



**Cavanaugh Macdonald**  
CONSULTING, LLC

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Retirement Systems  
of Alabama

**Report on the Actuarial Valuation of the  
Employees' Retirement System of Alabama  
Prepared as of September 30, 2013**





# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

July 18, 2014

Board of Control  
Employees' Retirement System of Alabama  
Montgomery, Alabama

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, 2013 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, 2013, 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 System was amended to provide a new benefit structure for members initially joining the System on or after January 1, 2013 (Tier II). Since the previous valuation, the System was amended to provide for a one-time lump sum payment to retired members and beneficiaries on October 1, 2014. Since the previous valuation, the Board has adopted a funding policy, which is shown in Schedule G of the report.

On the basis of the 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 14.57% of payroll for Tier I members and 14.09% for Tier II members. It is also recommended that the State make contributions to the Retirement System for State policemen at the rate of 42.61% of payroll for Tier I members and 38.98% for Tier II members for the fiscal year ending September 30, 2016. The contribution rates for local employers for the fiscal year beginning October 1, 2015 will be submitted in a separate report and will include the impact of all assumption changes and employer-elected changes through September 30, 2013.

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 3.25% annually, in accordance with the funding policy adopted by the Board. 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.

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.

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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

A handwritten signature in blue ink, appearing to read 'John J. Garrett'.

John J. Garrett, ASA, FCA, MAAA  
Principal and Consulting Actuary

EAM/CT/JJG:jj



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**REPORT ON THE ACTUARIAL VALUATION OF  
THE EMPLOYEES' RETIREMENT SYSTEM OF ALABAMA  
PREPARED AS OF SEPTEMBER 30, 2013**

**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, 2013</b>	<b>September 30, 2012</b>
Number of active members	28,873	29,548
Annual compensation	\$ 1,195,934,558	\$ 1,179,824,013
Number of retired members and beneficiaries	21,368	20,618
Annual retirement allowances	\$ 441,992,587	\$ 419,165,667
Number of DROP participants	1,022	1,445
Annual compensation	\$ 62,927,875	\$ 87,308,963
Annual allowances	33,590,995	45,986,004
Assets:		
Actuarial value	\$ 4,248,068,397	\$ 4,152,166,843
Market value	4,459,495,968	4,152,166,843
Unfunded accrued liability	\$ 2,560,097,142	\$ 2,483,987,366
Funded Ratio	62.4%	62.6%
<b>CONTRIBUTIONS FOR FISCAL YEAR ENDING</b>	<b>September 30, 2016</b>	<b>September 30, 2015</b>
<b><u>Tier I</u></b>		
Employer contribution rate		
Normal	0.81%	0.62%
Accrued liability	12.36	12.48
Death benefit	0.02	0.14
Administration	<u>0.35</u>	<u>0.21</u>
Subtotal	13.54%	13.45%
Act 2014-429*	<u>1.03</u>	N/A
Total	14.57%	13.45%
<b><u>Tier II</u></b>		
Employer contribution rate		
Normal	0.33%	0.48%
Accrued liability	12.36	12.48
Death benefit	0.02	0.14
Administration	<u>0.35</u>	<u>0.21</u>
Subtotal	13.06%	13.31%
Act 2014-429*	<u>1.03</u>	N/A
Total	14.09%	13.31%
Blended Amortization period	30 years	30 years

\*Rate required for September 30, 2016 fiscal year to fund the one-time lump sum payment provided for by Act 2014-429.



**SUMMARY OF PRINCIPAL RESULTS FOR STATE POLICEMEN**

<b>VALUATION DATE</b>	<b>September 30, 2013</b>	<b>September 30, 2012</b>
Number of active members	745	777
Annual compensation	\$ 41,373,139	\$ 44,028,717*
Number of retired members and beneficiaries	858	839
Annual retirement allowances	\$ 38,090,757	\$ 36,522,226
Number of DROP participants	19	25
Annual compensation	\$ 1,534,511	\$ 1,934,696
Annual allowances	1,216,314	1,533,318
Assets:		
Actuarial value	\$ 298,623,566	\$ 293,604,464
Market value	313,456,131	293,604,464
Unfunded accrued liability	\$ 227,471,139	\$ 223,751,421
Funded Ratio	56.8%	56.8%
<b>CONTRIBUTION FOR FISCAL YEAR ENDING</b>	<b>September 30, 2016</b>	<b>September 30, 2015</b>
<b><u>Tier I</u></b>		
Employer contribution rate		
Normal	8.71%	8.44%
Accrued liability	32.25	29.58
Death benefit	0.02	0.14
Administration	<u>0.35</u>	<u>0.21</u>
Subtotal	41.33%	38.37%
Act 2014-429**	<u>1.28</u>	N/A
Total	42.61%	38.37%
<b><u>Tier II</u></b>		
Employer contribution rate		
Normal	5.08%	2.52%
Accrued liability	32.25	29.58
Death benefit	0.02	0.14
Administration	<u>0.35</u>	<u>0.21</u>
Subtotal	37.70%	32.45%
Act 2014-429**	<u>1.28</u>	N/A
Total	38.98%	32.45%
Blended Amortization Period	30 years	30 years

\* Amount shown is reported compensation increased 7% for estimated overtime.

\*\* Rate required for September 30, 2016 fiscal year to fund the one-time lump sum payment provided for by Act 2014-429.



**SUMMARY OF PRINCIPAL RESULTS FOR LOCAL EMPLOYEES**

<b>VALUATION DATE</b>	<b>September 30, 2013</b>	<b>September 30, 2012</b>
Number of active members	54,417	53,844
Annual compensation	\$ 2,070,203,771	\$ 1,900,938,692
Number of retired members and beneficiaries	20,453	19,519
Annual retirement allowances	\$ 368,653,257	\$ 341,978,091
Number of DROP participants	473	651
Annual compensation	\$ 28,621,704	\$ 37,967,780
Annual allowances	14,667,960	19,773,054
Assets:		
Actuarial value	\$ 4,999,766,600	\$ 4,670,779,998
Market value	5,240,014,628	4,670,779,998
Unfunded accrued liability	\$ 2,202,572,530	\$ 2,060,705,460
Funded Ratio	69.4%	69.4%
<b>CONTRIBUTIONS FOR FISCAL YEAR ENDING</b>	<b>September 30, 2016</b>	<b>September 30, 2015</b>
Employer contribution rate		
Normal	Varies	Varies
Accrued liability	Varies	Varies
Death benefit	0.02	0.14
Administration	<u>0.35</u>	<u>0.21</u>
Total	Varies	Varies
Amortization period	Varies	Varies



### SUMMARY OF PRINCIPAL RESULTS FOR ALL GROUPS

<b>VALUATION DATE</b>	<b>September 30, 2013</b>	<b>September 30, 2012</b>
Number of active members	84,035	84,169
Annual compensation	\$ 3,307,511,468	\$ 3,124,791,422*
Number of retired members and beneficiaries	42,679	40,976
Annual retirement allowances	\$ 848,736,601	\$ 797,665,984
Number of DROP participants	1,514	2,121
Annual compensation	\$ 93,084,090	\$ 127,211,439
Annual allowances	49,475,269	67,292,376
Assets:		
Actuarial value	\$ 9,546,458,563	\$ 9,116,551,305
Market value	10,012,966,727	9,116,551,305
Unfunded accrued liability	\$ 4,990,140,811	\$ 4,768,444,247
Funded Ratio	65.7%	65.7%

\* Amount shown reflects an increase in reported compensation for State Policemen of 7% for estimated overtime.

2. Comments on the valuation results as of September 30, 2013 are given in Section IV and further discussion of the contribution levels is set out in Section V. The contribution rates for local employers for fiscal year beginning October 1, 2015 will be submitted in a separate report.
3. Schedule D of this report shows the development of the smoothed interest rate used for valuation purposes. Schedule B shows the development of the actuarial value of assets. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the current valuation. Since the previous valuation, the Board has adopted a funding policy, which is shown in Schedule G.
4. The System was amended to provide a new benefit structure for members initially joining the System on or after January 1, 2013 (Tier II). Provisions of the System, as summarized in Schedule I, were taken into account in the current valuation.
5. The System was amended to provide for a one-time lump sum payment to be made in October 2014 to each member retired prior to October 1, 2013 and in receipt of a retirement allowance on September 30, 2014. The lump sum is the greater of \$2 per month for each year of service or \$300.00. Beneficiaries of deceased members or retirees will receive \$300.00. The cost of the lump sum payment will be paid by each employer as an increase in the employer contribution rate for the fiscal year beginning October 1, 2015. The lump sum payment is optional for Local Employers.





**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, 2013 on the basis of which the valuation was prepared.

**TABLE 1**

**THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF SEPTEMBER 30, 2013**

<b>GROUP</b>	<b>NUMBER</b>	<b>COMPENSATION</b>
State Employees		
Tier 1	27,440	\$1,154,273,702
Tier 2	1,433	41,660,856
Subtotal	28,873	\$1,195,934,558
DROP	1,022	62,927,875
Total	29,895	\$1,258,862,433
State Policemen		
Tier 1	744	\$41,332,380
Tier 2	1	40,759
Subtotal	745	\$41,373,139
DROP	19	1,534,511
Total	764	\$42,907,650
Local Employees		
Tier 1	50,913	\$1,985,526,102
Tier 2	3,504	84,677,669
Subtotal	54,417	\$2,070,203,771
DROP	473	28,621,704
Total	54,890	\$2,098,825,475
All Groups		
Tier 1	79,097	\$3,181,132,184
Tier 2	4,938	126,379,284
Subtotal	84,035	\$3,307,511,468
DROP	1,514	93,084,090
Total	85,549	\$3,400,595,558

The table reflects the active membership for whom complete valuation data were submitted. The results of the valuation include an estimated liability for an additional 9,534 inactive members and members for whom incomplete data were submitted, and contribution balances for 17,696 non-vested inactive members who have not contributed for more than 5 years.



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>
9/30/2013 <sup>1</sup>	84,035	\$ 3,307,511,468	\$ 39,359	6.02%
9/30/2012 <sup>2</sup>	84,169	3,124,791,422	37,125	-5.88
9/30/2011 <sup>3</sup>	85,633	3,377,717,419	39,444	-1.00
9/30/2010 <sup>4</sup>	86,967	3,464,913,031	39,842	0.38
9/30/2009 <sup>5</sup>	87,647	3,478,635,402	39,689	3.65
9/30/2008 <sup>6</sup>	88,002	3,369,696,707	38,291	4.71

<sup>1</sup>In addition, there are 1,514 members with compensation of \$93,084,090 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

<sup>2</sup>In addition, there are 2,121 members with compensation of \$127,211,439 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

<sup>3</sup>In addition, there are 2,708 members with compensation of \$162,963,178 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

<sup>4</sup>In addition, there are 2,593 members with compensation of \$154,756,911 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

<sup>5</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>6</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.



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**  
**OF RETIRED MEMBERS AND BENEFICIARIES OF**  
**DECEASED MEMBERS ON THE ROLL AS OF SEPTEMBER 30, 2013**

TYPE OF RETIREMENT	GROUP			
	STATE EMPLOYEES	STATE POLICEMEN	LOCAL EMPLOYEES*	TOTAL
Service:				
Number	17,686	716	16,744	35,146
Annual Allowances	\$ 394,958,779	\$ 34,825,798	\$ 328,149,962	\$ 757,934,539
Disability:				
Number	2,134	39	1,797	3,970
Annual Allowances	\$ 28,377,570	\$ 1,102,840	\$ 22,641,592	\$ 52,122,002
Beneficiaries:				
Number	1,548	103	1,912	3,563
Annual Allowances	\$ 18,656,238	\$ 2,162,119	\$ 17,861,703	\$ 36,680,060
DROP participants:				
Number	1,022	19	473	1,514
Annual Allowances	\$ 33,590,995	\$ 1,216,314	\$ 14,667,960	\$ 49,475,269
Total:				
Number	22,390	877	20,926	44,193
Annual Allowances	\$ 475,583,582	\$ 39,307,071	\$ 383,321,217	\$ 898,211,870

\* In addition, there are 39 terminated vested pensioners with annual deferred allowances totaling \$190,273.

4. Tables in Schedule J show the distribution by age and service of the number and average annual compensation of active members included in the valuation. In addition, tables in Schedule J show the distribution by age and benefit type of the number, annual benefits, and average annual benefits of retired members included in the valuation.



### **SECTION III - ASSETS**

1. The current retirement law provides for the maintenance of five funds for the purpose of recording the fiscal transactions of the System, namely, the Annuity Savings Fund, the Pension Accumulation Fund, the Pre-Retirement Death Benefit Fund, the Expense Fund and the Deferred Retirement Option Plan Fund.

(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, 2013, the market value of assets credited to this Fund amounted to \$2,363,599,666 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. The market value of assets credited to this fund amounted to \$7,320,496,506 on September 30, 2013.

(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. The DROP is closed to new participants as of June 1, 2011. On September 30, 2013, the market value of assets credited to this Fund amounted to \$328,870,555.

(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, 2013, the market value of assets credited to this fund amounted to \$29,648,999. These assets are not included in the valuation and the liabilities associated with these death benefits are not included in the valuation.

(e) Expense Fund

The Expense Fund is the fund from which the expenses of the administration of the Retirement System are paid. Any amounts credited to the accounts of members withdrawing before retirement and not returnable under the provisions of Code Section 36-27-16(c) are credited to the Expense Fund. Additional contributions required to meet the expenses of the



Retirement System made by the employer are also credited to this fund. On September 30, 2013, the market value of assets credited to this fund amounted to \$1,563,841. These assets are not included in the valuation.

- As of September 30, 2013 the total market value of assets exclusive of the Pre-Retirement Death Benefit Fund and the Expense Fund amounted to \$10,012,966,727 as shown in the following table.

**TABLE 4**  
**MARKET VALUE OF ASSETS BY FUND**  
**AS OF SEPTEMBER 30, 2013**

FUND	MARKET VALUE OF ASSETS
Annuity Savings Fund	\$ 2,363,599,666
Pension Accumulation Fund	7,320,496,506
DROP Fund	<u>328,870,555</u>
Total Market Value of Assets	\$ 10,012,966,727

- The five-year market related actuarial value of assets as of September 30, 2013 was \$9,546,458,563. The following table shows the actuarial value of assets used for the current valuation allocated among State employees, State policemen and local employees.

**TABLE 5**  
**COMPARISON OF ACTUARIAL VALUE OF ASSETS**  
**AT SEPTEMBER 30, 2013 AND SEPTEMBER 30, 2012**

GROUP	SEPTEMBER 30, 2013 ACTUARIAL VALUE	SEPTEMBER 30, 2012 ACTUARIAL VALUE
State Employees	\$ 4,248,068,397	\$ 4,152,166,843
State Policemen	298,623,566	293,604,464
Local Employees	<u>4,999,766,600</u>	<u>4,670,779,998</u>
Total Assets	\$ 9,546,458,563	\$ 9,116,551,305

- 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, 2013. 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 \$16,501,639,773. Of this amount, \$8,085,291,180 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and DROP participants, \$282,557,112 is for the prospective benefits payable on account of present inactive members and \$8,133,791,481 is for the prospective benefits payable on account of present active members. Against these liabilities the System has total actuarial value of assets of \$9,546,458,563 as of September 30, 2013. The difference of \$6,955,181,210 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, \$1,481,757,330 is the present value of future contributions expected to be made by members to the Annuity Savings Fund, and the balance of \$5,473,423,880 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 0.81% of payroll for Tier I members and 0.33% of payroll for Tier II members are required to provide the benefits of the System for State employees. For State policemen, employer normal contributions at the rate of 8.71% of payroll for Tier I members and 5.08% of payroll for Tier II members 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 \$483,283,069. When this amount is subtracted from \$5,473,423,880, which is the present value of the total future contributions to be made by the employers, there remains \$4,990,140,811 as the amount of future cost-of-living and accrued liability contributions.



5. The funding policy adopted by the Board, as shown in Schedule G, provides that one-fifteenth of the unfunded actuarial accrued liability as of September 30, 2012 (Transitional UAAL) will be amortized as a level percent of payroll over a closed period. The closed period shall be the amortization period for the September 30, 2012 valuation, not to exceed 30 years. The remaining Transitional UAAL each year will be amortized over an open period. The open period shall be the amortization period for the September 30, 2012 valuation, not to exceed 30 years. After 15 years the entire Transitional UAAL will be closed. In each subsequent valuation all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuation will determine a New Incremental UAAL. Each New Incremental UAAL will be amortized as a level percent of payroll over a closed 30-year period from the date it is established.
6. The accrued liability contribution rate payable by the State is 12.36% of payroll for State employees and 32.25% of payroll for State Policemen determined in accordance with the Board's funding policy. The accrued liability contribution rates have been calculated on the assumption that the aggregate amount of accrued liability contribution will increase by 3.25% each year. Schedule H of this report shows a projection of the open Transitional UAAL and amortization schedules for all closed bases as of September 30, 2013.
7. The following table shows the components of the total unfunded actuarial accrued liability (UAAL) and the derivation of the accrued liability contribution rate in accordance with the funding policy for State employees and State policemen:



TABLE 6

TOTAL UAAL AND UAAL CONTRIBUTION RATE

STATE EMPLOYEES

	<u>UAAL</u>	<u>Amortization Period</u>	<u>Amortization Payment</u>
Open Transitional	\$2,186,936,208	30	\$140,266,104
Closed Transitional 9/30/2012	168,225,862	29	10,966,418
Closed Transitional 9/30/2013	168,225,862	30	10,789,700
New Incremental 9/30/2013	<u>36,709,210</u>	30	<u>2,354,462</u>
Total	\$2,560,097,142		\$164,376,684
Estimated payroll			\$1,329,374,064
UAAL Contribution Rate			12.36%

STATE POLICEMEN

	<u>UAAL</u>	<u>Amortization Period</u>	<u>Amortization Payment</u>
Open Transitional	\$196,993,790	30	\$12,634,823
Closed Transitional 9/30/2012	15,153,368	29	987,828
Closed Transitional 9/30/2013	15,153,368	30	971,909
New Incremental 9/30/2013	<u>170,613</u>	30	<u>10,943</u>
Total	\$227,471,139		\$14,605,503
Estimated payroll			\$45,289,995
UAAL Contribution Rate			32.25%

8. For all employers, an additional contribution of 0.02% of payroll will be required to meet the cost of the pre-retirement death benefit program established under Act No. 83-616. The assets and liabilities of the program are not included in the valuation.
9. For all employers, an additional contribution of 0.35% is required to cover the expenses of administering the System.
10. An additional contribution of 1.03% for State employees and 1.28% of payroll for State policemen is required for fiscal year ending September 30, 2016 to fund the one-time lump sum payment provided for in Act 2014-429.





**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, 2013 it is recommended that the State make contributions at the following rates for the fiscal year beginning October 1, 2015:

**TABLE 7  
RECOMMENDED CONTRIBUTION RATES**

CONTRIBUTION	PERCENTAGE OF MEMBERS' COMPENSATION FOR FISCAL YEAR ENDING SEPTEMBER 20, 2016			
	STATE EMPLOYEES		STATE POLICEMEN	
	<u>Tier I</u>	<u>Tier II</u>	<u>Tier I</u>	<u>Tier II</u>
Normal	0.81%	0.33%	8.71%	5.08%
Accrued liability	12.36	12.36	32.25	32.25
Death benefit	0.02	0.02	0.02	0.02
Administration	<u>0.35</u>	<u>0.35</u>	<u>0.35</u>	<u>0.35</u>
Subtotal	13.54%	13.06%	41.33%	37.70%
Act 2014-429*	<u>1.03</u>	<u>1.03</u>	<u>1.28</u>	<u>1.28</u>
Total	14.57%	14.09%	42.61%	38.98%

\*Rate required for September 30, 2016 fiscal year to fund the one-time lump sum payment provided for by Act 2014-429.

3. Contribution rates for Local Employers were submitted in a separate report. The rates for the fiscal year beginning October 1, 2015 were determined as of September 30, 2013, and reflect any elections made pursuant to Act 2011-676 as of April 1, 2014. Employers electing to provide the one-time lump sum payment to retired members and beneficiaries under Act 2014-429 may choose to pre-fund the benefit in a lump sum or pay an increased employer contribution rate for fiscal year ending September 30, 2016.



**SECTION VI – ANALYSIS OF FINANCIAL EXPERIENCE**

The following table shows the estimated gain or loss from various factors that resulted in an increase or decrease in the unfunded accrued liability during the year ending September 30, 2013. For State employees, the unfunded accrued liability increased \$76,109,776; for State policemen, the unfunded accrued liability increased \$3,719,718. 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) IN UAAL	
	<u>STATE EMPLOYEES</u>	<u>STATE POLICEMEN</u>
Interest (8.50%) added to previous unfunded accrued liability	\$ 211.1	\$ 19.0
Accrued liability contribution*	(135.6)	(10.6)
Experience:		
Valuation asset growth	(35.9)	(2.3)
Pensioners' mortality	0.9	(0.3)
Turnover and retirements	0.4	0.7
New entrants	10.1	1.5
Salary increases	(64.9)	(10.8)
Method changes	0.0	0.0
Amendments	0.0	0.0
Interest Smoothing	74.6	5.9
Data Change	15.3	0.5
Miscellaneous	<u>0.1</u>	<u>0.1</u>
Total Increase/Decrease in UAAL	\$ 76.1	\$ 3.7

\* Equal to the total contribution made to the System less the normal cost for the year adjusted for interest to September 30, 2013.



**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, 2013**

GROUP	NUMBER			
	State Employees	State Police	Local Employees	Total
Retirees and beneficiaries currently receiving benefits	21,368	858	20,453	42,679
DROP participants	1,022	19	473	1,514
Terminated employees entitled to benefits but not yet receiving benefits	20,590	12	6,667	27,269
Active Members	<u>28,873</u>	<u>745</u>	<u>54,417</u>	<u>84,035</u>
Total	71,853	1,634	82,010	155,497



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 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><u>TOTAL ALL GROUPS</u></b>						
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
9/30/2010	9,739,331	14,284,119	4,544,788	68.2	3,619,670	125.6
9/30/2011	9,456,158	14,366,796	4,910,638	65.8	3,540,681	138.7
9/30/2012	9,116,551	13,884,995	4,768,444	65.7	3,252,003	146.6
9/30/2013	9,546,459	14,536,600	4,990,141	65.7	3,400,596	146.7
<b><u>STATE EMPLOYEES</u></b>						
9/30/2008	\$4,912,248	\$6,613,798	\$1,701,550	74.3%	\$1,531,217 <sup>1</sup>	111.1%
9/30/2009	4,817,987	6,795,389	1,977,402	70.9	1,510,157	130.9
9/30/2010	4,649,567	6,935,473	2,285,906	67.0	1,494,440	153.0
9/30/2011	4,428,511	6,899,083	2,470,572	64.2	1,411,725	175.0
9/30/2012	4,152,167	6,636,154	2,483,987	62.6	1,267,133	196.0
9/30/2013	4,248,068	6,808,165	2,560,097	62.4	1,258,862	203.4
<b><u>STATE POLICEMEN</u></b>						
9/30/2008	\$350,686	\$489,058	\$138,372	71.7%	\$51,495 <sup>1</sup>	268.7%
9/30/2009	345,246	502,065	156,819	68.8	53,705	292.0
9/30/2010	334,178	533,209	199,031	62.7	57,266	347.6
9/30/2011	317,968	543,695	225,727	58.5	52,987	426.0
9/30/2012	293,604	517,355	223,751	56.8	45,963	486.8
9/30/2013	298,624	526,095	227,471	56.8	42,908	530.1
<b><u>LOCAL EMPLOYEES</u></b>						
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
9/30/2010	4,755,586	6,815,437	2,059,851	69.8	2,067,964	99.6
9/30/2011	4,709,678	6,924,017	2,214,339	68.0	2,075,968	106.7
9/30/2012	4,670,780	6,731,485	2,060,705	69.4	1,938,906	106.3
9/30/2013	4,999,767	7,202,340	2,202,573	69.4	2,098,825	104.9

<sup>1</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, 2013. Additional information as of the latest actuarial valuation follows.

	<b><u>State Employees</u></b>	<b><u>State Policemen</u></b>	<b><u>Local Employees</u></b>
Valuation date	9/30/2013	9/30/2013	9/30/2013
Actuarial cost method	Entry age	Entry age	Entry age
Amortization method	Level percent Closed	Level percent Closed	Level percent Closed
Single equivalent remaining amortization period	29.9 years	29.9 years	Within 30 years - Varies by employer
Asset valuation method	Five-year market related value	Five-year market related value	Five-year market related value
Actuarial assumptions:			
Ultimate Investment rate of return (discount rate)**	8.00%	8.00%	8.00%
Projected salary increases**	3.75 – 7.25%	5.00%	3.75 – 7.25%
Cost-of-living adjustment	None	None	None
**Includes inflation at	3.00%	3.00%	3.00%

#### TREND INFORMATION

<b><u>Year Ending</u></b>	<b><u>Annual Pension Cost (APC)</u></b>	<b><u>Percent Of APC Contributed</u></b>	<b><u>Net Pension Obligation (NPO)</u></b>
<b><u>State Employees</u></b>			
9/30/2011	\$162,923,038	100%	\$0
9/30/2012	120,128,454	100	0
9/30/2013	125,647,631	100	0
<b><u>State Policemen</u></b>			
9/30/2011	\$16,723,246	100%	\$0
9/30/2012	13,067,496	100	0
9/30/2013	13,905,606	100	0
<b><u>Local Employees</u></b>			
9/30/2011	Varies	Varies	Varies
9/30/2012	Varies	Varies	Varies
9/30/2013	Varies	Varies	Varies



**SCHEDULE A**

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

**STATE EMPLOYEES**

	<b>SEPTEMBER 30, 2013</b>
<b><u>ASSETS</u></b>	
Actuarial Value of Assets	\$ 4,248,068,397
Present value of future members' contributions to the Annuity Savings Fund	\$ 617,086,053
Present value of future employer contributions to the Pension Accumulation Fund	
Normal contributions	\$ 72,139,997
Unfunded accrued liability contributions	<u>2,560,097,142</u>
Total prospective employer contributions	\$ 2,632,237,139
Total Assets	<u>\$ 7,497,391,589</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	
Service Retirements	\$ 3,692,178,035
Disability Retirements	226,989,236
Beneficiaries of Deceased Members	132,744,667
DROP Participant Accounts	<u>236,224,491</u>
Total	\$ 4,288,136,429
Inactive Members	\$ 111,558,900
Inactive T-section accounts	\$ 9,856,627
Present value of prospective benefits payable on account of present active members:	
Service retirement allowances	\$ 2,674,705,447
Disability retirement allowances	129,015,127
Death Benefits	34,916,156
Termination Benefits	<u>249,202,903</u>
Total	\$ 3,087,839,633
Total Liabilities	<u>\$ 7,497,391,589</u>



**SCHEDULE A** (Continued)

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

**STATE POLICEMEN**

	<b>SEPTEMBER 30, 2013</b>
<b><u>ASSETS</u></b>	
Actuarial Value of Assets	\$ 298,623,566
Present value of future members' contributions to the Annuity Savings Fund	\$ 33,690,286
Present value of future employer contributions to the Pension Accumulation Fund	
Normal contributions	\$ 30,390,905
Unfunded accrued liability contributions	<u>227,471,139</u>
Total prospective employer contributions	\$ 257,862,044
Total Assets	<u>\$ 590,175,896</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	
Service Retirements	\$ 324,579,878
Disability Retirements	7,640,104
Beneficiaries of Deceased Members	15,838,397
DROP Participant Accounts	<u>5,847,765</u>
Total	\$ 353,906,144
Inactive Members	\$ 2,180,284
Present value of prospective benefits payable on account of present active members:	
Service retirement allowances	\$ 222,991,842
Disability retirement allowances	4,616,329
Death Benefits	1,420,920
Termination Benefits	<u>5,060,377</u>
Total	\$ 234,089,468
Total Liabilities	<u>\$ 590,175,896</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, 2013</b>
<b><u>ASSETS</u></b>	
Actuarial Value of Assets	\$ 4,999,766,600
Present value of future members' contributions to the Annuity Savings Fund	\$ 830,980,991
Present value of future employer contributions to the Pension Accumulation Fund	
Normal contributions	\$ 380,752,167
Unfunded accrued liability contributions	<u>2,202,572,530</u>
Total prospective employer contributions	\$ 2,583,324,697
Total Assets	<u>\$ 8,414,072,288</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	
Service Retirements	\$ 3,038,412,639
Disability Retirements	181,512,874
Beneficiaries of Deceased Members	136,524,795
DROP Participant Accounts	<u>86,798,299</u>
Total	\$ 3,443,248,607
Inactive Members	\$ 158,961,301
Present value of prospective benefits payable on account of present active members:	
Service retirement allowances	\$ 4,168,064,423
Disability retirement allowances	201,047,693
Death Benefits	54,410,772
Termination Benefits	<u>388,339,492</u>
Total	\$ 4,811,862,380
Total Liabilities	<u>\$ 8,414,072,288</u>





**SCHEDULE A** (Continued)

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

**TOTAL - ALL GROUPS**

	<b>SEPTEMBER 30, 2013</b>
<b><u>ASSETS</u></b>	
Actuarial Value of Assets	\$ 9,546,458,563
Present value of future members' contributions to the Annuity Savings Fund	\$ 1,481,757,330
Present value of future employer contributions to the Pension Accumulation Fund	
Normal contributions	\$ 483,283,069
Unfunded accrued liability contributions	<u>4,990,140,811</u>
Total prospective employer contributions	\$ 5,473,423,880
Total Assets	<u>\$ 16,501,639,773</u>
<b><u>LIABILITIES</u></b>	
Present value of benefits payable on account of retired members, beneficiaries of deceased members now drawing retirement allowances, and DROP participants	
Service Retirements	\$ 7,055,170,552
Disability Retirements	416,142,214
Beneficiaries of Deceased Members	285,107,859
DROP Participant Accounts	<u>328,870,555</u>
Total	\$ 8,085,291,180
Inactive Members	\$ 272,700,485
Inactive T-section accounts	\$ 9,856,627
Present value of prospective benefits payable on account of present active members:	
Service retirement allowances	\$ 7,065,761,712
Disability retirement allowances	334,679,149
Death Benefits	90,747,848
Termination Benefits	<u>642,602,772</u>
Total	\$ 8,133,791,481
Total Liabilities	<u>\$ 16,501,639,773</u>



**SCHEDULE A** (continued)

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

Valuation Date	Aggregate Accrued Liabilities For			Reported Assets	Portion of Accrued Liabilities Covered by Reported Asset		
	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)		(1)	(2)	(3)
9/30/2013	\$2,363,600	\$8,085,291	\$4,087,709	\$9,546,459	100%	89%	0%
9/30/2012 <sup>1</sup>	2,218,478	7,781,431	3,885,086	9,116,551	100	89	0
9/30/2011 <sup>2</sup>	2,112,356	7,722,942	4,531,498	9,456,158	100	95	0
9/30/2010	2,050,051	7,130,938	4,535,113	9,739,331	100	100	12.3
9/30/2009	1,973,511	6,707,240	5,075,425	9,928,104	100	100	24.6
9/30/2008 <sup>3</sup>	1,860,095	6,275,136	4,943,455	9,905,766	100	100	35.8

<sup>1</sup> Reflects changes in methods.

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

<sup>3</sup> Reflects pay increases payable under Act 2007-297.



**SCHEDULE B**

**DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS  
AS OF SEPTEMBER 30, 2013**

**STATE EMPLOYEES**

(1)	Actuarial Value Beginning of Year	
	a. Actuarial Value Beginning of Year	\$ 4,152,166,843
	b. Adjustment	505,874
	c. Adjusted Actuarial Value Beginning of Year	\$ 4,152,672,717
(2)	Market Value End of Year	\$ 4,459,495,968
(3)	Market Value Beginning of Year	
	a. Market Value Beginning of Year	\$ 4,152,166,843
	b. Adjustment	505,874
	c. Adjusted Market Value Beginning of Year	\$ 4,152,672,717
(4)	Cash Flow	
	a. Contributions	\$ 226,762,639
	b. Benefit Payments and DROP Disbursements	(478,433,993)
	c. Refunds to Members	(17,976,965)
	d. Transfers to Expense Fund - Interest Forfeitures	(3,803,803)
	e. Transfer to Plant and Pre-retirement Death Benefit Funds	(7,312,899)
	f. Transfers to/from Police/Locals	2,305,270
	g. Investment Expenses	(4,252,575)
	h. Net	\$ (282,712,326)
(5)	Investment Income	
	a. Market total: (2) – (3)c – (4)h	\$ 589,535,577
	b. Assumed Rate	8.00%
	c. Amount for Immediate Recognition [(3)c x (5)b] + [(4)a + (4)b + (4)c + (4)d + (4)e + (4)f] * (5)b * 0.5] – (4)g	\$ 325,328,002
	d. Amount for Phased-in Recognition (5)a – (5)c	\$ 264,207,575
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20*(5)d	\$ 52,841,515
	b. First Prior Year	
	c. Second Prior Year	
	d. Third Prior Year	
	e. Fourth Prior Year	
	f. Total Recognized Investment Gain	\$ 52,841,515
(7)	Transfer to Locals:	\$ (61,511)
(8)	Actuarial Value End of Year: (1)c + (4)h + (5)c + (6)f + (7)	\$ 4,248,068,397



**SCHEDULE B** (Continued)

**DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS  
AS OF SEPTEMBER 30, 2013**

**STATE POLICEMEN**

(1)	Actuarial Value Beginning of Year	\$	293,604,464
(2)	Market Value End of Year	\$	313,456,131
(3)	Market Value Beginning of Year	\$	293,604,464
(4)	Cash Flow		
	a. Contributions	\$	18,404,548
	b. Benefit Payments and DROP Disbursements		(39,509,920)
	c. Refunds to Members		(76,648)
	d. Transfers to Plant Fund		(1,936)
	e. Transfers to/from State/Local		(140,463)
	f. Net	\$	(21,324,419)
(5)	Investment Income		
	a. Market total: (2) – (3) – (4)f	\$	41,176,086
	b. Assumed Rate		8.00%
	c. Amount of Immediate Recognition [(3) x (5)b] + [(4)f * (5)b * 0.5]	\$	22,635,380
	d. Amount for Phased-in Recognition (5)a – (5)c	\$	18,540,706
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20*(5)d	\$	3,708,141
	b. First Prior Year		
	c. Second Prior Year		
	d. Third Prior Year		
	e. Fourth Prior Year		
	f. Total Recognized Investment Gain	\$	3,708,141
(7)	Actuarial Value End of Year: (1) + (4)f + (5)c + (6)f	\$	298,623,566



**SCHEDULE B** (Continued)

**DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS  
AS OF SEPTEMBER 30, 2013**

**LOCAL EMPLOYEES**

(1)	Actuarial Value Beginning of Year	
	a. Actuarial Value Beginning of Year	\$ 4,670,779,998
	b. Adjustment	<u>(505,874)</u>
	c. Adjusted Actuarial Value Beginning of Year	\$ 4,670,274,124
(2)	Market Value End of Year	\$ 5,240,014,628
(3)	Market Value Beginning of Year	
	a. Market Value Beginning of Year	\$ 4,670,779,998
	b. Adjustment	<u>(505,874)</u>
	c. Adjusted Market Value Beginning of Year	\$ 4,670,274,124
(4)	Cash Flow	
	a. Contributions	\$ 305,421,466
	b. Benefit Payments and DROP Disbursements	(377,703,824)
	c. Refunds to Members	(25,783,868)
	d. Transfers to Plant Fund	(30,800)
	e. Transfers to/from State/Police	<u>(2,164,807)</u>
	f. Net	\$ (100,261,833)
(5)	Investment Income	
	a. Market total: (2) – (3)c – (4)f	\$ 670,002,336
	b. Assumed Rate	8.00%
	c. Amount of Immediate Recognition [(3)c x (5)b] + [(4)f * (5)b * 0.5]	\$ 369,611,457
	d. Adjustment for Employer Lump Sums	\$ 3,956
	e. Adjusted Amount for Immediate Recognition (5)c + (5)d	\$ 369,615,413
	f. Amount for Phased-In Recognition (5)a – (5)e	\$ 300,386,923
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20*(5)f	\$ 60,077,385
	b. First Prior Year	
	c. Second Prior Year	
	d. Third Prior Year	
	e. Fourth Prior Year	
	f. Total Recognized Investment Gain	<u>\$ 60,077,385</u>
(7)	Transfer from State:	\$ 61,511
(8)	Actuarial Value End of Year: (1)c + (4)f + (5)e + (6)f + (7)	\$ 4,999,766,600



**SCHEDULE B** (Continued)

**SEPTEMBER 30, 2013  
DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS**

**TOTAL - ALL GROUPS**

(1)	Actuarial Value Beginning of Year	\$ 9,116,551,305
(2)	Market Value End of Year	\$ 10,012,966,727
(3)	Market Value Beginning of Year	\$ 9,116,551,305
(4)	Cash Flow	
	a. Contributions	\$ 550,588,653
	b. Benefit Payments and DROP Disbursements	(895,647,738)
	c. Refunds to Members	(43,837,480)
	d. Transfer to Expense Fund – Interest Forfeitures	(3,803,803)
	e. Transfer to Plant and Pre-retirement Death Benefit Funds	(7,345,635)
	f. Investment Expenses	(4,252,575)
	g. Net	\$ (404,298,578)
(5)	Investment Income	
	a. Market total: (2) – (3) – (4)g	\$ 1,300,714,000
	b. Assumed Rate	8.00%
	c. Amount for Immediate Recognition [(3) x (5)b] + [(4)a + (4)b + (4)c + (4)d + (4)e] * (5)b * 0.5] – (4)f	\$ 717,574,839
	d. Adjusted for Employer Lump Sums	\$ 3,956
	e. Adjusted Amount for Immediate Recognition (5)c + (5)d	\$ 717,578,795
	f. Amount for Phased-In Recognition (5)a – (5)e	\$ 583,135,205
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20*(5)f	\$ 116,627,041
	b. First Prior Year	
	c. Second Prior Year	
	d. Third Prior Year	
	e. Fourth Prior Year	
	f. Total Recognized Investment Gain	\$ 116,627,041
(7)	Actuarial Value End of Year: (1) + (4)g + (5)e + (6)f	\$ 9,546,458,563



**SCHEDULE B** (Continued)

**SEPTEMBER 30, 2013**  
**DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS**

<u>Date</u>	<u>Investment Gain/(Loss)</u>	<u>Amount Recognized</u>	<u>Remaining Balance as of 9/30/2013</u>
9/30/2013	\$ 583,135,205	\$ 116,627,041	\$ 466,508,164

Actuarial value of assets was set equal to market value on September 30, 2012.



**SCHEDULE C**

**SUMMARY OF RECEIPTS AND DISBURSEMENTS  
FOR THE YEAR ENDING SEPTEMBER 30, 2013**

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Receipts for the Year

Contributions:		
Members	\$ 223,646,119	
Employers	<u>326,942,534</u>	
Total		\$ 550,588,653
Net Investment Income*		<u>1,299,010,022</u>
TOTAL		\$ 1,849,598,675

Disbursements for the Year

Benefit Payments		\$ (811,929,315)
Refunds to Members		(43,837,480)
DROP Distributions		(83,718,423)
Miscellaneous:		
Transfers to Plant Fund	\$ (60,116)	
Transfers to Expense Fund	(6,352,400)	
Transfers to Pre-retirement Death Benefit Fund	<u>(7,285,519)</u>	
TOTAL		(13,698,035)
TOTAL		\$ (953,183,253)

Excess of Receipts Over Disbursements \$ 896,415,422

Reconciliation of Asset Balances

Market Value of Assets as of September 30, 2012	\$ 9,116,551,305
Excess of Receipts Over Disbursements	896,415,422
Market Value of Assets as of September 30, 2013	<u>\$ 10,012,966,727</u>

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\*Net of \$1,703,978 in investment expenses.





**SCHEDULE D**

**SMOOTHED INTEREST RATE**

**Actual Rate of Return for 5 Year Look Back Period**

<b>Fiscal Year Ending 9/30</b>	<b>Actual Rate of Return for Fiscal Year</b>
2009	-10.03 %
2010	8.47
2011	2.21
2012	18.01
2013	14.60

**SMOOTHED INTEREST RATE:** The assumed rate of return during the 25 year look forward period beginning on the valuation date. This is the investment rate of return expected to be earned during this period based on the actual rates earned during the five year look back period shown above such that the average rate of return over the combined 30 year period is equivalent to the ultimate investment rate of return (currently 8.00%). On this basis, for the September 30, 2013 valuation, the smoothed interest rate during the 25 year look forward period has been determined to be 8.37%.

**ULTIMATE INVESTMENT RATE OF RETURN:** The assumed investment rate of return used in determining the smoothed interest rate described above. This is also the assumed investment rate of return after the 25 year look forward period and is currently 8.00%.

**CORRIDOR AROUND LONG-TERM INVESTMENT RATE OF RETURN:** A corridor of 0.50% around the ultimate investment rate of return is applied in determining the smoothed interest rate.

**LIMITED SMOOTHED INTEREST RATE:** The assumed rate of return during the 25 year look forward period as limited based on the application of the corridor above and used for valuation purposes. Since the smoothed interest rate is 8.37%, the assumed rate for the first 25 years after the valuation date is within the corridor.



**SCHEDULE E**

**OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS**

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of September 30, 2010, submitted to and adopted by the Board on January 27, 2012.

ULTIMATE INVESTMENT RATE OF RETURN: 8.00% per annum, compounded annually, including price inflation at 3.00%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include wage inflation at 3.25% per annum:

**STATE AND LOCAL EMPLOYEES**

<b>Service</b>	<b>Annual Rate</b>	<b>Service</b>	<b>Annual Rate</b>
0	7.25 %	7	5.00 %
1	7.25	8	5.00
2	6.00	9 to 13	4.75
3	5.50	14 to 16	4.50
4	5.25	17	4.00
5	5.25	18 & Over	3.75
6	5.25		

**STATE POLICEMEN**

5% per year for all years of service



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

**STATE AND LOCAL EMPLOYEES**

Age	Death*	Annual Rate of					
		Disability		Withdrawal			
		Years of Service		Years of Service			
		0-24	25+	0-4	5-9	10-20	20+
<b><u>Male</u></b>							
20	0.03%	0.04%		28.00%			
25	0.03	0.06		19.50	10.00%		
30	0.05	0.08		17.50	7.00	5.00%	
35	0.08	0.10		16.00	6.00	4.75	
40	0.10	0.27		15.50	4.50	3.50	2.50%
45	0.14	0.42	0.25%	14.00	4.00	3.00	2.25
50	0.20	0.77	0.25	13.00	4.00	2.75	2.00
55	0.36	1.53	0.25	12.00	3.75	2.75	2.00
60	0.71	2.50	0.25	12.00	4.25		
65	1.30			16.00	7.00		
69	1.99			17.00	7.00		

Age	Death*	Annual Rate of					
		Disability		Withdrawal			
		Years of Service		Years of Service			
		0-24	25+	0-4	5-9	10-20	20+
<b><u>Female</u></b>							
20	0.01%	0.04%		34.00%			
25	0.01	0.06		24.00	12.00%		
30	0.02	0.08		20.00	8.25	6.50%	
35	0.03	0.14		18.00	7.25	6.00	
40	0.04	0.29		16.00	6.00	4.00	3.00%
45	0.07	0.43	0.25%	14.75	5.25	3.75	2.50
50	0.10	0.69	0.25	14.00	4.50	3.50	2.50
55	0.19	1.24	0.25	14.00	4.00	3.00	2.50
60	0.38	0.25	0.25	14.00	4.00		
65	0.71			14.00	8.50		
69	1.09			14.00	8.50		

\* Rates of pre-retirement mortality are according to the sex distinct RP-2000 Combined Mortality Table Projected with Scale AA to 2015 set forward three years for males and set forward one year for females with an adjustment factor of 0.90% for males and 0.70% for females.



SERVICE RETIREMENT: The assumed annual rates of service retirement for Tier I members 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	
	Male <sup>1</sup>	Female <sup>2</sup>	Male	Female
47 & Under	16.00%	13.00%		
48 to 51	11.00	11.00		
52 to 54	10.00	10.00		
55 to 59	16.00	16.00		
60	16.00	25.00	12.00%	16.00%
61	20.00	16.00	11.00	13.00
62	42.00	32.00	28.00	26.00
63	35.00	28.00	23.00	20.00
64	30.00	25.00	18.00	15.00
65			30.00	28.00
66			30.00	28.00
67			25.00	23.00
68 to 74			23.00	23.00
75 & Above			100.00	100.00

<sup>1</sup>Rates are increased by 10% in year when member attains 25 years of service at or before age 60.

<sup>2</sup>Rates are increased by 7% in year when member attains 25 years of service at or before age 60.

The assumed annual rates of service retirement for Tier II members are as follows:

Age	Annual Rate			
	Less than 25 years of service		25 or more years of service	
	Male	Female	Male	Female
62	40%	45%	55%	60%
63	23	20	35	28
64	18	15	30	25
65	30	28	30	28
66	30	28	30	28
67	25	23	25	23
68 to 74	23	23	23	23
75 & Above	100	100	100	100



**STATE POLICEMEN**

Annual Rate of

<u>Age</u>	<u>Death<sup>1</sup></u>		<u>Disability</u>	<u>Withdrawal<sup>2</sup></u>
	<u>Male</u>	<u>Female</u>		
20	0.03%	0.01%	0.08%	3.00%
25	0.03	0.01	0.10	3.00
30	0.05	0.02	0.14	2.50
35	0.08	0.03	0.22	1.75
40	0.10	0.04	0.34	1.75
45	0.14	0.07	0.46	1.75
50	0.20	0.10	0.60	
55	0.36	0.19		
60	0.71	0.38		
62	0.91	0.50		
65	1.30	0.71		

<sup>1</sup> Rates of pre-retirement mortality are according to the sex distinct RP-2000 Combined Mortality Table Projected with Scale AA to 2015 set forward three years for males and set forward one year for females with an adjustment factor of 0.90% for males and 0.70% for females.

<sup>2</sup> A rate of 4.00% is assumed during the first four years of employment.

Annual Rate of Service Retirement for Tier I Members

<u>Age</u>	<u>Under Age 60 with &lt;20 years of service and all over age 60</u>	<u>Under Age 60 with between 20 and 24 years of service</u>	<u>Under Age 60 with 25 or more years of service</u>
< 52			25.00%
52	10.00%	25.00%	25.00
53	10.00	25.00	25.00
54	10.00	25.00	25.00
55	10.00	15.00	25.00
56	10.00	15.00	25.00
57	10.00	15.00	25.00
58	10.00	15.00	25.00
59	10.00	15.00	25.00
60	40.00		
62	40.00		
65	100.00		



Annual Rate of Service Retirement for Tier II Members

<u>Age</u>	<u>Under Age 60 with &lt;20 years of service and all over age 60</u>	<u>Under Age 60 with between 20 and 24 years of service</u>	<u>Under Age 60 with 25 or more years of service</u>
55			
56	40.00%	60.00%	75.00%
57	10.00	15.00	25.00
58	10.00	15.00	25.00
59	10.00	15.00	25.00
60	40.00		
62	40.00		
65	100.00		

**DEATH AFTER RETIREMENT:** The rates of mortality for the period after service retirement are according to the sex distinct RP-2000 Combined Mortality Table Projected with Scale AA to 2015 set forward three years for males and two years for females. The rates of mortality for the period after disability retirement are according to the sex distinct RP-2000 Disabled Mortality Table.

**DEATH IN ACTIVE SERVICE BENEFIT:** For those eligible for service retirement who die in active service, it is assumed that 75% of beneficiaries will elect the lump sum death benefit and 25% will elect the Option 3 allowance.

**BENEFITS PAYABLE UPON SEPARATION FROM SERVICE:** For active members who separate from service prior to eligibility for a service retirement allowance, the liability is assumed to be the greater of the value of the refund of contributions and the value of the deferred annuity.

**UNUSED SICK LEAVE:** 2.25% load on service retirement liabilities for active members (No load for Tier II members).

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

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

**ASSET METHOD:** 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. The actuarial value of assets was set equal to the market value on September 30, 2012.

**LIABILITY FOR CURRENT INACTIVE MEMBERS:** Member Contribution Balance is multiplied by a factor of 2.5 for State Employees, and 3.0 for Local Employees and State Policemen.



**VALUATION INTEREST RATE SMOOTHING:** The valuation liabilities are calculated using a smoothed interest rate method. The interest rate assumed during the look forward period (currently 25 years from the valuation date) is the investment rate of return expected to be earned during the look forward period based on the actual rate of return earned during the look back period (currently 5 years) such that the average assumed rate of return over the combined 30 year period is equivalent to the assumed ultimate investment rate of return (currently 8.00%). The interest rate after the 25 year look forward period is the ultimate investment rate of return of 8.00%.

**CORRIDOR LIMIT ON INTEREST SMOOTHING:** The smoothed interest rate used during the 25 year look forward period is limited to a corridor of 0.50% around the ultimate investment rate of return.



## **SCHEDULE F**

### **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 (See Schedules D and E for a description of the interest rate used). 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 "individual 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 each 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 G**

### **FUNDING POLICY OF THE ERS BOARD OF CONTROL**

The purpose of the funding policy is to state the overall funding objectives for the Employees Retirement System of Alabama (System), the benchmarks that will be used to measure progress in achieving those goals, and the methods and assumptions that will be employed to develop the benchmarks.

The Board's funding policy applies to all plans administered by the Board of Control. The funding policy reflects the Board's long-term strategy for stability in funding of the plans.

#### **I. Funding Objectives**

The goal in requiring employer and member contributions to the System is to accumulate sufficient assets during a member's employment to fully finance the benefits the member is expected to receive throughout retirement. In meeting this objective, the System will strive to meet the following funding objectives:

- To maintain an increasing funded ratio (ratio of system actuarial value of assets to actuarial accrued liabilities) that reflects a trend of improved actuarial condition. The long-term objective is to attain a funded ratio which is consistent with the fiscal health and long-term stability of the System.
- To maintain adequate asset levels to finance the benefits promised to members and monitor the future demands for liquidity.
- To develop a pattern of contribution rates expressed as a percentage of member payroll or as a dollar amount for employers with no active members as measured by valuations prepared in accordance with applicable State laws and the principles of practice prescribed by the Actuarial Standards Board. In no event will the employer contribution rate be negative.
- To provide intergenerational equity for taxpayers with respect to System costs.

#### **II. Benchmarks**

To track progress in achieving the previously outlined funding objectives, the following benchmarks will be measured annually as of the valuation date. The valuation date is the date that the annual actuarial valuation of the System's assets and liabilities is prepared. This date is currently September 30<sup>th</sup> each year with due recognition that a single year's results may not be indicative of long-term trends:

- **Funded ratio** – The funded ratio, defined as the actuarial value of assets divided by the actuarial accrued liability, should increase over time, before adjustments for changes in benefits, actuarial methods, and/or actuarial assumptions. An open amortization period is one for which the amortization period is recalculated on a yearly basis and the ending date of the amortization



period is a variable with each recalculation. A closed amortization period is one which is calculated over a fixed period and at the end of that period, the amount is fully amortized.

• **Unfunded Actuarial Accrued Liability (UAAL)**

- **Transitional UAAL** - The UAAL established as of the initial valuation date for which this funding policy is adopted shall be known as the Transitional UAAL (applicable only to employers participating in the System as of the adoption date of the funding policy).
- **New Incremental UAAL** - Each subsequent valuation will produce a New Incremental UAAL consisting of all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuation.

• **UAAL Amortization Period and Contribution Rates for All Employers**

- For those employers with a funded percentage less than 100% in the valuation prior to the adoption of the funding policy: In each valuation 1/15<sup>th</sup> of the Transitional UAAL will be amortized over a closed period. The closed period shall be the amortization period for the valuation preceding the adoption of the funding policy not to exceed 30 years. The remaining Transitional UAAL each year will be amortized over an open period. The open period shall be the amortization period for the valuation preceding the adoption of the funding policy not to exceed 30 years. After 15 years the entire Transitional UAAL will be closed.
- For those employers with a funded percentage 100% or greater in the valuation prior to the adoption of the funding policy: In each valuation 1/15<sup>th</sup> of the Transitional UAAL will be amortized over a 30 year closed period. The remaining Transitional UAAL each year will be amortized over a 30 year open period. After 15 years the entire Transitional UAAL will be closed.
- Each New Incremental UAAL shall be amortized over a closed 30 year period.
- Employer Normal Contribution Rate – the contribution rate determined as of the valuation date each year based on the provisions of Alabama Code Section 36-27-24.
- In each valuation subsequent to the adoption of this funding policy the required employer contribution rate will be determined by the summation of the employer Normal Contribution Rate, a contribution rate for administrative expenses, a contribution rate for the pre-retirement death benefit fund, the individual amortization rate for each of the New Incremental UAAL bases, the individual amortization rate for each of the 15 closed periods for the Transitional UAAL and the amortization of any remaining open portion of the Transitional UAAL. If the resulting contribution rate will not support the cash flow and



projected benefit payment needs of a particular unit or employer then the RSA staff may approve a more aggressive funding policy for these units or employers.

**•UAAL Amortization Period for Employers joining the System after the Implementation of this Funding Policy**

- For Employers joining the System after the implementation of this Funding Policy, the employer contribution rate shall be computed as the sum of the employer Normal Contribution rate, a contribution rate for administrative expenses, a contribution rate for the pre-retirement death benefit fund and the initial UAAL contribution rate. The initial UAAL contribution rate shall be determined by amortizing the initial UAAL over a closed period equal to the expected future working lifetime of the active membership. This initial amortization period shall not be less than 10 years nor greater than 30 years.
- In subsequent years the UAAL and employer contribution rate shall be determined in accordance with the rules of the Funding Policy described in the previous section.

- Special Consideration**--If the resulting contribution rate will not support the cash flow and projected benefit payment needs of a particular unit or employer then the RSA staff may approve a more aggressive funding policy for these units or employers.

**III.Methods and Assumptions**

The actuarial funding method used to develop the benchmarks will be the Entry Age Normal (EAN) actuarial cost method. The actuarial methods and assumptions used will be those last adopted by the Board based upon the advice and recommendation of the actuary including the Interest Smoothing methodology. The actuary shall conduct an investigation into the system's experience at least every five years and utilize the results of the investigation to form the basis for those recommendations which shall include the Interest Smoothing Methodology.

**IV.Funding Policy Progress**

The Board will periodically have projections of funded status performed to assess the current and expected future progress towards the overall funding goals of the System.



**SCHEDULE H**

**PROJECTION OF TRANSITIONAL UAL  
AND AMORTIZATION OF BASES**

**PROJECTION OF THE OPEN TRANSITIONAL UAL**

**STATE EMPLOYEES**

<b>Valuation Date</b>	<b>Transitional UAL Beginning of Year (1)</b>	<b>Transitional closed (2)</b>	<b>Transitional remaining open (3)=(1)-(2)</b>	<b>8% interest (4)=(3)*.08</b>	<b>Amortization Payment (5)</b>	<b>Transitional Open UAL End of Year (6)=(3)+(4)-(5)</b>
9/30/2012	2,483,987,366	165,599,158	2,318,388,208	185,471,057	148,697,195	2,355,162,070
9/30/2013	2,355,162,070	168,225,862	2,186,936,208	174,954,897	140,266,104	2,221,625,001
9/30/2014	2,221,625,001	170,894,231	2,050,730,770	164,058,462	131,530,135	2,083,259,097
9/30/2015	2,083,259,097	173,604,925	1,909,654,172	152,772,334	122,481,739	1,939,944,767
9/30/2016	1,939,944,767	176,358,615	1,763,586,151	141,086,892	113,113,202	1,791,559,841
9/30/2017	1,791,559,841	179,155,984	1,612,403,857	128,992,309	103,416,645	1,637,979,520
9/30/2018	1,637,979,520	181,997,725	1,455,981,796	116,478,544	93,384,019	1,479,076,320
9/30/2019	1,479,076,320	184,884,540	1,294,191,780	103,535,342	83,007,103	1,314,720,020
9/30/2020	1,314,720,020	187,817,146	1,126,902,874	90,152,230	72,277,497	1,144,777,607
9/30/2021	1,144,777,607	190,796,268	953,981,339	76,318,507	61,186,625	969,113,221
9/30/2022	969,113,221	193,822,644	775,290,577	62,023,246	49,725,725	787,588,098
9/30/2023	787,588,098	196,897,025	590,691,073	47,255,286	37,885,849	600,060,510
9/30/2024	600,060,510	200,020,170	400,040,340	32,003,227	25,657,859	406,385,708
9/30/2025	406,385,708	203,192,855	203,192,854	16,255,428	13,032,419	206,415,864
9/30/2026	206,415,864	206,415,864	0	0	0	0

**STATE POLICEMEN**

<b>Valuation Date</b>	<b>Transitional UAL Beginning of Year (1)</b>	<b>Transitional closed (2)</b>	<b>Transitional remaining open (3)=(1)-(2)</b>	<b>8% interest (4)=(3)*.08</b>	<b>Amortization Payment (5)</b>	<b>Transitional Open UAL End of Year (6)=(3)+(4)-(5)</b>
9/30/2012	223,751,421	14,916,761	208,834,660	16,706,773	13,394,275	212,147,158
9/30/2013	212,147,158	15,153,368	196,993,790	15,759,503	12,634,823	200,118,470
9/30/2014	200,118,470	15,393,728	184,724,742	14,777,979	11,847,908	187,654,813
9/30/2015	187,654,813	15,637,901	172,016,912	13,761,353	11,032,851	174,745,413
9/30/2016	174,745,413	15,885,947	158,859,467	12,708,757	10,188,957	161,379,267
9/30/2017	161,379,267	16,137,927	145,241,341	11,619,307	9,315,515	147,545,133
9/30/2018	147,545,133	16,393,904	131,151,229	10,492,098	8,411,801	133,231,527
9/30/2019	133,231,527	16,653,941	116,577,586	9,326,207	7,477,074	118,426,719
9/30/2020	118,426,719	16,918,103	101,508,616	8,120,689	6,510,578	103,118,728
9/30/2021	103,118,728	17,186,455	85,932,273	6,874,582	5,511,539	87,295,315
9/30/2022	87,295,315	17,459,063	69,836,252	5,586,900	4,479,170	70,943,982
9/30/2023	70,943,982	17,735,996	53,207,987	4,256,639	3,412,663	54,051,962
9/30/2024	54,051,962	18,017,321	36,034,641	2,882,771	2,311,196	36,606,216
9/30/2025	36,606,216	18,303,108	18,303,108	1,464,249	1,173,928	18,593,429
9/30/2026	18,593,429	18,593,429	0	0	0	0



**SCHEDULE H** (Continued)

**AMORTIZATION SCHEDULE FOR CLOSED BASES  
AS OF SEPTEMBER 30, 2012**

**STATE EMPLOYEES**

<b>Valuation Date</b>	<b>Balance of Transitional Closed 9/30/2012</b>	<b>Annual Amortization Payment</b>
9/30/2012	\$165,599,158	\$10,621,228
9/30/2013	168,225,862	10,966,418
9/30/2014	170,717,514	11,322,827
9/30/2015	173,052,088	11,690,819
9/30/2016	175,205,436	12,070,770
9/30/2017	177,151,101	12,463,070
9/30/2018	178,860,119	12,868,120
9/30/2019	180,300,809	13,286,334
9/30/2020	181,438,540	13,718,140
9/30/2021	182,235,483	14,163,979
9/30/2022	182,650,343	14,624,309
9/30/2023	182,638,061	15,099,599
9/30/2024	182,149,507	15,590,336
9/30/2025	181,131,132	16,097,022
9/30/2026	179,524,601	16,620,175
9/30/2027	177,266,394	17,160,331
9/30/2028	174,287,375	17,718,041
9/30/2029	170,512,324	18,293,878
9/30/2030	165,859,432	18,888,429
9/30/2031	160,239,758	19,502,303
9/30/2032	153,556,636	20,136,128
9/30/2033	145,705,039	20,790,552
9/30/2034	136,570,890	21,466,245
9/30/2035	126,030,316	22,163,897
9/30/2036	113,948,844	22,884,224
9/30/2037	100,180,528	23,627,962
9/30/2038	84,567,008	24,395,870
9/30/2039	66,936,499	25,188,736
9/30/2040	47,102,683	26,007,370
9/30/2041	24,863,528	26,852,610
9/30/2042	0	0

**STATE POLICE**

<b>Valuation Date</b>	<b>Balance of Transitional Closed 9/30/2012</b>	<b>Annual Amortization Payment</b>
9/30/2012	\$14,916,761	\$956,734
9/30/2013	15,153,368	987,828
9/30/2014	15,377,809	1,019,932
9/30/2015	15,588,102	1,053,080
9/30/2016	15,782,070	1,087,305
9/30/2017	15,957,331	1,122,642
9/30/2018	16,111,275	1,159,128
9/30/2019	16,241,049	1,196,800
9/30/2020	16,343,533	1,235,696
9/30/2021	16,415,320	1,275,856
9/30/2022	16,452,690	1,317,321
9/30/2023	16,451,584	1,360,134
9/30/2024	16,407,577	1,404,339
9/30/2025	16,315,844	1,449,980
9/30/2026	16,171,132	1,497,104
9/30/2027	15,967,719	1,545,760
9/30/2028	15,699,377	1,595,997
9/30/2029	15,359,330	1,647,867
9/30/2030	14,940,209	1,701,423
9/30/2031	14,434,003	1,756,719
9/30/2032	13,832,004	1,813,813
9/30/2033	13,124,751	1,872,762
9/30/2034	12,301,969	1,933,626
9/30/2035	11,352,501	1,996,469
9/30/2036	10,264,232	2,061,355
9/30/2037	9,024,016	2,128,349
9/30/2038	7,617,588	2,197,520
9/30/2039	6,029,475	2,268,939
9/30/2040	4,242,894	2,342,680
9/30/2041	2,239,646	2,418,818
9/30/2042	0	0



**SCHEDULE H** (Continued)

**AMORTIZATION SCHEDULE FOR CLOSED BASES  
AS OF SEPTEMBER 30, 2013**

**STATE EMPLOYEES**

	<b>Balance of Transitional Closed 9/30/2013</b>	<b>Annual Amortization Payment</b>	<b>Balance of New Incremental UAAL 9/30/2013</b>	<b>Annual Amortization Payment</b>
9/30/2013	\$168,225,862	\$10,789,700	\$36,709,210	\$2,354,462
9/30/2014	170,894,231	11,140,366	37,291,485	2,430,982
9/30/2015	173,425,404	11,502,427	37,843,822	2,509,989
9/30/2016	175,797,009	11,876,256	38,361,339	2,591,563
9/30/2017	177,984,513	12,262,235	38,838,683	2,675,789
9/30/2018	179,961,039	12,660,757	39,269,988	2,762,752
9/30/2019	181,697,165	13,072,232	39,648,835	2,852,542
9/30/2020	183,160,707	13,497,079	39,968,200	2,945,249
9/30/2021	184,316,484	13,935,734	40,220,406	3,040,970
9/30/2022	185,126,068	14,388,646	40,397,069	3,139,802
9/30/2023	185,547,508	14,856,277	40,489,033	3,241,845
9/30/2024	185,535,031	15,339,106	40,486,310	3,347,205
9/30/2025	185,038,728	15,837,627	40,378,010	3,455,989
9/30/2026	184,004,200	16,352,350	40,152,261	3,568,309
9/30/2027	182,372,186	16,883,801	39,796,134	3,684,279
9/30/2028	180,078,160	17,432,525	39,295,545	3,804,018
9/30/2029	177,051,888	17,999,082	38,635,171	3,927,649
9/30/2030	173,216,957	18,584,052	37,798,336	4,055,297
9/30/2031	168,490,262	19,188,033	36,766,906	4,187,094
9/30/2032	162,781,450	19,811,644	35,521,164	4,323,175
9/30/2033	155,992,321	20,455,523	34,039,682	4,463,678
9/30/2034	148,016,184	21,120,327	32,299,179	4,608,748
9/30/2035	138,737,151	21,806,738	30,274,365	4,758,532
9/30/2036	128,029,385	22,515,457	27,937,783	4,913,184
9/30/2037	115,756,279	23,247,209	25,259,621	5,072,863
9/30/2038	101,769,572	24,002,744	22,207,528	5,237,731
9/30/2039	85,908,394	24,782,833	18,746,400	5,407,957
9/30/2040	67,998,233	25,588,275	14,838,155	5,583,716
9/30/2041	47,849,816	26,419,894	10,441,492	5,765,186
9/30/2042	25,257,908	27,278,540	5,511,625	5,952,555
9/30/2043	0	0	0	0



**SCHEDULE H** (Continued)

**AMORTIZATION SCHEDULE FOR CLOSED BASES  
AS OF SEPTEMBER 30, 2013**

**STATE POLICE**

	<b>Balance of Transitional Closed 9/30/2013</b>	<b>Annual Amortization Payment</b>	<b>Balance of New Incremental UAAL 9/30/2013</b>	<b>Annual Amortization Payment</b>
9/30/2013	\$15,153,368	\$971,909	\$170,613	\$10,943
9/30/2014	15,393,728	1,003,496	173,319	11,298
9/30/2015	15,621,730	1,036,110	175,886	11,666
9/30/2016	15,835,358	1,069,784	178,292	12,045
9/30/2017	16,032,403	1,104,552	180,510	12,436
9/30/2018	16,210,444	1,140,450	182,515	12,840
9/30/2019	16,366,830	1,177,514	184,275	13,258
9/30/2020	16,498,662	1,215,783	185,760	13,689
9/30/2021	16,602,771	1,255,296	186,932	14,133
9/30/2022	16,675,697	1,296,093	187,753	14,593
9/30/2023	16,713,659	1,338,217	188,180	15,067
9/30/2024	16,712,535	1,381,709	188,168	15,557
9/30/2025	16,667,829	1,426,614	187,664	16,062
9/30/2026	16,574,641	1,472,979	186,615	16,584
9/30/2027	16,427,634	1,520,851	184,960	17,123
9/30/2028	16,220,994	1,570,279	182,633	17,680
9/30/2029	15,948,395	1,621,313	179,564	18,254
9/30/2030	15,602,953	1,674,005	175,675	18,848
9/30/2031	15,177,185	1,728,410	170,881	19,460
9/30/2032	14,662,949	1,784,584	165,091	20,093
9/30/2033	14,051,401	1,842,583	158,206	20,746
9/30/2034	13,332,930	1,902,467	150,117	21,420
9/30/2035	12,497,098	1,964,297	140,706	22,116
9/30/2036	11,532,569	2,028,136	129,846	22,835
9/30/2037	10,427,038	2,094,051	117,399	23,577
9/30/2038	9,167,150	2,162,108	103,214	24,343
9/30/2039	7,738,415	2,232,376	87,127	25,135
9/30/2040	6,125,112	2,304,928	68,963	25,951
9/30/2041	4,310,193	2,379,838	48,529	26,795
9/30/2042	2,275,170	2,457,183	25,616	27,666
9/30/2043	0	0	0	0



## **SCHEDULE I**

### **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:

- Tier 1 - the 3 highest years in the last 10 years of creditable service
- Tier 2 - the 5 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**

Tier I	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.
Tier II	A retirement allowance is payable upon the request of any member who has attained age 62 and completed at least 10





years of creditable service (age 56 with 10 years of creditable service for a full-time certified firefighter, police officer or correctional officer).

Amount of Allowance

Tier I

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.

Tier II

Upon service retirement a member receives a retirement allowance equal to 1.65% of the member's average final compensation multiplied by the number of years of creditable service. The benefit is capped at 80% of the member's average final compensation.

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

Tier I

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.

Tier II

Upon disability retirement a member receives a retirement allowance equal to 1.65% of the member's average final compensation multiplied by the number of years of creditable service. The benefit is capped at 80% of the member's average final compensation.

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 (age 62 for Tier II members).

#### 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.

The effect of Act 2011-27 is that no new participants will be allowed to enter DROP with an effective participation date after June 1, 2011.

#### Member Contributions

##### Tier I

Prior to October 1, 2011, regular members contributed 5.0% of salary. Full-time certified police officers, firefighters and correctional officers contributed 6.0% of salary. DROP participants continue to contribute during the DROP period, but receive a refund of these contributions and regular interest upon retirement.

Beginning October 1, 2011, the contribution rates were increased to 7.25% for regular members and 8.25% for full-time certified police officers, firefighters and correctional officers, for all State employees and for local employees whose employers elect to do so.

Beginning October 1, 2012, the contribution rates were increased to 7.50% for regular members and 8.50% for full-time certified police officers, firefighters and correctional officers, for all State employees and for local employees whose employers elect to do so.

##### Tier II

Regular members contribute 6% of salary and full-time certified firefighters, police officers and correctional officers contribute 7% of salary.

##### Both

If positive investment performance results in a decrease in the total contribution rate paid by employers and employees participating in the System, the Retirement System of Alabama shall first reduce the employee contribution rate.

“Regular Interest” is 4% which is the rate adopted by the Board and applied to the balance in each member’s account every year; however, if a member receives a refund of contributions, the interest rate applied to the refund is



lower than the 4% regular rate (Based on Section 36-27-16.3(c)(1)).

#### MEMBERS CLASSIFIED AS STATE POLICEMEN

#### Service Retirement Allowance

##### Condition for Allowance

- |         |   |
|---------|---|
| Tier I  | 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. |
| Tier II | A retirement allowance is payable upon the request of any member who has attained age 56 and completed at least 10 years of creditable service.   |

##### Amount of Allowance

- |         |   |
|---------|---|
| Tier I  | <p>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.</p> <p>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:</p> <ul style="list-style-type: none"><li>- Age 56 or older – bonus service of 4 years reduced by 1 month for each month over the age of 56.</li><li>- Age 52 to 56 – bonus service of 4 years.</li><li>- Age 52 or less (disability retirement only) – bonus service of 4 years.</li><li>- Age 52 or less with 25 or more years of service – bonus service of 4 years.</li></ul> |
| Tier II | Upon service retirement a member receives a retirement allowance equal to 2.375% of the member's average final compensation multiplied by the number of years of his creditable service. The benefit is capped at 80% of the member's average final compensation.   |



## 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

#### Tier I

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.

#### Tier II

Upon retirement for disability, a member receives a retirement allowance equal to 2.375% of the member's average final compensation multiplied by the number of years of his creditable service. The benefit is capped at 80% of the member's average final compensation.

### 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 (age 56 for Tier II members).

### 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.

The effect of Act 2011-27 is that no new participants will be allowed to enter DROP with an effective participation date after June 1, 2011.

#### 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 J**

**SCHEDULE OF MEMBERSHIP DATA  
AS OF SEPTEMBER 30, 2013**

**ACTIVE 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>	408	303	16									727
Avg. Pay	\$26,505	\$29,630	\$23,841									\$27,749
<b>25 to 29</b>	533	1,187	486	5								2,211
Avg. Pay	\$27,504	\$32,596	\$31,700	\$29,136								\$31,164
<b>30 to 34</b>	321	939	1,582	353	1							3,196
Avg. Pay	\$29,176	\$32,644	\$36,106	\$36,632	\$45,990							\$34,454
<b>35 to 39</b>	260	596	1,206	1,044	191	1						3,298
Avg. Pay	\$29,403	\$34,107	\$36,873	\$42,204	\$42,835	\$35,274						\$37,817
<b>40 to 44</b>	244	536	991	958	705	282	4					3,720
Avg. Pay	\$30,564	\$34,004	\$37,590	\$42,884	\$49,684	\$49,998	\$43,403					\$41,215
<b>45 to 49</b>	194	469	765	744	634	1,046	267	5				4,124
Avg. Pay	\$28,357	\$33,154	\$35,773	\$40,388	\$49,871	\$54,637	\$54,615	\$68,452				\$44,170
<b>50 to 54</b>	182	419	769	677	538	1,016	727	170	6			4,504
Avg. Pay	\$29,957	\$32,487	\$35,464	\$39,322	\$46,790	\$51,986	\$61,512	\$55,090	\$56,423			\$45,597
<b>55 to 59</b>	126	329	660	620	467	782	472	278	76	1		3,811
Avg. Pay	\$31,896	\$32,743	\$35,491	\$38,296	\$45,560	\$49,994	\$58,559	\$59,221	\$60,155	\$50,118		\$44,885
<b>60 to 64</b>	168	330	410	397	288	456	150	17	17	2		2,235
Avg. Pay	\$47,623	\$52,734	\$38,319	\$40,325	\$48,481	\$50,950	\$53,443	\$58,815	\$62,394	\$31,507		\$46,737
<b>65 to 69</b>	26	130	200	145	92	134	48	5	2	3		785
Avg. Pay	\$56,407	\$62,611	\$47,074	\$47,059	\$51,308	\$54,449	\$56,394	\$66,256	\$50,387	\$87,505		\$52,564
<b>70 &amp; up</b>	6	36	58	52	34	47	21	3	3	2		262
Avg. Pay	\$81,465	\$67,851	\$47,886	\$45,946	\$45,907	\$60,178	\$57,325	\$61,366	\$139,294	\$53,538		\$54,962
<b>Total</b>	2,468	5,274	7,143	4,995	2,950	3,764	1,689	478	104	8		28,873
Avg. Pay	\$30,336	\$35,039	\$36,482	\$40,812	\$47,988	\$52,220	\$58,639	\$57,921	\$62,400	\$60,340		\$41,421

Average Age:45.43      Average Service:11.52

In addition there are 1,022 employees with annual compensation of \$62,927,875 participating in the DROP as of September 30, 2013.





**SCHEDULE J (Continued)**  
**SCHEDULE OF MEMBERSHIP DATA**  
**AS OF SEPTEMBER 30, 2013**  
**ACTIVE STATE POLICE**

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												
<b>25 to 29</b> Avg. Pay		6 \$42,894	23 \$42,956									29 \$42,943
<b>30 to 34</b> Avg. Pay	1 \$41,172	16 \$44,283	67 \$44,213	28 \$46,908								112 \$44,869
<b>35 to 39</b> Avg. Pay		11 \$44,692	43 \$46,123	47 \$48,001	37 \$61,062	1 \$42,396						139 \$50,594
<b>40 to 44</b> Avg. Pay	1 \$40,759	4 \$42,031	36 \$45,753	41 \$48,835	89 \$58,345	18 \$67,191						189 \$54,288
<b>45 to 49</b> Avg. Pay			20 \$46,379	22 \$51,720	52 \$61,356	55 \$73,599	12 \$77,478					161 \$63,563
<b>50 to 54</b> Avg. Pay	2 \$54,857	2 \$48,113	13 \$47,506	6 \$46,813	19 \$64,461	14 \$72,774	18 \$78,123	4 \$88,137				78 \$65,471
<b>55 to 59</b> Avg. Pay	1 \$18,662	5 \$70,040	5 \$47,707	3 \$63,058	3 \$73,218	6 \$67,899	1 \$53,995	1 \$80,287				25 \$62,316
<b>60 to 64</b> Avg. Pay		3 \$75,307			2 \$65,639	3 \$75,240	2 \$83,801					10 \$75,052
<b>65 to 69</b> Avg. Pay			1 \$76,349									1 \$76,349
<b>70 &amp; up</b> Avg. Pay					1 \$84,276							1 \$84,276
<b>Total</b> Avg. Pay	5 \$42,062	47 \$48,893	208 \$45,388	147 \$48,841	203 \$60,603	97 \$71,667	33 \$77,501	5 \$86,567				745 \$55,534

Average Age:41.92      Average Service:13.79

In addition there are 19 employees with annual compensation of \$1,534,511 participating in the DROP as of September 30, 2013.



**SCHEDULE J (Continued)**  
**SCHEDULE OF MEMBERSHIP DATA**  
**AS OF SEPTEMBER 30, 2013**  
**ACTIVE 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>	1,200	1,111	51									2,362
Avg. Pay	\$20,755	\$26,477	\$33,932									\$23,731
<b>25 to 29</b>	1,276	2,591	1,357	18								5,242
Avg. Pay	\$22,809	\$29,454	\$36,201	\$42,892								\$29,629
<b>30 to 34</b>	896	1,918	2,288	765	26							5,893
Avg. Pay	\$24,269	\$30,396	\$38,085	\$43,041	\$47,260							\$34,166
<b>35 to 39</b>	646	1,432	1,901	1,524	618	15						6,135
Avg. Pay	\$24,493	\$31,839	\$38,157	\$44,965	\$49,999	\$72,316						\$38,155
<b>40 to 44</b>	747	1,494	1,780	1,569	1,531	575	17					7,713
Avg. Pay	\$25,645	\$30,261	\$37,876	\$44,233	\$51,932	\$55,606	\$52,616					\$40,654
<b>45 to 49</b>	580	1,273	1,527	1,275	1,312	1,136	437	10				7,550
Avg. Pay	\$25,995	\$30,933	\$35,601	\$41,506	\$49,010	\$54,503	\$58,334	\$53,051				\$41,587
<b>50 to 54</b>	473	1,092	1,425	1,332	1,109	1,006	685	247	17			7,386
Avg. Pay	\$24,981	\$30,118	\$35,240	\$40,347	\$46,718	\$51,853	\$60,871	\$61,784	\$52,596			\$42,038
<b>55 to 59</b>	329	845	1,229	1,125	946	848	521	292	123	3		6,261
Avg. Pay	\$28,272	\$29,906	\$33,801	\$38,298	\$43,176	\$49,349	\$55,786	\$57,375	\$64,614	\$46,565		\$40,856
<b>60 to 64</b>	209	505	851	709	611	522	240	85	60	14		3,806
Avg. Pay	\$31,666	\$31,978	\$33,370	\$38,677	\$43,303	\$49,330	\$53,649	\$52,090	\$62,038	\$75,660		\$40,168
<b>65 to 69</b>	81	174	339	300	197	134	79	20	14	12		1,350
Avg. Pay	\$26,617	\$31,699	\$33,465	\$39,994	\$45,244	\$47,114	\$52,913	\$54,082	\$62,721	\$59,819		\$39,332
<b>70 &amp; up</b>	53	110	199	138	73	83	31	15	8	9		719
Avg. Pay	\$22,192	\$23,149	\$29,633	\$33,603	\$39,593	\$43,743	\$41,816	\$41,390	\$56,511	\$51,420		\$32,837
<b>Total</b>	6,490	12,545	12,947	8,755	6,423	4,318	2,010	669	222	38		54,417
Avg. Pay	\$24,173	\$30,019	\$36,279	\$41,740	\$47,774	\$51,945	\$57,463	\$57,810	\$62,586	\$62,620		\$38,043

Average Age: 44.25      Average Service: 9.76

In addition there are 473 employees with annual compensation of \$28,621,704 participating in the DROP as of September 30, 2013.



**SCHEDULE J** (Continued)

**SCHEDULE OF MEMBERSHIP DATA  
AS OF SEPTEMBER 30, 2013**

**NUMBER OF SERVICE RETIREMENTS  
AND THEIR BENEFITS BY AGE**

<b>Age</b>	<b>Number of Members</b>	<b>Total Annual Benefits</b>	<b>Average Annual Benefits</b>
Under 50	304	\$ 9,401,061	\$ 30,925
50 – 54	1560	48,158,378	30,871
55 – 59	3148	89,176,566	28,328
60 – 64	6946	168,744,686	24,294
65 – 69	7829	168,198,868	21,484
70 – 74	5954	117,872,919	19,797
75 – 79	4374	79,784,235	18,241
80 – 84	2799	44,790,825	16,002
85 – 89	1548	23,260,462	15,026
90 – 94	536	6,958,031	12,981
95 & Over	148	1,588,508	10,733
Total	35,146	\$ 757,934,539	\$ 21,565

Average Age:68.92

**NUMBER OF DROP PARTICIPANTS  
AND THEIR BENEFITS BY AGE**

<b>Age</b>	<b>Number of Members</b>	<b>Total Annual Benefits</b>	<b>Average Annual Benefits</b>
Under 60	713	\$ 24,314,903	\$ 34,102
60 – 64	644	20,381,057	31,648
65 – 69	126	3,883,712	30,823
70 – 74	26	770,185	29,622
75 – 79	5	125,412	25,082
80 – 84	0	0	0
85 & Over			
Total	1,514	\$ 49,475,269	\$ 32,679

Average Age:60.55



**SCHEDULE J** (Continued)

**SCHEDULE OF MEMBERSHIP DATA  
AS OF SEPTEMBER 30, 2013**

**NUMBER OF BENEFICIARIES  
AND THEIR BENEFITS BY AGE**

<b>Age</b>	<b>Number of Members</b>	<b>Total Annual Benefits</b>	<b>Average Annual Benefits</b>
Under 50	141	\$ 1,356,127	\$ 9,618
50 – 54	100	1,169,710	11,697
55 – 59	178	2,078,245	11,676
60 – 64	302	3,698,799	12,248
65 – 69	407	4,904,816	12,051
70 – 74	538	6,394,870	11,886
75 – 79	607	7,169,401	11,811
80 – 84	556	5,447,205	9,797
85 – 89	464	4,304,883	9,278
90 – 94	202	1,678,910	8,311
95 & Over	68	477,094	7,016
Total	3,563	\$ 38,680,060	\$ 10,856

Average Age: 73.95

**NUMBER OF DISABLED RETIREES  
AND THEIR BENEFITS BY AGE**

<b>Age</b>	<b>Number of Members</b>	<b>Total Annual Benefits</b>	<b>Average Annual Benefits</b>
Under 50	396	\$ 5,462,297	\$ 13,794
50 – 54	505	7,295,337	14,446
55 – 59	774	10,596,341	13,690
60 – 64	888	12,116,660	13,645
65 – 69	699	8,516,844	12,184
70 – 74	356	4,150,570	11,659
75 – 79	197	2,317,198	11,762
80 – 84	97	1,076,402	11,097
85 – 89	42	476,782	11,352
90 – 94	11	88,573	8,052
95 & Over	5	24,998	5,000
Total	3,970	\$ 52,122,002	\$ 13,129

Average Age:61.49