

The experience and dedication you deserve



Report on the Actuarial Valuation of the Employees' Retirement System of Alabama Prepared as of September 30, 2014





The experience and dedication you deserve

July 10, 2015

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 assets and liabilities of the Employees' Retirement System of Alabama, prepared as of September 30, 2014 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, 2014 and to recommend rates of employer contribution. While not verifying the data at the source, the actuary performed tests for consistency and reasonability. The valuation reflects the impact of Act 2013-67 which provides that State policemen hired on or after January 1, 2015 will no longer be eligible for benefits under the code section covering State policemen, but instead will be covered under the provisions pertaining to State employees who are law enforcement officers. This resulted in a change to the method used to amortize the unfunded actuarial accrued liability for State policemen from level percentage of increasing payroll amortization to level dollar amortization expressed as a percentage of current payroll.

On the basis of the valuation, it is recommended that the employer make contributions to the System for State employees (members other than State policemen) at the rate of 13.89% of payroll for Tier I members and 13.25% for Tier II members. It is also recommended that the employer make contributions to the System for State policemen at the rate of 57.25% of payroll for Tier I members and 53.55% for Tier II members for the fiscal year ending September 30, 2017. The contribution rates for local employers for the fiscal year beginning October 1, 2016 will be submitted in a separate report and will include the impact of all assumption changes and employer-elected changes through September 30, 2014.

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 actuarial 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 for State employees. For State policemen the unfunded actuarial accrued liability is being amortized as a level dollar amount expressed as a percentage of current payroll. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System. The assumptions and methods used for funding purposes meet the parameters set for the disclosures presented in the financial section by Governmental Accounting Standards Board (GASB) Statement No. 27 and those outlined in the Board's funding policy.



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.

The necessary GASB Statement No. 67 disclosure information has been provided in a separate supplemental report.

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

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

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

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

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA

Jul Mildel

President

Cathy Turcot

Principal and Managing Director

EAM/CT:jcj



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# REPORT ON THE ACTUARIAL VALUATION OF THE EMPLOYEES' RETIREMENT SYSTEM OF ALABAMA PREPARED AS OF SEPTEMBER 30, 2014

### **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

VALUATION DATE	September 30, 2014	September 30, 2013
Number of active members Annual compensation	28,977 \$ 1,209,550,191	28,873 \$ 1,195,934,558
Number of retired members and beneficiaries Annual retirement allowances	22,118 \$ 466,198,651	21,368 \$ 441,992,587
Number of DROP participants Annual compensation Annual allowances	589 \$ 37,350,488 19,957,619	1,022 \$ 62,927,875 33,590,995
Assets: Actuarial value Market value	\$ 4,388,745,993 4,689,941,510	\$ 4,248,068,397 4,459,495,968
Unfunded actuarial accrued liability	\$ 2,560,498,896	\$ 2,560,097,142
Funded Ratio	63.2%	62.4%
CONTRIBUTIONS FOR FISCAL YEAR ENDING  Tier I (first hired prior to January 1, 2013)  Employer contribution rate	September 30, 2017	September 30, 2016
Normal Accrued liability Death benefit Administration Subtotal Act 2014-429* Total	1.01% 12.51 0.02 <u>0.35</u> 13.89% N/A 13.89%	0.81% 12.36 0.02 <u>0.35</u> 13.54% <u>1.03</u> 14.57%
Tier II (first hired on or after January 1, 2013)  Employer contribution rate  Normal  Accrued liability  Death benefit  Administration  Subtotal  Act 2014-429*  Total	0.37% 12.51 0.02 <u>0.35</u> 13.25% N/A 13.25%	0.33% 12.36 0.02 <u>0.35</u> 13.06% <u>1.03</u> 14.09%
Blended Amortization period	29.8 years	30 years

<sup>\*</sup>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

VALUATION DATE	September 30, 2014	September 30, 2013
Number of active members	715	745
Annual compensation	\$ 40,716,289	\$ 41,373,139
Number of retired members and beneficiaries	861	858
Annual retirement allowances	\$ 38,768,516	\$ 38,090,757
Allidal retilement allowances	φ 30,700,310	φ 30,090,737
Number of DROP participants	16	19
Annual compensation	\$ 1,330,653	\$ 1,534,511
Annual allowances	1,050,716	1,216,314
Assets:		
Actuarial value	\$ 308,999,876	\$ 298,623,566
Market value	329,831,992	313,456,131
Warket value	329,031,992	313,430,131
Unfunded actuarial accrued liability	\$ 231,142,093	\$ 227,471,139
Funded Ratio	57.2%	56.8%
CONTRIBUTION FOR FISCAL YEAR ENDING	September 30, 2017	September 30, 2016
Tier I (first hired prior to January 1, 2013)	ocptember 60, 2017	Cepteriber 60, 2016
Employer contribution rate		
Normal	8.98%	8.71%
Accrued liability**	47.90	32.25
Death benefit	0.02	0.02
Administration	<u>0.35</u>	<u>0.35</u>
Subtotal	57.25%	4 <del>1.33</del> %
Act 2014-429*	N/A	<u>1.28</u>
Total	57.25%	4 <del>2</del> .61%
Tier II (first hired on or after January 1, 2013)		
Employer contribution rate		
Normal	5.28%	5.08%
Accrued liability**	47.90	32.25
Death benefit	0.02	0.02
Administration	<u>0.35</u>	0.35
Subtotal	53.55%	37.70%
Act 2014-429*	N/A	<u>1.28</u>
Total	53.55%	38.98%
Blended Amortization Period	29.8 years	30 years

<sup>\*</sup> Rate required for September 30, 2016 fiscal year to fund the one-time lump sum payment provided for by Act 2014-429.
\*\* Amortization method changed from level percent of increasing payroll to level dollar as a percent of current payroll to reflect the impact of Act 2013-67.



# SUMMARY OF PRINCIPAL RESULTS FOR LOCAL EMPLOYEES

VALUATION DATE	September 30, 2014	September 30, 2013
Number of active members Annual compensation	55,002 \$ 2,136,920,378	54,417 \$ 2,070,203,771
Number of retired members and beneficiaries Annual retirement allowances	21,405 \$ 394,942,043	20,453 \$ 368,653,257
Number of DROP participants Annual compensation Annual allowances	286 \$ 18,472,732 9,305,845	473 \$ 28,621,704 14,667,960
Assets: Actuarial value Market value	\$ 5,436,835,394 5,783,336,465	\$ 4,999,766,600 5,240,014,628
Unfunded actuarial accrued liability	\$ 2,212,071,940	\$ 2,202,572,530
Funded Ratio	71.1%	69.4%
CONTRIBUTIONS FOR FISCAL YEAR ENDING	September 30, 2017	September 30, 2016
Employer contribution rate Normal Accrued liability Death benefit Administration Total  Amortization period	Varies Varies 0.02% <u>0.35</u> Varies	Varies Varies 0.02% <u>0.35</u> Varies



#### SUMMARY OF PRINCIPAL RESULTS FOR ALL GROUPS

VALUATION DATE		September 30, 2014		September 30, 2013	
Number of active members Annual compensation	\$	84,694 3,387,186,858	\$	84,035 3,307,511,468	
Number of retired members and beneficiaries Annual retirement allowances	\$	44,384 899,909,210	\$	42,679 848,736,601	
Number of DROP participants Annual compensation Annual allowances	\$	891 57,153,873 30,314,180	\$	1,514 93,084,090 49,475,269	
Assets: Actuarial value Market value	\$	10,134,581,263 10,803,109,967	\$	9,546,458,563 10,012,966,727	
Unfunded actuarial accrued liability	\$	5,003,712,929	\$	4,990,140,811	
Funded Ratio		66.9%		65.7%	

- Comments on the valuation results as of September 30, 2014 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, 2016 will be submitted in a separate report.
- 3. Since the previous valuation, the interest smoothing methodology has been modified to add a 1/8% corridor on the amount that the discount rate can change in any year. In addition, the amortization method for State policemen has been changed from level percentage of payroll to level dollar amortization due to the impact of Act 2013-67. 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. The Board funding policy is shown in Schedule G.
- 4. Provisions of the System, as summarized in Schedule I, were taken into account in the current valuation. The valuation reflects the impact of Act 2013-67 which provides that State policemen hired on or after January 1, 2015 will no longer be eligible for benefits under the code section covering State policemen, but instead will be covered under the provisions pertaining to State employees who are law enforcement officers.



### **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, 2014 on the basis of which the valuation was prepared.

TABLE 1

THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF SEPTEMBER 30, 2014

GROUP	NUMBER	COMPENSATION
State Employees		
Tier 1	25,385	\$1,101,962,830
Tier 2	3,592	107,587,361
Subtotal	28,977	\$1,209,550,191
DROP	589_	37,350,488
Total	29,566	\$1,246,900,679
State Policemen		
Tier 1	714	\$40,671,340
Tier 2	1_	44,949
Subtotal	715	\$40,716,289
DROP	<u>16</u>	1,330,653
Total	731	\$42,046,942
Local Employees	47.044	04 004 470 700
Tier 1	47,011	\$1,934,178,726
Tier 2	7,991	202,741,652
Subtotal	55,002	\$2,136,920,378
DROP Total	286	18,472,732
Total	55,288	\$2,155,393,110
All Groups		
Tier 1	73,110	\$3,076,812,896
Tier 2	11,584	310,373,962
Subtotal	84,694	\$3,387,186,858
DROP	<u>891</u>	57,153,873
Total	85,585	\$3,444,340,731

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 8,961 inactive members and members for whom incomplete data were submitted, and contribution balances for 18,793 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

Valuation <u>Date</u>	<u>Number</u>	Annual <u>Payroll</u>	Annual Average Pay	% Increase in Average Pay
9/30/2014 <sup>1</sup>	84,694	\$ 3,387,186,858	\$ 39,993	1.61%
9/30/2013 <sup>2</sup>	84,035	3,307,511,468	39,359	6.02
9/30/20123	84,169	3,124,791,422	37,125	-5.88
9/30/20114	85,633	3,377,717,419	39,444	-1.00
9/30/20105	86,967	3,464,913,031	39,842	0.38
9/30/20096	87,647	3,478,635,402	39,689	3.65

<sup>&</sup>lt;sup>1</sup>In addition, there are 891 members with compensation of \$57,153,873 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

<sup>&</sup>lt;sup>2</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>&</sup>lt;sup>3</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>&</sup>lt;sup>4</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>&</sup>lt;sup>5</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>&</sup>lt;sup>6</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.



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, 2014

	GROUP				
TYPE OF RETIREMENT	STATE EMPLOYEES	STATE POLICEMEN	LOCAL EMPLOYEES*	TOTAL	
Service: Number Annual Allowances	18,426 \$ 418,292,303	719 \$ 35,426,318	17,569 \$ 352,003,873	36,714 \$ 805,722,494	
Disability: Number Annual Allowances	2,146 \$ 28,937,348	40 \$ 1,145,028	1,846 \$ 23,711,249	4,032 \$ 53,793,625	
Beneficiaries: Number Annual Allowances	1,546 \$ 18,969,000	102 \$ 2,197,170	1,990 \$ 19,226,921	3,638 \$ 40,393,091	
DROP participants: Number Annual Allowances	589 \$ 19,957,619	16 \$ 1,050,716	286 \$ 9,305,845	891 \$ 30,314,180	
Total: Number Annual Allowances	22,707 \$ 486,156,270	877 \$ 39,819,232	21,691 \$ 404,247,888	45,275 \$ 930,223,390	

<sup>\*</sup> In addition, there are 37 terminated vested pensioners with annual deferred allowances totaling \$167,154.

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**

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 Deferred Retirement Option Plan Fund, the Pre-Retirement Death Benefit Fund, and the
Expense 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, 2014, the market value of assets credited to this Fund amounted to \$2,484,050,207 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 \$8,023,946,610 on September 30, 2014.

### (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, 2014, the market value of assets credited to this Fund amounted to \$295,113,150.

### (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, 2014, the market value of assets credited to this fund amounted to \$32,533,762. 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, 2014, the market value of assets credited to this fund amounted to \$2,186,760. These assets are not included in the valuation.

2. As of September 30, 2014 the total market value of assets exclusive of the Pre-Retirement Death Benefit Fund and the Expense Fund amounted to \$10,803,109,967 as shown in the following table.

TABLE 4

MARKET VALUE OF ASSETS BY FUND
AS OF SEPTEMBER 30, 2014

FUND	MARKET VALUE OF ASSETS
Annuity Savings Fund Pension Accumulation Fund DROP Fund	\$ 2,484,050,207 8,023,946,610 295,113,150
Total Market Value of Assets	\$ 10,803,109,967

3. The five-year market related actuarial value of assets as of September 30, 2014 was \$10,134,581,263. 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, 2014 AND SEPTEMBER 30, 2013

GROUP	SEPTEMBER 30, 2014 ACTUARIAL VALUE	SEPTEMBER 30, 2013 ACTUARIAL VALUE	
State Employees State Policemen Local Employees	\$ 4,388,745,993 308,999,876 5,436,835,394	\$ 4,248,068,397 298,623,566 4,999,766,600	
Total Assets	\$ 10,134,581,263	\$ 9,546,458,563	

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



### **SECTION IV - COMMENTS ON VALUATION**

- Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of September 30, 2014. 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 \$17,142,176,910. Of this amount, \$8,366,276,938 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and DROP participants, \$300,404,778 is for the prospective benefits payable on account of present inactive members and \$8,475,495,194 is for the prospective benefits payable on account of present active members. Against these liabilities the System has total actuarial value of assets of \$10,134,581,263 as of September 30, 2014. The difference of \$7,007,595,647 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, \$1,501,011,309 is the present value of future contributions expected to be made by members to the Annuity Savings Fund, and the balance of \$5,506,584,338 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 1.01% of payroll for Tier I members and 0.37% 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 8.98% of payroll for Tier I members and 5.28% 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 \$502,871,409. When this amount is subtracted from \$5,506,584,338, which is the present value of the total future contributions to be made by the employers, there remains \$5,003,712,929 as the amount of future cost-of-living and accrued liability contributions.



- 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 over a closed 30-year period from the date it is established.
- 6. The accrued liability contribution rate payable by the State is 12.51% of payroll for State employees and 47.90% of payroll for State Policemen determined in accordance with the Board's funding policy. The accrued liability contribution rate for State employees has been calculated on the assumption that the aggregate amount of accrued liability contribution will increase by 3.25% each year. The contribution rate for State policemen has been determined using a level dollar amortization methodology expressed as a percentage of current payroll due to the impact of Act 2013-67. Schedule H of this report shows a projection of the open Transitional UAAL and amortization schedules for all closed bases as of September 30, 2014.
- 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>	Amortization <u>Period</u>	Amortization <u>Payment</u>
Open Transitional	\$2,050,730,770	30	\$131,530,135
Closed Transitional 9/30/2012	170,717,514	28	11,322,827
Closed Transitional 9/30/2013	170,894,231	29	11,140,366
Closed Transitional 9/30/2014	170,894,231	30	10,960,845
New Incremental 9/30/2013	37,291,485	29	2,430,982
New Incremental 9/30/2014	(40,029,335)	30	(2,567,409)
Total	\$2,560,498,896		\$164,817,746
Estimated payroll			\$1,317,741,674
UAAL Contribution Rate			12.51%

### **STATE POLICEMEN**

		Amortization	Amortization
	<u>UAAL</u>	<u>Period</u>	Payment*
Open Transitional	\$184,724,742	30	\$16,408,625
Closed Transitional 9/30/2012	15,377,809	28	1,391,521
Closed Transitional 9/30/2013	15,393,728	29	1,379,563
Closed Transitional 9/30/2014	15,393,728	30	1,367,385
New Incremental 9/30/2013	173,319	29	15,533
New Incremental 9/30/2014	<u>78,767</u>	30	6,997
Total	\$231,142,093		\$20,569,624
Estimated payroll			\$42,939,232
UAAL Contribution Rate			47.90%

<sup>\*</sup> Amortization method changed from level percent of increasing payroll to level dollar as a percent of current payroll to reflect the impact of Act 2013-67.

- 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.



### **SECTION V - CONTRIBUTIONS PAYABLE BY EMPLOYERS**

- 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, 2014 it is recommended that the State make contributions at the following rates for the fiscal year beginning October 1, 2016:

TABLE 7

RECOMMENDED CONTRIBUTION RATES

	PERCENTAGE OF MEMBERS' COMPENSATION FOR FISCAL YEAR ENDING SEPTEMBER 20, 2017					
CONTRIBUTION	STATE EMPLOYEES STATE POLICEMEN			LICEMEN*		
	<u>Tier I</u>	<u>Tier II</u>	<u>Tier I</u>	<u>Tier II</u>		
Normal Accrued liability Death benefit Administration	1.01% 12.51 0.02 <u>0.35</u>	0.37% 12.51 0.02 <u>0.35</u>	8.98% 47.90 0.02 <u>0.35</u>	5.28% 47.90 0.02 <u>0.35</u>		
Total	13.89%	13.25%	57.25%	53.55%		

<sup>\*</sup> Amortization method changed from level percent of increasing payroll to level dollar as a percent of current payroll to reflect the impact of Act 2013-67.

 Contribution rates for Local Employers were submitted in a separate report. The rates for the fiscal year beginning October 1, 2016 were determined as of September 30, 2014, and reflect any elections made pursuant to Act 2011-676 as of April 1, 2015.



### 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, 2014. For State employees, the unfunded accrued liability increased \$401,754; for State policemen, the unfunded accrued liability increased \$3,670,954. 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)

	AMOUNT OF INCREASE / (DECREASE IN UAAL		
ITEM	STATE EMPLOYEES	STATE POLICEMEN	
Interest (8.37%) added to previous unfunded accrued liability	\$ 214.3	\$ 19.0	
Accrued liability contribution*	(150.0)	(12.4)	
Experience:			
Valuation asset growth Pensioners' mortality Turnover and retirements New entrants	(85.2) 10.5 (15.5) 10.6	(6.3) (0.1) 0.8 0.2	
Salary increases Method changes	(55.6) 0.0	(3.5) 0.0	
Amendments Interest Smoothing Data Change Miscellaneous	0.0 68.6 3.4 (0.7)	0.0 5.4 0.5 <u>0.1</u>	
Total Increase/Decrease in UAAL	\$ 0.4	\$ 3.7	

<sup>\*</sup> Equal to the total contribution made to the System less the normal cost for the year adjusted for interest to September 30, 2014.

State Employees:  $(\$243,337,083 \times 1.04185) - (\$95,530,363 \times 1.0837)$ 

State Police: (\$19,800,996 x 1.04185) – (\$7,587,014 x 1.0837)



### **SECTION VII - ACCOUNTING INFORMATION**

Governmental Accounting Standards Board (GASB) has issued Statement No. 67 which replaces Statement 25 for plan years beginning after June 15, 2013. The information required under GASB 67 was issued in a separate report. The following information is provided for informational purposes and for disclosure in the financial statements of the System and the employer under GASB 27. GASB 68 replaces GASB 27 for the employer's fiscal year beginning after June 15, 2014.

1. The following is a distribution of the number of employees by type of membership.

# NUMBER OF ACTIVE AND RETIRED MEMBERS AS OF SEPTEMBER 30, 2014

GROUP	NUMBER				
	State Employees	State Police	Local Employees	Total	
Retirees and beneficiaries currently receiving benefits	22,118	861	21,405	44,384	
DROP participants	589	16	286	891	
Terminated employees entitled to benefits but not yet receiving benefits	2,687	11	6,300	8,998	
Non-vested inactive members who have not contributed for more than 5 years	18,793	0	0	18,793	
Active Members	28,977	<u>715</u>	_55,002	<u>84,694</u>	
Total	73,164	1,603	82,993	157,760	



2. The schedule of funding progress is shown below.

# **SCHEDULE OF FUNDING PROGRESS**

(Dollar amounts in thousands)

Actuarial Valuation <u>Date</u>	Actuarial Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
		тот	AL ALL GROU	JPS		
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 9/30/2014	9,546,459 10,134,581	14,536,600 15,138,294	4,990,141 5,003,713	65.7 66.9	3,400,596 3,444,341	146.7 145.3
9/30/2014	10, 134,361	15, 156,294	5,005,715	00.9	3,444,341	145.5
		STA	ATE EMPLOYE	ES		
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
9/30/2014	4,388,746	6,949,245	2,560,499	63.2	1,246,901	205.3
		ST	ATE POLICEM	FN		
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
9/30/2014	309,000	540,142	231,142	57.2	42,047	549.7
		LOC	CAL EMPLOYE	ES		
9/30/2009	\$4,764,871	\$6,458,721	\$1,693,850	73.8%	\$2,056,381	82.4%
9/30/2009	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	106.7
9/30/2013	4,999,767	7,202,340	2,202,573	69.4	2,098,825	104.9
9/30/2014	5,436,835	7,648,907	2,212,072	71.1	2,155,393	102.6



3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at September 30, 2014. Additional information as of the latest actuarial valuation follows.

	State <u>Employees</u>	State <u>Policemen</u>	Local <u>Employees</u>
Valuation date	9/30/2014	9/30/2014	9/30/2014
Actuarial cost method	Entry age	Entry age	Entry age
Amortization method	Level percent Closed	Level dollar Closed	Level percent Closed
Single equivalent remaining amortization period	29.8 years	29.5 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

	Annual	Percent	Net					
Year	Pension Cost	Of APC	Pension Obligation					
<u>Ending</u>	<u>(APC)</u>	<u>Contributed</u>	<u>(NPO)</u>					
	State Er	<u>nployees</u>						
9/30/2012	\$120,128,454	100%	\$0					
9/30/2013	125,647,631	100	0					
9/30/2014	146,751,655	100	0					
	State Po	<u>olicemen</u>						
9/30/2012	\$13,067,496	100%	\$0					
9/30/2013	13,905,606	100	0					
9/30/2014	15,346,599	100	0					
	, ,							
	Local Employees							
9/30/2012	Varies	Varies	Varies					
9/30/2013	Varies	Varies	Varies					
9/30/2014	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**

055550550000000000000000000000000000000						
	SEPTEMBER 30, 201					
<u>ASSETS</u>						
Actuarial Value of Assets	\$	4,388,745,993				
Present value of future members' contributions to the Annuity Savings Fund	\$	606,952,295				
Present value of future employer contributions to the Pension Accumulation Fund						
Normal contributions Unfunded accrued liability contributions	\$	85,430,335 2,560,498,896				
Total prospective employer contributions	\$	2,645,929,231				
Total Assets	\$	7,641,627,519				
<u>LIABILITIES</u>						
Present value of benefits payable on account of retired members and beneficiaries of deceased members now drawing retirement allowances Service Retirements Disability Retirements Beneficiaries of Deceased Members DROP Participant Accounts Total	\$	3,782,121,066 233,398,076 136,528,256 204,697,680 4,356,745,078				
Inactive Members Inactive T-section accounts	\$ \$	116,057,620 12,027,176				
Present value of prospective benefits payable on account of present active members: Service retirement allowances Disability retirement allowances Death Benefits Termination Benefits Total Total Liabilities	\$ \$ \$	2,741,228,819 130,226,226 35,231,504 250,111,096 3,156,797,645 7,641,627,519				
i otal Liabilities	_Φ	1,041,021,319				



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

### **STATE POLICEMEN**

	SEPT	EMBER 30, 2014
<u>ASSETS</u>		
Actuarial Value of Assets	\$	308,999,876
Present value of future members' contributions to the Annuity Savings Fund	\$	31,744,461
Present value of future employer contributions to the Pension Accumulation Fund		
Normal contributions Unfunded accrued liability contributions	\$	29,647,412 231,142,093
Total prospective employer contributions	\$	260,789,505
Total Assets	<u>\$</u>	601,533,842
<u>LIABILITIES</u>		
Present value of benefits payable on account of retired members and beneficiaries of deceased members now drawing retirement allowances Service Retirements Disability Retirements Beneficiaries of Deceased Members DROP Participant Accounts Total	\$ \$	329,011,278 8,064,884 15,995,733 6,461,692 359,533,587
Inactive Members	\$	2,202,758
Present value of prospective benefits payable on account of present active members: Service retirement allowances Disability retirement allowances Death Benefits Termination Benefits Total	\$ 	229,338,124 4,422,697 1,419,218 4,617,458 239,797,497
Total Liabilities	\$	601,533,842



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

### **LOCAL EMPLOYEES**

	<u> </u>
	<b>SEPTEMBER 30, 2014</b>
<u>ASSETS</u>	1
Actuarial Value of Assets	\$ 5,436,835,394
Present value of future members' contributions to the Annuity Savings Fund	\$ 862,314,553
Present value of future employer contributions to the Pension Accumulation Fund	
Normal contributions Unfunded accrued liability contributions	\$ 387,793,662 2,212,071,940
Total prospective employer contributions	\$ 2,599,865,602
Total Assets	<u>\$ 8,899,015,549</u>
<u>LIABILITIES</u>	
Present value of benefits payable on account of retired members and beneficiaries of deceased members now drawing retirement allowances Service Retirements Disability Retirements Beneficiaries of Deceased Members DROP Participant Accounts Total	\$ 3,227,444,723 191,036,337 147,563,435 83,953,778 \$ 3,649,998,273
Inactive Members	\$ 170,117,224
Present value of prospective benefits payable on account of present active members:  Service retirement allowances Disability retirement allowances Death Benefits Termination Benefits Total	\$ 4,410,300,804 209,518,018 56,683,167 402,398,063 \$ 5,078,900,052
Total Liabilities	\$ 8,899,015,549



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

# **TOTAL - ALL GROUPS**

	SEPTEMBER 30, 2014		
<u>ASSETS</u>			
Actuarial Value of Assets	\$	10,134,581,263	
Present value of future members' contributions to the Annuity Savings Fund	\$	1,501,011,309	
Present value of future employer contributions to the Pension Accumulation Fund			
Normal contributions Unfunded accrued liability contributions	\$	502,871,409 5,003,712,929	
Total prospective employer contributions	\$	5,506,584,338	
Total Assets	<u>\$</u>	17,142,176,910	
<u>LIABILITIES</u>	 		
Present value of benefits payable on account of retired members, beneficiaries of deceased members now drawing retirement allowances, and DROP participants Service Retirements Disability Retirements Beneficiaries of Deceased Members DROP Participant Accounts Total	\$	7,338,577,067 432,499,297 300,087,424 295,113,150 8,366,276,938	
Inactive Members Inactive T-section accounts	\$ \$	288,377,602 12,027,176	
Present value of prospective benefits payable on account of present active members: Service retirement allowances Disability retirement allowances Death Benefits Termination Benefits Total	\$	7,380,867,747 344,166,941 93,333,889 657,126,617 8,475,495,194	
Total Liabilities	<u>\$</u>	17,142,176,910	



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

	Aggre	egate Accrued Lia	abilities For			tion of Acc Liabilities by Repor	3
Valuation Date	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	(1)	(2)	(3)
9/30/2014	\$2,484,050	\$8,366,277	\$4,287,967	\$10,134,581	100%	91%	0%
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
9/30/20112	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

Reflects changes in methods.
 Reflects changes in actuarial assumptions.



# SCHEDULE B

# DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS AS OF SEPTEMBER 30, 2014

# STATE EMPLOYEES

(1)	<ul> <li>Actuarial Value of Assets on September 30, 2013</li> <li>a. Actuarial Value on September 30, 2013</li> <li>b. Adjustment</li> <li>c. Adjusted Actuarial Value on September 30, 2013</li> </ul>	\$ 	4,248,068,397 (4,643,846) 4,243,424,551
(2)	Market Value of Assets on September 30, 2014	\$	4,689,941,510
(3)	Market Value of Assets on September 30, 2013 a. Market Value on September 30, 2013 b. Adjustment c. Adjusted Market Value on September 30, 2013	\$ \$	4,459,495,968 (4,643,840) 4,454,852,128
(4)	Cash Flow a. Contributions b. Benefit Payments and DROP Disbursements c. Refunds to Members d. Transfers to Expense Fund - Interest Forfeitures e. Transfers to/from Police/Locals f. Net	\$ \$	243,337,083 (511,630,508) (16,808,309) (3,347,221) 409,910 (288,039,045)
(5)	Investment Income  a. Market total: (2) – (3)c – (4)f  b. Assumed Rate  c. Amount for Immediate Recognition   [(3)c x (5)b] + [(4)f * (5)b * 0.5]  d. Amount for Phased-in Recognition (5)a – (5)c	\$ \$ \$	523,128,427 8.00% 344,866,608 178,261,819
(6)	Phased-In Recognition of Investment Income  a. Current Year: 0.20*(5)d  b. First Prior Year  c. Second Prior Year  d. Third Prior Year  e. Fourth Prior Year	\$	35,652,364 52,841,515
	f. Total Recognized Investment Gain	\$	88,493,879
(7)	Actuarial Value of Assets on September 30, 2014: (1)c + (4)f + (5)c + (6)f	\$	4,388,745,993



# DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS AS OF SEPTEMBER 30, 2014

# **STATE POLICEMEN**

			1
(1)	Actuarial Value of Assets on September 30, 2013	\$	298,623,566
(2)	Market Value of Assets on September 30, 2014	\$	329,831,992
(3)	Market Value of Assets on September 30, 2013	\$	313,456,131
(4)	Cash Flow a. Contributions b. Benefit Payments and DROP Disbursements c. Refunds to Members d. Transfers to/from State/Local e. Net	\$	19,800,996 (39,314,953) (135,545) (384,387) (20,033,889)
(5)	Investment Income  a. Market total: (2) – (3) – (4)e  b. Assumed Rate  c. Amount of Immediate Recognition   [(3) x (5)b] + [(4)e * (5)b * 0.5]  d. Amount for Phased-in Recognition (5)a – (5)c	\$ \$ \$	36,409,750 8.00% 24,275,135 12,134,615
(6)	Phased-In Recognition of Investment Income a. Current Year: 0.20*(5)d b. First Prior Year c. Second Prior Year d. Third Prior Year e. Fourth Prior Year f. Total Recognized Investment Gain	\$	2,426,923 3,708,141 6,135,064
(7)	Actuarial Value of Assets on September 30, 2014: (1) + (4)e + (5)c + (6)f	\$	308,999,876



# DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS AS OF SEPTEMBER 30, 2014

# **LOCAL EMPLOYEES**

(1)	Actuarial Value of Assets on September 30, 2013 a. Actuarial Value on September 30, 2013 b. Adjustment c. Adjusted Actuarial Value on September 30, 2013	\$	4,999,766,600 4,643,846 5,004,410,446
(2)	Market Value of Assets on September 30, 2014	\$	5,783,336,465
(3)	Market Value of Assets on September 30, 2013 a. Market Value on September 30, 2013 b. Adjustment c. Adjusted Market Value on September 30, 2013	\$ 	5,240,014,628 4,643,840 5,244,658,468
(4)	Cash Flow a. Contributions b. Benefit Payments and DROP Disbursements c. Refunds to Members d. Transfers to/from State/Police e. Net	\$ <del>\$</del>	342,039,642 (397,699,588) (29,476,265) (25,523) (85,161,734)
(5)	Investment Income  a. Market total: (2) – (3)c – (4)e  b. Assumed Rate  c. Amount of Immediate Recognition [(3)c x (5)b] + [(4)e * (5)b * 0.5]  d. Adjustment for Employer Lump Sums  e. Adjusted Amount for Immediate Recognition (5)c + (5)d  f. Amount for Phased-In Recognition (5)a – (5)e	\$ \$\$\$\$	623,839,731 8.00% 416,166,208 (238,744) 415,927,464 207,912,267
(6)	Phased-In Recognition of Investment Income a. Current Year: 0.20*(5)f b. First Prior Year c. Second Prior Year d. Third Prior Year e. Fourth Prior Year f. Total Recognized Investment Gain	\$ 	41,582,453 60,076,765 101,659,218
(7)	Actuarial Value of Assets on September 30, 2014: (1)c + (4)e + (5)e + (6)f	\$	5,436,835,394



# SEPTEMBER 30, 2014 DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

# **TOTAL - ALL GROUPS**

(1)	Actuarial Value of Assets on September 30, 2013	\$	9,546,458,563
(2)	Market Value of Assets on September 30, 2014	\$	10,803,109,967
(3)	Market Value of Assets on September 30, 2013	\$	10,012,966,727
(4)	Cash Flow a. Contributions b. Benefit Payments and DROP Disbursements c. Refunds to Members d. Transfer to Expense Fund – Interest Forfeitures e. Net	\$ 	605,177,721 (948,645,049) (46,420,119) (3,347,221) (393,234,668)
(5)	Investment Income  a. Market total: (2) – (3) – (4)e  b. Assumed Rate  c. Amount for Immediate Recognition   [(3) x (5)b] + [(4)e * (5)b * 0.5]  d. Adjusted for Employer Lump Sums  e. Adjusted Amount for Immediate Recognition (5)c + (5)d  f. Amount for Phased-In Recognition (5)a – (5)e	\$ \$ \$ \$	1,183,377,908 8.00% 785,307,951 (238,744) 785,069,207 398,308,701
(6)	Phased-In Recognition of Investment Income  a. Current Year: 0.20*(5)f  b. First Prior Year  c. Second Prior Year  d. Third Prior Year  e. Fourth Prior Year  f. Total Recognized Investment Gain	\$ 	79,661,740 116,626,421 196,288,161
(7)	Actuarial Value of Assets on September 30, 2014: (1) + (4)e + (5)e + (6)f	\$	10,134,581,263



# SEPTEMBER 30, 2014 DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

<u>Date</u>	Investment <u>Date</u> <u>Gain/(Loss)</u>		Amount Recognized		Remaining Balance as of 9/30/2014	
9/30/2013 9/30/2014	\$	583,135,205 398,308,701	\$	116,626,421 79,661,740	\$	349,881,743 318,646,961

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, 2014

Receipts for the Period		
Contributions:  Members  Employers	\$ 226,014,854 <u>379,162,867</u>	
Total		\$ 605,177,721
Investment Income*		1,189,295,514
TOTAL		\$ 1,794,473,235
Disbursements for the Period		
Benefit Payments Refunds to Members DROP Distributions Miscellaneous: Transfers to Plant Fund Transfers to Expense Fund Transfers to Pre-retirement Death Benefit Fund	\$ (94,418) (6,113,151) (3,057,258)	\$ (859,523,073) (46,420,119) (89,121,976)
TOTAL		(9,264,827)
TOTAL		\$ (1,004,329,995)
Excess of Receipts Over Disbursements		\$ 790,143,240
Reconciliation of Asset Balances		
Market Value of Assets as of September 30, 2013		\$ 10,012,966,727
Excess of Receipts Over Disbursements		790,143,240
Market Value of Assets as of September 30, 2014		\$ 10,803,109,967

<sup>\*</sup>Net of \$1,255,486 in investment expenses.



### **SCHEDULE D**

### **SMOOTHED INTEREST RATE**

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

Fiscal Year Ending 9/30	Actual Rate of Return for Fiscal Year
2010	8.47 %
2011	2.21
2012	18.01
2013	14.60
2014	12.02

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 7.42%.

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. In addition, the limited smoothed interest rate may not increase or decrease by more than  $1/8^{th}$ % each year.

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 7.42%, the assumed rate for the first 25 years after the valuation date is outside the corridor. The smoothed interest rate for valuation purposes is limited to 8.25%.



### **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**

Service	Service Annual Rate		Annual Rate
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**

	Annual Rate of						
<u>Disab</u>	oility		Withdr	awal			
Years of S	Service		Years of	Service			
<u>0-24</u>	<u>25+</u>	<u>0-4</u>	<u>5-9</u>	<u>10-20</u>	<u>20+</u>		
	<u>Male</u>						
0.04% 0.06 0.08 0.10 0.27 0.42 0.77 1.53 2.50	0.25% 0.25 0.25 0.25	28.00% 19.50 17.50 16.00 15.50 14.00 13.00 12.00 12.00 16.00	10.00% 7.00 6.00 4.50 4.00 4.00 3.75 4.25 7.00	5.00% 4.75 3.50 3.00 2.75 2.75	2.50% 2.25 2.00 2.00		
	0.04% 0.06 0.08 0.10 0.27 0.42 0.77 1.53	Male 0.04% 0.06 0.08 0.10 0.27 0.42 0.77 0.42 0.77 0.25 1.53 0.25	Disability           Years of Service         0-24         25+         0-4           Male           0.04%         28.00%           0.06         19.50           0.08         17.50           0.10         16.00           0.27         15.50           0.42         0.25%         14.00           0.77         0.25         13.00           1.53         0.25         12.00           2.50         0.25         12.00	Disability         Withdr           Years of Service         Years of Service         Years of Service           Male           Male           0.04%         28.00%           0.06         19.50         10.00%           0.08         17.50         7.00           0.10         16.00         6.00           0.27         15.50         4.50           0.42         0.25%         14.00         4.00           0.77         0.25         13.00         4.00           1.53         0.25         12.00         3.75           2.50         0.25         12.00         4.25           16.00         7.00	Disability         Withdrawal           Years of Service         Years of Service           0-24         25+         0-4         5-9         10-20           Male           0.04%         28.00%           0.06         19.50         10.00%           0.08         17.50         7.00         5.00%           0.10         16.00         6.00         4.75           0.27         15.50         4.50         3.50           0.42         0.25%         14.00         4.00         3.00           0.77         0.25         13.00         4.00         2.75           1.53         0.25         12.00         3.75         2.75           2.50         0.25         12.00         4.25           16.00         7.00         4.25		

		Annual Rate of						
Age	Death*	Disab	oility		Withdr	<u>rawal</u>		
		Years of	Service		Service			
		<u>0-24</u>	<u>25+</u>	<u>0-4</u>	<u>5-9</u>	<u>10-20</u>	<u>20+</u>	
			<u>Female</u>					
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			

<sup>\*</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.



SERVICE RETIREMENT: The assumed annual rates of service retirement for Tier I members are as follows:

**Annual Rate** 

26.00

20.00

15.00 28.00

28.00

23.00

23.00

100.00

100

28.00

23.00

18.00

30.00

30.00

25.00

23.00

100.00

100

	Under age 65 w years of		Under age 65 with less tha 25 years of service & All over age 65		
<u>Age</u>	Male <sup>1</sup>	Female <sup>2</sup>	Male	<u>Female</u>	
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	

32.00

28.00

25.00

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

100

42.00

35.00

30.00

62

63

64

65

66

67

68 to 74

75 & Above

75 & Above

	Annual Rate				
	Less than 25	years of service	25 or more years of service		
<u>Age</u>	Male	<u>Female</u>	Male	<u>Female</u>	
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	

100

<sup>&</sup>lt;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.



#### **STATE POLICEMEN**

#### Annual Rate of

<u>Age</u>	<u>De</u>	ath1	<u>Disability</u>	Withdrawal <sup>2</sup>
	<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		

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.
 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> < 52	Under Age 60 with <20 years of service and all over age 60	Under Age 60 with between 20 and 24 years of service	Under Age 60 with 25 or more years of service 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>	Under Age 60 with <20 years of service and all over age 60	Under Age 60 with between 20 and 24 years of service	Under Age 60 with 25 or more years of service
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. In our opinion, the projection of the RP-2000 mortality rates with Scale AA continues to provide a sufficient margin in the assumed rates of mortality to allow for additional improvement in mortality experience.

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 market value. In order to reduce short-term volatility in valuation results and because the market value and actuarial value of assets were close in value, the actuarial value of assets was set equal to the market value on September 30, 2012. 5-year smoothing commenced again beginning September 30, 2013.

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. In addition, the limited smoothed interest rate may not increase or decrease by more than 1/8<sup>th</sup> % each year.



#### **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 UAAL AND AMORTIZATION OF BASES

### PROJECTION OF THE OPEN TRANSITIONAL UAAL

#### **STATE EMPLOYEES**

Valuation <u>Date</u>	Transitional UAL Beginning of Year (1)	Transitional closed (2)	Transitional remaining open (3)=(1)-(2)	8% interest (4)=(3)*.08	Amortization Payment (5)	Transitional Open UAL End of Year (6)=(3)+(4)-(5)
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**

Valuation <u>Date</u>	Transitional UAL Beginning of Year (1)	Transitional closed (2)	Transitional remaining open (3)=(1)-(2)	8% interest (4)=(3)*.08	Amortization Payment* (5)	Transitional Open UAL End of Year (6)=(3)+(4)-(5)
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	16,408,625	183,094,096
9/30/2015	183,094,096	15,257,841	167,836,255	13,426,900	14,908,464	166,354,691
9/30/2016	166,354,691	15,123,154	151,231,537	12,098,523	13,433,509	149,896,551
9/30/2017	149,896,551	14,989,655	134,906,896	10,792,552	11,983,433	133,716,015
9/30/2018	133,716,015	14,857,335	118,858,680	9,508,694	10,557,911	117,809,462
9/30/2019	117,809,462	14,726,183	103,083,279	8,246,662	9,156,623	102,173,318
9/30/2020	102,173,318	14,596,188	87,577,130	7,006,170	7,779,252	86,804,048
9/30/2021	86,804,048	14,467,342	72,336,707	5,786,937	6,425,484	71,698,159
9/30/2022	71,698,159	14,339,632	57,358,527	4,588,682	5,095,011	56,852,199
9/30/2023	56,852,199	14,213,050	42,639,149	3,411,132	3,787,526	42,262,754
9/30/2024	42,262,754	14,087,585	28,175,169	2,254,014	2,502,728	27,926,455
9/30/2025	27,926,455	13,963,228	13,963,227	1,117,058	1,240,318	13,839,968
9/30/2026	13,839,968	13,839,968	0	0	0	0

<sup>\*</sup> Amortization method changed from level percent of increasing payroll to level dollar as a percent of current payroll to reflect the impact of Act 2013-67.



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

#### **STATE EMPLOYEES**

#### **STATE POLICE**

	Balance of	Annual	]		Balance of	Annual
Valuation	Transitional	Annual		Valuation	Transitional	Annual
<u>Date</u>	Closed 9/30/2012	Payment		Date	Closed 9/30/2012	Payment*
<u> </u>	010304 3/30/2012	<u>r ayment</u>		<u> Date</u>	0103ca 3/30/2012	<u>r ayment</u>
9/30/2012	\$165,599,158	\$10,621,228		9/30/2012	\$14,916,761	\$956,734
9/30/2013	168,225,862	10,966,418		9/30/2013	15,153,368	987,828
9/30/2014	170,717,514	11,322,827		9/30/2014	15,377,809	1,391,521
9/30/2015	173,052,088	11,690,819		9/30/2015	15,216,513	1,391,521
9/30/2016	175,205,436	12,070,770		9/30/2016	15,042,313	1,391,521
9/30/2017	177,151,101	12,463,070		9/30/2017	14,854,177	1,391,521
9/30/2018	178,860,119	12,868,120		9/30/2018	14,650,990	1,391,521
9/30/2019	180,300,809	13,286,334		9/30/2019	14,431,548	1,391,521
9/30/2020	181,438,540	13,718,140		9/30/2020	14,194,551	1,391,521
9/30/2021	182,235,483	14,163,979		9/30/2021	13,938,594	1,391,521
9/30/2022	182,650,343	14,624,309		9/30/2022	13,662,160	1,391,521
9/30/2023	182,638,061	15,099,599		9/30/2023	13,363,612	1,391,521
9/30/2024	182,149,507	15,590,336		9/30/2024	13,041,180	1,391,521
9/30/2025	181,131,132	16,097,022		9/30/2025	12,692,953	1,391,521
9/30/2026	179,524,601	16,620,175		9/30/2026	12,316,868	1,391,521
9/30/2027	177,266,394	17,160,331		9/30/2027	11,910,696	1,391,521
9/30/2028	174,287,375	17,718,041		9/30/2028	11,472,030	1,391,521
9/30/2029	170,512,324	18,293,878		9/30/2029	10,998,271	1,391,521
9/30/2030	165,859,432	18,888,429		9/30/2030	10,486,612	1,391,521
9/30/2031	160,239,758	19,502,303		9/30/2031	9,934,020	1,391,521
9/30/2032	153,556,636	20,136,128		9/30/2032	9,337,220	1,391,521
9/30/2033	145,705,039	20,790,552		9/30/2033	8,692,676	1,391,521
9/30/2034	136,570,890	21,466,245		9/30/2034	7,996,569	1,391,521
9/30/2035	126,030,316	22,163,897		9/30/2035	7,244,773	1,391,521
9/30/2036	113,948,844	22,884,224		9/30/2036	6,432,834	1,391,521
9/30/2037	100,180,528	23,627,962		9/30/2037	5,555,940	1,391,521
9/30/2038	84,567,008	24,395,870		9/30/2038	4,608,894	1,391,521
9/30/2039	66,936,499	25,188,736		9/30/2039	3,586,085	1,391,521
9/30/2040	47,102,683	26,007,370		9/30/2040	2,481,451	1,391,521
9/30/2041	24,863,528	26,852,610		9/30/2041	1,288,446	1,391,522
9/30/2042	0	0		9/30/2042	-	-

<sup>\*</sup> Amortization method changed from level percent of increasing payroll to level dollar as a percent of current payroll to reflect the impact of Act 2013-67.



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

#### **STATE EMPLOYEES**

	Balance of Transitional Closed 9/30/2013	Annual Amortization <u>Payment</u>	Balance of New Incremental UAAL 9/30/2013	Annual Amortization <u>Payment</u>
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



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

#### STATE POLICE

	Balance of Transitional Closed 9/30/2013	Annual Amortization Payment*	Balance of New Incremental UAAL 9/30/2013	Annual Amortization <u>Payment*</u>
9/30/2013	\$15,153,368	\$971,909	\$170,613	\$10,943
9/30/2014	15,393,728	1,379,563	173,319	15,533
9/30/2015	15,245,663	1,379,563	171,652	15,533
9/30/2016	15,085,753	1,379,563	169,852	15,533
9/30/2017	14,913,049	1,379,563	167,907	15,533
9/30/2018	14,726,530	1,379,563	165,807	15,533
9/30/2019	14,525,089	1,379,563	163,539	15,533
9/30/2020	14,307,533	1,379,563	161,090	15,533
9/30/2021	14,072,572	1,379,563	158,444	15,533
9/30/2022	13,818,815	1,379,563	155,587	15,533
9/30/2023	13,544,756	1,379,563	152,502	15,533
9/30/2024	13,248,774	1,379,563	149,169	15,533
9/30/2025	12,929,112	1,379,563	145,570	15,533
9/30/2026	12,583,878	1,379,563	141,683	15,533
9/30/2027	12,211,025	1,379,563	137,485	15,533
9/30/2028	11,808,343	1,379,563	132,951	15,533
9/30/2029	11,373,447	1,379,563	128,055	15,533
9/30/2030	10,903,760	1,379,563	122,766	15,533
9/30/2031	10,396,497	1,379,563	117,055	15,533
9/30/2032	9,848,653	1,379,563	110,887	15,533
9/30/2033	9,256,982	1,379,563	104,225	15,533
9/30/2034	8,617,978	1,379,563	97,031	15,533
9/30/2035	7,927,852	1,379,563	89,260	15,533
9/30/2036	7,182,517	1,379,563	80,869	15,533
9/30/2037	6,377,555	1,379,563	71,805	15,533
9/30/2038	5,508,196	1,379,563	62,017	15,533
9/30/2039	4,569,289	1,379,563	51,446	15,533
9/30/2040	3,555,269	1,379,563	40,029	15,533
9/30/2041	2,460,127	1,379,563	27,699	15,533
9/30/2042	1,277,373	1,379,563	14,382	15,533
9/30/2043	0	0	0	0

<sup>\*</sup> Amortization method changed from level percent of increasing payroll to level dollar as a percent of current payroll to reflect the impact of Act 2013-67.



# AMORTIZATION SCHEDULE FOR CLOSED BASES AS OF SEPTEMBER 30, 2014

#### **STATE EMPLOYEES**

	Balance of Transitional Closed 9/30/2014	Annual Amortization <u>Payment</u>	Balance of New Incremental UAAL 9/30/2014	Annual Amortization <u>Payment</u>
9/30/2014	\$170,894,231	\$10,960,845	(\$40,029,335)	(\$2,567,409)
9/30/2015	173,604,925	11,317,072	(40,664,273)	(2,650,849)
9/30/2016	176,176,247	11,684,877	(41,266,566)	(2,737,002)
9/30/2017	178,585,470	12,064,635	(41,830,889)	(2,825,955)
9/30/2018	180,807,672	12,456,736	(42,351,405)	(2,917,798)
9/30/2019	182,815,549	12,861,580	(42,821,720)	(3,012,627)
9/30/2020	184,579,214	13,279,581	(43,234,831)	(3,110,537)
9/30/2021	186,065,969	13,711,168	(43,583,080)	(3,211,629)
9/30/2022	187,240,079	14,156,781	(43,858,098)	(3,316,007)
9/30/2023	188,062,505	14,616,876	(44,050,738)	(3,423,778)
9/30/2024	188,490,629	15,091,924	(44,151,020)	(3,535,050)
9/30/2025	188,477,955	15,582,412	(44,148,051)	(3,649,939)
9/30/2026	187,973,780	16,088,840	(44,029,956)	(3,768,562)
9/30/2027	186,922,842	16,611,728	(43,783,790)	(3,891,041)
9/30/2028	185,264,941	17,151,609	(43,395,452)	(4,017,500)
9/30/2029	182,934,528	17,709,036	(42,849,589)	(4,148,068)
9/30/2030	179,860,254	18,284,580	(42,129,487)	(4,282,881)
9/30/2031	175,964,494	18,878,829	(41,216,966)	(4,422,074)
9/30/2032	171,162,825	19,492,391	(40,092,249)	(4,565,792)
9/30/2033	165,363,460	20,125,893	(38,733,837)	(4,714,180)
9/30/2034	158,466,644	20,779,985	(37,118,365)	(4,867,391)
9/30/2035	150,363,991	21,455,334	(35,220,443)	(5,025,581)
9/30/2036	140,937,776	22,152,633	(33,012,498)	(5,188,912)
9/30/2037	130,060,165	22,872,593	(30,464,586)	(5,357,552)
9/30/2038	117,592,385	23,615,953	(27,544,201)	(5,531,672)
9/30/2039	103,383,823	24,383,471	(24,216,064)	(5,711,452)
9/30/2040	87,271,058	25,175,934	(20,441,898)	(5,897,074)
9/30/2041	69,076,809	25,994,152	(16,180,176)	(6,088,729)
9/30/2042	48,608,802	26,838,962	(11,385,861)	(6,286,612)
9/30/2043	25,658,544	27,711,228	(6,010,118)	(6,490,927)
9/30/2044	0	0	0	0



# AMORTIZATION SCHEDULE FOR CLOSED BASES AS OF SEPTEMBER 30, 2014

#### **STATE POLICE**

	Balance of Transitional Closed 9/30/2014	Annual Amortization <u>Payment*</u>	Balance of New Incremental UAAL 9/30/2014	Annual Amortization <u>Payment*</u>
9/30/2014	\$15,393,728	\$1,367,385	\$78,767	\$6,997
9/30/2015	15,257,841	1,367,385	78,072	6,997
9/30/2016	15,111,083	1,367,385	77,321	6,997
9/30/2017	14,952,585	1,367,385	76,510	6,997
9/30/2018	14,781,406	1,367,385	75,634	6,997
9/30/2019	14,596,533	1,367,385	74,688	6,997
9/30/2020	14,396,870	1,367,385	73,666	6,997
9/30/2021	14,181,234	1,367,385	72,563	6,997
9/30/2022	13,948,348	1,367,385	71,371	6,997
9/30/2023	13,696,830	1,367,385	70,084	6,997
9/30/2024	13,425,191	1,367,385	68,694	6,997
9/30/2025	13,131,821	1,367,385	67,193	6,997
9/30/2026	12,814,982	1,367,385	65,572	6,997
9/30/2027	12,472,795	1,367,385	63,821	6,997
9/30/2028	12,103,233	1,367,385	61,930	6,997
9/30/2029	11,704,106	1,367,385	59,888	6,997
9/30/2030	11,273,049	1,367,385	57,682	6,997
9/30/2031	10,807,508	1,367,385	55,300	6,997
9/30/2032	10,304,723	1,367,385	52,727	6,997
9/30/2033	9,761,715	1,367,385	49,949	6,997
9/30/2034	9,175,267	1,367,385	46,948	6,997
9/30/2035	8,541,903	1,367,385	43,707	6,997
9/30/2036	7,857,870	1,367,385	40,207	6,997
9/30/2037	7,119,114	1,367,385	36,427	6,997
9/30/2038	6,321,258	1,367,385	32,345	6,997
9/30/2039	5,459,573	1,367,385	27,936	6,997
9/30/2040	4,528,954	1,367,385	23,174	6,997
9/30/2041	3,523,885	1,367,385	18,031	6,997
9/30/2042	2,438,410	1,367,385	12,477	6,997
9/30/2043	1,266,098	1,367,385	6,478	6,997
9/30/2044	0	0	0	0

<sup>\*</sup> Amortization method changed from level percent of increasing payroll to level dollar as a percent of current payroll to reflect the impact of Act 2013-67.



#### **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. There is a new tier (Tier II) of benefits for all members initially joining the System on and after January 1, 2013. Act 2013-67 provides that State policemen hired on or after January 1, 2015 will no longer be eligible for benefits under the code section covering State policemen, but instead will be covered under the provisions pertaining to State employees who are law enforcement officers. 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 preretirement 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.

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

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.

Tier II

Both



"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

Upon service retirement a member receives a retirement allowance equal to 2.875% of the member's average final compensation multiplied by the number of years of his creditable service.

A member who has attained 20 or more years of creditable service and retires prior to age 60 is eligible to receive a "bonus service credit" up to 4 years as follows:

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

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 preretirement 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, 2014

### **ACTIVE STATE EMPLOYEES**

Attained Age					Complet	ed Years of	Service				
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	490	338	5								833
Avg. Pay	\$25,607	\$30,040	\$29,317								\$27,428
25 to 29	765	1,247	439	4							2,455
Avg. Pay	\$28,737	\$32,576	\$33,246	\$31,556							\$31,498
				. ,							
30 to 34	430	962	1,367	332	3						3,094
Avg. Pay	\$29,976	\$33,945	\$36,800	\$37,829	\$37,116						\$35,075
35 to 39	312	656	1,092	1,093	225	6					3,384
Avg. Pay	\$29,346	\$34,309	\$37,766	\$42,277	\$42,226	\$38,889					\$38,075
40 to 44	000	554	057	040	055	000	0				0.055
Avg. Pay	298 \$29,121	554 \$35,168	957 \$38,763	916 \$44,536	655 \$48,358	269 \$51,436	6 \$54,995				3,655 \$41,558
7.vg. ruy	φ29,121	φ35, 106	φ30,703	φ44,550	φ40,330	φ51,430	φ04,990				φ41,556
45 to 49	247	495	688	704	615	933	296	3			3,981
Avg. Pay	\$32,161	\$35,132	\$36,680	\$41,966	\$48,558	\$54,611	\$53,932	\$57,807			\$44,478
50 to 54	215	441	724	647	523	950	739	170	7		4,416
Avg. Pay	\$30,204	\$34,840	\$36,907	\$40,285	\$47,728	\$53,670	\$60,510	\$56,566	\$58,869		\$46,498
FF to F0											
<b>55 to 59</b> Avg. Pay	128	340	611	571	454	688 ¢50 601	566 \$60,333	360	113	2 \$20,142	3,833
Avg.ray	\$31,376	\$35,099	\$35,730	\$40,460	\$44,010	\$50,601	\$60,322	\$59,936	\$60,273	\$39,142	\$46,513
60 to 64	151	319	380	371	279	441	226	21	15	5	2,208
Avg. Pay	\$32,795	\$50,476	\$38,694	\$42,095	\$47,121	\$50,053	\$53,886	\$62,902	\$69,425	\$48,272	\$45,913
65 to 69	27	121	238	142	94	154	64	5	2	2	849
Avg. Pay	\$34,195	\$56,211	\$49,994	\$45,779	\$55,351	\$51,208	\$56,506	\$60,544	\$50,387	\$93,083	\$51,141
70 & up	9	23	65	52	33	48	28	5	3	3	269
Avg. Pay	\$26,786	\$69,771	\$56,342	\$43,978	\$52,082	\$57,636	\$59,574	\$65,298	\$57,193	\$61,141	\$54,385
Total	2.070	E 400	6 500	4 000	2 004	2 400	1.005	F.C.4	140	40	20 077
Avg. Pay	3,072 \$29,240	5,496 \$35,411	6,566 \$37,684	4,832 \$41,971	2,881 \$47,262	3,489 \$52,608	1,925 \$58,502	564 \$59,073	140 \$60,976	12 \$57,436	28,977 \$41,742
	ψ <b>2</b> 3, <b>24</b> 0	ψυυ, <del>-</del> Η Ι	ψυ1,004	ψ <del>-</del> 1,3/1	ψ <del>+</del> 1,202	ψυ2,000	ψ50,502	ψυθ,073	ψου, 970	ψυ1, <del>1</del> 00	ψ+1,742

Average Age:44.97

Average Service: 11.52

In addition there are 589 employees with annual compensation of \$37,350,488 participating in the DROP as of September 30, 2014.



# SCHEDULE OF MEMBERSHIP DATA AS OF SEPTEMBER 30, 2014

#### **ACTIVE STATE POLICE**

Attained Age					Complet	ed Years of	Service				
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
<b>Under 25</b> Avg. Pay											
<b>25 to 29</b> Avg. Pay			15 \$44,051	1 \$41,821							16 \$43,912
<b>30 to 34</b> Avg. Pay		3 \$47,777	65 \$44,824	26 \$47,658							94 \$45,702
<b>35 to 39</b> Avg. Pay		6 \$43,336	37 \$45,531	53 \$49,223	33 \$60,988						129 \$50,900
<b>40 to 44</b> Avg. Pay		1 \$44,871	34 \$43,255	43 \$51,268	79 \$59,112	22 \$65,974					179 \$54,980
<b>45 to 49</b> Avg. Pay		2 \$41,851	21 \$46,826	28 \$49,510	47 \$63,395	58 \$71,342	20 \$83,518				176 \$63,870
<b>50 to 54</b> Avg. Pay		2 \$60,757	11 \$47,803	7 \$54,615	16 \$62,213	27 \$71,906	15 \$74,039	3 \$84,205			81 \$65,799
<b>55 to 59</b> Avg. Pay	1 \$73,297	3 \$80,369	5 \$47,803	5 \$56,036	1 \$60,949	7 \$72,848		2 \$80,868			24 \$65,259
<b>60 to 64</b> Avg. Pay		3 \$65,802	1 \$46,138	1 \$69,448		4 \$66,391	1 \$107,823	1 \$89,641			11 \$70,547
<b>65 to 69</b> Avg. Pay			1 \$77,010			2 \$75,492	1 \$84,276				4 \$78,067
<b>70 &amp; up</b> Avg. Pay					1 \$84,914						1 \$84,914
<b>Total</b> Avg. Pay	1 \$73,297	20 \$54,597	190 \$45,268	164 \$50,076	177 \$61,035	120 \$70,477	37 \$80,352	6 \$83,999			715 \$56,946

Average Age:42.63

Average Service: 14.62

In addition there are 16 employees with annual compensation of \$1,330,653 participating in the DROP as of September 30, 2014.



### $\underline{\text{SCHEDULE J}} \text{ (Continued)}$

# SCHEDULE OF MEMBERSHIP DATA AS OF SEPTEMBER 30, 2014

#### **ACTIVE LOCAL EMPLOYEES**

Attained Age					Complet	ed Years of	Service				
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	1,315	1,189	23								2,527
Avg. Pay	\$20,539	\$27,446	\$33,470								\$23,906
25 to 29	1 246	2,814	1,228	24							5,412
Avg. Pay	1,346 \$22,743	\$30,196	\$37,722	\$43,883							\$30,111
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30 to 34	851	2,108	2,239	743	24						5,965
Avg. Pay	\$24,342	\$31,156	\$39,033	\$44,328	\$47,605						\$34,847
35 to 39	684	1,486	1,873	1,501	615	13					6,171
Avg. Pay	\$24,989	\$32,585	\$39,693	\$46,139	\$50,241	\$98,527					\$39,009
40 to 44	657	1,546	1,632	1,528	1,547	558	16				7,484
Avg. Pay	\$24,298	\$31,688	\$38,734	\$45,123	\$52,823	\$56,958	\$58,719				\$41,629
45 to 49	F27	1 210	1 440	1 244	1,352	1 102	387	0			7 490
Avg. Pay	537 \$25,094	1,319 \$31,925	1,449 \$36,920	1,244 \$42,312	\$50,366	1,183 \$55,775	\$58,042	9 \$57,299			7,480 \$42,617
_ ,	Ψ20,00 .	<b>40.,020</b>	<del>400,020</del>	ψ ·2,0 ·2	ψου,σσσ	ψου,υ	<del>+00,012</del>	<b>40.</b> ,200			ψ 1 <u>2</u> ,011
50 to 54	465	1,179	1,378	1,236	1,166	989	718	246	15		7,392
Avg. Pay	\$25,477	\$31,641	\$36,195	\$40,460	\$48,097	\$53,309	\$61,191	\$62,013	\$71,190		\$43,033
55 to 59	318	905	1,176	1,115	959	848	598	319	141	4	6,383
Avg. Pay	\$26,414	\$30,503	\$35,039	\$39,666	\$43,883	\$50,213	\$57,916	\$61,040	\$65,871	\$47,333	\$42,251
00.1- 04											
<b>60 to 64</b> Avg. Pay	205	558	854	734	625	535	309	90	68	12	3,990
Avg. ray	\$27,058	\$33,092	\$34,947	\$39,239	\$43,653	\$49,418	\$53,610	\$53,997	\$65,852	\$66,032	\$40,871
65 to 69	73	211	360	310	211	155	88	22	16	12	1,458
Avg. Pay	\$19,911	\$33,859	\$34,390	\$40,468	\$47,181	\$48,052	\$54,863	\$50,746	\$62,547	\$71,064	\$40,277
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70 & up	45	133	187	128	90	79	40	16	12	10	740
Avg. Pay	\$17,853	\$24,566	\$32,562	\$33,001	\$38,779	\$44,883	\$43,425	\$44,864	\$56,335	\$49,538	\$33,846
Total	6,496	13,448	12,399	8,563	6,589	4,359	2,156	702	252	38	55,002
Avg. Pay	\$23,540	\$30,978	\$37,498	\$42,583	\$48,679	\$53,043	\$58,024	\$59,739	\$65,517	\$61,312	\$38,852

Average Age: 44.20

Average Service: 9.83

In addition there are 286 employees with annual compensation of \$18,472,732 participating in the DROP as of September 30, 2014.



# SCHEDULE OF MEMBERSHIP DATA AS OF SEPTEMBER 30, 2014

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

	Number	Total	Average
Age	of Members	Annual Benefits	Annual Benefits
Under 50	282	\$ 8,787,241	\$ 31,160
50 – 54	1565	49,325,745	31,518
55 – 59	3233	94,159,478	29,124
60 – 64	7164	176,871,071	24,689
65 – 69	8581	187,685,057	21,872
70 – 74	6115	122,905,155	20,099
75 – 79	4501	83,971,533	18,656
80 – 84	2961	48,447,956	16,362
85 – 89	1574	23,931,545	15,204
90 – 94	582	7,805,016	13,411
95 & Over	156	1,832,697	11,748
Total	36,714	\$ 805,722,494	\$ 21,946

Average Age: 68.99

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

	Number	Tota	I	Avei	age
Age	of Members	Annual Be	enefits	Annual	Benefits
Under 60	319	\$	11,117,056	\$	34,850
60 – 64	475		16,195,320		34,095
65 – 69	75		2,377,752		31,703
70 – 74	17		409,293		24,076
75 – 79	4		199,154		49,789
80 – 84	1		15,605		15,605
85 & Over					
Total	891	\$	30,314,180	\$	34,023

Average Age:61.09



# SCHEDULE OF MEMBERSHIP DATA AS OF SEPTEMBER 30, 2014

# NUMBER OF BENEFICIARIES AND THEIR BENEFITS BY AGE

	Number	Total	Average
Age	of Members	Annual Benefits	Annual Benefits
Under 50	149	\$ 1,444,858	\$ 9,697
50 – 54	95	1,162,555	12,237
55 – 59	199	2,579,554	12,963
60 – 64	303	3,652,815	12,055
65 – 69	417	5,309,287	12,732
70 – 74	541	6,148,574	11,365
75 – 79	617	7,574,720	12,277
80 – 84	576	5,757,289	9,995
85 – 89	454	4,471,505	9,849
90 – 94	217	1,825,649	8,413
95 & Over	70	466,285	6,661
Total	3,638	\$ 40,393,091	\$ 11,103

Average Age: 73.83

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

	Number	Total	Average
Age	of Members	Annual Benefits	Annual Benefits
Under 50	391	\$ 5,573,160	\$ 14,254
50 – 54	487	7,168,911	14,721
55 – 59	771	10,991,019	14,256
60 – 64	902	12,300,666	13,637
65 – 69	733	9,337,958	12,739
70 – 74	395	4,487,829	11,362
75 – 79	200	2,321,335	11,607
80 – 84	98	1,047,602	10,690
85 – 89	39	444,653	11,401
90 – 94	12	92,599	7,717
95 & Over	4	27,893	6,973
Total	4,032	\$ 53,793,625	\$ 13,342

Average Age:61.68