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Retirement Systems of Alabama

Teachers' Retirement System of Alabama
Report of the Actuary on the Annual Valuation
Prepared as of September 30, 2013

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Cavanaugh Macdonald
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The experience and dedication you deserve

July 18, 2014

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

Members of the Board:

In this report are submitted the results of the annual valuation of the assets and liabilities of the Teachers' Retirement System of Alabama, prepared as of September 30, 2013 in accordance with Section 16-25-19(q) of the act governing the operation of the System.

The purpose of this report is to provide a summary of the funded status of the System as of September 30, 2013, to recommend rates of State contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27). While not verifying the data at source, the actuary performed tests for consistency and reasonability. The System was amended to provide a new benefit structure for members initially joining the System on and after January 1, 2013 (Tier II). Since the previous valuation, the Board has adopted a funding policy, which is shown in Schedule G of the report.

On the basis of the valuation, we have determined employer contribution rates of 11.94% of payroll for Tier I members and 10.84% of payroll for Tier II members for the fiscal year ending September 30, 2016.

The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the Entry Age Normal cost method. Five-year smoothed market value of assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll, on the assumption that payroll will increase by 3.25% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Fund and to reasonable expectations of anticipated experience under the Fund and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the Schedule of Funding Progress and Trend Information shown in the financial section of the Comprehensive Annual Financial Report, and all supporting schedules including the Schedule of Active Member Valuation Data, the Solvency Test and the Analysis of Financial Experience shown in the actuarial section of the Comprehensive Annual Financial Report.

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

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

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

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

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Cathy Turcot
Cathy Turcot
Principal and Managing Director

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

EAM/mjn

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TEACHERS' RETIREMENT SYSTEM OF ALABAMA
REPORT OF THE ACTUARY ON THE ANNUAL VALUATION
PREPARED AS OF SEPTEMBER 30, 2013

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized below:

VALUATION DATE	September 30, 2013	September 30, 2012
Active members		
Number	133,919	133,791
Annual compensation	$ 6,065,042,345	$ 5,936,831,043
Retired members and beneficiaries		
Number	81,745	78,370
Annual allowances	$ 1,767,433,849	$ 1,670,391,576
DROP participants		
Number	3,029	4,436
Annual compensation	$ 198,322,151	$ 285,484,977
Annual allowances	104,007,504	148,607,322
Assets		
Actuarial value	$ 19,629,815,869	$ 18,786,007,955
Market value	20,641,739,259	18,786,007,955
Unfunded accrued liability	$ 10,036,026,524	$ 9,465,359,317
Funded Ratio	66.2%	66.5%
CONTRIBUTIONS FOR FISCAL YEAR ENDING	**September 30, 2016**	**September 30, 2015**
Tier I		
Employer contribution rate		
Normal	1.84%	1.53%
Accrued liability	9.74	9.82
Death benefit	0.02	0.10
Term life	0.01	0.05
Administration	0.33	0.21
Total	11.94%	11.71%
Tier II		
Employer contribution rate		
Normal	0.74%	0.87%
Accrued liability	9.74	9.82
Death benefit	0.02	0.10
Term life	0.01	0.05
Administration	0.33	0.21
Total	10.84%	11.05%
Blended Amortization period	29.9 years	30 years

2. Comments on the valuation results as of September 30, 2013 are given in Section IV and further discussion of the contribution levels is set out in Section V.

3. Schedule D of this report shows the development of the smoothed interest rate used for valuation purposes. Schedule B shows the development of the actuarial value of assets. Schedule E of this report outlines the full set of actuarial assumptions and methods used in the current valuation. Since the previous valuation, the Board has adopted a funding policy, which is shown in Schedule G.

4. The System was amended to provide a new benefit structure for members initially joining the System on and after January 1, 2013 (Tier II). Provisions of the System, as summarized in Schedule I, were taken into account in the current valuation. Section VI of this report shows the certification of the liquidation period used to determine the accrued liability contribution rate.

SECTION II - MEMBERSHIP

1. The following table shows the number of active members and their annual compensation as of September 30, 2013 on the basis of which the valuation was prepared.

TABLE 1

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

GROUP	NUMBER	COMPENSATION
Tier I	127,118	$ 5,808,407,460
Tier II	6,801	256,634,885
Subtotal	133,919	$ 6,065,042,345
DROP	3,029	198,322,151
Total	136,948	$ 6,263,364,496

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 17,643 inactive members and contribution balances for 26,633 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 Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
9/30/2013[1]	133,919	$ 6,065,042,345	$ 45,289	2.06%
9/30/2012[2]	133,791	5,936,831,043	44,374	3.74
9/30/2011[3]	135,768	5,807,655,862	42,776	(0.12)
9/30/2010[4]	136,290	5,836,902,762	42,827	(0.01)
9/30/2009[5]	137,935	5,908,098,156	42,832	1.55
9/30/2008[6]	141,528	5,969,302,850	42,178	6.55

[1] In addition, there are 3,029 employees with annual compensation of $198,322,151 who are currently participating in the DROP program. Employers of the Retirement System contribute on this payroll.

[2] In addition, there are 4,436 employees with annual compensation of $285,484,977 who are currently participating in the DROP program. Employers of the Retirement System contribute on this payroll.

[3] In addition, there are 5,625 employees with annual compensation of $351,906,404 who are currently participating in the DROP program. Employers of the Retirement System contribute on this payroll.

[4] In addition, there are 5,737 employees with annual compensation of $346,301,313 who are currently participating in the DROP program. Employers of the Retirement System contribute on this payroll.

[5] In addition, there are 5,340 employees with annual compensation of $328,823,442 who are currently participating in the DROP program. Employers of the Retirement System contribute on this payroll.

[6] In addition, there are 5,169 employees with annual compensation of $325,038,414 who are currently participating in the DROP program. 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 ON THE ROLL AS OF SEPTEMBER 30, 2013

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES
Service Retirements	72,376	$ 1,649,431,702
Disability Retirements	5,152	57,579,306
Beneficiaries of Deceased Members	4,217	60,422,841
DROP Participants	3,029	104,007,504
Total	84,774	$ 1,871,441,353

4. Schedule J shows the distribution by age and service of the number and average annual compensation of active members included in the valuation and a distribution by age of the number and benefits of retired members and beneficiaries included in the valuation.

SECTION III - ASSETS

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

(a) Annuity Savings Fund

The Annuity Savings Fund is the fund to which are credited all contributions made by members together with regular interest thereon. When a member retires or when a survivor allowance becomes payable the amount of the member's accumulated contributions are transferred from the Annuity Savings Fund to the Pension Accumulation Fund. The market value of assets credited to the Annuity Savings Fund on September 30, 2013, which represent the accumulated contributions of active members to that date, including interest, amounted to $4,261,269,207.

(b) Pension Accumulation Fund

The Pension Accumulation Fund is the fund to which are credited all contributions made by the employer, except those contributions made to the Pre-Retirement Death Benefit Fund, the Life Insurance Fund or the Expense Fund. When a member retires or when a survivor allowance becomes payable, the pension is paid from this fund. In addition, the amount of the member's accumulated contributions is transferred from the Annuity Savings Fund to the Pension Accumulation Fund and the annuity is paid from this fund. On September 30, 2013 the market value of assets credited to this fund amounted to $15,643,908,226.

(c) DROP Fund

The DROP Fund is the fund to which are credited deferred retirement benefits on behalf of members who elect to participate in the DROP, together with regular interest thereon. In addition, member contributions while participating in the DROP, together with regular interest therein, are credited to the Fund. At the end of the DROP deferral period, the member receives the amount of the deferred retirement benefits and contributions plus interest in the member's DROP account. The DROP is closed to new participants as of June 1, 2011. On September 30, 2013, the market value of assets credited to this Fund amounted to $736,561,826.

(d) Pre-Retirement Death Benefit Fund

The Pre-Retirement Death Benefit Fund is the fund to which are credited contributions made by the employer for the special pre-retirement death benefit which became effective October 1, 1983. On September 30, 2013, the market value of assets credited to this fund amounted to $43,035,402. These assets are not included in the valuation and the liabilities associated with these death benefits are not included in the valuation.

(e) Life Insurance Fund

The Life Insurance Fund is the fund to which are credited contributions made by the employer for life insurance benefits which became effective October 1, 1987. On September 30, 2013, the market value of assets credited to this fund amounted to $14,453,376. These assets are not included in the valuation and the liabilities associated with these life insurance benefits are not included in the valuation.

(f) 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 subsection (g) of Section 16-25-14 are credited to the Expense Fund. Additional contributions required to meet the expenses of the retirement system made by the employer are also credited to this fund. On September 30, 2013, the market value of assets credited to this fund amounted to $25,073,132. These assets are not included in the valuation.

2. As of September 30, 2013 the total market value of assets reported exclusive of the Pre-Retirement Death Benefit Fund, the Life Insurance Fund and the Expense Fund amounted to $20,641,739,259 as shown in the following table.

TABLE 4

MARKET VALUE OF ASSETS BY FUND AS OF SEPTEMBER 30, 2013

FUND	MARKET VALUE OF ASSETS
Annuity Savings Fund	$ 4,261,269,207
Pension Accumulation Fund	15,643,908,226
DROP Fund	736,561,826
Total Market Value of Assets	$ 20,641,739,259

3. The five-year market related actuarial value of assets as of September 30, 2013 was $19,629,815,869. Schedule B shows the development of the actuarial value of assets as of September 30, 2013.

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

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of September 30, 2013.

2. The valuation balance sheet shows that the System has total prospective liabilities of $33,991,245,266. Of this amount, $17,666,932,181 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and DROP participants, $563,840,721 is for the prospective benefits payable on account of present inactive members and $15,760,472,364 is for the prospective benefits payable on account of present active members. Against these liabilities, the System has total actuarial value of assets, exclusive of the Pre-Retirement Death Benefit Fund, of $19,629,815,869 as of September 30, 2013. The difference of $14,361,429,397 between the total liabilities and the total actuarial value of assets represents the present value of contributions to be made in the future. Of this amount, $3,474,586,403 is the present value of future contributions expected to be made by members to the Annuity Savings Fund, and the balance of $10,886,842,994 represents the present value of future contributions payable by the employer.

3. The employer's regular contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 1.84% of payroll for Tier I members and 0.74% of payroll for Tier II members are required to provide the benefits of the System.

4. Prospective normal contributions have a present value of $850,816,470. When this amount is subtracted from $10,886,842,994 which is the present value of the total future contributions to be made by the employer, there remains $10,036,026,524 as the amount of future accrued liability contributions.

5. The funding policy adopted by the Board, as shown in Schedule G, provides that one-fifteenth of the unfunded actuarial liability as of September 30, 2012 (Transitional UAAL) will be amortized as a level percent of payroll over a closed period. The closed period shall be the amortization period for the September 30, 2012 valuation, not to exceed 30 years. The remaining Transitional UAAL each year will be amortized over an open period. The open period shall be the amortization period for the

September 30, 2012 valuation, not to exceed 30 years. After 15 years the entire Transitional UAAL will be closed. In each subsequent valuation all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuation will determine a New Incremental UAAL. Each New Incremental UAAL will be amortized as a level percent of payroll over a closed 30–year period from the date it is established.

6. The accrued liability contribution rate is 9.74% of payroll determined in accordance with the Board's funding policy. The accrued liability contribution rate has been calculated on the assumption that the aggregate amount of accrued liability contribution will increase by 3.25% each year. Schedule H of this report shows a projection of the open Transitional UAAL and amortization schedules for all closed bases on September 30, 2013.

7. The following table shows the components of the total unfunded actuarial accrued liability (UAAL) and the derivation of the accrued liability contribution rate in accordance with the funding policy.

TABLE 5

TOTAL UAAL AND UAAL CONTRIBUTION RATE

	UAAL	Amortization Period	Amortization Payment
Open Transitional	$ 8,333,430,875	30	$534,491,072
Closed Transitional 9/30/2012	641,033,144	29	41,788,090
Closed Transitional 9/30/2013	641,033,144	30	41,114,698
New Incremental 9/30/2013	420,529,361	30	26,971,987
	$10,036,026,524		$644,365,847
Estimated Payroll			$6,613,690,198
UAAL Contribution Rate			9.74%

8. A contribution of 0.02% is required to meet the cost of the pre-retirement death benefit program this year. The assets and liabilities of this program are not included in the valuation. A contribution of 0.01% is required to meet the cost of group term-life insurance premiums. The assets and liabilities of this program are not included in the valuation.

9. An additional contribution of 0.33% of payroll is required to cover the expenses of administering the System.

SECTION V - CONTRIBUTIONS PAYABLE BY EMPLOYER

1. The retirement law provides that the employer contributions are to be paid from the same source from which employees' salaries are paid.

2. On the basis of the actuarial valuation prepared as of September 30, 2013 it is recommended that the employer make contributions at the following rates beginning October 1, 2015:

TABLE 6

EMPLOYER CONTRIBUTION RATES AS A PERCENTAGE OF MEMBERS' COMPENSATION*

EMPLOYER CONTRIBUTION	FISCAL YEAR ENDING SEPTEMBER 30, 2016	
	Tier I	Tier II
Normal	1.84%	0.74%
Accrued Liability	9.74	9.74
Death Benefit	0.02	0.02
Term-Life	0.01	0.01
Administration	0.33	0.33
Total	11.94%	10.84%

* All members initially joining the System on and after January 1, 2013 are Tier II members.

3. Contributions at the above rates of payroll are also recommended for payment by the Alabama High School Athletic Association. The following table shows the rates to be paid by special units of the System in addition to the rates shown above and the fiscal year through which these additional rates are required to be paid. These additional rates were determined based on the liabilities for the prior service of members at the time the unit joined the System, amortized over a fixed number of years.

TABLE 7

ADDITIONAL RATES REQUIRED FOR SPECIAL UNITS OF THE SYSTEM

UNIT	ADDITIONAL EMPLOYER RATE	THROUGH FISCAL YEAR ENDING SEPTEMBER 30
Alabama State Employees Association	2.66%	2015
Developing Alabama Youth Foundation	2.74	2017
Alabama Congress of Parents and Teachers	2.15	2020

SECTION VI – ANNUAL ACTUARIAL CERTIFICATION

The following is the annual actuarial certification to the Teachers' Retirement System of Alabama required by Act 2000-732.

1. We hereby certify that there has been a change since the previous valuation in the liquidation period used to determine the accrued liability contribution rate. The accrued liability rate of 9.74% to be paid by employers to the Teachers' Retirement System of Alabama has been determined in accordance with the Funding Policy adopted by the Board and shown in Schedule G of this report.

Signed ______________________________
Edward A. Macdonald, ASA, FCA, MAAA
President

SECTION VII – ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $570,667,207 in the unfunded accrued liability from $9,465,359,317 to $10,036,026,524 during the year ending September 30, 2013.

ANALYSIS OF FINANCIAL EXPERIENCE
(in millions of dollars)

ITEM	AMOUNT OF INCREASE/ (DECREASE) IN UAAL
Interest (8.50%) added to previous unfunded accrued liability	$ 804.6
Accrued liability contribution*	(568.7)
Experience:	
Valuation asset growth	(161.2)
Pensioners' mortality	10.4
Turnover and retirements	(8.2)
New entrants	40.0
Salary increases	(252.6)
Method changes	0.0
Amendments	0.0
Interest Smoothing	610.6
Data changes	95.8
Miscellaneous changes	0.0
Total Increase/(Decrease) in UAAL	$ 570.7

*Equal to the total contributions made to the System less the normal cost for the year adjusted for interest to September 30, 2013 (($1,083,051,758 x 1.0425) – ($516,482,843 x 1.085)).

SECTION VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF SEPTEMBER 30, 2013

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	81,745
DROP participants	3,029
Terminated employees entitled to benefits but not yet receiving benefits	17,643
Non-vested inactive members who have not contributed for more than 5 years	26,633
Active members	133,919
Total	262,969

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

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of 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)
9/30/2008	$20,812,477	$26,804,117	$5,991,640	77.6%	$6,294,341	95.2%
9/30/2009	20,582,348	27,537,400	6,955,052	74.7	6,236,922	111.5
9/30/2010	20,132,779	28,299,523	8,166,744	71.1	6,183,204	132.1
9/30/2011[1]	19,430,135	28,776,316	9,346,181	67.5	6,159,562	151.7
9/30/2012[2]	18,786,008	28,251,367	9,465,359	66.5	6,222,316	152.1
9/30/2013	19,629,816	29,665,843	10,036,027	66.2	6,263,364	160.2

[1]Reflects changes in assumptions.
[2]Reflects changes in methods.

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at September 30, 2013. Additional information as of the latest actuarial valuation follows.

Valuation date	09/30/2013
Actuarial cost method	Entry Age Normal
Amortization method	Level percent closed
Single equivalent remaining amortization period	29.9 years
Asset valuation method	Five-year market related value
Actuarial assumptions:	
Ultimate Investment Rate of Return*	8.00%
Projected salary increases*	3.50 - 8.25%
Cost-of-living adjustments	None
*Includes price inflation at	3.00%

TRENDINFORMATION
($ in 1,000's)

Period Ending	Annual Pension Cost (APC)	Percentage Of APC Contributed	Net Pension Obligation (NPO)
September 30, 2011	$755,944	100%	$0
September 30, 2012	594,771	100	0
September 30, 2013	605,465	100	0

SCHEDULE A

VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE TEACHERS' RETIREMENT SYSTEM OF ALABAMA
AS OF SEPTEMBER 30, 2013

	September 30, 2013
ASSETS	
Actuarial Value of Assets	$ 19,629,815,869
Present value of future members' contributions to the Annuity Savings Fund	$ 3,474,586,403
Present value of future employer contributions to the Pension Accumulation Fund	
Normal contributions	$ 850,816,470
Unfunded accrued liability contributions	10,036,026,524
Total prospective employer contributions	$ 10,886,842,994
Total Assets	$ 33,991,245,266
LIABILITIES	
Present value of benefits payable on account of retired members, beneficiaries of deceased members now drawing retirement allowances, and DROP participants	
Service Retirements	$ 15,975,884,064
Disability Retirements	481,846,836
Beneficiaries of Deceased Members	472,639,455
DROP Participant Accounts	736,561,826
Total	$ 17,666,932,181
Inactive Members	$ 528,848,671
Inactive T-Section Accounts	$ 34,992,050
Present value of prospective benefits payable on account of present active members:	
Service retirement allowances	$ 14,159,633,140
Disability retirement allowances	565,412,469
Death Benefits	98,474,437
Termination Benefits	936,952,318
Total	$ 15,760,472,364
Total Liabilities	$ 33,991,245,266

SCHEDULE A
(continued)

SOLVENCY TEST
($1000's)

	Aggregate Accrued Liabilities For				Portion of Accrued Liabilities Covered by Reported Asset		
Valuation Date	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	(1)	(2)	(3)
9/30/2013	$4,261,269	$17,666,932	$7,737,642	$19,629,816	100%	87%	0.0%
9/30/2012[1]	3,921,179	17,085,972	7,244,216	18,786,008	100	87	0.0
9/30/2011[2]	3,620,301	17,245,088	7,910,927	19,430,135	100	92	0.0
9/30/2010	3,498,959	16,083,293	8,717,271	20,132,779	100	100	6.3
9/30/2009	3,233,664	15,328,508	8,975,228	20,582,348	100	100	22.5
9/30/2008	3,153,859	14,678,975	8,971,283	20,812,477	100	100	33.2

[1] Reflects changes in methods.
[2] Reflects changes in actuarial assumptions

SCHEDULE B

DEVELOPMENT OF SEPTEMBER 30, 2013 ACTUARIAL VALUE OF ASSETS

(1)	Actuarial Value of Assets on September 30, 2012	$ 18,786,007,955
(2)	Market Value of Assets on September 30, 2013	20,641,739,259
(3)	Market Value of Assets on September 30, 2012	18,786,007,955
(4)	Net Cash Flow During the Fiscal Year	
	a. Contributions	1,083,051,758
	b. Benefit Payments and DROP Distributions	1,893,249,777
	c. Refunds to Members	50,031,906
	d. Transfer to Expense Fund	6,069,911
	e. Transfer to Plant and Pre-retirement Death Funds	10,674,750
	f. Investment Expenses	9,459,489
	g. Net Cash Flow: (a. - b. - c. - d. - e. - f.)	(886,434,075)
(5)	Actual Investment Return ((2) - (3) - (4)g.)	2,742,165,379
(6)	Assumed Rate of Return on Assets	8.00%
(7)	Amount for Immediate Recognition ((3) * (6)) + (((4)a. - (4)b. - (4)c. - (4)d. - (4)e.) * .5 * (6)) + (4)f.	1,477,261,142
(8)	Investment Gain/(Loss) for the Fiscal Year ((5) - (7))	1,264,904,237
(9)	Phased-In Recognition of Investment Gain/(Loss)	
	a. Current Fiscal Year: (.2 * (8))	252,980,847
	b. Prior Fiscal Year	0
	c. Second Prior Fiscal Year	0
	d. Third Prior Fiscal Year	0
	e. Fourth Prior Fiscal Year	0
	f. Total Recognized Investment Gain/(Loss) for Fiscal Year	252,980,847
(10)	Actuarial Value of Assets on September 30, 2013 ((1) + (4)g. + (7) + (9)f.)	$ 19,629,815,869

Date	Investment Gain/(Loss)	Amount Recognized	Remaining Balance as of September 30, 2013
9/30/2013	$ 1,264,904,237	$ 252,980,847	$ 1,011,923,390

SCHEDULE C

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

Receipts for the Period		
Contributions:		
Members	$ 477,586,262	
Employer	605,465,496	
Total		$ 1,083,051,758
Investment Income		2,738,418,379*
TOTAL		$ 3,821,470,137
Disbursements for the Period		
Benefit Payments		$ 1,674,074,082
Refunds to Members		50,031,906
DROP Distributions		219,175,695
Miscellaneous:		
Transfers to Plant Fund	$ 184,660	
Transfers to Expense Fund	11,782,400	
Transfers to Pre-retirement Death Benefit Fund	10,490,090	
Total		22,457,150
TOTAL		$ 1,965,738,833
Excess of Receipts over Disbursements		$ 1,855,731,304
Reconciliation of Asset Balances		
Market Value of Assets as of September 30, 2012		$ 18,786,007,955
Excess of Receipts over Disbursements		1,855,731,304
Market Value of Assets as of September 30, 2013		$ 20,641,739,259

*Net of $3,747,000 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
2009	-7.94 %
2010	8.42
2011	1.81
2012	18.30
2013	14.93

SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period beginning on the valuation date. This is the investment rate of return expected to be earned during this period based on the actual rates earned during the five year look back period shown above such that the average rate of return over the combined 30 year period is equivalent to the ultimate investment rate of return (currently 8.00%). On this basis, for the September 30, 2013 valuation, the smoothed interest rate during the 25 year look forward period has been determined to be 8.27%.

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 SMOOTHED INTEREST RATE: A corridor of 0.50% around the ultimate investment rate of return is applied in determining the smoothed interest rate.

LIMITED SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period as limited based on the application of the corridor above and used for valuation purposes. Since the smoothed interest rate is 8.27%, the assumed rate for the first 25 years after the valuation date is within the corridor.

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

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

ULTIMATE INVESTMENT RATE OF RETURN: 8.00% per annum, compounded annually, including price inflation at 3%.

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:

Service	Annual Rate	Service	Annual Rate
0	8.25 %	6	5.00 %
1	6.50	7	4.75
2	5.75	8 to 13	4.50
3	5.50	14 to 18	4.00
4	5.25	19 & Over	3.50
5	5.00		

SEPARATIONS BEFORE SERVICE RETIREMENT: Representative values of the assumed annual rates of death, disability, and withdrawal are as follows:

	Annual Rate of						
Age	Death*	Disability		Withdrawal			
		Years of Service		Years of Service			
		0-24	25+	0-4	5-9	10-20	20+
			Male				
20	0.02%	0.04%		30.00%			
25	0.02	0.05		15.68	10.00%		
30	0.03	0.05		14.25	5.40	5.00%	
35	0.05	0.10		14.25	5.40	3.00	
40	0.07	0.18		14.00	5.40	2.50	1.00%
45	0.09	0.31	0.10%	14.00	5.00	2.50	1.00
50	0.12	0.51	0.10	12.50	4.50	2.50	1.00
55	0.20	0.96	0.10	12.00	4.00	2.50	1.00
60	0.40	0.50	0.10	12.00	4.00		
65	0.77			12.00	6.00		
69	1.20			12.00	6.00		
			Female				
20	0.01%	0.10%		28.50%			
25	0.01	0.10		14.00	8.00%		
30	0.01	0.10		14.00	5.80	4.00%	
35	0.02	0.15		14.00	5.00	3.00	
40	0.03	0.16		12.00	4.50	2.10	1.10%
45	0.04	0.33	0.15%	11.50	3.75	2.10	0.75
50	0.06	0.63	0.15	11.00	3.75	2.10	0.75
55	0.11	0.99	0.15	11.00	3.75	2.50	0.75
60	0.21	0.25	0.25	12.00	4.50		
65	0.40			14.00	6.00		
69	0.62			14.00	6.00		

* Rates of pre-retirement mortality are according to the sex distinct RP-2000 Combined Mortality Table Projected with Scale AA to 2015 set back one year for females with an adjustment of factor of 0.75% for males and 0.50% for females.

SERVICE RETIREMENT:

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

For members first eligible for unreduced benefits upon attaining 25 years of service but before age 65, rates are as follows:

	Annual Rate	
Age Group	Male*	Female**
47 & Under	20.0%	25.0%
48	20.0	17.0
49	20.0	16.0
50 to 52	15.0	16.0
53 to 54	14.0	16.0
55 to 59	15.0	20.0
60	15.0	15.0
61	20.0	25.0
62	35.0	35.0
63	30.0	25.0
64	25.0	30.0

*Retirement rates are increased by 7% in the year first eligible for unreduced retirement from age 50 through age 54 and by 10% from age 55 through age 60.

**Retirement rates are increased by 7% in the year first eligible for unreduced retirement from age 50 through age 54 and by 20% from age 55 through age 60.

For members first eligible for unreduced benefits before attaining 25 years of service and all members age 65 and over, the rates are as follows:

	Annual Rate	
Age Group	Male	Female
60	13.0%	20.0%
61	12.0	15.0
62	28.0	25.0
63	20.0	20.0
64	15.0	18.0
65	30.0	30.0
66	28.0	30.0
67	20.0	25.0
68	20.0	28.0
69	20.0	22.0
70	20.0	25.0
71 to 74	20.0	22.0
75 & Above	100.0	100.0

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

Age Group	Annual Rate: Male, Less than 25 years of service	Male, 25 or more years of service	Female, Less than 25 years of service	Female, 25 or more years of service
62	50.0%	60.0%	50.0%	65.0%
63	20.0	30.0	20.0	25.0
64	15.0	25.0	18.0	30.0
65	30.0	30.0	30.0	30.0
66	28.0	28.0	30.0	30.0
67	20.0	20.0	25.0	25.0
68	20.0	20.0	28.0	28.0
69	20.0	20.0	22.0	22.0
70	20.0	20.0	25.0	25.0
71 to 74	20.0	20.0	22.0	22.0
75 & above	100.0	100.0	100.0	100.0

DEATHS AFTER RETIREMENT: 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 back one year for females. Rates of mortality for the period after disability retirement are according to the RP-2000 Disabled Mortality Table, adjusted for males by a factor of 0.85. Representative values of the assumed annual rates of death after retirement are as follows:

Age	Annual Rate: After Service Retirement, Male	After Service Retirement, Female	After Disability Retirement, Male	After Disability Retirement, Female
35	0.07%	0.04%	1.92%	0.75%
40	0.10	0.05	1.92	0.75
45	0.12	0.08	1.92	0.75
50	0.16	0.12	2.46	1.15
55	0.27	0.21	3.01	1.65
60	0.53	0.41	3.57	2.18
65	1.03	0.80	4.26	2.80
70	1.77	1.38	5.32	3.76
75	3.06	2.26	6.98	5.22
80	5.54	3.74	9.30	7.23
85	9.97	6.35	12.04	10.02
90	17.27	11.39	15.59	14.00
95	25.96	17.74	22.74	19.45

SPOUSE'S BENEFIT: For those eligible for spouse's benefits, it is assumed that 75% will elect the lump sum death benefit payable from the death benefit fund and 25% will elect the spouse's benefit payable from the pension accumulation fund and included in the liabilities of the System.

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. Assumed refunds are reduced by 10% to account for interest accumulation adjustments which are less than the "regular" 4% rate adopted by the Board.

UNUSED SICK LEAVE: 3% load on service retirement liabilities for active members. (No load for Tier II members)

PERCENTAGE MARRIED: 100% of active members are assumed to be married with the husband 3 years older than the wife.

VALUATION 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. The actuarial value of assets was set equal to the market value on September 30, 2012.

LIABILITY FOR CURRENT INACTIVE MEMBERS: Member Contribution Balance is multiplied by a factor of 2.0.

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

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

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (see Schedules D and E for a description of the interest rate used), of each member's expected benefit payable at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the probability of his terminating with a service, disability or survivor's benefit. Future salary increases are also anticipated. The present value of the expected benefits payable on account of the 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 from the System on account of 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 the 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 contributions are determined by subtracting the present value of prospective employer normal contributions and member contributions together with the current assets held from the present value of expected benefits to be paid from the System.

SCHEDULE G

BOARD FUNDING POLICY

The purpose of the funding policy is to state the overall funding objectives for the Teachers' 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 funding policy reflects the Board's long-term strategy for stability in funding of the plan. For that reason, it is critical that this funding policy remain unchanged until its objectives are met.

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 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 30th 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**
  - ➢ In each valuation 1/15th 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.
  - ➢ 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 16-25-21.
  - ➢ 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, a contribution rate for the term life insurance 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.

- **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, a contribution rate for the term life insurance 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.

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

Valuation Date	Transitional UAAL Beginning of Year (1)	Transitional Closed (2)	Transitional Remaining Open (3)=(1)-(2)	8% Interest (4)=(3)*.08	Amortization Payment (5)	Transitional Open UAAL End of Year (6)=(3)+(4)-(5)
9/30/2012	$9,465,359,317	$631,023,954	$8,834,335,363	$706,746,829	$566,618,173	$8,974,464,019
9/30/2013	8,974,464,019	641,033,144	8,333,430,875	666,674,470	534,491,072	8,465,614,273
9/30/2014	8,465,614,273	651,201,098	7,814,413,175	625,153,054	501,202,222	7,938,364,007
9/30/2015	7,938,364,007	661,530,334	7,276,833,673	582,146,694	466,722,853	7,392,257,515
9/30/2016	7,392,257,515	672,023,410	6,720,234,104	537,618,728	431,023,570	6,826,829,262
9/30/2017	6,826,829,262	682,682,926	6,144,146,336	491,531,707	394,074,351	6,241,603,692
9/30/2018	6,241,603,692	693,511,521	5,548,092,171	443,847,374	355,844,523	5,636,095,022
9/30/2019	5,636,095,022	704,511,878	4,931,583,144	394,526,652	316,302,757	5,009,807,039
9/30/2020	5,009,807,039	715,686,720	4,294,120,319	343,529,626	275,417,053	4,362,232,892
9/30/2021	4,362,232,892	727,038,815	3,635,194,077	290,815,526	233,154,724	3,692,854,879
9/30/2022	3,692,854,879	738,570,976	2,954,283,903	236,342,712	189,482,386	3,001,144,229
9/30/2023	3,001,144,229	750,286,057	2,250,858,172	180,068,654	144,365,942	2,286,560,884
9/30/2024	2,286,560,884	762,186,961	1,524,373,923	121,949,914	97,770,566	1,548,553,271
9/30/2025	1,548,553,271	774,276,635	774,276,636	61,942,131	49,660,693	786,558,074
9/30/2026	786,558,074	786,558,074	0	0	0	0

SCHEDULE H
(continued)

AMORTIZATION SCHEDULE FOR CLOSED BASES
AS OF SEPTEMBER 30, 2012

Valuation Date	Balance of Transitional Closed 9/30/2012	Annual Amortization Payment
9/30/2012	$631,023,954	$40,472,727
9/30/2013	641,033,144	41,788,090
9/30/2014	650,527,705	43,146,203
9/30/2015	659,423,718	44,548,455
9/30/2016	667,629,161	45,996,280
9/30/2017	675,043,214	47,491,159
9/30/2018	681,555,513	49,034,621
9/30/2019	687,045,333	50,628,246
9/30/2020	691,380,713	52,273,664
9/30/2021	694,417,505	53,972,559
9/30/2022	695,998,347	55,726,667
9/30/2023	695,951,548	57,537,783
9/30/2024	694,089,889	59,407,761
9/30/2025	690,209,318	61,338,514
9/30/2026	684,087,550	63,332,015
9/30/2027	675,482,539	65,390,306
9/30/2028	664,130,836	67,515,491
9/30/2029	649,745,812	69,709,744
9/30/2030	632,015,733	71,975,311
9/30/2031	610,601,681	74,314,508
9/30/2032	585,135,307	76,729,730
9/30/2033	555,216,402	79,223,446
9/30/2034	520,410,267	81,798,208
9/30/2035	480,244,881	84,456,650
9/30/2036	434,207,821	87,201,491
9/30/2037	381,742,956	90,035,540
9/30/2038	322,246,853	92,961,695
9/30/2039	255,064,906	95,982,950
9/30/2040	179,487,149	99,102,396
9/30/2041	94,743,725	102,323,223
9/30/2042	0	0
9/30/2043		

SCHEDULE H
(continued)

AMORTIZATION SCHEDULE FOR CLOSED BASES AS OF SEPTEMBER 30, 2013

Valuation Date	Balance of Transitional Closed 9/30/2013	Annual Amortization Payment	Balance of New Incremental UAAL 9/30/2013	Annual Amortization Payment
9/30/2013	$641,033,144	$41,114,698	$420,529,361	$26,971,987
9/30/2014	651,201,098	42,450,925	427,199,723	27,848,577
9/30/2015	660,846,260	43,830,581	433,527,124	28,753,655
9/30/2016	669,883,380	45,255,074	439,455,639	29,688,149
9/30/2017	678,218,976	46,725,864	444,923,941	30,653,014
9/30/2018	685,750,630	48,244,455	449,864,842	31,649,237
9/30/2019	692,366,225	49,812,400	454,204,793	32,677,837
9/30/2020	697,943,124	51,431,303	457,863,339	33,739,867
9/30/2021	702,347,271	53,102,820	460,752,540	34,836,412
9/30/2022	705,432,232	54,828,662	462,776,330	35,968,596
9/30/2023	707,038,149	56,610,593	463,829,841	37,137,575
9/30/2024	706,990,608	58,450,438	463,798,653	38,344,546
9/30/2025	705,099,419	60,350,077	462,557,999	39,590,744
9/30/2026	701,157,296	62,311,454	459,971,894	40,877,443
9/30/2027	694,938,425	64,336,576	455,892,203	42,205,960
9/30/2028	686,196,923	66,427,515	450,157,619	43,577,654
9/30/2029	674,665,162	68,586,409	442,592,574	44,993,928
9/30/2030	660,051,965	70,815,468	433,006,052	46,456,230
9/30/2031	642,040,655	73,116,970	421,190,306	47,966,058
9/30/2032	620,286,936	75,493,272	406,919,473	49,524,955
9/30/2033	594,416,619	77,946,803	389,948,076	51,134,516
9/30/2034	564,023,146	80,480,074	370,009,406	52,796,388
9/30/2035	528,664,923	83,095,677	346,813,771	54,512,270
9/30/2036	487,862,440	85,796,286	320,046,603	56,283,919
9/30/2037	441,095,149	88,584,666	289,366,412	58,113,146
9/30/2038	387,798,095	91,463,667	254,402,579	60,001,824
9/30/2039	327,358,275	94,436,237	214,752,962	61,951,883
9/30/2040	259,110,700	97,505,414	169,981,316	63,965,319
9/30/2041	182,334,142	100,674,340	119,614,502	66,044,192
9/30/2042	96,246,534	103,946,256	63,139,470	68,190,628
9/30/2043	0	0	0	0

SCHEDULE I

SUMMARY OF MAIN PLAN PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of Alabama was established on September 15, 1939 and went into effect September 30, 1941. The valuation took into account amendments to the System 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. 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 I – the 3 highest years in the last 10 years of Creditable Service
Tier II – 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 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 employer contributions.

Retirement Allowance – the sum of the annuity and pension.

2 - BENEFITS

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 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 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.
Both	The member may elect to receive a reduced retirement allowance in order to provide an allowance to a designated beneficiary after the member's death (see "Special Privileges at Retirement" below).

Disability Retirement Allowance

Condition for Allowance	A disability retirement allowance may be granted to a member who has 10 years or more of creditable service who becomes totally and permanently incapacitated for duty before reaching eligibility for a service retirement allowance.
Amount of Allowance	
Tier I	On 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 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.
Both	The member may elect to receive a reduced retirement allowance in order to provide an allowance to a designated beneficiary after the member's death (see "Special Privileges at Retirement" below).

Benefits Payable on Separation from Service

Any member who withdraws from service is entitled to receive his or her 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 defined below under "Special Privileges at Retirement" or (2) to receive a return of member contributions and total earned interest 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 scholastic year (July 1-June 30).*

In the event of the death of a member with more than one year of service who is not eligible to retire, the designated beneficiary shall receive the return of member contributions and total earned interest. Also, the designated beneficiary shall receive an additional death benefit payable from the pre-retirement death benefit fund equal to the salary on which retirement contributions were made for the previous scholastic year (July 1-June 30).*

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

In the event of the death of a member with less than one year of service that is not job-related, the designated beneficiary shall receive the return of member contributions and total earned interest plus a matching death benefit which is limited to a $5,000 maximum.

*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.

Special Privileges at Retirement	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 annuity payments have equaled the present value of the annuity at the date of retirement, the balance is paid to a designated beneficiary or to his 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 such other person as the member shall designate 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.
Deferred Retirement Option Plan (DROP)	Prior to March 25, 2011, 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 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 will withdraw from active service and receive the retirement benefit calculated 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.
Term Life Insurance	Upon the death of a contributing member there is paid a term life insurance benefit of $15,000 (pro-rated for part-time members)

Member Contributions

Tier I

Prior to October 1, 2011, regular members contributed 5.0% of salary and 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 police officers, firefighters and correctional officers.

Beginning October 1, 2012, the contribution rates were increased to 7.50% for regular members and 8.50% for police officers, firefighters and correctional officers.

Tier II

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

Both

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

"Regular Interest" is 4% which is the rate adopted by the Board and applied to the balance in each member's' account every year; however, if a member receives a refund of contributions, the interest rate applied to the refund is lower than the 4% regular rate (Based on Section 16-25-14-(g)(1)).

SCHEDULE J

SCHEDULE OF MEMBERSHIP DATA
AS OF SEPTEMBER 30, 2013
NUMBER OF ACTIVE MEMBERS AND THEIR AVERAGE COMPENSATION
BY AGE AND YEARS OF SERVICE

Attained Age	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	Total
Under 25	1,128	1,330	8								2,466
Avg. Pay	32,814	29,925	31,205								31,250
25 to 29	1,361	6,787	2,022	17							10,187
Avg. Pay	35,712	35,170	40,643	36,198							36,330
30 to 34	910	4,333	7,112	1,654	13						14,022
Avg. Pay	42,596	37,530	44,696	47,913	44,166						42,724
35 to 39	906	3,938	4,980	5,526	1,466	13					16,829
Avg. Pay	44,767	39,172	45,250	50,609	53,197	41,516					46,251
40 to 44	703	3,341	4,801	4,140	5,314	1,310	20				19,629
Avg. Pay	35,937	36,922	42,699	49,232	54,788	57,176	41,797				47,090
45 to 49	502	2,665	4,083	3,674	3,656	3,780	916	15			19,291
Avg. Pay	34,967	36,409	40,553	44,856	51,784	57,314	56,872	41,798			46,843
50 to 54	442	2,245	3,468	3,653	3,663	3,122	2,163	556	17		19,329
Avg. Pay	37,937	36,798	39,083	42,307	47,010	53,951	57,937	58,218	49,399		45,974
55 to 59	284	1,696	2,730	2,840	3,391	3,250	1,781	968	209		17,149
Avg. Pay	36,697	38,775	39,282	42,280	45,923	51,326	57,240	60,585	59,965		46,601
60 to 64	274	1,397	1,809	1,684	1,823	1,890	917	99	41	7	9,941
Avg. Pay	59,478	50,765	39,816	44,465	44,347	50,957	57,546	75,739	55,577	51,384	47,699
65 to 69	94	569	952	618	518	494	263	36	21	16	3,581
Avg. Pay	50,238	55,668	46,450	43,421	44,271	57,227	62,152	63,023	91,906	113,630	50,549
70 & up	26	174	484	294	207	172	83	23	19	13	1,495
Avg. Pay	74,878	41,488	47,903	36,130	42,771	56,834	54,537	49,860	63,205	78,031	46,482
Total	6,630	28,475	32,449	24,100	20,051	14,031	6,143	1,697	307	36	133,919
Avg. Pay	38,901	37,716	42,480	46,270	49,852	54,286	57,600	60,433	61,179	88,671	45,289

Average Age: 45.40 Average Service: 10.84

SCHEDULE J
(continued)

NUMBER OF SERVICE RETIREMENTS AND THEIR BENEFITS BY AGE

Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	329	$ 9,333,166	$ 28,368
50 – 54	1,874	53,421,923	28,507
55 – 59	5,350	152,034,179	28,418
60 – 64	14,614	362,269,497	24,789
65 – 69	17,451	399,446,390	22,890
70 – 74	12,674	281,314,281	22,196
75 – 79	8,818	183,217,436	20,778
80 – 84	6,054	118,184,694	19,522
85 – 89	3,360	61,117,017	18,190
90 – 94	1,411	22,494,261	15,942
95 & Over	441	6,598,858	14,963
Total	72,376	$ 1,649,431,702	$ 22,790

Average Age: 69.7

NUMBER OF DROP PARTICIPANTS AND THEIR BENEFITS BY AGE

Age	Number of Members	Total Annual Benefits	Average Annual Benefits
55 – 59	1,338	$ 46,729,695	$ 34,925
60 – 64	1,293	43,232,023	33,435
65 – 69	316	10,923,000	34,566
70 – 74	68	2,678,992	39,397
75 – 79	13	435,873	33,529
80 – 84	1	7,921	7,921
85 & Over			
Total	3,029	$ 104,007,504	$ 34,337

Average Age: 60.9

SCHEDULE J
(continued)

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

Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	312	$ 3,278,033	$ 10,507
50 – 54	182	1,946,705	10,696
55 – 59	253	3,143,422	12,425
60 – 64	393	5,793,597	14,742
65 – 69	546	8,854,863	16,218
70 – 74	541	8,804,045	16,274
75 – 79	655	9,939,817	15,175
80 – 84	577	8,666,649	15,020
85 – 89	467	6,718,290	14,386
90 – 94	228	2,651,491	11,629
95 & Over	63	625,929	9,935
Total	4,217	$ 60,422,841	$ 14,328

Average Age: 71.6

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

Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	360	$ 3,986,607	$ 11,074
50 – 54	540	6,068,585	11,238
55 – 59	990	11,628,295	11,746
60 – 64	1,230	13,600,666	11,057
65 – 69	1,019	11,220,360	11,011
70 – 74	566	6,068,018	10,721
75 – 79	243	2,678,063	11,021
80 – 84	128	1,413,996	11,047
85 – 89	51	603,892	11,841
90 – 94	19	231,534	12,186
95 & Over	6	79,290	13,215
Total	5,152	$ 57,579,306	$ 11,176

Average Age: 62.5