



**Cavanaugh Macdonald**  
CONSULTING, LLC

*The experience and dedication you deserve*



Retirement Systems  
of Alabama

**Report on the Actuarial Valuation of the  
Employees' Retirement System of Alabama  
Prepared as of September 30, 2009**





**Cavanaugh Macdonald**  
CONSULTING, LLC  
*The experience and dedication you deserve*

June 17, 2010

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, 2009 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, 2009, 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.

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 12.31% of payroll. It is also recommended that the State make contributions to the Retirement System for State policemen at the rate of 30.57% of payroll for the fiscal year ending September 30, 2012. The contribution rates for local employers for the fiscal year beginning October 1, 2011 will be submitted in a separate report and will not include the impact of any employer-elected benefit improvements after September 30, 2009.

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, 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](http://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.

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,

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

Edward A. Macdonald, ASA, FCA, MAAA  
President

A handwritten signature in blue ink, appearing to read 'Cathy Turcot'.

Cathy Turcot  
Principal and Managing Director

EAM/CT:kc



## TABLE OF CONTENTS

<u>Section</u>	<u>Item</u>	<u>Page No.</u>
I	Summary of Principal Results	1
II	Membership Data	5
III	Assets	8
IV	Comments on Valuation	10
V	Contributions Payable by Employers	11
VI	Analysis of Financial Experience	12
VII	Accounting Information	13
<u>Schedule</u>		
A	Valuation Balance Sheet and Solvency Test	16
B	Development of the Actuarial Value of Assets	21
C	Summary of Receipts and Disbursements	25
D	Outline of Actuarial Assumptions and Methods	26
E	Actuarial Cost Method	31
F	Summary of Main Plan Provisions as Interpreted for Valuation Purposes	32
G	Schedules of Active Membership Data	38





**REPORT ON THE ACTUARIAL VALUATION OF  
THE EMPLOYEES' RETIREMENT SYSTEM OF ALABAMA  
PREPARED AS OF SEPTEMBER 30, 2009**

**SECTION I - SUMMARY OF PRINCIPAL RESULTS**

1. 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:

**SUMMARY OF PRINCIPAL RESULTS FOR STATE EMPLOYEES**

<b>VALUATION DATE</b>	<b>September 30, 2009</b>	<b>September 30, 2008</b>
Number of active members	32,659	33,341
Annual compensation <sup>1</sup>	\$ 1,407,374,913	\$ 1,382,536,439
Number of retired members and beneficiaries	18,498	17,973
Annual retirement allowances <sup>1</sup>	\$ 357,046,729	\$ 340,354,654
Number of DROP participants	1,697	1,610
Annual compensation <sup>1</sup>	\$ 102,782,509	\$ 96,900,333
Annual allowances	49,226,294	45,679,912
<b>Assets</b>		
Actuarial value	\$ 4,817,987,132	\$ 4,912,248,475
Market value	3,674,852,062	4,244,638,516
Unfunded accrued liability	\$ 1,977,402,229	\$ 1,701,549,508
Funded Ratio	70.9%	74.3%
<b>CONTRIBUTIONS FOR FISCAL YEAR ENDING</b>	<b>September 30, 2012</b>	<b>September 30, 2011<sup>2</sup></b>
Employer contribution rate:		
Normal	4.99%	4.90%
Accrued liability	6.99	6.71
Death benefit	0.15	0.15
Administration	0.18	0.18
Total	12.31%	11.94%
Amortization period	30 years	25 years

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

<sup>2</sup> The contribution rate has been revised since the previous valuation to reflect Act 2010-221, which increased the maximum allowed amortization (liquidation) period from 20 to 30 years.



**SUMMARY OF PRINCIPAL RESULTS FOR STATE POLICEMEN**

<b>VALUATION DATE</b>	<b>September 30, 2009</b>	<b>September 30, 2008</b>
Number of active members	814	755
Annual compensation <sup>1</sup>	\$ 51,139,984	\$ 46,881,655
Number of retired members and beneficiaries	772	770
Annual retirement allowances <sup>1</sup>	\$ 30,851,675	\$ 30,200,305
Number of DROP participants	30	34
Annual compensation <sup>1</sup>	\$ 2,565,142	\$ 2,871,596
Annual allowances	1,730,952	1,866,571
<b>Assets</b>		
Actuarial value	\$ 345,246,095	\$ 350,685,611
Market value	263,215,762	303,647,352
Unfunded accrued liability	\$ 156,819,390	\$ 138,371,614
Funded Ratio	68.8%	71.7%
<b>CONTRIBUTIONS FOR FISCAL YEAR ENDING</b>	<b>September 30, 2012</b>	<b>September 30, 2011<sup>2</sup></b>
Employer contribution rate:		
Normal	13.24%	13.30%
Accrued liability	17.00	16.94
Death benefit	0.15	0.15
Administration	0.18	0.18
Total	<u>30.57%</u>	<u>30.57%</u>
Amortization period	26 years	23 years

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

<sup>2</sup> The contribution rate has been revised since the previous valuation to reflect Act 2010-221, which increased the maximum allowed amortization (liquidation) period from 20 to 30 years.



**SUMMARY OF PRINCIPAL RESULTS FOR LOCAL EMPLOYEES**

<b>VALUATION DATE</b>	<b>September 30, 2009</b>	<b>September 30, 2008</b>
Number of active members	54,174	53,906
Annual compensation <sup>1</sup>	\$ 2,020,120,505	\$ 1,940,278,613
Number of retired members and beneficiaries	17,143	16,202
Annual retirement allowances <sup>1</sup>	\$ 277,666,469	\$ 257,169,797
Number of DROP participants	644	540
Annual compensation <sup>1</sup>	\$ 36,260,056	\$ 30,339,956
Annual allowances	18,077,768	14,763,675
<b>Assets</b>		
Actuarial value	\$ 4,764,870,832	\$ 4,642,832,248
Market value	3,660,992,684	4,017,013,672
Unfunded accrued liability	\$ 1,693,850,305	\$ 1,332,998,973
Funded Ratio	73.8%	77.7%
<b>CONTRIBUTIONS FOR FISCAL YEAR ENDING</b>	<b>September 30, 2012</b>	<b>September 30, 2011</b>
Employer contribution rate:		
Normal	Varies	Varies
Accrued liability	Varies	Varies
Death benefit	0.15	0.15
Administration	0.18	0.18
Total	<u>Varies</u>	<u>Varies</u>
Amortization period	Varies	Varies

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





### SUMMARY OF PRINCIPAL RESULTS FOR ALL GROUPS

VALUATION DATE	September 30, 2009	September 30, 2008
Number of active members	87,647	88,002
Annual compensation <sup>1</sup>	\$ 3,478,635,402	\$ 3,369,696,707
Number of retired members and beneficiaries	36,413	34,945
Annual retirement allowances <sup>1</sup>	\$ 665,564,873	\$ 627,724,756
Number of DROP participants	2,371	2,184
Annual compensation <sup>1</sup>	\$ 141,607,707	\$ 130,111,885
Annual allowances	69,035,014	62,310,158
Assets		
Actuarial value	\$ 9,928,104,059	\$ 9,905,766,334
Market value	7,599,060,508	8,565,299,540
Unfunded accrued liability	\$ 3,828,071,924	\$ 3,172,920,095
Funded Ratio	72.2%	75.7%

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

- The valuation indicates that employer contributions at the rate of 12.31% of payroll for State employees and 30.57% 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, 2009 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, 2011 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.

**SECTION II – MEMBERSHIP DATA**

1. 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, 2009 on the basis of which the valuation was prepared.

**TABLE 1**

**THE NUMBER AND ANNUAL COMPENSATION OF  
ACTIVE MEMBERS AS OF SEPTEMBER 30, 2009**

GROUP	NUMBER	COMPENSATION*
State Employees	32,659	\$ 1,407,374,913
State Policemen	814	51,139,984
Local Employees	54,174	2,020,120,505
Total	87,647	\$ 3,478,635,402

\*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 11,744 non-contributing inactive members. In addition, there were 2,371 members with annual compensation of \$141,607,707 who were participating in the DROP program as of September 30, 2009.



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

**TABLE 2**  
**SCHEDULE OF ACTIVE MEMBER VALUATION DATA**

<u>Valuation Date</u>	<u>Number</u>	<u>Annual Payroll</u>	<u>Annual Average Pay</u>	<u>% Increase in Average Pay</u>
9/30/2009 <sup>1</sup>	87,647	\$ 3,478,635,402	\$ 39,689	3.65%
9/30/2008 <sup>2</sup>	88,002	3,369,696,707	38,291	4.71
9/30/2007 <sup>3</sup>	86,668	3,169,432,161	36,570	4.65
9/30/2006 <sup>4</sup>	84,482	2,952,186,813	34,945	3.05
9/30/2005 <sup>5</sup>	82,830	2,808,823,045	33,911	4.94
9/30/2004 <sup>6</sup>	81,249	2,625,617,551	32,316	1.18

- <sup>1</sup> In addition, there are 2,371 members with compensation of \$141,607,707 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.
- <sup>2</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>3</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>4</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>5</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>6</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.





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, 2009**

TYPE OF RETIREMENT	GROUP			TOTAL
	STATE EMPLOYEES	STATE POLICEMEN	LOCAL EMPLOYEES <sup>2</sup>	
Service:				
Number	15,091	632	13,866	29,589
Annual Allowances	\$ 317,347,808	\$ 27,963,146	\$ 245,647,712	\$ 590,958,666
Disability:				
Number	1,888	38	1,520	3,446
Annual Allowances	\$ 23,303,406	\$ 984,723	\$ 17,648,458	\$ 41,936,587
Beneficiaries:				
Number	1,519	102	1,757	3,378
Annual Allowances	\$ 16,395,515	\$ 1,903,806	\$ 14,370,299	\$ 32,669,620
DROP participants:				
Number	1,697	30	644	2,371
Annual Allowances	\$ 49,226,294	\$ 1,730,952	\$ 18,077,768	\$ 69,035,014
Total:				
Number	20,195	802	17,787	38,784
Annual Allowances	\$ 406,273,023	\$ 32,582,627	\$ 295,744,237	\$ 734,599,887

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

<sup>2</sup> In addition, there are 47 terminated vested members with annual deferred allowances totaling \$276,179.

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.



### **SECTION III - ASSETS**

1. 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, 2009, the market value of assets credited to this Fund amounted to \$1,973,510,976 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, 2009 the market value of assets credited to this fund amounted to \$5,372,845,203.

- (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, 2009, the market value of assets credited to this Fund amounted to \$252,704,329.

- (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, 2009, the market value of assets credited to this fund amounted to \$21,044,550.



2. As of September 30, 2009 the total market value of assets exclusive of the Pre-Retirement Death Benefit Fund amounted to \$7,599,060,508 as shown in the following table.

**TABLE 4**  
**MARKET VALUE OF ASSETS BY FUND**  
**AS OF SEPTEMBER 30, 2009**

FUND	MARKET VALUE OF ASSETS
Annuity Savings Fund	\$ 1,973,510,976
Pension Accumulation Fund	5,372,845,203
DROP Fund	<u>252,704,329</u>
Total Market Value of Assets	\$ 7,599,060,508

3. The five-year market related actuarial value of assets used for the current valuation was \$9,928,104,059. Schedule B shows the development of the actuarial value of assets as of September 30, 2009. 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, 2009 AND SEPTEMBER 30, 2008**

GROUP	SEPTEMBER 30, 2009 ACTUARIAL VALUE	SEPTEMBER 30, 2008 ACTUARIAL VALUE
State Employees	\$ 4,817,987,132	\$ 4,912,248,475
State Policemen	345,246,095	350,685,611
Local Employees	<u>4,764,870,832</u>	<u>4,642,832,248</u>
Total Assets	\$ 9,928,104,059	\$ 9,905,766,334

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**

1. 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, 2009. 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 \$16,584,081,419, of which \$6,707,240,315 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, and \$9,876,841,104 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 \$9,928,104,059 as of September 30, 2009. The difference of \$6,655,977,360 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, \$1,476,128,878 is the present value of future contributions expected to be made by members to the Annuity Savings Fund, and the balance of \$5,179,848,482 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 4.99% 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 13.24% 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 \$1,351,776,558. When this amount is subtracted from \$5,179,848,482, which is the present value of the total future contributions to be made by the employers, there remains \$3,828,071,924 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 6.99% of payroll. For State policemen, it is recommended that the accrued liability contribution rate payable by the State be set at 17.00% of payroll. These rates are sufficient to



amortize the unfunded accrued liability of \$1,977,402,229 for State employees and \$156,819,390 for State policemen within 30 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, 2009 it is recommended that the State make contributions at the following rates for the fiscal year beginning October 1, 2011:

**TABLE 6**

**RECOMMENDED CONTRIBUTION RATES**

CONTRIBUTION	PERCENTAGE OF MEMBERS' COMPENSATION FOR FISCAL YEAR ENDING SEPTEMBER 30, 2012	
	STATE EMPLOYEES	STATE POLICEMEN
Normal	4.99%	13.24%
Accrued liability	6.99	17.00
Death benefit	0.15	0.15
Administration	<u>0.18</u>	<u>0.18</u>
Total	12.31%	30.57%

3. Contribution rates for Local Employers will be submitted in a separate report. The rates for the fiscal year beginning October 1, 2011 will be determined as of September 30, 2009, 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, 2009. For State employees, the unfunded accrued liability increased \$275,852,721; for State policemen, the unfunded accrued liability increased \$18,447,776. 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.

**ANALYSIS OF FINANCIAL EXPERIENCE**  
(in millions of dollars)

ITEM	AMOUNT OF INCREASE / (DECREASE)	
	<u>STATE EMPLOYEES</u>	<u>STATE POLICEMEN</u>
Interest (8.00%) added to previous unfunded accrued liability	\$ 136.1	\$ 11.1
Accrued liability contribution	(93.3)	(9.4)
Experience:		
Valuation asset growth	338.8	24.1
Pensioners' mortality	9.2	0.6
Turnover and retirements	19.3	0.4
New entrants	10.4	5.0
Salary increases	(152.7)	(11.9)
Method changes	0.0	0.0
Amendments	0.0	0.0
Assumption changes	0.0	0.0
Miscellaneous	8.1	(1.5)
<b>Total</b>	<b>\$ 275.9</b>	<b>\$ 18.4</b>





**SECTION VII - ACCOUNTING INFORMATION**

1. 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:

**NUMBER OF ACTIVE AND RETIRED MEMBERS  
AS OF SEPTEMBER 30, 2009**

GROUP	NUMBER			
	State Employees	State Policemen	Local Employees	Total
Retired and beneficiaries currently receiving benefits	18,498	772	17,143	36,413
DROP participants	1,697	30	644	2,371
Terminated employees entitled to benefits but not yet receiving benefits	3,778	20	7,993	11,791
Active members	32,659	814	54,174	87,647
Total	56,632	1,636	79,954	138,222



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

**SCHEDULE OF FUNDING PROGRESS**

(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
<b>TOTAL ALL GROUPS</b>						
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
9/30/2009	9,928,104	13,756,176	3,828,072	72.2	3,620,243	105.7
<b>STATE EMPLOYEES</b>						
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 <sup>1</sup>	74.2
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>	97.6
9/30/2008	4,912,248	6,613,798	1,701,550	74.3	1,531,217 <sup>3</sup>	111.1
9/30/2009	4,817,987	6,795,389	1,977,402	70.9	1,510,157	130.9
<b>STATE POLICEMEN</b>						
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>	218.6
9/30/2006	342,051	451,702	109,651	75.7	45,304 <sup>2</sup>	242.0
9/30/2007	350,437	475,409	124,972	73.7	50,987 <sup>3</sup>	245.1
9/30/2008	350,686	489,058	138,372	71.7	51,495 <sup>3</sup>	268.7
9/30/2009	345,246	502,065	156,819	68.8	53,705	292.0
<b>LOCAL EMPLOYEES</b>						
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
9/30/2009	4,764,871	6,458,721	1,693,850	73.8	2,056,381	82.4

<sup>1</sup> Includes pay increases granted under Act 2005-316.

<sup>2</sup> Includes pay increases granted under Act 2005-231.

<sup>3</sup> 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, 2009. Additional information as of the latest actuarial valuation follows.

	<u>State Employees</u>	<u>State Policemen</u>	<u>Local Employees</u>
Valuation date	9/30/2009	9/30/2009	9/30/2009
Actuarial cost method	Entry age	Entry age	Entry age
Amortization method	Level percent Open	Level percent Open	Level percent Open
Remaining amortization period	30 years	26 years	Within 30 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

<u>Year Ending</u>	<u>Annual Pension Cost APC</u>	<u>Percent of APC Contributed</u>	<u>Net Pension Obligation (NPO)</u>
<b><u>State Employees</u></b>			
9/30/2007	\$102,258,702	100%	\$0
9/30/2008	138,343,938	100	0
9/30/2009	171,097,038	100	0
<b><u>State Policemen</u></b>			
9/30/2007	\$12,068,537	100%	\$0
9/30/2008	16,271,620	100	0
9/30/2009	16,912,176	100	0
<b><u>Local Employees</u></b>			
9/30/2007	Varies	Varies	Varies
9/30/2008	Varies	Varies	Varies
9/30/2009	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**

	<b>SEPTEMBER 30, 2009</b>	<b>SEPTEMBER 30, 2008</b>
<b><u>ASSETS</u></b>		
Actuarial Value of Present Assets	\$ 9,928,104,059	\$ 9,905,766,334
Present value of future members' contributions to the Annuity Savings Fund	\$ 1,476,128,878	\$ 1,450,948,940
Present value of future employer contributions to the Pension Accumulation Fund		
Normal contributions	\$ 1,351,776,558	\$ 1,305,988,355
Unfunded accrued liability contributions	<u>3,828,071,924</u>	<u>3,172,920,095</u>
Total prospective employer contributions	\$ 5,179,848,482	\$ 4,478,908,450
Total assets	<u>\$ 16,584,081,419</u>	<u>\$ 15,835,623,724</u>
<b><u>LIABILITIES</u></b>		
Present value of benefits payable on account of retired members and beneficiaries of deceased members now drawing retirement allowances (includes DROP members)	\$ 6,707,240,315	\$ 6,275,136,143
Present value of prospective benefits payable on account of present active and inactive members		
Service retirement allowances	\$ 9,251,896,416	\$ 8,953,559,657
Disability retirement allowances	369,851,790	359,027,377
Survivor allowances	30,166,084	28,969,104
Refunds of members' contributions	<u>224,926,814</u>	<u>218,931,443</u>
Total	\$ 9,876,841,104	\$ 9,560,487,581
Total liabilities	<u>\$ 16,584,081,419</u>	<u>\$ 15,835,623,724</u>



**SCHEDULE A** (Continued)

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

**STATE EMPLOYEES**

	<b>SEPTEMBER 30, 2009</b>	<b>SEPTEMBER 30, 2008</b>
<b><u>ASSETS</u></b>		
Actuarial Value of Present Assets	\$ 4,817,987,132	\$ 4,912,248,475
Present value of future members' contributions to the Annuity Savings Fund	\$ 560,140,290	\$ 569,969,004
Present value of future employer contributions to the Pension Accumulation Fund		
Normal contributions	\$ 543,576,152	\$ 542,668,777
Unfunded accrued liability contributions	<u>1,977,402,229</u>	<u>1,701,549,508</u>
Total prospective employer contributions	\$ 2,520,978,381	\$ 2,244,218,285
Total assets	<u>\$ 7,899,105,803</u>	<u>\$ 7,726,435,764</u>
<b><u>LIABILITIES</u></b>		
Present value of benefits payable on account of retired members and beneficiaries of deceased members now drawing retirement allowances	\$ 3,731,310,491	\$ 3,528,132,579
Present value of prospective benefits payable on account of present active and inactive members		
Service retirement allowances	\$ 3,910,585,344	\$ 3,940,806,633
Disability retirement allowances	165,308,611	166,733,636
Survivor allowances	10,091,375	10,077,821
Refunds of members' contributions	<u>81,809,982</u>	<u>80,685,095</u>
Total	\$ 4,167,795,312	\$ 4,198,303,185
Total liabilities	<u>\$ 7,899,105,803</u>	<u>\$ 7,726,435,764</u>

\*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**

	SEPTEMBER 30, 2009	SEPTEMBER 30, 2008
<b>ASSETS</b>		
Actuarial Value of Present Assets	\$ 345,246,095	\$ 350,685,611
Present value of future members' contributions to the Annuity Savings Fund	\$ 50,264,432	\$ 48,062,858
Present value of future employer contributions to the Pension Accumulation Fund		
Normal contributions	\$ 66,550,107	\$ 63,923,601
Unfunded accrued liability contributions	<u>156,819,390</u>	<u>138,371,614</u>
Total prospective employer contributions	\$ 223,369,497	\$ 202,295,215
Total assets	<u>\$ 618,880,024</u>	<u>\$ 601,043,684</u>
<b>LIABILITIES</b>		
Present value of benefits payable on account of retired members and beneficiaries of deceased members now drawing retirement allowances	\$ 297,264,259	\$ 292,211,549
Present value of prospective benefits payable on account of present active and inactive members		
Service retirement allowances	\$ 313,534,977	\$ 301,103,208
Disability retirement allowances	5,208,498	5,096,696
Survivor allowances	424,932	404,104
Refunds of members' contributions	<u>2,447,358</u>	<u>2,228,127</u>
Total	\$ 321,615,765	\$ 308,832,135
Total liabilities	<u>\$ 618,880,024</u>	<u>\$ 601,043,684</u>





**SCHEDULE A** (Continued)

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

**LOCAL EMPLOYEES**

	<b>SEPTEMBER 30, 2009</b>	<b>SEPTEMBER 30, 2008</b>
<b><u>ASSETS</u></b>		
Actuarial Value of Present Assets	\$ 4,764,870,832	\$ 4,642,832,248
Present value of future members' contributions to the Annuity Savings Fund	\$ 865,724,156	\$ 832,917,078
Present value of future employer contributions to the Pension Accumulation Fund		
Normal contributions	\$ 741,650,299	\$ 699,395,977
Unfunded accrued liability contributions	<u>1,693,850,305</u>	<u>1,332,998,973</u>
Total prospective employer contributions	\$ 2,435,500,604	\$ 2,032,394,950
Total assets	<u>\$ 8,066,095,592</u>	<u>\$ 7,508,144,276</u>
<b><u>LIABILITIES</u></b>		
Present value of benefits payable on account of retired members and beneficiaries of deceased members now drawing retirement allowances	\$ 2,678,665,565	\$ 2,454,792,015
Present value of prospective benefits payable on account of present active and inactive members		
Service retirement allowances	\$ 5,027,776,095	\$ 4,711,649,816
Disability retirement allowances	199,334,681	187,197,045
Survivor allowances	19,649,777	18,487,179
Refunds of members' contributions	<u>140,669,474</u>	<u>136,018,221</u>
Total	\$ 5,387,430,027	\$ 5,053,352,261
Total liabilities	<u>\$ 8,066,095,592</u>	<u>\$ 7,508,144,276</u>



**SCHEDULE A** (continued)

**SOLVENCY TEST**  
(\$1000's)

Valuation Date	Aggregate Accrued Liabilities For			Reported Assets	Portion of Accrued Liabilities Covered By Reported Assets		
	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)		(1)	(2)	(3)
9/30/2009	\$1,973,511	\$6,707,240	\$5,075,425	\$9,928,104	100%	100%	24.6%
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

<sup>1</sup> Reflects pay increases payable under Act 2007-297.

<sup>2</sup> Reflects changes in actuarial assumptions.

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

<sup>4</sup> Reflects COLA granted effective October 1, 2005 under Act 2005-316.

<sup>5</sup> Excludes \$20,500,000 of employee lump sum contributions made by local employers before September 30, 2004 not recognized for valuation purposes.



**SCHEDULE B**

**DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS  
AS OF SEPTEMBER 30, 2009**

**TOTAL - ALL GROUPS**

(1) Actuarial Value Beginning of Year *	\$ 9,905,766,329
(2) Market Value End of Year	\$ 7,599,060,508
(3) Market Value Beginning of Year *	\$ 8,565,299,535
(4) Cash Flow	
a. Contributions	\$ 654,674,901
b. Benefit Payments	(735,683,026)
c. Net: (4)a + (4)b	\$ (81,008,125)
(5) Investment Income	
a. Market Total: (2) - (3) - (4)c	\$ (885,230,902)
b. Assumed Rate	8.00%
c. Amount of Immediate Recognition [(3) x (5)b] + [(4)c * (5)b * 0.5]	\$ 681,983,639
d. Adjustment for Employer Lump Sums	\$ 2,378,865
e. Adjusted Amount for Immediate Recognition: (5)c + (5)d	\$ 684,362,504
f. Amount for Phased-In Recognition: (5)a - (5)e	\$ (1,569,593,406)
(6) Phased-In Recognition of Investment Income	
a. Current Year: 0.20 * (5)f	\$ (313,918,681)
b. First Prior Year	(478,093,610)
c. Second Prior Year	178,358,144
d. Thrid Prior Year	72,600
e. Fourth Prior Year	32,564,898
f. Total Recognized Investment Gain	\$ (581,016,649)
(7) Actuarial Value End of Year (1) + (4)c + (5)e + (6)f	\$ 9,928,104,059

\* Adjusted since previous valuation





**SCHEDULE B** (Continued)

**DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS  
AS OF SEPTEMBER 30, 2009**

**STATE EMPLOYEES\***

(1) Actuarial Value Beginning of Year	
a. Actuarial Value Beginning of Year	\$ 4,912,248,475
b. Adjustment	<u>(162,309)</u>
c. Adjusted Actuarial Value Beginning of Year	\$ 4,912,086,166
(2) Market Value End of Year	\$ 3,674,852,062
(3) Market Value Beginning of Year	
a. Market Value Beginning of Year	\$ 4,244,638,516
b. Adjustment	<u>(125,258)</u>
c. Adjusted Market Value Beginning of Year	\$ 4,244,513,258
(4) Cash Flow	
a. Contributions	\$ 254,003,372
b. Benefit Payments	<u>(396,747,872)</u>
c. Net	\$ (142,744,500)
(5) Investment Income	
a. Market Total: (2) - (3)c - (4)c	\$ (426,916,696)
b. Assumed Rate	8.00%
c. Amount of Immediate Recognition [(3)c x (5)b] + [(4)c * (5)b * 0.5]	\$ 333,851,281
d. Amount for Phased-In Recognition: (5)a - (5)c	\$ (760,767,977)
(6) Phased-In Recognition of Investment Income	
a. Current Year: 0.20 * (5)d	\$ (152,153,595)
b. First Prior Year	(239,770,134)
c. Second Prior Year	90,734,650
d. Thrid Prior Year	(602,930)
e. Fourth Prior Year	<u>16,586,194</u>
f. Total Recognized Investment Gain	\$ (285,205,815)
(7) Actuarial Value End of Year (1)c + (4)c + (5)c + (6)f	\$ 4,817,987,132

\*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, 2009**

**STATE POLICEMEN**

(1) Actuarial Value Beginning of Year	\$ 350,685,611
(2) Market Value End of Year	\$ 263,215,762
(3) Market Value Beginning of Year	\$ 303,647,352
(4) Cash Flow	
a. Contributions	\$ 22,399,229
b. Benefit Payments	(31,421,518)
c. Net	\$ (9,022,289)
(5) Investment Income	
a. Market Total: (2) - (3) - (4)c	\$ (31,409,301)
b. Assumed Rate	8.00%
c. Amount of Immediate Recognition [(3) x (5)b] + [(4)c * (5)b * 0.5]	\$ 23,930,897
d. Amount for Phased-In Recognition: (5)a - (5)c	\$ (55,340,198)
(6) Phased-In Recognition of Investment Income	
a. Current Year: 0.20 * (5)d	\$ (11,068,040)
b. First Prior Year	(16,949,719)
c. Second Prior Year	6,573,000
d. Thrid Prior Year	(55,022)
e. Fourth Prior Year	1,151,657
f. Total Recognized Investment Gain	\$ (20,348,124)
(7) Actuarial Value End of Year (1) + (4)c + (5)c + (6)f	\$ 345,246,095



**SCHEDULE B** (Continued)

**DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS  
AS OF SEPTEMBER 30, 2009**

**LOCAL EMPLOYEES\***

(1) Actuarial Value Beginning of Year	
a. Actuarial Value Beginning of Year	\$ 4,642,832,248
b. Adjustment	162,304
c. Adjusted Actuarial Value Beginning of Year	\$ 4,642,994,552
(2) Market Value End of Year	\$ 3,660,992,684
(3) Market Value Beginning of Year	
a. Market Value Beginning of Year	\$ 4,017,013,672
b. Adjustment	125,253
c. Adjusted Market Value Beginning of Year	\$ 4,017,138,925
(4) Cash Flow	
a. Contributions	\$ 378,272,300
b. Benefit Payments	(307,513,636)
c. Net	\$ 70,758,664
(5) Investment Income	
a. Market Total: (2) - (3)c - (4)c	\$ (426,904,905)
b. Assumed Rate	8.00%
c. Amount of Immediate Recognition [(3)c x (5)b] + [(4)c * (5)b * 0.5]	\$ 324,201,461
d. Adjustment for Employer Lump Sums	\$ 2,378,865
e. Adjusted Amount for Immediate Recognition: (5)c + (5)d	\$ 326,580,326
f. Amount for Phased-In Recognition: (5)a - (5)e	\$ (753,485,231)
(6) Phased-In Recognition of Investment Income	
a. Current Year: 0.20 * (5)f	\$ (150,697,046)
b. First Prior Year	(221,373,757)
c. Second Prior Year	81,050,494
d. Thrid Prior Year	730,552
e. Fourth Prior Year	14,827,047
f. Total Recognized Investment Gain	\$ (275,462,710)
(7) Actuarial Value End of Year (1)c + (4)c + (5)e + (6)f	\$ 4,764,870,832

\*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, 2009**

---

<u>Receipts for the Year</u>		
Contributions:		
Members	\$ 210,280,305	
Employers	<u>444,394,596</u>	
Total		\$ 654,674,901
Net Investment Income		<u>(885,230,902)</u>
TOTAL		\$ (230,556,001)
<u>Disbursements for the Year</u>		
Benefit Payments	\$ 695,523,369	
Refunds to Members	27,629,747	
Miscellaneous	<u>12,529,910</u>	
TOTAL		\$ 735,683,026
<u>Excess of Receipts Over Disbursements</u>		\$ (966,239,027)
<u>Reconciliations of Asset Balances</u>		
Market Value of Assets as of September 30, 2008 *		\$ 8,565,299,535
Excess of Receipts Over Disbursements		<u>(966,239,027)</u>
Market Value of Assets as of September 30, 2009		<u>\$ 7,599,060,508</u>

---

\* Adjusted since previous valuation



**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>	<u>Annual Rate</u>
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:

Age	Annual Rate of							
	<u>Death</u>		<u>Disability</u>		<u>Withdrawal</u>			
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>		<u>Female</u>	
					Years of Service		Years of Service	
				0-4	5+	0-4	5+	
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:

Age	Annual Rate			
	Under age 65 with 25 or more years of service		Under age 65 with less than 25 years of service & All over age 65	
	<u>Male</u> <sup>1</sup>	<u>Female</u> <sup>2</sup>	<u>Male</u>	<u>Female</u>
45	15.00%	15.00%		
50	10.00	10.00		
55	48.00	51.00		
60	42.00	48.00	16.00%	22.00%
62	56.00	58.00	32.00	31.00
64	28.00	50.00	25.00	24.00
65			36.00	36.00
70			27.00	30.00
72			23.00	30.00
75			100.00	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>	<u>Withdrawal</u> <sup>1</sup>	<u>Service</u>	
	<u>Male</u>	<u>Female</u>			<u>&lt; 25 Years</u>	<u>25+ Years</u>
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:

Age	Annual Rate of							
	<u>Death</u>		<u>Disability</u>		<u>Withdrawal</u>			
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>		<u>Female</u>	
					Years of Service		Years of Service	
				0-4	5+	0-4	5+	
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:

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

- Age 56 or older – bonus service of 4 years reduced by 1 month for each month over the age of 56.
- Age 52 to 56 – bonus service of 4 years.
- Age 52 or less (disability retirement only) – bonus service of 4 years.
- Age 52 or less with 25 or more years of service – bonus service of 4 years.

### 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

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.

Benefits Payable upon  
Death in Active Service

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 pre-retirement 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, 2009  
STATE EMPLOYEES**

Attained Age	Completed Years of Service										Total
	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	
<b>Under 25</b>	462	787	8								1,257
Avg. Pay	\$27,312	\$28,250	\$26,815								\$27,896
<b>25 to 29</b>	466	2,114	552	10							3,142
Avg. Pay	\$28,193	\$33,375	\$35,288	\$33,174							\$32,942
<b>30 to 34</b>	301	1,504	1,395	311	11						3,522
Avg. Pay	\$28,583	\$34,673	\$40,614	\$41,006	\$42,735						\$37,090
<b>35 to 39</b>	274	1,247	1,138	818	358	11					3,846
Avg. Pay	\$29,366	\$35,791	\$41,666	\$46,231	\$49,832	\$53,446					\$40,650
<b>40 to 44</b>	184	955	843	732	1,059	470	12				4,255
Avg. Pay	\$31,246	\$34,349	\$40,162	\$47,070	\$53,637	\$52,202	\$50,420				\$44,373
<b>45 to 49</b>	157	924	823	576	1,072	1,182	383	17			5,134
Avg. Pay	\$29,202	\$34,675	\$38,817	\$46,183	\$51,590	\$57,306	\$51,769	\$51,029			\$46,534
<b>50 to 54</b>	129	788	769	552	820	944	845	349	20		5,216
Avg. Pay	\$28,709	\$34,727	\$38,713	\$44,862	\$49,074	\$56,641	\$58,324	\$57,482	\$48,855		\$47,859
<b>55 to 59</b>	83	554	579	452	679	700	179	123	41		3,390
Avg. Pay	\$26,907	\$37,546	\$38,453	\$45,455	\$48,621	\$53,547	\$58,452	\$67,446	\$59,883		\$46,476
<b>60 to 64</b>	249	402	374	254	418	331	66	15	9	2	2,120
Avg. Pay	\$61,514	\$48,905	\$42,339	\$46,799	\$49,084	\$51,821	\$54,560	\$60,130	\$59,423	\$106,841	\$49,821
<b>65 to 69</b>	42	105	126	73	103	89	16	7	6		567
Avg. Pay	\$73,955	\$61,541	\$37,505	\$48,199	\$58,276	\$53,958	\$57,108	\$34,641	\$103,902		\$53,609
<b>70 &amp; up</b>	9	44	45	25	39	33	7	1	1	6	210
Avg. Pay	\$57,071	\$63,680	\$38,893	\$42,052	\$49,196	\$59,853	\$58,083	\$34,462	\$72,686	\$65,911	\$52,000
<b>Total</b>	2,356	9,424	6,652	3,803	4,559	3,760	1,508	512	77	8	32,659
Avg. Pay	\$32,943	\$35,176	\$39,674	\$45,681	\$50,912	\$55,250	\$56,433	\$59,382	\$60,561	\$76,144	\$43,093

In addition there are 1,697 employees with annual compensation of \$102,782,509 participating in the DROP as of September 30, 2009.

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, 2009  
STATE POLICEMEN**

Attained Age	Completed Years of Service										Total
	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	
<b>Under 25</b> Avg. Pay		4 \$43,232	1 \$44,857								5 \$43,557
<b>25 to 29</b> Avg. Pay		49 \$46,542	27 \$50,272	1 \$49,671							77 \$47,890
<b>30 to 34</b> Avg. Pay	3 \$50,783	25 \$48,494	48 \$49,436	39 \$58,248							115 \$52,255
<b>35 to 39</b> Avg. Pay	1 \$44,474	31 \$47,164	42 \$51,678	83 \$59,717	28 \$69,337						185 \$57,162
<b>40 to 44</b> Avg. Pay	1 \$47,038	16 \$49,148	24 \$53,517	42 \$62,082	64 \$71,676	32 \$81,201					179 \$66,542
<b>45 to 49</b> Avg. Pay	1 \$53,031	9 \$48,841	7 \$54,284	16 \$62,178	30 \$70,792	84 \$79,139	14 \$83,875				161 \$73,374
<b>50 to 54</b> Avg. Pay	2 \$45,811	5 \$60,437	4 \$59,094	1 \$70,398	15 \$74,392	23 \$74,500	11 \$86,835	2 \$95,868			63 \$74,236
<b>55 to 59</b> Avg. Pay	4 \$94,653	2 \$67,566	2 \$74,104	1 \$74,611	5 \$68,322	5 \$84,829	1 \$68,032				20 \$78,518
<b>60 to 64</b> Avg. Pay	3 \$74,341	3 \$73,534		1 \$84,883	1 \$63,694						8 \$74,026
<b>65 to 69</b> Avg. Pay				1 \$86,750							1 \$86,750
<b>70 &amp; up</b> Avg. Pay											
<b>Total</b> Avg. Pay	15 \$66,010	144 \$48,693	155 \$51,578	185 \$60,524	143 \$71,144	144 \$79,054	26 \$84,518	2 \$95,868			814 \$62,826

In addition there are 30 employees with annual compensation of \$2,565,142 participating in the DROP as of September 30, 2009.

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, 2009  
LOCAL EMPLOYEES**

Attained Age	Completed Years of Service										Total
	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	
<b>Under 25</b>	1,180	1,895	58			1					3,134
Avg. Pay	\$21,031	\$27,297	\$33,435			\$29,601					\$25,052
<b>25 to 29</b>	947	3,122	1,079	56							5,204
Avg. Pay	\$22,757	\$30,400	\$36,358	\$40,179							\$30,349
<b>30 to 34</b>	715	2,395	1,845	818	27						5,800
Avg. Pay	\$23,947	\$32,087	\$38,955	\$43,014	\$49,113						\$34,889
<b>35 to 39</b>	681	2,197	1,846	1,786	705	38					7,253
Avg. Pay	\$23,312	\$31,924	\$38,976	\$45,750	\$49,596	\$53,179					\$38,144
<b>40 to 44</b>	546	1,846	1,492	1,514	1,302	683	28				7,411
Avg. Pay	\$24,670	\$30,911	\$36,766	\$44,289	\$49,493	\$52,727	\$53,415				\$39,723
<b>45 to 49</b>	458	1,749	1,542	1,365	1,069	1,169	490	33			7,875
Avg. Pay	\$25,021	\$30,699	\$35,709	\$42,504	\$47,061	\$53,331	\$54,848	\$65,044			\$40,623
<b>50 to 54</b>	362	1,438	1,374	1,130	969	1,027	640	336	20		7,296
Avg. Pay	\$24,448	\$29,734	\$35,149	\$39,740	\$46,140	\$50,681	\$54,019	\$57,567	\$52,329		\$40,643
<b>55 to 59</b>	257	1,044	1,093	964	841	731	313	210	62	4	5,519
Avg. Pay	\$24,216	\$30,330	\$34,704	\$39,159	\$44,525	\$48,500	\$51,571	\$60,874	\$66,302	\$82,497	\$39,832
<b>60 to 64</b>	152	536	708	554	457	377	123	74	51	18	3,050
Avg. Pay	\$32,920	\$30,770	\$33,922	\$38,962	\$43,501	\$46,276	\$47,213	\$53,796	\$61,801	\$68,879	\$38,887
<b>65 to 69</b>	56	230	268	185	125	105	39	12	8	7	1,035
Avg. Pay	\$24,292	\$31,678	\$31,521	\$36,537	\$45,334	\$44,432	\$49,054	\$50,675	\$46,686	\$62,988	\$36,252
<b>70 &amp; up</b>	40	144	138	89	78	63	22	12	5	6	597
Avg. Pay	\$23,760	\$22,519	\$26,120	\$30,038	\$39,120	\$37,334	\$39,207	\$45,526	\$38,093	\$66,118	\$29,934
<b>Total</b>	5,394	16,596	11,443	8,461	5,573	4,194	1,655	677	146	35	54,174
Avg. Pay	\$23,486	\$30,478	\$36,460	\$42,299	\$46,975	\$50,638	\$52,971	\$58,209	\$60,775	\$68,784	\$37,289

In addition there are 644 employees with annual compensation of \$36,260,056 participating in the DROP as of September 30, 2009.