\$ Gain (or Loss) For Year Ending 6/30/09	\$ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (99.1)	\$ (116.3)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(48.5)	(43.4)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.1)	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	19.1	61.9
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	80.3	(10.3)
New Members. Additional unfunded accrued liability will produce a loss.	(97.1)	(106.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(1,439.6)	(293.3)
Death After Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	(49.7)	6.8
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(202.0)	(51.2)
Gain (or Loss) During Year From Financial Experience	\$ (1,836.7)	\$ (552.6)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, or method changes.	(332.6)	(23.5)
Composite Gain (or Loss) During Year	\$ (2,169.3)	<u>\$ (576.1)</u>



SCHEDULE F GLOSSARY

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

<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 an 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.

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.