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PEEHIP

GASB STATEMENT NO. 74 REPORT

For the Alabama Retired Education Employees' Health Care Trust

PREPARED AS OF SEPTEMBER 30, 2017

REVISED FEBRUARY 22, 2018

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February 22, 2018

Retirement Systems of Alabama
P.O. Box 302150
Montgomery, AL 36130-2150

Dear Members of the Board:

Presented in this report is information to assist the Alabama Public Education Employees' Health Insurance Plan (PEEHIP) in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 74 for the Alabama Retired Education Employees' Health Care Trust. The information is presented for the one-year period ending September 30, 2017. These calculations have been made on a basis that is consistent with our understanding of these accounting standards.

The annual actuarial valuation performed as of September 30, 2016 was used as the basis for much of the information presented as of September 30, 2017 in this report. The valuation was based upon data furnished by the Alabama Teachers' Retirement System and the PEEHIP staff, concerning active, inactive, and retired members along with pertinent claims data and financial information. This information was reviewed for completeness and internal consistency, but was not audited. The valuation results depend on the integrity of the data. If any of the information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

To the best of our knowledge, the information contained in this report is complete and accurate. These calculations were performed by, and under the supervision of, independent consulting actuaries with experience in performing valuations for public retirement systems and retiree health benefit plans. In addition, the valuation was prepared in accordance with generally accepted actuarial principles and practices as well as with Actuarial Standards of Practice prescribed by the Actuarial Standards Board.

Our calculation of the liability associated with the benefits described in this report was performed for the purpose of providing reporting and disclosure information that satisfies the requirements of GASB Statement No. 74. The calculation of the plan's liability for this report may not be applicable for funding purposes of the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB No. 74 may produce significantly different results.

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 and retiree health benefit plans, that the valuations were 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 medical plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of each plan.

Respectfully submitted,

Alisa Bennett, FSA, EA, FCA, MAAA	Edward A. Macdonald, ASA, FCA, MAAA
Principal and Consulting Actuary	President

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REPORT OF THE ANNUAL GASB STATEMENT NO. 74
REQUIRED INFORMATION FOR THE
ALABAMA RETIRED EDUCATION EMPLOYEES' HEALTH CARE TRUST

PREPARED AS OF SEPTEMBER 30, 2017

Valuation Date (VD):	September 30, 2016
Prior Measurement Date:	September 30, 2016
Measurement Date (MD):	September 30, 2017
Membership Data as of September 1, 2016:	
Retired Members Currently Receiving Benefits	83,626
Surviving Spouses Currently Receiving Benefits	1,842
Inactive Members Entitled to Benefits but Not Yet Receiving	4,915
Active Members	134,126
Total Membership	224,509
Discount Rate:	
Long-Term Expected Rate of Return	7.25%
Municipal Bond Index Rate at Measurement Date	3.57%
Municipal Bond Index Rate at Prior Measurement Date	2.93%
Year in which Fiduciary Net Position is Projected to be Depleted	2042
Single Equivalent Interest Rate at Measurement Date	4.63%
Single Equivalent Interest Rate at Prior Measurement Date	4.01%
Net OPEB Liability:	
Total OPEB Liability (TOL)	$8,775,991,786
Fiduciary Net Position (FNP)	1,348,563,000
Net OPEB Liability (NOL = TOL – FNP)	$7,427,428,786
Estimated FNP as a percentage of TOL	15.37%

Section II – Introduction

The Governmental Accounting Standards Board (GASB) issued Statement No. 74 (GASB 74), *"Financial Reporting for Postemployment Benefit Plans other than Pension Plans,"* in June 2015. The effective date for reporting under GASB 74 is plan years beginning after June 15, 2016, but early implementation is encouraged. This report has been prepared as of September 30, 2017 (the Measurement Date) to assist the Alabama Public Education Employees' Health Insurance Plan (Plan) in better understanding the requirements of GASB 74 and to identify the information to be provided by the Plan's actuary, Cavanaugh Macdonald Consulting (CMC). Much of the material provided in this report is based on the data, assumptions, and results of the annual actuarial valuation of the Plan as of September 30, 2016.

GASB 74 replaces GASB 43, and represents a significant departure from the requirements of the prior statement. GASB 43 was issued as a "funding friendly" statement that required postemployment benefit plans other than pension plans (OPEB) to report items consistent with the results of the plan's actuarial valuations, as long as those valuations met certain parameters. GASB 74 basically separates accounting from funding by creating disclosure and reporting requirements that may or may not be consistent with the basis used for funding the Plan.

A major change in GASB 74 is the requirement to determine the Total OPEB Liability (TOL) utilizing the Entry Age Normal actuarial cost method. The Net OPEB Liability (NOL) is then set equal to the TOL minus the Plan's Fiduciary Net Position (FNP) (basically the market value of assets). The benefit provisions recognized in the calculation of the TOL are summarized in Schedule B.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR), as described by GASB 74. To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan's provisions applicable to the members and beneficiaries of the Plan on the Measurement Date. If the FNP is not projected to be depleted at any point in the future, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate (Municipal Bond Index Rate). The Municipal Bond Index Rate used, if necessary, for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index. The Municipal Bond Index Rate as of September 30, 2017 was 3.57%. To aid in the calculation of the projected FNP, it is recommended that a funding policy be implemented to project employer contributions. For the purpose of this report, we have determined that a discount rate of 4.63% as of September 30, 2017 meets the requirements of GASB 74, as it is our understanding that a portion of the health care premium rate paid on behalf of active employees will be used to fund the OPEB plan.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 74 for note disclosure and Required Supplementary Information (RSI).

The actuarial related information presented herein will follow the order presented in GASB 74. Paragraph numbers are provided for ease of reference.

Paragraphs 34.a. (1)-(3): This information will be supplied by the Plan.

Paragraph 34.a. (4): The data required regarding the membership of the Plan were furnished by the PEEHIP and the Alabama Teachers' Retirement System. The following table summarizes the membership of the Fund as of September 30, 2016, the date of the valuation used to determine the September 30, 2017 Total OPEB Liability.

Membership

	Total Number	Number Not Eligible for PEEHIP	Number Eligible for PEEHIP
Retired Members Currently Receiving Benefits	83,626	0	83,626
Surviving Spouses Currently Receiving Benefits	1,842		1,842
Inactive Members Entitled To But Not Yet Receiving Benefits	5,001	(86)	4,915
Active Members	136,731	(2,605)	134,126
Total	227,200	(2,691)	224,509

Paragraphs 34.a. (5)-(6) and Paragraphs 34.b.-e.: This information will be supplied by the Plan.

Paragraphs 35.a. (1)-(4): As stated earlier, the NOL is equal to the TOL minus the FNP. That result, as of September 30, 2017, is presented in the following table.

	Fiscal Year Ending September 30	
		2017
Total OPEB Liability	$	8,775,991,786
Fiduciary Net Position		1,348,563,000
Net OPEB Liability	$	7,427,428,786
Ratio of Fiduciary Net Position to Total OPEB Liability		15.37%

Paragraph 35.b.: This paragraph requires information regarding the actuarial assumptions used to measure the TOL. The actuarial assumptions utilized in developing the TOL are outlined in Schedule C. The Total OPEB Liability as of September 30, 2017 was determined based on an actuarial valuation prepared as of September 30, 2016, using the following actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of September 30, 2017:

Inflation	2.75 percent
Salary increases	5.00–3.25 percent, including 3.00% wage inflation
Long-term investment rate of return	7.25 percent compounded annually, net of investment expense, and including inflation
Municipal Bond Index Rate at Measurement Date	3.57 percent
Municipal Bond Index Rate at Prior Measurement Date	2.93 percent
Year FNP is projected to be depleted	2042
Single Equivalent Interest Rate at Measurement Date	4.63 percent
Single Equivalent Interest Rate at Prior Measurement Date	4.01 percent

Healthcare cost trend rate	
Pre-Medicare Eligible	7.75%
Medicare Eligible	5.00%
Ultimate trend rate	
Pre-Medicare Eligible	5.00%
Medicare Eligible	5.00%
Year of Ultimate trend rate	2022

Mortality	Rates of mortality for the period after service retirement are according to the RP-2000 White Collar Mortality Table projected to 2020 using scale BB and adjusted 115% for all ages for males and 112% for ages 78 and over for females. The rates of disabled mortality were based on the RP-2000 Disabled Mortality Table projected to 2020 using scale BB and adjusted 105% for males and 120% for females.

The decremental assumptions used in the valuation were selected based on the actuarial experience study prepared as of September 30, 2015, submitted to and adopted by the Teachers' Retirement System of Alabama Board on September 13, 2016.

The remaining actuarial assumptions (e.g., initial per capita costs, health care cost trends, rate of plan participation, rates of plan election, etc.) used in the September 30, 2016 valuation were based on a review of recent plan experience done concurrently with the September 30, 2016 valuation.

The long-term expected return on plan assets is to be reviewed as part of regular experience studies prepared every five years, in conjunction with similar analysis for the Alabama Teachers' Retirement System. Several factors should be considered in evaluating the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation), as developed for each major asset class. These ranges should be combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The assumption is intended to be a long-term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

The target asset allocation and best estimates of expected geometric real rates of return for each major asset class are to be summarized in a manner suggested by the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return*
Fixed income	30%	4.40%
US Large Stocks	38%	8.00%
US Mid Stocks	8%	10.00%
US Small Stocks	4%	11.00%
International Developed Market Stocks	15%	9.50%
Cash	5%	1.50%
Total	100.0%	

**Geometric mean, includes 2.5% inflation*

Discount rate (SEIR). For the purpose of this report, we have determined that a discount rate of 4.63% as of September 30, 2017 meets the requirements of GASB 74, because any premiums paid to the Public Education Employees' Health Insurance Board for active employees shall include an amount to partially fund the cost of coverage for retired employees.

Paragraph 35.b.(1)

Sensitivity analysis: Disclosure of the sensitivity of the Net OPEB Liability to changes in the healthcare cost trend rate. The following presents the Net OPEB Liability of the Fund, calculated using the current healthcare trend rates, as well as the Net OPEB Liability calculated using healthcare trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current rates:

	1% Decrease (6.75% decreasing to 4% for pre-Medicare, 4% for Medicare eligible 1% for Optional Plans)	Current Healthcare Trend Rate (7.75% decreasing to 5% for pre-Medicare, 5% for Medicare eligible 2% for Optional Plans)	1% Increase (8.75% decreasing to 6% for pre-Medicare, 6% for Medicare eligible 3% for Optional Plans)
Net OPEB Liability	$5,996,767,599	$7,427,428,786	$9,273,373,801

Paragraph 35.b.(2)

(a) **Discount rate (SEIR)**. The discount rate used to measure the Total OPEB Liability was 4.63% percent.

(b) **Projected cash flows:** The projection of cash flows used to determine the discount rate assumed that plan contributions will be made at the current contribution rates. Each year, the State specifies the monthly employer rate that participating school systems must contribute for each active employee. Approximately, 27.08% of the employer contributions were used to assist in funding retiree benefit payments in 2016 and it is assumed that amount will increase by 3.00% per year and continue into the future.

(c) **Long term rate of return:** The long-term expected rate of return on OPEB plan investments will be determined based on the allocation of assets by asset class and by the mean and variance of real returns.

(d) **Municipal bond rate:** The discount rate determination will use a municipal bond rate to the extent the trust is projected to run out of money before all benefits are paid.

(e) **Periods of projected benefit payments:** Projected future benefit payments for all current plan members were projected through 2115.

(f) Assumed asset allocation: The target asset allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return*
Fixed income	30%	4.40%
US Large Stocks	38%	8.00%
US Mid Stocks	8%	10.00%
US Small Stocks	4%	11.00%
International Developed Market Stocks	15%	9.50%
Cash	5%	1.50%
Total	100.0%	

**Geometric mean, includes 2.5% inflation*

(g) Sensitivity analysis: This paragraph requires disclosure of the sensitivity of the Net OPEB Liability to changes in the discount rate. The following presents the Net OPEB Liability, calculated using the discount rate of 4.63 percent, as well as the Net OPEB Liability calculated using a discount rate that is 1-percentage-point lower (3.63 percent) or 1-percentage-point higher (5.63 percent) than the current rate:

	1% Decrease (3.63%)	Current Discount Rate (4.63%)	1% Increase (5.63%)
Net OPEB Liability	$8,978,216,246	$7,427,428,786	$6,191,257,546

Paragraph 35.c.: September 30, 2016 is the actuarial valuation date upon which the TOL is based. The result is rolled forward using standard actuarial techniques to the measurement date. The roll forward calculation adds the normal cost (also called the service cost) for the period October 1, 2016 through September 30, 2017, subtracts the actual benefit payments for the same period and then applies the expected investment rate of return for the period. If applicable, actuarial gains and losses arising from benefit changes, the differences between estimates and actual experience, and changes in assumptions or other inputs are reconciled to the TOL as of the Measurement Date. The procedure was used to determine the TOL as of September 30, 2017, as shown in the following table:

TOL Roll Forward	
(a) TOL as of September 30, 2016*	$9,272,437,170
(b) Actual Benefit Payments and Refunds, for the Period October 1, 2016 – September 30, 2017	(271,746,000)
(c) Interest on TOL = [(a) x (Prior SEIR)] + [(b) x (Prior SEIR *0.5)]	366,376,223
(d) Service Cost for the Period October 1, 2016 – September 30, 2017at the End of the Period	327,568,574
(e) Change Due to Change in SEIR	(918,644,181)
(f) TOL Rolled Forward to September 30, 2017 = (a) + (b) + (c) + (d) + (e)	$8,775,991,786

* The TOL as of September 30, 2016 used in the roll forward was calculated using the discount rate as of the Prior Measurement Date.

There are several tables of Required Supplementary Information (RSI) that need to be included in the Plan's financial statements. Paragraph numbers are provided for ease of reference.

Paragraphs 36.a.-c.: The required tables of schedules are provided in Schedule A.

Paragraph 36.d. and 37: The required schedule presenting the annual money-weighted rates of return is to be supplied by the Plan.

Paragraph 38: The following information should be noted regarding the RSI, particularly for the *Schedule of Employer Contributions*:

Changes in actuarial assumptions:

In 2016, rates of withdrawal, retirement, disability, mortality, spouse coverage and tobacco usage were adjusted to more closely reflect actual experience. In 2016, economic assumptions and the assumed rates of salary increase were adjusted to more closely reflect actual and anticipated experience. In 2016 and later, the expectation of retired life mortality was changed to the RP-2000 White Collar Mortality Table projected to 2020 using scale BB and adjusted 115% for all ages for males and 112% for ages 78 and over for females.

Recent Plan Changes:

Effective January 1, 2017, Medicare eligible medical and prescription drug benefits are provided through the MAPD plan.

The Health Plan was changed in 2017 to reflect the ACA maximum annual out-of-pocket amounts.

Method and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates in the schedule of employer contributions are calculated as of September 30, three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine the most recent contribution rate reported in that schedule:

Actuarial cost method	Projected Unit Credit
Amortization method	Level percent of pay, closed
Remaining amortization period	27 years
Asset valuation method	Market value of assets
Inflation	3.00%
Healthcare cost trend rate	
Pre-Medicare eligible	7.50%
Medicare eligible	5.75%
Ultimate trend rate	
Pre-Medicare eligible	5.00%
Medicare eligible	5.00%
Year of ultimate trend rate	2019 for pre-Medicare eligible 2017 for Medicare eligible
Investment rate of return	5.00%, including inflation

SCHEDULE OF CHANGES IN THE NET OPEB LIABILITY
GASB 74 Paragraph 36.a.

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Total OPEB Liability										
Service Cost	$327,568,574									
Interest	366,376,223									
Benefit changes	0									
Difference between expected and actual experience	0									
Changes of assumptions	(918,644,181)									
Benefit payments	(271,746,000)									
Refunds of contributions	0									
Net change in Total OPEB Liability	$(496,445,384)									
Total OPEB Liability - beginning	$9,272,437,170									
Total OPEB Liability - ending (a)	$8,775,991,786									
Plan Fiduciary Net Position (Estimated)										
Contributions – employer	$243,146,000									
Contribution - non-employer	0									
Contributions – member	0									
Net investment income	138,261,000									
Benefit payments*	(271,746,000)									
Administrative expense	(1,354,000)									
Refund of contributions	0									
Other	56,000									
Net change in Plan Fiduciary Net Position	$108,363,000									
Plan Fiduciary Net Position – beginning	$1,240,200,000									
Plan Fiduciary Net Position - ending (b)	1,348,563,000									
Net OPEB Liability - ending (a) - (b)	$7,427,428,786									

***Benefit payments are net of member contributions.**

SCHEDULE OF THE NET OPEB LIABILITY
GASB 74 Paragraph 36.b.

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Total OPEB Liability	$8,775,991,786									
Plan Fiduciary Net Position	1,348,563,000									
Net OPEB Liability	$7,427,428,786									
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	15.37%									
Covered-employee payroll	$6,491,805,798									
Net OPEB Liability as a percentage of covered-employee payroll	114.41%									

	Total	Not Eligible for PEEHIP	Eligible for PEEHIP
Active Members	136,731	(2,605)	134,126
Compensation 9/30/2016	$6,430,999,445	($128,275,369)	$6,302,724,076
Compensation rolled forward to 9/30/2017 (3% wage growth)			$6,491,805,798

SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB 74 Paragraph 36.c.
($ in Thousands)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Actuarially determined employer contribution	$697,677									
Actual employer contributions	243,146									
Annual contribution deficiency (excess)	454,531									
Covered-employee payroll	$6,491,806									
Actual contributions as a percentage of covered-employee payroll	3.75%									

SUMMARY OF BENEFIT PROVISIONS VALUED

ELIGIBILITY: Retiree medical eligibility is attained when an employee retires from an employing agency participating in PEEHIP, and is immediately eligible to draw a retirement annuity from the Teachers' Retirement System of Alabama.

RETIREE CONTRIBUTIONS: Retiree contributions vary based on plan election, dependent coverage, Medicare eligibility and election, tobacco usage, spousal surcharge applicability and, for non-Medicare eligible retirees and spouses, wellness credits.

In November 2004, the Alabama Legislature enacted legislation (Act 2004-649) that required the Public Education Employees' Insurance Board to implement a sliding scale premium for all employees retiring after September 30, 2005, based on their years of service at retirement.

The premium for retiree coverage is broken down into the employer share (what PEEHIP pays) and the retiree share. Under the sliding scale, the retiree will still be responsible for the retiree share, however, the employer share will increase or decrease based upon a retiree's years of service. For those employees retiring with 25 years of service, the employer would pay 100% of the employer share of the premium. For each year less than 25, the employer share would be reduced by 2% and the retiree share will be increased accordingly. For each year over 25, the employer share would be increased by 2% and the retiree share is reduced accordingly.

The sliding scale premium will not apply to disability retirements for twenty-four (24) months from the member's date of retirement, provided the member submits to PEEHIP proof of application for Social Security Disability benefits. The exemption from the sliding scale premium can be extended beyond twenty-four (24) months from the member's date of retirement if the member qualifies for Social Security Disability benefits during the twenty-four (24) months following the member's date of retirement.

For members retiring on or after January 1, 2012, Act 2011-704 establishes changes to the sliding scale premium calculation. Under the law there are three major changes to the retiree sliding scale premium. These changes are related to a retiree's years of service (Service Premium Component), age at the time of retirement (Age Component) and subsidy premium (Subsidy Component).

- Service Premium Component: An employee who retires with less than 25 years of service will contribute 4% of the employer share for each year under 25 years of service instead of 2% under Act 2004-649. The Service Premium Component continues for the retiree's lifetime.
- Age Component: An employee who retires before becoming Medicare eligible will contribute 1% of the employer share for each year less than 65. Upon Medicare entitlement, the age component will be removed.
- Subsidy Component: An employee will contribute the net difference between the active employee subsidy and the non-Medicare eligible retiree subsidy (subsidy premium). The Fiscal Year 2018 subsidy premium amount is $172.81 per month. Upon Medicare entitlement, the subsidy component will be removed.

The additional premium amounts for members retiring on or after January 1, 2012 will be phased in over the period ending October 1, 2016. Members retiring after attaining age 65 will be subject to the full 4% of the employer share for each year of service under 25 years of service and will not be eligible for the five-year phase-in.

Retired Members

The following health insurance premiums are the base rates set by the PEEHIP Board. Base rates are before the wellness premiums, tobacco premiums, or the retiree sliding scale adjustments are applied, if applicable. The monthly premiums for members who retired prior to October 1, 2005, or members who retired on or after October 1, 2005, and before January 1, 2012, with 25 years of service are listed in the chart below and show a retiree's out-of-pocket cost after subtracting the retiree insurance contribution.

Sample Premium Rates 2017-2018 Plan Year			
Type of Contract	*Retiree Monthly Out-of-Pocket Premium	Family Premium with Covered ME Spouse	Family Premium with Covered NME Spouse
Individual Coverage / NME Retired Member	$166	N/A	N/A
Family Coverage / NME Retired Member & More Than 1 Dependent or Only Dependent NME	$421	$451	$521
Family Coverage/ NME Retired Members & Only Dependent ME	$280	$310	N/A
Individual Coverage / ME Retired Member	$25	N/A	N/A
Family Coverage / ME Retired Member & More Than 1 Dependent or Only Dependent NME	$280	$310	$380
Family Coverage / ME Retired Member & Only Dependent ME	$139	$169	N/A

* *This rate applies to the PEEHIP Hospital Medical or the VIVA Health Plan and is the monthly amount that will be deducted from a retiree's check. The VIVA Health Plan is not available to retired members who are Medicare eligible or retired members who have dependents who are Medicare eligible.*

The premium rates above do not include the $50 monthly tobacco surcharge for both retirees and their spouses.

Beginning October 1, 2015, a monthly spousal surcharge was added. Effective October 1, 2016, the monthly spousal surcharge was fully phased in and amounts to $100 for spouses on active contracts and non-Medicare eligible spouses on retired contracts, and $30 surcharge for Medicare primary spouses on retired contracts. The premiums above include the spousal surcharge.

Retirees participating in the PEEHIP Supplemental Plan were assumed to cost $145 monthly effective October 1, 2017.

If a University participates in PEEHIP only for its retirees, the University System makes a contribution to PEEHIP for every University retiree participating in PEEHIP plans regardless of age or plan tier election. For Fiscal Year 2018, the monthly amount is $341 per retiree.

Schedule B – Summary of Benefit Provisions Valued

The State per member per month funding can be used to purchase the PEEHIP Supplemental Plan or two optional plans at no cost to the retiree if the retiree is not purchasing one of the hospital medical plans. Additional optional plans can be purchased for $38.00 per month per plan.

Optional Coverage: Active and Retired Members

Cancer	$38.00/month Individual or Family Coverage
Indemnity	$38.00/month Individual or Family Coverage
Dental	$38.00/month Individual Coverage
	$50.00/month Family Coverage
Vision	$38.00/month Individual or Family Coverage

Retiree premiums for the four optional plans, Hospital Indemnity, Dental, Cancer and Vision, are $38 per retiree per month. Since two of these plans can be purchased for $0 in lieu of taking the hospital medical coverage, it is assumed that 75% of participants in the Dental plan and 50% of participants in the other optional plans are making the $38 per month ($50 for Family Dental) contributions.

Surviving Dependent

The following health insurance premiums are the base rates set by law and approved by the PEEHIP Board. Base rates are before wellness and tobacco premiums are applied, if applicable. These rates begin the first of the month following the member's date of death.

Premium Rates 2017-2018 Plan Year	
Type of Contract	**Monthly Premium for PEEHIP Hospital Medical or VIVA Health Plan**
Individual Coverage/Non-Medicare-eligible (NME) Survivor	$823
Family Coverage/NME Survivor & More Than 1 Dependent or Only Dependent NME	$1,066
Family Coverage/NME Survivor & Only Dependent Medicare-eligible (ME)	$999
Individual Coverage/ME Survivor	$355
Family Coverage/ME Survivor & More Than 1 Dependent or Only Dependent NME	$676
Family Coverage/Medicare-eligible Survivor & Only Dependent ME	$609
Supplemental Medical Plan (Single or Family)	$145
Optional (Each) – Cancer, Indemnity, Vision, and Single Dental	$38
Optional – Family Dental Premium	$50
Tobacco Premium for Survivor Enrolling in Hospital Medical	$50
Wellness Premium/NME Survivor	$50

NOTABLE PEEHIP CHANGES EFFECTIVE OCTOBER 1, 2017 (unless otherwise noted):

Medical Plan Changes

- **Maximum Annual Out-of-Pocket Amounts:**
  - For the hospital, medical plan, administered by Blue Cross Blue Shield of Alabama, beginning 1/1/18, the combined medical and prescription drug in-network maximum annual out-of-pocket amounts will increase to $7,350 per individual and $14,700 per family per calendar year.
  - For the VIVA Health plan, the combined medical and prescription drug maximum annual out-of-pocket amounts will be increased to $7,150 per member and $14,300 per family for the 2017/2018 benefits.

Premium Rate Changes for Surviving Spouses

- **Increase medical premium $7** per month for individual coverage/NME survivor
- **Increase medical premium $38** per month for family coverage/NME survivor & More Than 1 dependent or only dependent NME
- **Decrease medical premium $68** per month for family coverage NME survivor & only dependent Medicare-eligible (ME)
- **Decrease medical premium $75** per month for individual coverage/ME survivor
- **Decrease medical premium $44** per month for family coverage/ME survivor & more than 1 dependent or only dependent NME
- **Decrease medical premium $150** per month for family coverage/ME survivor & only dependent ME

Pharmacy Plan Changes

- Due to the fast-moving nature of both new drugs becoming available and price changes amongst existing drugs, PEEHIP implements various utilization management programs throughout the plan year to the commercial plan formulary, including prior authorizations, step therapy, quantity limits and the exclusion of some drugs to drive utilization to lower cost therapeutic alternative medications. This is to ensure the PEEHIP formulary covers the most effective drugs at the most reasonable prices. No changes were made to the drug copay tiers.

Supplemental Medical Plan Changes

- **Maximum Annual Out-of-Pocket Amounts:** Beginning 1/1/18, the combined medical and prescription drug in-network maximum annual out-of-pocket amounts will increase to $7,350 per individual and $14,700 per family per calendar year.

Medicare Advantage with Prescription Drug Coverage for Medicare eligible Retirees

- Beginning 1/1/2017, Medicare eligible retirees and their Medicare eligible dependents will be enrolled in the new UnitedHealthcare® Group Medicare Advantage plan for PEEHIP retirees. The plan will be fully insured and will have all Medicare Part A, Part B and Part D in one plan.

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The decremental assumptions used in the valuation were selected based on the actuarial experience study prepared as of September 30, 2015, submitted to and adopted by the Teachers' Retirement System of Alabama Board on September 13, 2016, and are reasonable expectations of anticipated experience under the Plan. The assumptions were used in the retiree health care valuation for consistency and are under PEEHIP Board jurisdiction.

VALUATION DATE: September 30, 2016

PAYROLL GROWTH: 3.0% per annum, compounded annually.

HEALTH CARE COST TREND RATES: Health care cost trend rates reflect the change in per capita health costs over time due to factors such as inflation, utilization, plan design, and technology improvements which are detailed in the "Annual Increase in Medical/Prescription Drug/Optional Plan Costs" below. Pre-Medicare initial medical trend amounts were chosen based on an analysis of national average health trend surveys specific to pre-Medicare retirees. Medicare eligible initial trend rates reflect the Medicare Advantage plan rate guarantees. Long term trend is set to recognize that medical trend has been as is expected to outpace general price inflation.

Annual Increase in Medical/Prescription Drug/Optional Plan Costs			
Year	Pre-Medicare Medical Trend*	Medicare-Eligible Medical Trend*	Optional Plans Trend
2016	7.75%	**	2.0%
2017	7.00%	**	2.0%
2018	6.50%	5.00%	2.0%
2019	6.00%	5.00%	2.0%
2020	5.50%	5.00%	2.0%
2021	5.25%	5.00%	2.0%
2022	5.00%	5.00%	2.0%

* *Also applies to sliding scale age and years of service premium to be contributed by retirees, surviving dependent contributions, University Contributions and the PEEHIP Supplemental Plan cost.*

** *No trend is applied to the MAPD until 2018 because the rates are guaranteed through 2018.*

The "Annual Increase in Base Contributions Received from Covered Members" details how the expected increase in the amounts contributed from covered retirees and dependents will increase over time. The trend rates are detailed below and apply to the base rate retiree premiums only. The sliding scale premiums are assumed to increase with health care trend. The premiums for surviving dependents are assumed to approximate the assumed claims cost over time.

Annual Increase in Base Contributions Received from Covered Members	
Retiree Share of Premium	**Retiree Optional Plans Premium**
2.0%	2.0%

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase*
< 40	0.0%
40 – 44	2.6%
45 – 49	2.6%
50 – 54	3.2%
55 – 59	3.4%
60 - 64	3.7%
65 – 69	3.2%
70 – 74	2.4%
75 – 79	1.8%
80 – 84	1.3%
85 and over	0.0%

**Optional and Supplemental Plan costs are not age adjusted.*

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation and spouse coverage were based upon analysis of actual plan retiree data and are as follows:

Medical	Under 65	Over 65
Disabled Retirement*	100%	n/a
Service Retirement**	80%	80%
Spouse Coverage	50%	50%

** 100% of current disabled retirees and future disabled retirees who are not also eligible for service retirement are assumed to qualify for Social Security Disability benefits and thus would be exempt from sliding scale contributions.*

*** Only retirees who retire directly from active employment are assumed to participate. Deferred vested members are not assumed to participate upon retirement.*

Optional Plans	
Plan	**Participation**
Hospital Indemnity	10%
Dental	40%
Cancer	10%
Vision	10%

Wives are assumed to be three years younger than husbands.

We assume 15% of males and 10% of females pay the $50 monthly tobacco surcharge. This applies to both retirees and spouses. We assume 100% of the spouses of current and future will pay the spouse surcharge. We assume 100% of pre-Medicare eligible retirees and covered spouses will qualify for the wellness credit.

ANNUAL EXPECTED MEDICAL/PRESCRIPTION DRUGS CLAIMS (AGE 65): Following is a chart detailing expected per member per year medical/prescription drugs claims for pre-Medicare eligible members for the year following the valuation date. Medicare eligible claims are based on the adjusted premium rate for the MAPD plan. Claims are age-adjusted to age 65.

Medical/Prescription Drugs	
Pre-Medicare	$11,056
Medicare eligible	$2,208

ANNUAL EXPECTED OPTIONAL PLAN CLAIMS: Following is a chart detailing expected Optional Plan claims for the year following the valuation date. Optional Plan claims are not age-adjusted.

Dental Plan	Vision Plan	Cancer Plan	Hospital Indemnity Plan
$514	$97	$159	$255

ASSET VALUATION METHOD: Market value.

Schedule C – Statement of Actuarial Assumptions and Methods

The following decremental assumptions used in the valuation were selected based on the actuarial experience study prepared as of September 30, 2015, submitted to and adopted by the Teachers' Retirement System of Alabama Board on September 13, 2016.

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***			
		Tier I		Tier II				
		Years of Service			Years of Service			
		10-24	25+	10+	0-4	5-9	10-19	20+
				Male				
20	0.0293%	0.0008%		0.0008%	25.00%			
25	0.0319	0.0250		0.0250	14.80	11.00%		
30	0.0376	0.0425		0.0425	13.80	5.40	3.50%	
35	0.0655	0.1300		0.1300	13.50	5.40	2.50	0.50%
40	0.0914	0.1700		0.1700	13.00	5.40	2.25	0.50
45	0.1278	0.2700	0.2000%	0.2700	13.00	5.40	2.25	0.75
50	0.1812	0.6000	0.2000	0.6000	12.00	5.00	2.50	0.80
55	0.2567	0.9000	0.2000	0.9000	11.50	5.00	2.50	0.90
60	0.3815	0.5000	0.5000	1.3000	12.00	4.50	2.50	0.90
65	0.5353	0.5000	0.5000	0.5000	12.00	6.00		
69	0.6326	0.5000	0.5000	0.5000	12.00	6.25		
				Female				
20	0.0108%	0.0100%		0.0100%	25.00%			
25	0.0117	0.0275		0.0275	12.75	9.00%		
30	0.0149	0.0425		0.0425	13.50	5.80	4.30%	
35	0.0268	0.1000		0.1000	13.50	5.00	2.60	1.50%
40	0.0399	0.2000		0.2000	11.50	4.75	2.00	1.50
45	0.0635	0.3500	0.2000%	0.3500	10.75	4.10	2.00	0.50
50	0.0947	0.6500	0.2000	0.6500	10.75	3.90	2.20	0.75
55	0.1371	1.0500	0.2000	1.0500	11.00	4.20	2.40	0.80
60	0.1929	0.5000	0.5000	1.4000	12.00	4.50	2.70	1.00
65	0.2743	0.5000	0.5000	0.5000	15.00	6.75		
69	0.3435	0.5000	0.5000	0.5000	15.00	7.25		

**Rates of pre-retirement mortality are according to the sex distinct RP-2000 Employee Mortality Table (with the sex distinct RP-2000 Combined Mortality Table used for ages over 70) projected with Scale BB to 2020 with an adjustment factor of 90% for males and 60% for females.*
***No rates of disability are assumed for members with less than 10 years of service.*
****No rates of withdrawal are assumed after eligibility for service retirement.*

SERVICE RETIREMENT:

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

For Tier I members upon attaining 25 years of service, rates are as follows:

Age Group	Annual Rate Male*	Annual Rate Female**
47 & Under	25.0%	28.0%
48	25.0	20.0
49	20.0	17.0
50	16.5	13.0
51 to 53	16.0	15.0
54	16.0	17.0
55	16.0	18.0
56-57	16.0	19.0
58	16.0	21.0
59	20.0	22.0
60	20.0	30.0
61	20.0	27.5
62	35.0	45.0
63	30.0	35.0
64	23.0	32.0
65	28.0	38.0
66	27.0	40.0
67	22.0	35.0
68	22.0	37.0
69 to 70	22.0	30.0
71-74	20.0	30.0
75	100.0	100.0

**For males, retirement rates are increased by 5% in the year first attaining 25 years of service from age 51 through age 60.*
***For females, retirement rates are increased by 9% in the year first attaining 25 years of service from age 50 through age 59.*

For Tier I members first eligible for unreduced benefits before attaining 25 years of service, the rates are as follows:

	Annual Rate	
Age Group	Male	Female
60	12.5%	17.0%
61	11.0	13.5
62	25.0	23.5
63	18.5	18.0
64	15.0	17.0
65	28.0	28.0
66	27.0	28.0
67	22.0	23.0
68	22.0	27.0
69	22.0	22.0
70	22.0	26.0
71 to 74	20.0	24.0
75 & Above	100.0	100.0

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

	Annual Rate			
	Male*		Female**	
Age Group	Less than 25 years of service	25 or more years of service	Less than 25 years of service	25 or more years of service
62	50.0%	60.0%	50.0%	70.0%
63	18.5	30.0	18.0	35.0
64	15.0	23.0	17.0	32.0
65	28.0	28.0	28.0	38.0
66	27.0	27.0	28.0	40.0
67	22.0	22.0	23.0	35.0
68	22.0	22.0	27.0	37.0
69	22.0	22.0	22.0	30.0
70	22.0	22.0	26.0	30.0
71 to 74	20.0	20.0	24.0	30.0
75 & above	100.0	100.0	100.0	100.0

* *For FLC Tier II members, rates on or after age 60 are the same as those for Tier I, while rates from ages 56 to 59 are equal to 0.20 for service less than 25 years and 0.30 for service greater than or equal to 25 years.*

** *For FLC Tier II members, rates on or after age 60 are the same as those for Tier I, while rates from ages 56 to 59 are equal to 0.20 for service less than 25 years and 0.40 for service greater than or equal to 25 years.*

DEATHS AFTER RETIREMENT: Rates of mortality for the period after service retirement are according to the RP-2000 White Collar Mortality Table projected to 2020 using scale BB and adjusted 115% for all ages for males and 112% for ages 78 and over for females. The rates of disabled mortality were based on the RP-2000 Disabled Mortality Table projected to 2020 using scale BB and adjusted 105% for males and 120% for females. Representative values of assumed mortality are as follows:

	Service Retirement		Disability Retirement	
Age	Male	Female	Male	Female
55	0.3575%	0.2339%	3.5044%	1.7959%
60	0.5579	0.3825	3.8359	2.1434
65	0.9991	0.6795	4.1382	2.6417
70	1.6384	1.1928	4.8570	3.5474
75	2.8589	2.0200	6.3692	4.9231
80	5.0501	3.7900	8.4883	6.8160
85	8.8966	6.5271	10.9897	9.4450
90	16.4327	11.3249	15.4359	13.4706

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows:

	Annual Rate	
Service	2016 Valuation*	2017 Valuation and later**
0	5.125 %	5.000 %
1-5	4.125	4.000
6-10	3.875	3.750
11-15	3.625	3.500
16 & Over	3.375	3.250

**Includes wage inflation at 3.125% per annum.*
***Includes wage inflation at 3.000% per annum.*

AFFORDABLE CARE ACT: The impact of the Affordable Care Act (ACA) was addressed in this valuation in our long term trend assumption. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the excise tax on high-value health insurance plans beginning in 2020 (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by amounts employers and retirees can afford (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, plan changes, government-mandated benefits and technological advances. Given the uncertainty regarding the ACA's implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA's impact on the Plan's liability will be required.

Schedule D – 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 (currently 4.63%), of each participant's expected retiree health benefit at retirement or death based on his age and service. The calculations take into account the probability of a participant'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. The present value of the expected benefits payable on account of the active participants is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of participants and beneficiaries.

2. The contributions required to support the benefits of the Plan are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.

3. The normal contribution is determined using the "entry age normal" method. Using 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 participant during the entire period of his anticipated covered service, would be required in addition to the contributions of the participant to meet the cost of all benefits payable on his behalf.

4. The present value of future unfunded accrued liability contributions is determined by subtracting the present value of prospective normal contributions together with the current assets held, from the present value of expected benefits to be paid from the Plan.