

Report on the Actuarial Valuation of the Employees' Retirement System of Alabama Prepared as of September 30, 2008



June 22, 2009

Board of Control Employees' Retirement System of Alabama State Capitol Montgomery, AL 36104

Members of the Board:

In this report are submitted the results of the annual actuarial valuation of the Employees' Retirement System of Alabama, prepared as of September 30, 2008 in accordance with Section 36-27-23(p) of the act governing the operation of the System.

The purpose of this report is to provide a summary of the funded status of the system as of September 30, 2008, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). While not verifying the data at source, the actuary performed tests for consistency and reasonability. The valuation liabilities include the pay increases granted to active State employees under Act 2007-297.

On the basis of this valuation, it is recommended that the State make contributions to the Retirement System for State employees (members other than State policemen) at the rate of 12.94% of payroll. It is also recommended that the State make contributions to the Retirement System for State policemen at the rate of 32.28% of payroll for the fiscal year ending September 30, 2011. The contribution rates for local employers for the fiscal year beginning October 1, 2010 will be submitted in a separate report and will not include the impact of any employer-elected benefit improvements after September 30, 2008.

The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method. Five-year smoothed market value of assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 20-year period for State Employees and State policemen, on the assumption that payroll will increase by 4.5% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Fund and to reasonable expectations of anticipated experience under the Fund and meet the parameters for the disclosures under GASB 25 and 27.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144 Phone (678) 388-1700 • Fax (678) 388-1730 www.CavMacConsulting.com Offices in Englewood, CO • Kennesaw, GA • Hilton Head Island, SC



We have prepared the Schedule of Funding Progress and Trend Information shown in the financial section of the Comprehensive Annual Financial Report, and all supporting schedules including the Schedule of Active Member Valuation Data, the Solvency Test and the Analysis of Financial Experience shown in the actuarial section of the Comprehensive Annual Financial Report. All historical information that references a valuation date prior to September 30, 2004 was prepared by the previous actuarial firm.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

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.

In our opinion the System is operating on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA President

EAM/CT:kc

Cathy Turcot Principal and Managing Director



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#### REPORT ON THE ACTUARIAL VALUATION OF THE EMPLOYEES' RETIREMENT SYSTEM OF ALABAMA PREPARED AS OF SEPTEMBER 30, 2008

#### **SECTION I - SUMMARY OF PRINCIPAL RESULTS**

 For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results for State Employees, Local Employees and State Policemen are summarized below:

VALUATION DATE		otember 30, 2008	Sep	otember 30, 2007
Number of active members		33,341		33,065
Annual compensation <sup>1</sup>	\$	1,382,536,439	\$	1,303,226,956
Number of retired members and beneficiaries		17,973		17,516
Annual retirement allowances <sup>1</sup>	\$	340,354,654	\$	323,923,099
Number of DROP participants		1,610		1,518
Annual compensation <sup>1</sup>	\$	96,900,333	\$	89,784,060
Annual allowances		45,679,912		43,373,423
Assets				
Actuarial value	\$	4,912,248,475	\$	4,922,133,307
Market value		4,244,638,516		5,203,219,169
Unfunded accrued liability	\$	1,701,549,508	\$	1,454,993,836
CONTRIBUTIONS FOR FISCAL YEAR ENDING	Sep	otember 30, 2011	Sep	otember 30, 2010
Employer contribution rate:				
Normal		4.90%		4.84%
Accrued liability		7.71		6.77
Death benefit		0.15		0.15
Administration		0.18		0.18
Total		12.94%		11.94%
Amortization period		20 years		20 years

#### SUMMARY OF PRINCIPAL RESULTS FOR STATE EMPLOYEES



VALUATION DATE	Sep	tember 30, 2008	Sept	ember 30, 2007
Number of active members		755		730
Annual compensation <sup>1</sup>	\$	46,881,655	\$	44,872,765
Number of retired members and beneficiaries		770		747
Annual retirement allowances <sup>1</sup>	\$	30,200,305	\$	28,488,584
Number of DROP participants		34		35
Annual compensation <sup>1</sup>	\$	2,871,596	\$	2,778,321
Annual allowances		1,866,571		1,902,954
Assets				
Actuarial value	\$	350,685,611	\$	350,437,005
Market value		303,647,352		369,785,053
Unfunded accrued liability	\$	138,371,614	\$	124,971,531
CONTRIBUTIONS FOR FISCAL YEAR ENDING	Sep	tember 30, 2011	Sept	ember 30, 2010
Employer contribution rate:				
Normal		13.30%		13.23%
Accrued liability		18.65		17.01
Death benefit		0.15		0.15
Administration		0.18		0.18
Total		32.28%		30.57%
Amortization period		20 years		20 years

# SUMMARY OF PRINCIPAL RESULTS FOR STATE POLICEMEN



VALUATION DATE		otember 30, 2008	Sep	otember 30, 2007
Number of active members		53,906		52,873
Annual compensation <sup>1</sup>	\$	1,940,278,613	\$	1,821,332,440
Number of retired members and beneficiaries		16,202		15,550
Annual retirement allowances <sup>1</sup>	\$	257,169,797	\$	239,712,251
Number of DROP participants		540		486
Annual compensation <sup>1</sup>	\$	30,339,956	\$	26,315,002
Annual allowances		14,763,675		12,943,159
Assets				
Actuarial value	\$	4,642,832,248	\$	4,498,326,504
Market value		4,017,013,672		4,771,688,275
Unfunded accrued liability	\$	1,332,998,973	\$	1,019,478,962
CONTRIBUTIONS FOR FISCAL YEAR ENDING	Sep	otember 30, 2011	Sep	otember 30, 2010
Employer contribution rate:				
Normal		Varies		Varies
Accrued liability		Varies		Varies
Death benefit		0.15		0.15
Administration		0.18		0.18
Total		Varies		Varies
Amortization period		Varies		Varies

# SUMMARY OF PRINCIPAL RESULTS FOR LOCAL EMPLOYEES



VALUATION DATE		September 30, 2008		September 30, 2007	
Number of active members		88,002		86,668	
Annual compensation <sup>1</sup>	\$	3,369,696,707	\$	3,169,432,161	
Number of retired members and beneficiaries		34,945		33,813	
Annual retirement allowances <sup>1</sup>	\$	627,724,756	\$	592,123,934	
Number of DROP participants		2,184		2,039	
Annual compensation <sup>1</sup>	\$	130,111,885	\$	118,877,383	
Annual allowances		62,310,158		58,219,536	
Assets					
Actuarial value	\$	9,905,766,334	\$	9,770,896,816	
Market value		8,565,299,540		10,344,692,497	
Unfunded accrued liability	\$	3,172,920,095	\$	2,599,444,329	

#### SUMMARY OF PRINCIPAL RESULTS FOR ALL GROUPS

- 2. The valuation indicates that employer contributions at the rate of 12.94% of payroll for State employees and 32.28% for State policemen and varying rates for local employees, along with member contributions of 10.00% for State policemen, 6.00% for certified police officers, firefighters, and correctional officers and 5.00% for other State and local employees, are sufficient to support the benefits of the System. Comments on the valuation results as of September 30, 2008 are given in Section IV and further discussion of the contribution levels is set out in Section V. The valuation results for local employees do not include the impact of any benefit improvements elected by local employers after the valuation date. The contribution rates for local employers for fiscal year beginning October 1, 2010 will be submitted in a separate report.
- 3. Schedule B shows the development of the actuarial value of assets. Schedule D of this report outlines the full set of actuarial assumptions and methods used in the current valuation. There have been no changes since the previous valuation.



4. The valuation takes into account the effect of amendments to the System through the valuation date. Provisions of the System, as summarized in Schedule F, were taken into account in the current valuation. The valuation reflects the pay increases granted to State employees under Act 2007-297.

## SECTION II – MEMBERSHIP DATA

 Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual compensation as of September 30, 2008 on the basis of which the valuation was prepared.

#### TABLE 1

# THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF SEPTEMBER 30, 2008

GROUP	NUMBER	COMPENSATION*
State Employees	33,341	\$ 1,382,536,439
State Policemen	755	46,881,655
Local Employees	53,906	1,940,278,613
Total	88,002	\$ 3,369,696,707

\*Does not include pay increases effective after the valuation date.

The table reflects the active membership for whom complete valuation data were submitted. The results of the valuation were adjusted to take into account an additional 11,399 non-contributing inactive members. In addition, there were 2,184 members with annual compensation of \$130,111,885 who were participating in the DROP program as of September 30, 2008.



2. The following table shows a six-year history of active member valuation data.

# TABLE 2

Valuation		Annual	Annual	% Increase in
Date	<u>Number</u>	<u>Payroll</u>	<u>Average Pay</u>	<u>Average Pay</u>
9/30/2008 <sup>1</sup>	88,002	\$ 3,369,696,707	\$ 38,291	4.71%
9/30/2007 <sup>2</sup>	86,668	3,169,432,161	36,570	4.65
9/30/2006 <sup>3</sup>	84,482	2,952,186,813	34,945	3.05
9/30/2005 4	82,830	2,808,823,045	33,911	4.94
9/30/2004 <sup>5</sup>	81,249	2,625,617,551	32,316	1.18
9/30/2003 <sup>6</sup>	82,304	2,628,626,363	31,938	3.12

## SCHEDULE OF ACTIVE MEMBER VALUATION DATA

<sup>1</sup> In addition, there are 2,184 members with compensation of \$130,111,885 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

<sup>2</sup> In addition, there are 2,039 members with compensation of \$118,877,383 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

<sup>3</sup> In addition, there are 1,905 members with compensation of \$115,812,131 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

<sup>4</sup> In addition, there are 1,753 members with compensation of \$95,585,173 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

<sup>5</sup> In addition, there are 1,440 members with compensation of \$76,775,883 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

<sup>6</sup> In addition, there are 923 members with compensation of \$48,398,330 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.



# 3. The following table shows the number and annual retirement allowances payable to retired

members and their beneficiaries on the roll of the Retirement System as of the valuation date.

#### TABLE 3

#### THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES<sup>1</sup> OF RETIRED MEMBERS AND BENEFICIARIES OF DECEASED MEMBERS ON THE ROLL AS OF SEPTEMBER 30, 2008

	GROUP			
TYPE OF RETIREMENT	STATE EMPLOYEES	STATE POLICEMEN	LOCAL EMPLOYEES <sup>2</sup>	TOTAL
Service: Number Annual Allowances	14,606 \$ 301,790,022	630 \$ 27,298,763	13,026 \$ 227,288,855	28,262 \$ 556,377,640
Disability: Number Annual Allowances	1,856 \$ 22,584,440	41 \$ 1,038,819	1,455 \$ 16,491,694	3,352 \$ 40,114,953
Beneficiaries: Number Annual Allowances	1,511 \$ 15,980,192	99 \$ 1,862,723	1,721 \$ 13,389,248	3,331 \$ 31,232,163
DROP participants: Number Annual Allowances	1,610 \$ 45,679,912	34 \$ 1,866,571	540 \$ 14,763,675	2,184 \$ 62,310,158
Total: Number Annual Allowances	19,583 \$ 386,034,566	804 \$ 32,066,876	16,742 \$ 271,933,472	37,129 \$ 690,034,914

<sup>1</sup> Amounts shown do not reflect any increase in effect after the valuation date.

<sup>2</sup> In addition, there are 49 terminated vested members with annual deferred allowances totaling \$279,165.

4. Tables 1 through 3 of Schedule G show the distribution by age and service of the number and average annual compensation of active members included in the valuation.

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#### **SECTION III - ASSETS**

- As of October 1, 2001, the retirement law provided for the maintenance of three funds for the purpose of recording the fiscal transactions of the System, namely, the Annuity Savings Fund, the Pension Accumulation Fund, and the Pre-Retirement Death Benefit Fund. Effective February 1, 2003, a separate fund was created for the DROP.
  - (a) Annuity Savings Fund

The Annuity Savings Fund is the fund to which are credited all contributions made by members, except those contributions made by members who are participating in DROP, together with regular interest thereon. When a member retires or when a survivor allowance becomes payable or a member enters DROP, the amount of the member's accumulated contributions are transferred from the Annuity Savings Fund to the Pension Accumulation Fund. On September 30, 2008, the market value of assets credited to this Fund amounted to \$1,860,094,806 which represent the contributions of members to this date.

(b) Pension Accumulation Fund

The Pension Accumulation Fund is the fund to which are credited all contributions made by the employers, except those contributions made to the Pre-Retirement Death Benefit Fund which was created October 1, 1983. When a member retires or when a survivor allowance becomes payable, the pension is paid from this fund. When a members enters DROP, the deferred pension is transferred from this fund to the DROP Fund. On September 30, 2008 the market value of assets credited to this fund amounted to \$6,485,519,888.

(c) DROP Fund

The DROP Fund is the fund to which are credited deferred retirement benefits on behalf of members who elect to participate in the DROP, together with regular interest thereon. In addition, member contributions while participating in the DROP, together with regular interest therein, are credited to the Fund. At the end of the DROP deferral period, the member receives the amount of the deferred retirement benefits and contributions plus interest in the member's DROP account. On September 30, 2008, the market value of assets credited to this Fund amounted to \$219,684,846.

(d) Pre-Retirement Death Benefit Fund

The Pre-Retirement Death Benefit Fund is the fund to which are credited contributions made by the employer for the special pre-retirement death benefit which became effective October 1, 1983. On September 30, 2008, the market value of assets credited to this fund amounted to \$25,693,928.



2. As of September 30, 2008 the total market value of assets exclusive of the Pre-Retirement Death

Benefit Fund amounted to \$8,565,299,540 as shown in the following table.

#### TABLE 4

#### MARKET VALUE OF ASSETS BY FUND AS OF SEPTEMBER 30, 2008

FUND	MARKET VALUE OF ASSETS
Annuity Savings Fund Pension Accumulation Fund DROP Fund	\$ 1,860,094,806 6,485,519,888 219,684,846
Total Market Value of Assets	\$ 8,565,299,540

3. The five-year market related actuarial value of assets used for the current valuation was \$9,905,766,334. Schedule B shows the development of the actuarial value of assets as of September 30, 2008. The following table shows the actuarial value of assets allocated among state employees, state policemen and local employees.

## TABLE 5

#### COMPARISON OF ACTUARIAL VALUE OF ASSETS AT SEPTEMBER 30, 2008 AND SEPTEMBER 30, 2007

GROUP	SEPTEMBER 30, 2008 ACTUARIAL VALUE	SEPTEMBER 30, 2007 ACTUARIAL VALUE
State Employees	\$ 4,912,248,475	\$ 4,922,133,307
State Policemen	350,685,611	350,437,005
Local Employees	4,642,832,248	4,498,326,504
Total Assets	\$ 9,905,766,334	\$ 9,770,896,816

4. Schedule C shows the receipts and disbursements of the System for the year preceding the valuation date and a reconciliation of the fund balances at market value.



#### SECTION IV - COMMENTS ON VALUATION

- Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of September 30, 2008. Separate balance sheets are shown for each employee group as well as in total for all groups.
- 2. The total valuation balance sheet shows that the System has total prospective liabilities of \$15,835,623,724, of which \$6,275,136,143 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, and \$9,560,487,581 is for the prospective benefits payable on account of present active and inactive members. Against these liabilities the System has total present actuarial value of assets of \$9,905,766,334 as of September 30, 2008. The difference of \$5,929,857,390 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future. Of this amount, \$1,450,948,940 is the present value of future contributions expected to be made by members to the Annuity Savings Fund, and the balance of \$4,478,908,450 represents the present value of future contributions payable by the employers.
- 3. The employers' contributions to the System consist of normal contributions, accrued liability contributions and current disbursement cost-of-living benefit increase contributions. The valuation indicates that employer normal contributions at the rate of 4.90% of payroll are required to provide the benefits of the System for the average new member of the State employees system. For State policemen, employer normal contributions at the rate of 13.30% of payroll are required. For local employees, varying rates of employer normal contributions are required.
- 4. Prospective employer normal contributions at the above rates have a present value of \$1,305,988,355. When this amount is subtracted from \$4,478,908,450, which is the present value of the total future contributions to be made by the employers, there remains \$3,172,920,095 as the amount of future accrued liability contributions.
- 5. For State employees, it is recommended that the accrued liability contribution rate payable by the State be set at 7.71% of payroll. For State policemen, it is recommended that the accrued liability contribution rate payable by the State be set at 18.65% of payroll. These rates are sufficient to



amortize the unfunded accrued liability of \$1,701,549,508 for State employees and \$138,371,614 for State policemen within 20 years on the assumption that the aggregate amount of accrued liability contribution will increase by 4.50% each year.

- 6. For all employers, an additional contribution of 0.15% of payroll will be required to meet the cost of the pre-retirement death benefit program established under Act No. 83-616.
- 7. For all employers, an additional contribution of 0.18% is required to cover the expenses of administering the System.

## SECTION V - CONTRIBUTIONS PAYABLE BY EMPLOYERS

- 1. The retirement act provides that the Board of Control shall certify to the chief fiscal officer of each employer the rates of contribution required to be paid by the employer.
- 2. On the basis of the actuarial valuation prepared as of September 30, 2008 it is recommended that the State make contributions at the following rates for the fiscal year beginning October 1, 2010:

## TABLE 6

CONTRIBUTION	PERCENTAGE OF MEMBERS' COMPENSATION FOR FISCAL YEAR ENDING SEPTEMBER 30, 2011 STATE EMPLOYEES STATE POLICEMEN			
Normal Accrued liability	4.90% 7.71	13.30% 18.65		
Death benefit Administration Total	0.15 0.18 12.94%	0.15 		

## **RECOMMENDED CONTRIBUTION RATES**

3. Contribution rates for Local Employers will be submitted in a separate report. The rates for the fiscal year beginning October 1, 2010 will be determined as of September 30, 2008, and will only reflect employer-elected benefit improvements through the valuation date.



#### SECTION VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase in the unfunded accrued liability during the year ending September 30, 2008. For State employees, the unfunded accrued liability increased \$246,555,672: for State policemen, the unfunded accrued liability increased \$13,400,083. Since the benefits, assumptions and accrued liability rates vary by location for the Local employees, we do not develop an analysis of financial experience for this group.

ITEM	AMOUNT OF INCRE	ASE / (DECREASE)
	STATE EMPLOYEES	STATE POLICEMEN
Interest (8.00%) added to previous unfunded accrued liability	\$ 116.4	\$ 10.0
Accrued liability contribution	(74.9)	(8.3)
Experience:		
Valuation asset growth	227.6	16.8
Pensioners' mortality	10.6	1.1
Turnover and retirements	23.5	(2.3)
New entrants	14.6	5.1
Salary increases	(97.7)	(9.8)
Method changes	0.0	0.0
Amendments	0.0	0.0
Assumption changes	0.0	0.0
Miscellaneous	26.5	0.8
Total	\$ 246.6	\$ 13.4

ANALYSIS OF FINANCIAL EXPERIENCE (in millions of dollars)



# **SECTION VII - ACCOUNTING INFORMATION**

 Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary 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:

GROUP	NUMBER				
	State Employees	State Policemen	Local Employees	Total	
Retired and beneficiaries currently receiving benefits	17,973	770	16,202	34,945	
DROP participants	1,610	34	540	2,184	
Terminated employees entitled to benefits but not yet receiving benefits Active members	3,752 33,341	16 755	7,680 53,906	11,448 88,002	
Total	56,676	1,575	78,328	136,579	

## NUMBER OF ACTIVE AND RETIRED MEMBERS AS OF SEPTEMBER 30, 2008



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

SCHEDULE (	OF FUNDING	PROGRESS
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(Dollar amounts in thousands)

	Actuarial	Actuarial				
	Value of	Accrued	Unfunded			UAAL as a
Actuarial	Plan	Liability (AAL)	AAL	Funded	Covered	Percentage of
Valuation	Assets	Entry Age	(UAAL)	Ratio	Payroll	Covered Payoll
<u>Date</u>	<u>(a)</u>	<u>(b)</u>	<u>(b-a)</u>	<u>(a/b)</u>	<u>(c)</u>	<u>((b-a)/c)</u>
		то	TAL ALL GRO	DUPS		
9/30/2003	\$8,312,500	\$9,124,279	\$811,779	91.1%	\$2,677,025	30.3%
9/30/2004	8,563,945	9,546,478	982,533	89.7	2,702,393	36.4
9/30/2005	8,935,358	10,634,976	1,699,618	84.0	2,982,122	57.0
9/30/2006	9,287,531	11,457,564	2,170,033	81.1	3,070,146	70.7
9/30/2007	9,770,897	12,370,342	2,599,445	79.0	3,389,156	76.7
9/30/2008	9,905,766	13,078,687	3,172,921	75.7	3,553,330	89.3
			ATE EMPLO			
9/30/2003	\$4,512,192	\$4,842,323	\$330,131	93.2%	\$1,179,996	28.0%
9/30/2004	4,590,564	5,081,338	490,774	90.3	1,155,614	42.5
9/30/2005	4,683,805	5,631,264	947,459	83.2	1,276,902 1	
9/30/2006	4,765,294	5,884,307	1,119,013	81.0	1,289,743	86.8
9/30/2007	4,922,133	6,377,127	1,454,994	77.2	1,490,522 <sup>3</sup>	
9/30/2008	4,912,248	6,613,798	1,701,550	74.3	1,531,217 <sup>3</sup>	111.1
		ST	ATE POLICE	MEN		
9/30/2003	\$332,147	\$365,232	\$33,085	90.9%	\$37,978	87.1%
9/30/2004	332,311	383,241	50,930	86.7	38,985	130.6
9/30/2005	336,068	436,335	100,267	77.0	45,861 <sup>2</sup>	
9/30/2006	342,051	451,702	109,651	75.7	45,304 <sup>2</sup>	
9/30/2007	350,437	475,409	124,972	73.7	50,987 <sup>3</sup>	
9/30/2008	350,686	489,058	138,372	71.7	51,495 <sup>3</sup>	268.7
		<u>L0</u>	CAL EMPLO	YEES		
9/30/2003	\$3,468,161	\$3,916,725	\$448,564	88.5%	\$1,459,050	30.7%
9/30/2004	3,641,071	4,081,900	440,829	89.2	1,507,794	29.2
9/30/2005	3,915,485	4,567,377	651,892	85.7	1,659,359	39.3
9/30/2006	4,180,186	5,121,555	941,369	81.6	1,735,099	54.3
9/30/2007	4,498,327	5,517,806	1,019,479	81.5	1,847,647	55.2
9/30/2008	4,642,832	5,975,831	1,332,999	77.7	1,970,618	67.6

Includes pay increases granted under Act 2005-316.
 Includes pay increases granted under Act 2005-231.
 Includes pay increases granted under Act 2007-297.



# 3. The information presented in the required supplementary schedules was determined as part of the actuarial

valuation at September 30, 2008. Additional information as of the latest actuarial valuation follows.

	State <u>Employees</u>	State <u>Policemen</u>	Local <u>Employees</u>
Valuation date	9/30/2008	9/30/2008	9/30/2008
Actuarial cost method	Entry age	Entry age	Entry age
Amortization method	Level percent Open	Level percent Open	Level percent Open
Remaining amortization period	20 years	20 years	Within 20 years - Varies by employer
Asset valuation method	5 year smoothed Market	5 year smoothed market	5 year smoothed market
Actuarial assumptions:			
Investment rate of return*	8.00%	8.00%	8.00%
Projected salary increases*	4.61 – 7.75%	4.61 – 7.75%	4.61 – 7.75%
Cost-of-living adjustment	None	None	None
*Includes inflation at	4.50%	4.50%	4.50%

# TREND INFORMATION

	Annual	Percent	Net
Year	Pension Cost	of APC	Pension Obligation
Ending	APC	<u>Contributed</u>	<u>(NPO)</u>
	State En	nployees	
9/30/2006	\$80,678,747	100%	\$0
9/30/2007	102,258,702	100	0
9/30/2008	138,343,938	100	0
	State Po	licemen	
9/30/2006	\$9,781,694	100%	\$0
9/30/2007	12,068,537	100	0
9/30/2008	16,271,620	100	0
	Local En	nployees	
9/30/2006	Varies	Varies	Varies
9/30/2007	Varies	Varies	Varies
9/30/2008	Varies	Varies	Varies



# SCHEDULE A

## VALUATION BALANCE SHEET SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE EMPLOYEES' RETIREMENT SYSTEM OF ALABAMA

# **TOTAL - ALL GROUPS**

	SEPT	EMBER 30, 2008	SEP	TEMBER 30, 2007
ASSE				
Actuarial Value of Present Assets	\$	9,905,766,334	\$	9,770,896,816
Present value of future members' contributions to the Annuity Savings Fund	\$	1,450,948,940	\$	1,390,333,140
Present value of future employer contributions to the Pension Accumulation Fund				
Normal contributions Unfunded accrued liability contributions	\$	1,305,988,355 3,172,920,095	\$	1,246,369,588 2,599,444,329
Total prospective employer contributions	\$	4,478,908,450	\$	3,845,813,917
Total assets	<u>\$</u>	15,835,623,724	\$	15,007,043,873
LIABILI	TIES			
Present value of benefits payable on account of retired members and beneficiaries of deceased members now drawing retirement allowances (includes DROP members)	\$	6,275,136,143	\$	5,911,861,461
Present value of prospective benefits payable on account of present active and inactive members Service retirement allowances Disability retirement allowances Survivor allowances	\$	8,953,559,657 359,027,377 28,969,104	\$	8,521,218,396 342,790,403 27,273,256
Refunds of members' contributions		218,931,443		203,900,357
Total	\$	9,560,487,581	\$	9,095,182,412
Total liabilities	\$	15,835,623,724	\$	15,007,043,873



# SCHEDULE A (Continued)

#### VALUATION BALANCE SHEET SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE EMPLOYEES' RETIREMENT SYSTEM OF ALABAMA

#### STATE EMPLOYEES

	SEP	TEMBER 30, 2008	SEP <sup>.</sup>	TEMBER 30, 2007
ASSE	<u>TS</u>			
Actuarial Value of Present Assets	\$	4,912,248,475	\$	4,922,133,307
Present value of future members' contributions to the Annuity Savings Fund	\$	569,969,004	\$	557,994,354
Present value of future employer contributions to the Pension Accumulation Fund				
Normal contributions Unfunded accrued liability contributions	\$	542,668,777 1,701,549,508	\$	524,393,965 1,454,993,836
Total prospective employer contributions	\$	2,244,218,285	\$	1,979,387,801
Total assets	<u>\$</u>	7,726,435,764	<u>\$</u>	7,459,515,462
LIABILI	TIES			
Present value of benefits payable on account of retired members and beneficiaries of deceased members now drawing retirement allowances	\$	3,528,132,579	\$	3,351,257,849
Present value of prospective benefits payable on account of present active and inactive members	-			
Service retirement allowances Disability retirement allowances Survivor allowances	\$	3,940,806,633 166,733,636 10,077,821	\$	3,858,619,732 164,076,210 9,772,467
Refunds of members' contributions		80,685,095		75,789,204
Total	\$	4,198,303,185	\$	4,108,257,613
Total liabilities	\$	7,726,435,764	\$	7,459,515,462

\*Adjustments made due to changes in timing of prior year local employer lump sum contributions.



# SCHEDULE A (Continued)

#### VALUATION BALANCE SHEET SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE EMPLOYEES' RETIREMENT SYSTEM OF ALABAMA

#### STATE POLICEMEN

	SEPT	EMBER 30, 2008	SEPT	EMBER 30, 2007
ASSE				
Actuarial Value of Present Assets	\$	350,685,611	\$	350,437,005
Present value of future members' contributions to the Annuity Savings Fund	\$	48,062,858	\$	46,419,969
Present value of future employer contributions to the Pension Accumulation Fund				
Normal contributions Unfunded accrued liability contributions	\$	63,923,601 138,371,614	\$	61,413,619 124,971,531
Total prospective employer contributions	\$	202,295,215	\$	186,385,150
Total assets		601,043,684	\$	583,242,124
LIABILI	<u>TIES</u>			
Present value of benefits payable on account of retired members and beneficiaries of deceased members now drawing retirement allowances	\$	292,211,549	\$	277,487,478
Present value of prospective benefits payable on account of present active and inactive members				
Service retirement allowances Disability retirement allowances Survivor allowances Refunds of members' contributions	\$	301,103,208 5,096,696 404,104 2,228,127	\$	298,382,734 4,927,592 399,252 2,045,068
Total	\$	308,832,135	\$	305,754,646
Total liabilities	\$	601,043,684	<u>\$</u>	583,242,124



# SCHEDULE A (Continued)

#### VALUATION BALANCE SHEET SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE EMPLOYEES' RETIREMENT SYSTEM OF ALABAMA

#### LOCAL EMPLOYEES

	SEP	TEMBER 30, 2008	SEP <sup>.</sup>	TEMBER 30, 2007
ASSE	<u>rs</u>			
Actuarial Value of Present Assets	\$	4,642,832,248	\$	4,498,326,504
Present value of future members' contributions to the Annuity Savings Fund	\$	832,917,078	\$	785,918,817
Present value of future employer contributions to the Pension Accumulation Fund				
Normal contributions Unfunded accrued liability contributions	\$	699,395,977 1,332,998,973	\$	660,562,004 1,019,478,962
Total prospective employer contributions	\$	2,032,394,950	\$	1,680,040,966
Total assets	<u>\$</u>	7,508,144,276	\$	6,964,286,287
LIABILI	TIES			
Present value of benefits payable on account of retired members and beneficiaries of deceased members now drawing retirement allowances	\$	2,454,792,015	\$	2,283,116,134
Present value of prospective benefits payable on account of present active and inactive members Service retirement allowances Disability retirement allowances Survivor allowances Refunds of members' contributions	\$	4,711,649,816 187,197,045 18,487,179	\$	4,364,215,930 173,786,601 17,101,537 126,066,085
Total		136,018,221 5,053,352,261		4,681,170,153
Total liabilities	\$	7,508,144,276	\$	6,964,286,287



# SCHEDULE A (continued)

## SOLVENCY TEST (\$1000's)

	Aggreg	ate Accrued Lia	bilities For			on of Accru .iabilities y Reported	
Valuation Date	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	(1)	(2)	(3)
9/30/2008	<sup>1</sup> \$1,860,095	\$6,275,136	\$4,943,455	\$9,905,766	100%	100%	35.8%
9/30/2007	<sup>1</sup> 1,777,331	5,911,861	4,681,149	9,770,897	100	100	44.5
9/30/2006	<sup>2</sup> 1,705,372	5,540,766	4,211,426	9,287,531	100	100	48.5
9/30/2005	<sup>3</sup> 1,616,410	5,076,621	3,941,945	8,935,358	100	100	56.9
9/30/2004 '	<sup>4</sup> 1,533,055 <sup>5</sup>	4,496,854	3,516,569	8,563,945	100	100	72.1
9/30/2003	1,484,793	3,928,131	3,711,355	8,312,500	100	100	78.1

1 Reflects pay increases payable under Act 2007-297. Reflects changes in actuarial assumptions. 2

Reflects pay increases payable under Act 2005-316 and Act 2006-231 and COLA granted effective October 1, 2006 under Act 2006-510. 3

4

Reflects COLA granted effective October 1, 2005 under Act 2005-316. Excludes \$20,500,000 of employee lump sum contributions made by local employers before September 30, 2004 not recognized 5 for valuation purposes.



# SCHEDULE B

## DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS AS OF SEPTEMBER 30, 2008

# **TOTAL - ALL GROUPS**

(1)	Actuarial Value Beginning of Year	\$ 9,770,896,816
(2)	Market Value End of Year	\$ 8,565,299,540
(3)	Market Value Beginning of Year	\$10,344,692,497
(0)		\$10,011,002,101
(4)	Cash Flow	
	a. Contributions	\$ 504,221,861
	b. Benefit Payments	(713,268,212)
	c. Net: (4)a - (4)b	\$ (209,046,351)
(5)	Investment Income	
	a. Market Total: (2) - (3) - (4)c	\$ (1,570,346,606)
	b. Assumed Rate	8.00%
	c. Amount of Immediate Recognition	
	[(3) x (5)b] + [(4)c * (5)b * 0.5]	\$ 819,213,546
	<ul> <li>Adjustment for Employer Lump Sums</li> </ul>	\$ (3,490)
	e. Adjusted Amount for Immediate Recognition: (5)c + (5)d	\$ 819,210,056
	f. Amount for Phased-In Recognition: (5)a - (5)e	\$ (2,389,556,662)
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20 * (5)f	\$ (477,911,332)
	b. First Prior Year	178,358,144
	c. Second Prior Year	72,600
	d. Thrid Prior Year	32,564,898
	e. Fourth Prior Year	(208,378,497)
	f. Total Recognized Investment Gain	\$ (475,294,187)
(7)	Actuarial Value End of Year	
	(1) + (4)c + (5)e + (6)f	\$ 9,905,766,334



# SCHEDULE B (Continued)

# DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS AS OF SEPTEMBER 30, 2008

## STATE EMPLOYEES\*

(1)	Actuarial Value Beginning of Year	
	a. Actuarial Value Beginning of Year	\$ 4,922,133,307
	b. Adjustment	54,287
	c. Adjusted Actuarial Value Beginning of Year	\$ 4,922,187,594
(2)	Market Value End of Year	\$ 4,244,638,516
(3)	Market Value Beginning of Year	
	a. Market Value Beginning of Year	\$ 5,203,219,169
	b. Adjustment	64,589
	c. Adjusted Market Value Beginning of Year	\$ 5,203,283,758
(4)	Cash Flow	
	a. Contributions	\$ 218,138,767
	b. Benefit Payments	(387,424,604)
	c. Net	\$ (169,285,837)
(5)	Investment Income	
	a. Market Total: (2) - (3)c - (4)c	\$ (789,359,405)
	b. Assumed Rate	8.00%
	c. Amount of Immediate Recognition	
	$[(3)c \times (5)b] + [(4)c * (5)b * 0.5]$	\$ 409,491,267
	d. Amount for Phased-In Recognition: (5)a - (5)c	\$ (1,198,850,672)
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20 * (5)d	\$ (239,770,134)
	b. First Prior Year	90,734,650
	c. Second Prior Year	(602,930)
	d. Thrid Prior Year	16,586,194
	e. Fourth Prior Year	(117,092,329)
	f. Total Recognized Investment Gain	\$ (250,144,549)
(7)	Actuarial Value End of Year	
	(1)c + (4)c + (5)c + (6)f	\$ 4,912,248,475

\*Adjustments due to the timing of prior year local employer lump sum contributions



# SCHEDULE B (Continued)

## DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS AS OF SEPTEMBER 30, 2008

## STATE POLICEMEN

(1)	Actuarial Value Beginning of Year	\$	350,437,005
(2)	Market Value End of Year	\$	303,647,352
(3)	Market Value Beginning of Year	\$	369,785,053
(0)		Ψ	000,700,000
(4)	Cash Flow		
	a. Contributions	\$	21,665,830
	b. Benefit Payments		(32,215,742)
	c. Net	\$	(10,549,912)
(5)			
(5)	Investment Income a. Market Total: (2) - (3) - (4)c	\$	(55,587,789)
	b. Assumed Rate	φ	(55,587,789) 8.00%
	c. Amount of Immediate Recognition		0.0070
	$[(3) \times (5)b] + [(4)c * (5)b * 0.5]$	\$	29,160,808
	d. Amount for Phased-In Recognition: (5)a - (5)c	\$	(84,748,597)
(6)	Phased-In Recognition of Investment Income	•	(40.040.740)
	a. Current Year: 0.20 * (5)d b. First Prior Year	\$	(16,949,719)
	c. Second Prior Year		6,573,000 (55,022)
	d. Thrid Prior Year		1,151,657
	e. Fourth Prior Year		(9,082,206)
	f. Total Recognized Investment Gain	\$	(18,362,290)
		Ψ	(10,002,200)
(7)	Actuarial Value End of Year		
	(1) + (4)c + (5)c + (6)f	\$	350,685,611



## SCHEDULE B (Continued)

## DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS AS OF SEPTEMBER 30, 2008

## LOCAL EMPLOYEES\*

(1)	Actuarial Value Beginning of Year	
. ,	a. Actuarial Value Beginning of Year	\$ 4,498,326,504
	b. Adjustment	(54,287)
	c. Adjusted Actuarial Value Beginning of Year	\$ 4,498,272,217
	, , ,	
(2)	Market Value End of Year	\$ 4,017,013,672
(3)	Market Value Beginning of Year	
	a. Market Value Beginning of Year	\$ 4,771,688,275
	b. Adjustment	(64,589)
	c. Adjusted Market Value Beginning of Year	\$ 4,771,623,686
(4)	Cash Flow	
(4)	a. Contributions	\$ 264,417,264
	b. Benefit Payments	(293,627,866)
	c. Net	
	C. Net	\$ (29,210,602)
(5)	Investment Income	
	a. Market Total: (2) - (3)c - (4)c	\$ (725,399,412)
	b. Assumed Rate	8.00%
	c. Amount of Immediate Recognition	
	[(3)c x (5)b] + [(4)c * (5)b * 0.5]	\$ 380,561,471
	d. Adjustment for Employer Lump Sums	\$ (3,490)
	e. Adjusted Amount for Immediate Recognition: (5)c + (5)d	\$ 380,557,981
	f. Amount for Phased-In Recognition: (5)a - (5)e	\$ (1,105,957,393)
	Dhasad In Dassemitian of Investment Income	
(6)	Phased-In Recognition of Investment Income a. Current Year: 0.20 * (5)f	\$ (221,191,479)
	b. First Prior Year	\$ (221,191,479) 81,050,494
	c. Second Prior Year	730,552
	d. Thrid Prior Year	14,827,047
	e. Fourth Prior Year	(82,203,962)
	f. Total Recognized Investment Gain	\$ (206,787,348)
(7)	Actuarial Value End of Year	
	(1)c + (4)c + (5)e + (6)f	\$ 4,642,832,248

\*Adjustments due to the timing of prior year local employer lump sum contributions



# SCHEDULE C

# SUMMARY OF RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDING SEPTEMBER 30, 2008

Receipts for the Year				
Contributions: Members Employers	\$	191,654,891 312,566,970		
Total			\$	504,221,861
Net Investment Income			(	(1,570,346,606)
TOTAL			\$ (	(1,066,124,745)
Disbursements for the Year				
Benefit Payments Refunds to Members Miscellaneous	\$	655,599,213 26,472,512 31,196,487		
TOTAL			\$	713,268,212
Excess of Receipts Over Disbursements			\$	(1,779,392,957)
Reconciliations of Asset Balances				
Market Value of Assets as of September 30, 2007 \$ 10,344,6			0,344,692,497	
Excess of Receipts Over Disbursements			(	(1,779,392,957)
Market Value of Assets as of September 30, 20	08		\$	8,565,299,540



## SCHEDULE D

# OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were based on the actuarial experience study prepared as of September 30, 2005, submitted to and adopted by the Board on May 30, 2007.

INVESTMENT RATE OF RETURN: 8% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.50% per annum:

<u>Age</u>	Annual Rate
20	7.66%
25	7.75
30	7.61
35	7.25
40	6.98
45	6.60
50	6.32
55	5.84
60	5.49
65	5.05



## STATE AND LOCAL EMPLOYEES WITH DROP COVERAGE

SEPARATIONS BEFORE SERVICE RETIREMENT: Representative values of the assumed annual rates of death, disability and withdrawal are shown in the following tables:

	Annual Rate of							
	De	<u>eath</u>	Disa	bility		Wit	hdrawal	
<u>Age</u>	<u>Male</u>	<u>Female</u>	Male	<u>Female</u>		<u>ale</u> Service		<u>male</u> of Service
					<u>0-4</u>	<u>5+</u>	<u><math>0-4</math></u>	<u>5+</u>
20	.06%	.03%	.05%	.08%	35.00%		37.00%	
25	.08	.03	.08	.09	19.50	10.00%	22.50	12.00%
30	.08	.04	.10	.12	17.00	8.00	18.50	10.00
35	.09	.06	.12	.24	16.00	6.00	18.00	7.50
40	.14	.08	.32	.38	16.00	4.50	15.00	5.00
45	.21	.11	.60	.58	14.00	3.50	13.00	4.00
50	.36	.17	1.00	.98	13.00	2.50	13.00	3.50
55	.63	.29	1.65	1.50	11.50	2.50	14.00	3.00
60	1.15	.58			12.00	3.00	12.00	3.00
62	1.45	.76			13.20	4.20	12.20	4.60
65	1.99	1.08			15.00	6.00	12.50	7.00
69	2.85	1.50			15.00	6.00	12.50	7.00

SERVICE RETIREMENT: Representative values of the assumed annual rates of service retirement are as follows:

	Annual Rate			
	Under age 65 w years of		Under age 65 25 years c & All over	of service
<u>Age</u>	Male <sup>1</sup>	Female <sup>2</sup>	Male	Female
45 50 55 60 62 64 65 70 72 75	15.00% 10.00 48.00 42.00 56.00 28.00	15.00% 10.00 51.00 48.00 58.00 50.00	16.00% 32.00 25.00 36.00 27.00 23.00 100.00	22.00% 31.00 24.00 36.00 30.00 30.00 100.00

<sup>1</sup>Rates are increased by 12% in year when member attains 25 years of service. <sup>2</sup>Rates are increased in year when member attains 25 years of service by 10% for ages less than 55 and by 17% for ages 55 and older.



# STATE POLICEMEN

Annual Rate of						
<u>Age</u>		<u>Death</u>	<u>Disability</u>	Withdrawal <sup>1</sup>	Ser	vice
	Male	<u>Female</u>			<u>&lt; 25 Years</u>	25+ Years
20	.06%	.03%	.08%	2.00%		
25	.08	.03	.10	2.00		
30	.08	.04	.14	2.00		
35	.09	.06	.22	2.00		
40	.14	.08	.34	2.00		19.00%
45	.21	.11	.46	2.00		19.00
50	.36	.17	.60			18.00
55	.63	.29			20.00%	65.00
60	1.15	.58			20.00	100.00
62	1.45	.76			20.00	100.00
65	1.99	1.08			100.00	100.00

<sup>1</sup> A rate of 3.50% is assumed during the first four years of employment.



# LOCAL EMPLOYEES WITH NO DROP COVERAGE

SEPARATIONS BEFORE SERVICE RETIREMENT: Representative values of the assumed annual rates of death, disability and withdrawal are shown in the following tables:

	Annual Rate of							
	De	<u>ath</u>	Disa	ability		Withd	rawal	
<u>Age</u>	Male	<u>Female</u>	Male	<u>Female</u>	<u>Ma</u> Years of		Fem Years of	
					<u>0-4</u>	<u>5+</u>	<u>0-4</u>	<u>5+</u>
20	.06%	.03%	.06%	.06%	26.00%		37.00%	
25	.08	.03	.08	.13	21.00	11.00%	30.00	15.00%
30	.08	.04	.11	.19	19.00	8.50	25.00	12.00
35	.09	.06	.13	.25	17.00	6.50	22.00	9.50
40	.14	.08	.20	.28	16.00	4.50	19.00	7.50
45	.21	.11	.42	.36	15.00	4.25	18.00	6.50
50	.36	.17	.77	.43	13.00	4.00	17.00	6.00
55	.63	.29	1.41	.82	13.00	4.25	16.00	6.00
60	1.15	.58			13.00	5.00	16.00	5.50
62	1.45	.76			15.00	6.20	16.00	7.30
65	1.99	1.08			18.00	8.00	16.00	10.00
69	2.85	1.50			18.00	8.00	16.00	10.00

SERVICE RETIREMENT: Representative values of the assumed annual rates of service retirement are as follows:

	Annual Rate			
	Under age 65 w years of		Under age 65 25 years c & All over	of service
<u>Age</u>	Male <sup>1</sup>	Female <sup>2</sup>	Male	Female
45 50 55 60 62 64 65 70 72 75	15.00% 12.00 16.00 19.00 49.00 28.00	17.00% 16.00 23.00 30.00 34.00 26.00	7.50% 31.00 14.00 28.00 20.00 20.00 100.00	18.00% 28.00 15.00 29.00 17.00 24.00 100.00

<sup>1</sup>Rates are increased by 12% in year when member attains 25 years of service. <sup>2</sup>Rates are increased in year when member attains 25 years of service by 10% for ages less than 55 and by 17% for ages 55 and older.



DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1994 Group Annuity Mortality Table set forward three years for males and set forward two years for females. Special tables are used for the period after disability retirement.

SPOUSAL BENEFIT: For those eligible for spousal benefits, it is assumed that 75% will elect the lump sum death benefit and 25% will elect the spousal benefit.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected 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 value.



#### SCHEDULE E

#### **ACTUARIAL COST METHOD**

- 1. 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 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%). 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 retired members and beneficiaries to obtain the present value of all expected benefits payable to the present group of members and beneficiaries.
- 2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
- 3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made 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.
- 4. 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 System. The accrued liability contribution amortizes the balance of the unfunded accrued liability over a period of years from the valuation date.



# SCHEDULE F

#### SUMMARY OF MAIN SYSTEM PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

The Employees' Retirement System of Alabama was established on October 1, 1945. The valuation took into account amendments to the System effective through the valuation date. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

## 1 – DEFINITIONS

Average Final Compensation - the average compensation of a member for the 3 highest years in the last 10 years of creditable service.

Membership Service – all service rendered while a member of the Retirement System and for which contributions are made.

Creditable Service – the sum of membership service, prior service, and any other previous service established as creditable in accordance with the provisions of the retirement law.

Annuity – payments for life derived from accumulated contributions of a member.

Pension – payments for life derived from the accumulated contributions of an employer.

Retirement Allowance – the sum of the annuity and pension payments.

## 2 - BENEFITS

#### MEMBERS CLASSIFIED OTHER THAN STATE POLICEMEN

Service Retirement Allowance

Condition for Allowance

A retirement allowance is payable upon the request of any member who has completed 25 years of creditable service, (except for employees of local employers who did not elect 25year retirement), or who has attained age 60 and completed at least 10 years of creditable service.



Amount of Allowance	Upon service retirement a member receives a retirement allowance equal to 2.0125% of the member's average final compensation multiplied by the number of years of his creditable service. At retirement, a member receives one additional year of creditable service in determining the retirement allowance for each five years of service as a full-time certified firefighter, police officer or correctional officer.
Disability Retirement Allowance	
Condition for Allowance	A disability retirement allowance may be granted to a member who has 10 or more years of creditable service and becomes permanently incapacitated for duty before reaching eligibility for service retirement.
Amount of Allowance	Upon retirement for disability, a member receives a retirement allowance equal to 2.0125% of the member's average final compensation multiplied by the number of years of his creditable service. At retirement, a member receives one additional year of creditable service in determining the retirement allowance for each five years of service as a full-time certified firefighter, police officer or correctional officer.
Benefits Payable on Separation from Service	Any member who withdraws from service is entitled to receive a return of member contributions with allowable interest. A member who has completed 10 years of creditable service may, after separation from service, continue in the membership of the System and file for service retirement after reaching age 60.
Benefits Payable upon Death in Active Service	In the event of the death of a member eligible for service retirement, the designated beneficiary may elect: (1) to exercise option 3 as defined below under "Special Privileges at Retirement – All Employees" or (2) to receive a return of member contributions and total interest earned plus a death benefit payable from the pre-retirement death benefit fund equal to the salary on which the member made retirement contributions for the previous fiscal year (October 1 – September 30).*



In the event of the death of a member with more than one year of service who is not eligible for retirement, the designated beneficiary shall receive a return of member contributions and total interest earned. Also, the designated beneficiary shall receive an additional death benefit payable from the preretirement death benefit fund equal to the salary on which their retirement contributions were made for the previous fiscal year (October 1 – September 30).\*

In the event of a job-related death of a member at any age with less than 1 year of service, the designated beneficiary shall receive the return of member contributions and total earned interest plus a death benefit payable from the pre-retirement death benefit fund equal to the annual earnable compensation of the member at the time death occurs.\*

In the event of a non job-related death of a member with less than 1 year of service, the beneficiary shall receive the return of member contributions and total interest earned plus a matching death benefit which is limited to a maximum of \$5,000.

\* However, if the death occurred more than 180 calendar days after the member's last day in pay status, or if the deceased had applied for a refund of contributions or terminated employment, the lump sum will be the same as if the member had less than one year of service and the death was not job-related.

Deferred Retirement Option Plan (DROP)

A member may elect to participate in the Deferred Retirement Option Plan (DROP) upon completion of at least 25 years of service (at least 30 years for employers that did not elect 25 year retirement) of creditable service (excluding sick leave) and attainment of at least 55 years of age. Under the DROP, the member may defer receipt of a retirement allowance and continue employment for a period not to exceed five years, nor to be less than three years. At the end of this period, the member may withdraw from active service and receive the retirement benefit based on his or her years of service credit at the time of enrollment in the DROP, and also receive a payment for the deferred retirement benefits, employee contributions while participating in the DROP, and interest earned on DROP deposits.



Member Contributions

Regular members contribute 5% of salary. Certified police officers and firefighters contribute 6% of salary. DROP participants continue to contribute during the DROP period, but receive a refund of these contributions and interest upon retirement.

## MEMBERS CLASSIFIED AS STATE POLICEMEN

Service Retirement Allowance	
Condition for Allowance	A retirement allowance is payable upon the request of any member who has completed 25 years of creditable service or who has attained age 52 and completed at least 10 years of creditable service.
Amount of Allowance	Upon service retirement a member receives a retirement allowance equal to 2.875% of the member's average final compensation multiplied by the number of years of his creditable service.
	A member who has attained 20 or more years of creditable service and retires prior to age 60 is eligible to receive a "bonus service credit" up to 4 years as follows:
	<ul> <li>Age 56 or older – bonus service of 4 years reduced by 1 month for each month over the age of 56.</li> </ul>
	- Age 52 to 56 – bonus service of 4 years.
	<ul> <li>Age 52 or less (disability retirement only) – bonus service of 4 years.</li> </ul>
	<ul> <li>Age 52 or less with 25 or more years of service – bonus service of 4 years.</li> </ul>
Disability Retirement Allowance	
Condition for Allowance	A disability retirement allowance may be granted to a member who has 10 or more years of creditable service or who becomes disabled as a result of his employment in line of duty without regard to his years of creditable service, and who becomes permanently incapacitated, mentally or physically, for the further performance of duty before reaching the minimum age for service retirement.
Amount of Allowance	Upon retirement for disability, a member receives a retirement allowance equal to 2.875% of the member's average final compensation multiplied by the number of years of his creditable service.



Benefits Payable on Separation from Service

Benefits Payable upon Death in Active Service Any member who withdraws from service is entitled to receive a return of member contributions with allowable interest. A member who has completed 10 years of creditable service may, after separation from service, continue in the membership of the System and file for service retirement after reaching age 52.

In the event of the death of a member who is eligible for service retirement, the designated beneficiary may elect: (1) to exercise option 3 as defined below under "Special Privileges at Retirement – All Employees" or (2) to receive a return of member contributions and total interest earned plus a death benefit payable from the pre-retirement death benefit fund equal to the salary on which the member made retirement contributions for the previous fiscal year (October 1 – September 30).\*

In the event of the death of a member with more than one year of service who is not eligible for retirement, the designated beneficiary shall receive a return of member contributions and total interest earned. Also, the designated beneficiary shall receive an additional death benefit payable from the preretirement death benefit fund equal to the salary on which their retirement contributions were made for the previous fiscal year (October 1 – September 30).\*

In the event of a job-related death of a member at any age with less than 1 year of service, the designated beneficiary shall receive the return of member contributions and total earned interest plus a death benefit payable from the pre-retirement death benefit fund equal to the annual earnable compensation of the member at the time death occurs.\*

In the event of a non job-related death of a member with less than 1 year of service, the beneficiary shall receive the return of member contributions and total interest earned plus a matching death benefit which is limited to a maximum of \$5,000.

\* However, if the death occurred more than 180 calendar days after the member's last day in pay status, or if the deceased had applied for a refund of contributions or terminated employment, the lump sum will be the same as if the member had less than one year of service and the death was not job-related.



Deferred Retirement Option Plan (DROP)

A member may elect to participate in the Deferred Retirement Option Plan (DROP) upon completion of at least 25 years of creditable service (excluding sick leave) and attainment of at least 52 years of age. Under the DROP, the member may defer receipt of a retirement allowance and continue employment for a period not to exceed five years, nor to be less than three years. At the end of this period, the member may withdraw from active service and receive the retirement benefit based on his or her years of service credit at the time of enrollment in the DROP, and also receive a payment for the deferred retirement benefits, employee contributions while participating in the DROP, and interest earned on DROP deposits.

Member Contributions

Each member contributes 10% of salary. DROP participants continue to contribute during the DROP period, but receive a refund of these contributions with interest upon retirement.

#### 3 - SPECIAL PRIVILEGES AT RETIREMENT – ALL MEMBERS

In lieu of the full retirement allowance, any member may, at retirement, elect to receive a reduced retirement allowance equal in value to the full allowance, with the provision that:

Option 1. If the member dies before the annuity payments equal or exceed the present value of the member's annuity at the date of retirement, the balance is paid to a designated beneficiary or to the estate, or

Option 2. After the member's death, the member's allowance is continued throughout the life of the designated beneficiary, or

Option 3. After the member's death, one half of the member's allowance is continued throughout the life of the designated beneficiary, or

Option 4. Some other benefit is paid either to the member or to the designated beneficiary provided such benefit, together with the reduced retirement allowance, is of equivalent actuarial value to his retirement allowance and is approved by the Board of Control.



# SCHEDULE G

#### SCHEDULE OF ACTIVE PARTICIPANT DATA AS OF SEPTEMBER 30, 2008 STATE EMPLOYEES

Attained	Completed Years of Service										
Attained	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
<b>Under 25</b> Avg. Pay	719 \$25,622	746 \$27,515	10 \$26,754								1,475 \$26,587
<b>25 to 29</b> Avg. Pay	640 \$28,169	2,152 \$32,469	552 \$33,694	5 \$31,171							3,349 \$31,847
<b>30 to 34</b> Avg. Pay	408 \$28,245	1,486 \$33,810	1,334 \$39,341	270 \$39,809	3 \$38,372						3,501 \$35,735
<b>35 to 39</b> Avg. Pay	383 \$29,136	1,184 \$34,785	1,191 \$39,753	855 \$46,490	368 \$47,185	9 \$40,984					3,990 \$39,392
<b>40 to 44</b> Avg. Pay	298 \$29,179	947 \$33,589	859 \$38,109	718 \$46,593	1,209 \$51,499	442 \$50,840	11 \$57,315				4,484 \$42,832
<b>45 to 49</b> Avg. Pay	263 \$31,367	905 \$33,586	815 \$37,382	595 \$45,300	1,124 \$50,202	1,141 \$56,747	370 \$49,598	22 \$54,289			5,235 \$45,231
<b>50 to 54</b> Avg. Pay	196 \$29,881	751 \$33,682	737 \$37,928	545 \$43,733	893 \$47,253	931 \$55,253	825 \$56,878	389 \$55,205	29 \$57,127		5,296 \$46,570
<b>55 to 59</b> Avg. Pay	138 \$34,741	515 \$36,426	617 \$36,325	458 \$44,543	773 \$48,089	641 \$52,217	189 \$55,742	144 \$63,421	23 \$58,211		3,498 \$45,174
<b>60 to 64</b> Avg. Pay	164 \$60,957	294 \$43,525	348 \$39,438	243 \$44,000	395 \$47,457	297 \$52,132	63 \$56,292	24 \$62,532	14 \$54,756	4 \$94,987	1,846 \$47,471
<b>65 to 69</b> Avg. Pay	33 \$59,411	76 \$54,653	108 \$41,492	75 \$47,688	98 \$53,481	74 \$51,530	12 \$47,058	6 \$44,276	1 \$44,092	1 \$94,735	484 \$49,991
<b>70 &amp; up</b> Avg. Pay	11 \$58,606	32 \$56,640	40 \$38,045	22 \$43,628	39 \$48,969	21 \$58,282	11 \$55,917	1 \$31,804	1 \$70,434	5 \$54,030	183 \$49,508
<b>Total</b> Avg. Pay	3,253 \$30,535	9,088 \$33,764	6,611 \$38,117	3,786 \$45,041	4,902 \$49,252	3,556 \$54,280	1,481 \$54,806	586 \$57,338	68 \$57,010	10 \$74,483	33,341 \$41,467

In addition there are 1,610 employees with annual compensation of \$96,900,333 participating in the DROP as of September 30, 2008. Amounts shown do not reflect any increase in effect after the valuation date.



## SCHEDULE G (Continued)

#### SCHEDULE OF ACTIVE PARTICIPANT DATA AS OF SEPTEMBER 30, 2008 STATE POLICEMEN

Attained	Completed Years of Service										
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
											10
<b>Under 25</b> Avg. Pay		9 \$46,642	1 \$53,903								10 \$47,368
, (rg. r u)		φ10,012	400,000								ψH,000
25 to 29		35	27								62
Avg. Pay		\$45,647	\$48,455								\$46,870
30 to 34	2	33	39	46							120
Avg. Pay	\$48,125	\$47,929	\$49,117	\$58,482							\$52,364
			05	00	00						475
<b>35 to 39</b> Avg. Pay	2 \$48,815	28 \$47,580	35 \$48,696	80 \$58,690	30 \$69,716						175 \$56,691
Avg. ray	ψ+0,010	ψ+7,000	φ+0,000	ψ30,030	ψ00,710						φ <b>00</b> ,001
40 to 44	3	12	16	47	52	36	3				169
Avg. Pay	\$47,552	\$50,556	\$52,083	\$61,699	\$71,374	\$77,830	\$80,389				\$66,491
45 to 49		8	3	21	22	76	17	2			149
Avg. Pay		\$51,196	\$55,362	\$62,438	\$67,442	\$78,371	\$82,813	\$98,255			\$73,363
50 to 54		5 \$50.257	3 *co.055	5 ¢c4 299	11 \$70.940	17 ¢77.262	9 \$84.001	2 ¢99.705			52
Avg. Pay		\$59,357	\$69,055	\$64,388	\$70,840	\$77,263	\$84,901	\$88,705			\$74,233
55 to 59	3	1		2	3	3	1				13
Avg. Pay	\$59,240	\$66,779		\$71,186	\$65,356	\$78,626	\$66,089				\$68,070
60 to 64	2	1	1								1
Avg. Pay	\$70,410	\$76,345	\$82,945								<del>،</del> \$75,028
65 to 69				1							1
Avg. Pay				\$84,289							\$84,289
70 & up											
Avg. Pay											
Total	12 \$54,590	132 \$48,390	125 \$50,173	202 \$60,124	118 \$70,016	132 \$78,087	30 \$82,640	4 \$93,480			755 \$62,095
Avg. Pay	<b>\$</b> 04,590	<b>φ40,39</b> 0	φ <del></del> υυ, 173	<b>φυυ, 124</b>	\$10,010	φ10,001	φo∠,040	<b></b> \$\$3,400			φ0∠,093

In addition there are 34 employees with annual compensation of \$2,871,596 participating in the DROP as of September 30, 2008.



# **SCHEDULE G** (Continued)

#### SCHEDULE OF ACTIVE PARTICIPANT DATA AS OF SEPTEMBER 30, 2008 LOCAL EMPLOYEES

Attained	Completed Years of Service										
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
	4 007	4 707	50								0.470
<b>Under 25</b> Avg. Pay	1,637 \$20,386	1,787 \$26,450	53 \$32,279	1 \$12,405		1 \$28,889					3,479 \$23,682
Avy. Fay	φ20,300	φ20,430	<i>φ</i> 32,279	φ12,403		φ20,009					φ23,002
25 to 29	1,324	2,822	1,068	45							5,259
Avg. Pay	\$22,518	\$30,097	\$35,454	\$39,519							\$29,357
001-04	947	0.050	4 050	000	07						5 000
<b>30 to 34</b> Avg. Pay	947 \$24,919	2,259 \$31,004	1,859 \$38,212	829 \$42,387	27 \$41,441	1 \$49,682					5,922 \$33,938
Avy. Fay	əz4,919	<b>\$31,004</b>	φ30,212	φ42,30 <i>1</i>	<b>Ψ</b> 41,441	φ49,00Z					<i>\$</i> 33,930
35 to 39	902	2,086	1,842	1,778	705	36		1			7,350
Avg. Pay	\$23,597	\$31,576	\$37,998	\$45,602	\$48,109	\$46,936		\$38,962			\$37,262
40 to 44	728	1,649	1,541	1,400	1,210	692	30				7,250
Avg. Pay	\$23,174	\$29,931	\$35,903	\$43,528	\$48,638	\$51,557	\$47,877				\$38,408
45 to 49	626	1,598	1,571	1,268	1,127	1,097	457	43			7,787
Avg. Pay	\$23,733	\$30,178	\$35,040	\$41,099	\$46,252	\$52,427	\$54,556	\$53,238			\$39,438
50 to 54	479	1,360	1,353	1,100	976	912	659	312	16		7,167
Avg. Pay	\$23,998	\$29,360	\$34,377	\$38,591	\$44,423	\$49,740	\$52,076	\$58,661	\$53,593		\$39,429
55 to 59	345	944	1,040	947	772	663	291	191	50	4	5,247
Avg. Pay	\$24,217	\$29,106	\$34,074	\$38,536	\$44,011	\$47,261	\$48,904	\$56,462	\$64,455	\$75,059	\$38,424
60 to 64	147	507	673	504	423	360	134	68	41	15	2,872
Avg. Pay	\$28,144	\$29,435	\$32,933	\$38,472	\$42,215	\$44,508	\$46,621	\$53,327	\$56,379	\$68,795	\$37,504
65 to 69	76	225	254	182	126	94	37	10	7	10	1,021
Avg. Pay	\$30,056	\$25,632	\$30,681	\$36,482	\$43,808	\$40,893	\$46,362	\$46,938	\$53,085	\$69,405	\$34,376
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70 & up	34	134	126	82	84	51	19	11	4	7	552
Avg. Pay	\$29,408	\$19,359	\$25,369	\$29,445	\$37,121	\$36,932	\$41,533	\$54,159	\$35,014	\$50,238	\$29,136
	<b>-</b> 0/-	45.05		0.405		o oc-	1.05-				
	7,245	15,371 \$20,601	11,380	8,136	5,450	3,907	1,627	636 \$56 771	118 \$59 504	36 \$66.052	53,906
Avg. Pay	\$23,060	\$29,691	\$35,684	\$41,599	\$45,842	\$49,502	\$51,425	\$56,771	\$58,504	\$66,052	\$35,994

In addition there are 540 employees with annual compensation of \$30,339,956 participating in the DROP as of September 30, 2008.