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GEORGIA STATE EMPLOYEES POST-EMPLOYMENT HEALTH BENEFIT FUND & GEORGIA SCHOOL PERSONNEL POST-EMPLOYMENT HEALTH BENEFIT FUND

> **REPORT OF THE ACTUARY ON THE RETIREE MEDICAL VALUATIONS**

PREPARED AS OF JUNE 30, 2018



www.CavMacConsulting.com



September 12, 2019

Georgia Department of Community Health 2 Peachtree Street, N.W., 34<sup>th</sup> Floor Atlanta, GA 30303-3159

Members of the Board:

The State Health Benefit Plan is comprised of three health insurance plans: a plan primarily for State employees, established by O.C.G.A. § 45-18-2, a plan for teachers, established by O.C.G.A. § 20-2-881, and a plan for non-certificated public school employees, established by O.C.G.A. § 20-2-911. These health insurance plans are operated as one plan, and together they are referred to as the State Health Benefit Plan (SHBP). The statutes establishing the plans are referred to as "The Acts." The State Health Benefit Plan covers active employees, retirees and their eligible dependents under The Acts for health insurance. Legislation was enacted in 2009 creating two separate OPEB funds, the Georgia State Employees Post-Employment Health Benefit Fund (the "State Employee OPEB Fund"), which provides for the payment of current and future retiree health benefits for State employees, and the Georgia School Personnel Post-Employment Health Benefit Fund (the "School Personnel OPEB Fund"), which provides for the payment of current and future retiree health benefits for teachers and non-certificated public school employees. The Georgia Department of Community Health (DCH) is the State agency responsible for obtaining the valuation of the two OPEB Funds. Enclosed are the results of the annual actuarial valuations of the State Employee OPEB Fund 30, 2018.

The impact of the Affordable Care Act (ACA) was addressed in this valuation. 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 future implementation of the excise tax on high-value health insurance plans (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 statebased health insurance exchanges), continued monitoring of the ACA's impact on the Plan's liability will be required. Plan design changes mandated by the ACA and incorporated in the plan designs are included in the current baseline claims costs.

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As separate and distinct Cost Sharing Multiple-Employer Plans, both OPEB Funds separately value their own OPEB liabilities, report the results, and make the appropriate disclosures under GASB. The Plan and the employers will be required to comply with the financial reporting requirements of GASB Statements No. 74 and 75. The necessary disclosure information will be provided in separate supplemental reports.

The OPEB liabilities of the State OPEB Fund are determined based on projected expenses for retired State employees enrolled in the SHBP. The OPEB liabilities of the School Personnel OPEB Fund are determined based on projected expenses for retired teachers and public school employees enrolled in the SHBP. Projected expenses are determined based on eligibility requirements in effect on January 1, 2019 and benefit offerings in effect on January 1, 2019. Results are shown separately for the State Employee OPEB Fund, which primarily includes members of the Employees' Retirement System (ERS), the Judicial Retirement System (JRS), and the Legislative Retirement System (LRS), and the School Personnel OPEB Fund, which primarily includes members of the Teachers' Retirement System (TRS) and the Public School Employees' Retirement System (PSERS). Although data from the retirement systems are used in the valuation, members are ultimately placed into the State Fund or the School Fund based on their last employer payroll location code.

#### Actuarial Certification

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: 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 benefit 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.

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 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,

Alin Brand

Alisa Bennett, FSA, EA, FCA, MAAA Principal and Consulting Actuary

Ben Moble

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#### GEORGIA DEPARTMENT OF COMMUNITY HEALTH STATE AND SCHOOL OPEB FUNDS REPORT OF ACTUARY ON THE RETIREE MEDICAL VALUATION PREPARED AS OF JUNE 30, 2018

#### EXECUTIVE SUMMARY

#### OVERVIEW

The State Health Benefit Plan (SHBP) provides post-employment health benefits for State Employees, Public School Teachers, Public School Employees, Retirees and their eligible Dependents, and other entities under The Acts for health insurance.

#### Affordable Care Act

The impact of the Affordable Care Act (ACA) was addressed in this valuation. 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 future implementation of the excise tax on high-value health insurance plans (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. Plan design changes mandated by the ACA and incorporated in the plan designs are included in the current baseline claims costs.

#### **Total Covered Payroll Development**

For the June 30, 2018 OPEB valuation, census data was provided by DCH for both active and retired members participating in the SHBP health plans. This data included, among other items, a payroll location code which could be used in conjunction with the pension data provided by ERS, JRS, and LRS for the State Fund and TRS and PSERS for the School Fund, to obtain additional information and to determine eligibilities and participation election patterns.

For the State Fund, the payroll location codes and the various pension plan data are used to develop a methodology to determine the Total Covered Payroll. The methodology attempts to estimate Total Covered Payroll for all eligible members, including waivers. Our methodology is as follows:

- Use the Total Covered Payroll for the pension systems as a starting point.
- Exclude compensation for pension plan members who are known to be ineligible for SHBP based on their payroll location codes. These would include, among others, certain Tax Officials, certain University or Charter School employees and certain library employees.

For the School Fund, no salary information is available on the PSERS pension data, so the Total Covered payroll shown for the School Fund on page 27 is an estimate only. The contribution amounts are shown as dollar values only in some exhibits.



### **Total Covered Payroll Development**

The Total Covered Compensation development for the State Fund is shown below.

State (ERS, JRS, LRS)	6/30/2018
Pension Payroll ERS JRS LRS (assumes annual salary of \$17,342) Total	2,634,129,162 60,571,786 <u>3,849,924</u> 2,698,550,872
Ineligible based on payroll codes	(72,650,423)
State Total Covered Payroll	\$ 2,625,900,449

The estimated Total Covered Compensation development for the School Fund is shown below.

School (TRS, PSERS, Atlanta and Fulton County Schools)	6/30/2018
Pension Payroll TRS PSERS (assume \$27,000 average) Atlanta and Fulton County Schools (estimate) Total	11,704,333,529 943,731,000 <u>49,742,000</u> 12,697,806,529
Ineligible Board of Regents	(1,842,092,681)
Ineligible based on payroll codes	(95,632,158)
School Total Covered Payroll	\$ 10,760,081,690



#### State Employee OPEB Fund

Although the State Employee OPEB Fund intends to begin pre-funding benefits, the current assets have not yet accumulated to the level needed for significant long term investment. Therefore, the discount rate used to determine the present value of benefits needs to be reflective of the expected investment return on cash and other very short-term investments. For the June 30, 2018 valuation, a discount rate of 4.50% has been used for the State Employee OPEB Fund.

The plan designs offered for the 2019 plan year are as follows:

For Medicare-eligible members

- UnitedHealthcare Medicare Advantage (MAPD) Plan Options (Standard and Premium)
- Anthem Blue Cross and Blue Shield Medicare Advantage (MAPD) Plan Options (Standard and Premium)

Non-MA Plan Options

- Anthem BCBS Gold, Silver, Bronze Health Reimbursement Arrangement (HRA) Plan Options
- Anthem BCBS, Kaiser Permanente (KP) and UnitedHealthcare Health Maintenance Organization (HMO) Plan Options
- UnitedHealthcare High Deductible Health Plan (HDHP)

The valuation indicates that a Pre-Funding Contribution in the amount of \$178,423,443 or 6.79% of total covered payroll, payable for the fiscal year ending June 30, 2021 is needed to actuarially support the benefits of the State Employee OPEB Fund.

If the employer contributions are increased to the required levels, and the Fund earns 4.50% annually in investment income, then the Fund will be projected to cover the cost of all future benefits. If the assets are invested in such a way as to expect a rate of return higher than 4.50%, then the discount rate used in valuing liabilities could be increased. Schedule A shows the results of the valuation using a 6.00% discount rate for illustrative purposes.

Medical and drug benefits of the SHBP offered in 2019 to State Employees are used as a basis for the actuarially calculated contribution rate which is developed using the unit credit actuarial cost method with projected benefits. Although there are State dental and vision plans, they are employee-pay-all and, therefore, not included in the liabilities. As of June 30, 2018, the assets in trust solely to provide benefits to retirees and their beneficiaries is \$1,201,865,359. Gains and losses are reflected in the unfunded accrued liability that is assumed amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 3.25% annually. The assumptions are recommended by the actuary and are in the aggregate, reasonably related to the experience under the Fund and to reasonable expectations of anticipated experience under the Fund.

#### School Personnel OPEB Fund

Although the School Employee OPEB Fund intends to begin pre-funding benefits, the current assets have not yet accumulated to the level needed for significant long term investment. Therefore, the discount rate used to determine the present value of benefits needs to be reflective of the expected investment return on cash and other very short-term investments. For the June 30, 2018 valuation, a discount rate of 4.50% has been used for the School Personnel OPEB Fund.



The plan designs offered for the 2019 plan year are as follows:

For Medicare-eligible members

- UnitedHealthcare Medicare Advantage (MAPD) Plan Options (Standard and Premium)
- Anthem Blue Cross and Blue Shield Medicare Advantage (MAPD) Plan Options (Standard and Premium)

Non-MA Plan Options

- Anthem Gold, Silver, Bronze Health Reimbursement Arrangement (HRA) Plan Options
- Anthem, Kaiser Permanente (KP) and UnitedHealthcare Health Maintenance Organization (HMO) Plan Options
- UnitedHealthcare High Deductible Health Plan (HDHP)

The valuation indicates that a Pre-Funding Contribution in the amount of \$754,012,531 payable for the fiscal year ending June 30, 2021 is required to actuarially support the benefits of the School Personnel OPEB Fund.

If the employer contributions are not increased to the required levels, the Fund will not be projected to cover the cost of all future benefits. If the employer contributions are increased to the required levels, and the Fund earns 4.50% in investment return each year, then the Fund will be projected to cover the cost of all future benefits. If the assets are invested in such a way as to expect a rate of return higher than 4.50%, then the discount rate used in valuing liabilities could be increased. Schedule A shows the results of the valuation using a 6.00% discount rate for illustrative purposes.

Medical and drug benefits of the SHBP offered in 2019 to teachers and non-certificated public school employees are used as a basis for the actuarially calculated contribution rate which is developed using the unit credit actuarial cost method with projected benefits. As of June 30, 2018, the assets in trust solely to provide benefits to retirees and their beneficiaries is \$383,263,046. Gains and losses are reflected in the unfunded accrued liability that is assumed amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 3.00% annually. The assumptions are recommended by the actuary and are in the aggregate, reasonably related to the experience under the Fund and to reasonable expectations of anticipated experience under the Fund.



### STATE EMPLOYEE OPEB FUND



#### GEORGIA DEPARTMENT OF COMMUNITY HEALTH STATE EMPLOYEE OPEB FUND REPORT OF ACTUARY ON THE RETIREE MEDICAL VALUATION PREPARED AS OF JUNE 30, 2018

#### SECTION I - SUMMARY OF PRINCIPAL RESULTS

 For convenience of reference, the principal results of the valuation are summarized below. The following table summarizes the June 30, 2018 and June 30, 2017 results for the State Employee OPEB Fund.

Valuation Date	June 30, 2018	June 30, 2017		
Discount Rate	4.50%	4.50%		
Members Receiving SHBP Benefits				
Actives	51,623	51,880		
Retirees	38,150	37,402		
Spouses of Retirees	<u>12,750</u>	<u>12,603</u>		
Total*	102,523	101,885		
Total Covered Payroll	\$ 2,625,900,449	\$ 2,535,722,000		
Actuarial Accrued Liability Assets:	\$ 3,351,781,850	\$ 3,642,055,909		
Market value	1,201,865,359	854,937,155		
Unfunded Actuarial Accrued Liability	\$ 2,149,916,491	\$ 2,787,118,754		
Amortization period (years)	30	30		
Fiscal Year	2021	2020		
Pre-Funding Contribution				
Normal	\$ 93,558,678	\$ 100,016,247		
Accrued Liability	84,864,765	110,017,380		
Total	\$ 178,423,443	\$ 210,033,627		
Contribution as a % of payroll				
Normal	3.56%	3.94%		
Accrued Liability Total	<u>3.23%</u>	<u>4.34%</u>		
i Utai	6.79%	8.28%		
*In addition, in 2018, data was collected for 11,183 State active employees who have waived health coverage under SHBP. It is assumed 20% of these members will elect SHBP coverage before retirement and be eligible for an OPEB benefit.				



The following table summarizes the Unfunded Actuarial Accrued Liability and the Pre-Funding Contribution for the State Employee OPEB Fund for June 30, 2018 and June 30, 2017:

Valuation Date	June 30, 2018	June 30, 2017
State Employee OPEB Fund Unfunded Actuarial Accrued Liability Pre-Funding Contribution (\$) Discount Rate	\$ 2,149,916,491 \$ 178,423,443 4.50%	\$ 2,787,118,754 \$ 210,033,627 4.50%
	1.0070	1.0070

- 2. The valuation indicates that contributions of \$178,423,443 are sufficient to support current benefits of the State Employee OPEB Fund. Comments on the valuation results as of June 30, 2018 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI. If the employer contributions are made at the required levels, and the Fund earns 4.50% in investment income each year, then the Fund will be projected to cover the cost of all future benefits. If the assets are invested in such a way as to expect a rate of return higher than 4.50%, then the discount rate used in valuing liabilities could be increased. Schedule A shows the results of the valuation using a 6.00% discount rate for illustrative purposes.
- Schedule C of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.
- Schedule D of this report outlines the summary of plan provisions as interpreted for valuation purposes.



5. The following table details the change in the Unfunded Accrued Liability (UAL). All dollar amounts are expressed in millions.

State Employee OPEB Fund	
June 30, 2017 Discount Rate	4.50%
June 30, 2018 Discount Rate	4.50%
June 30, 2017 UAL	\$ 2,787.1
June 30, 2017 Normal Cost	\$ 100.0
Pre-Funding Contribution	\$ 210.0
Fiscal Year 2018 Actual Contribution	\$ 501.6
1. Expected UAL based on Pre-Funding Contribution	\$ 2,802.3
2. Expected UAL based on Actual Contributions	\$ 2,504.1
3. (Gain)/Loss due to contribution different from Pre-Funding Contribution $= 2 1.$	\$ (298.2)
4. (Gain)/Loss due to claims and retiree premium experience and trend	\$ (422.7)
5. (Gain)/Loss due to investment experience	\$ 30.6
6. (Gain)/Loss due to Other*	\$ 37.9
7. Actual UAL June 30, 2018 = 1.+3.+4.+5.+6	\$ 2,149.9
June 30, 2017 Accrued Liability (AL)	\$ 3,642.1
Other as a % of June 30, 2017 AL	1.04%

Other category includes changes due to such sources as retirements, terminations, deaths, etc, differing from the assumed rates, new entrants entering the plan with a partial year of service credit at the valuation date, and actual cash flow and investment timing different from assumed.



#### **SECTION II - MEMBERSHIP DATA**

1. Data regarding the membership of the plans for use as a basis of the valuation were furnished by the Department of Community Health. Census from the Employees' Retirement System, the Judicial Retirement System, and the Legislative Retirement System was used to obtain additional information as appropriate. The following table shows the number of retirees, spouses of retirees and active employees currently participating in the SHBP health plans on the basis of which the valuation was prepared.

State Employee OPEB Fund	Total
Number of Retirees	38,150
Number of Spouses of Retirees	12,750
Number of Actives	51,623



2. Detailed membership summaries are shown in the following tables:

#### STATE EMPLOYEE OPEB FUND

Service								
Ago	Under 5	E to 0	10 to 14	15 to 19	20 to 24	25 to 29	30 and	Total
Age		5 to 9	10 10 14	15 10 19	201024	25 10 29	Up	Total
Under 25	1,127	6	-	-	-	-	-	1,133
25 to 29	4,541	481	5	-	-	-	-	5,027
30 to 34	3,825	1,468	531	11	-	-	-	5,835
35 to 39	2,751	1,317	1,707	412	2	-	-	6,189
40 to 44	2,209	1,095	1,580	1,348	338	3	-	6,573
45 to 49	2,092	1,025	1,403	1,370	1,229	318	2	7,439
50 to 54	1,573	846	1,243	1,104	1,014	1,017	162	6,959
55 to 59	1,301	736	1,122	1,038	957	898	421	6,473
60 to 64	757	573	851	701	539	429	289	4,139
65 to 69	200	275	358	218	138	130	86	1,405
70 & up	57	59	127	66	55	40	47	451
Total	20,433	7,881	8,927	6,268	4,272	2,835	1,007	51,623

#### Active Employees Currently Participating in Health Plans by Age and Service

#### **Enrolled Retirees and Covered Spouses**

	Retirees	Spouses	Total
Under 65	10,455	4,721	15,176
65 and Older	27,695	8,029	35,724
Total	38,150	12,750	50,900



#### **SECTION III - ASSETS**

Schedule B shows information regarding assets for valuation purposes. As of June 30, 2018, assets held in trust solely to provide benefits to retirees and their beneficiaries in accordance with the terms of the Fund equal \$1,201,865,359.

Although the State Employee OPEB Fund intends to begin pre-funding benefits, there is no funding policy in place to fund the full actuarially determined contribution every year. Therefore, the discount rate used to determine the present value of benefits needs to be reflective of the blend between the expected investment return on long term investments and on cash and other very short-term investments. For the June 30, 2018 valuation, a discount rate of 4.50% has been used for the State Employee OPEB Fund.



#### SECTION IV - COMMENTS ON VALUATION

- Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule C, and the summary of plan provisions, which are described in Schedule D.
- The valuation shows that the State Employee OPEB Fund has an actuarial accrued liability of \$1,540,691,247 for benefits expected to be paid on account of the present active membership, based on service to the valuation date.
- 3. The State Employee OPEB Fund's liability on account of benefits payable to retirees and covered spouses amounts to \$1,811,090,603.
- 4. The total State Employee OPEB Fund actuarial accrued liability amounts to \$3,351,781,850.
- Against these liabilities, the Fund has present assets for valuation purposes in the amount of \$1,201,865,359. Therefore, the total unfunded actuarial accrued liability for the State Employee OPEB Fund is \$2,149,916,491.
- 6. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the State Employee OPEB Fund is determined to be \$93,558,678.



#### SECTION V - CONTRIBUTIONS PAYABLE UNDER THE PLAN

#### PRE-FUNDING EMPLOYER CONTRIBUTION

#### For Fiscal Year Ending June 30, 2021

Actuarially Determined Employer Contribution	
State Employee OPEB Fund	
Normal	\$ 93,558,678
Accrued Liability	 84,864,765
Total	\$ 178,423,443

- 1. The valuation indicates that the normal contribution for the State Employee OPEB Fund is determined to be \$93,558,678.
- 2. The unfunded actuarial accrued liability amounts to \$2,149,916,491 and is for employees, retirees and covered spouses that will receive benefits paid from the State Employee OPEB Fund.
- 3. An accrued liability contribution for the State Employee OPEB Fund of \$84,864,765 is sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the contribution will increase by 3.25% annually.
- 4. The total Pre-Funding Contribution for the State Employee OPEB Fund is, therefore, \$178,423,443.



#### **SECTION VI - COMMENTS ON LEVEL OF FUNDING**

- 1. The monthly contribution for retirees to opt into the medical plan is based on plan election, Medicare eligibility and election, and dependent coverage election. Claims, premiums and associated costs paid by the employer, on behalf of the retiree, as well as contributions placed in trust will be considered as contributions towards the pre-funding contribution. All employer contributions shown in this report are net of retiree monthly contributions, which are shown in Schedule D as Retiree Premiums.
- 2. The valuation indicates that a decrease in the recommended employer contribution for the State Employee OPEB Fund from last year's recommended amount of \$210,033,627 to the current valuation amount of \$178,423,443 would be needed to fund the State Employee OPEB Fund.
- 3. This contribution of \$178,423,443 is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years.
- 4. The decrease in the recommended contribution is primarily due to lower than expected healthcare benefit costs for Medicare Advantage members and employer contributions over the actuarially determined amount. Offsetting the decrease is an increase due to lower than expected investment income.



#### SECTION VII - ACCOUNTING INFORMATION

The information required under the Governmental Accounting Standards Board (GASB) Statements No. 74 and 75 will be issued in separate reports. The following information is provided for informational purposes only.

> SCHEDULE OF FUNDING PROGRESS State Employee OPEB Fund

#### 1. Schedule of Funding Progress and Schedule of Employer Contributions

#### Actuarial Accrued UAAL as a Actuarial Liability (AAL) Unfunded Percentage of Value of Actuarial Projected AAL Funded Covered Covered Valuation Assets **Unit Credit** (UAAL) Ratio Payroll Payroll <u>((b-a)/c)</u> **Date** <u>(a)</u> <u>(b)</u> <u>(b-a)</u> (a/b) (c) 6/30/2011 0 4,311,635,522 4,311,635,522 0.0% 2,542,890,541 169.6% 6/30/2012 0 3,867,926,833 3,867,926,833 0.0% 0.0% 6/30/2013 0 3,587,913,000 3,587,913,000 2,328,334,488 154.1% 6/30/2014 0 2,871,842,791 2,871,842,791 0.0% 2,293,104,232 125.2% 6/30/2015 101,450,424 3,529,009,722 3,427,559,298 2.9% 2,333,060,000 146.9% 128.6% 6/30/2016 516,245,110 3,609,889,324 3,093,644,214 14.3% 2,404,901,000 6/30/2017 854,937,155 3,642,055,909 2,787,118,754 23.5% 2,535,721,817 109.9% 6/30/2018 1,201,865,359 3,351,781,850 2,149,916,491 35.9% 2,625,900,449 81.9%

A data audit was performed and data collection procedures and assumptions were changed beginning with the 6/30/2012 valuation. Assumptions were changed beginning with the 6/30/2015 valuation to reflect the retirement systems' experience studies. In 2017, the methodology used to split members between State and School was changed and the participation and tobacco use assumptions were changed.

#### SCHEDULE OF EMPLOYER CONTRIBUTIONS

#### State Employee OPEB Fund

Fiscal Year Ending <u>Date</u>	Pre-Funding Contribution <u>( a )</u>	Actual Employer Contribution (b)	Percentage of Pre-Funding Contribution Contributed <u>(b) / (a)</u>
6/30/2011	327,052,844	168,384,048	51.5%
6/30/2012	317,100,335	181,898,661	57.4%
6/30/2013	338,819,221	181,503,596	53.6%
6/30/2014	321,455,891	177,045,380	55.1%
6/30/2015	275,680,773	267,235,185	96.9%
6/30/2016	259,249,981	574,015,317	221.4%
6/30/2017	202,091,859	498,201,623	246.5%
6/30/2018	232,161,217	501,574,024	216.0%



2. The information presented in the supplementary schedules was determined as part of the actuarial valuation at June 30, 2018. Additional information as of the latest actuarial valuation follows.

Voluction data	6/20/2018
Valuation date	6/30/2018
Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, open
Remaining amortization period	30
Asset valuation method	Market Value of Assets
Actuarial assumptions:	
Investment Rate of Return*	4.50%
Healthcare cost trend rate*	
Pre-Medicare Eligible	7.25%
Medicare Eligible	5.375%
Ultimate trend rate	
Pre-Medicare Eligible	4.75%
Medicare Eligible	4.75%
Year of Ultimate trend rate	
Pre-Medicare Eligible	2028
Medicare Eligible	2022
*Includes inflation at	2.75%



#### SCHEDULE A

#### Benefit of Pre-Funding and Investing to Earn 6.0%

# STATE EMPLOYEE OPEB FUND (\$ shown in thousands)

	Benefit of F And Investing	
State Employee OPEB Fund	Discount Rate 4.5%	Discount Rate 6.0%
ACTUARIAL ACCRUED LIABILITY Present value of prospective benefits payable in respect of:	\$ 1,540,691	¢4 000 705
<ul><li>(a) Present active members:</li><li>(b) Present retired members and covered spouses:</li><li>(c) Total actuarial accrued liability</li></ul>	\$ 1,540,691 <u>1,811,091</u> \$ 3,351,782	\$1,238,795 <u>1,600,236</u> \$ 2,839,031
PRESENT ASSETS FOR VALUATION PURPOSES	\$ 1,201,865	\$ 1,201,865
UNFUNDED ACTUARIAL ACCRUED LIABILITY	\$ 2,149,917	\$ 1,637,166
CONTRIBUTIONS FOR FISCAL YEAR ENDING JUNE 30, 2021:		
Normal Accrued Liability Total	\$ 93,558 <u>84,865</u> \$ 178,423	\$   71,753 <u>77,861</u> \$ 149,614



#### SCHEDULE B

#### PLAN ASSETS

GASB defines plan assets as resources, usually in the form of stocks, bonds, and other classes of investments, that have been segregated and restricted in a trust, or equivalent arrangement, in which (a) employer contributions to the plan are irrevocable, (b) assets are dedicated to providing benefits to retirees and their beneficiaries, and (c) assets are legally protected from creditors of the employers or plan administrator, for the payment of benefits in accordance with the terms of the plan. Assets in the trust may be used to pay health benefits to current retirees and their beneficiaries.

As of June 30, 2018, assets held in trust solely to provide benefits to retirees and their beneficiaries in accordance with the terms of the State Employee OPEB Fund equal \$1,201,865,359.

Although the State Employee OPEB Fund intends to begin pre-funding benefits, there is no funding policy in place to fund the full actuarially determined contribution every year. Therefore, the discount rate used to determine the present value of benefits needs to be reflective of the blend between the expected investment return on long term investments and on cash and other very short-term investments. For the June 30, 2018 valuation, a discount rate of 4.50% has been used for the State Employee OPEB Fund.



#### SCHEDULE C

#### OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

#### VALUATION DATE: June 30, 2018

DISCOUNT RATE: 4.50% per annum, compounded annually

#### ANNUAL EXPECTED MEDICAL/RX CLAIMS (AGE ADJUSTED TO AGE 65):

#### PRE-MEDICARE

Following is a chart detailing expected claims for pre-65 retirees blended based on assumed plan elections and normalized to age 65.



\*Retirees selecting one of the HRA plans will also receive annual credits to use for eligible medical expenses. For 2019, the credits are \$400 for the Gold Plan, \$200 for the Silver Plan and \$100 for the Bronze plan. For members participating in the Anthem or UnitedHealthcare plans, wellness credits up to \$480 are available to those completing certain wellness requirements. It is assumed that 50% of eligible plan participants receive the additional wellness credits.

#### MEDICARE ELIGIBLE

Effective January 1, 2010, the Medicare Advantage Plans are mandatory for Medicare-eligible retirees to receive the State subsidy.

The Medicare Advantage Plan monthly retiree premiums for members with Medicare Parts A and B as of January 1, 2020 are as follows:

Medicare Advantage Plan	Retiree Premium
UHC Standard MA	\$ 20.00
UHC Premium MA	\$ 128.22
Anthem Standard MA	\$ 146.15
Anthem Premium MA	\$ 182.82

Following is a chart detailing expected claims costs for Medicare Advantage Plan retirees blended based on assumed plan elections and normalized to age 65. It is assumed that 95% of retirees will choose UHC plans and 5% of retirees will choose Anthem plans. It is further assumed that 40% choose a Premium plan and 60% choose a Standard plan.

2020 premium rates, trended to the valuation date, were used to develop the expected claims costs for Medicare Advantage Plan retirees.



\*An adjustment is made for current retirees with no Medicare Part A coverage.



Year	Pre-65 Retiree Claims Trend	Post-65 Retiree Claims Trend
2018	7.25%	5.375%
2019	7.00%	5.250%
2020	6.75%	5.125%
2021	6.50%	5.000%
2022	6.25%	4.750%
2023	6.00%	4.750%
2024	5.75%	4.750%
2025	5.50%	4.750%
2026	5.25%	4.750%
2027	5.00%	4.750%
2028 and beyond	4.75%	4.750%

#### **HEALTH CARE COST TREND RATES:** Following is a chart detailing trend assumptions:

**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
Under 30	0.00%
30 – 34	1.00%
35 – 39	1.50%
40 – 44	2.00%
45 – 49	2.60%
50 – 54	3.30%
55 – 59	3.60%
60 – 64	4.20%
65 – 69	3.00%
70 – 74	2.50%
75 – 79	2.00%
80 – 84	1.00%
85 – 89	0.50%
90 and over	0.00%



**ANTICIPATED PARTICIPATION:** Representative values of the assumed annual rates of member participation and spouse coverage by future retirees are as follows:

	State
Member Participation*:	
If 5 years of service on 1/1/2012	95%
If less than 5 years of service on 1/1/2012:	
Years of Service at Retirement:	
30+	95%
25-29	90%
20-24	80%
15-19	65%
10-14	50%
Under 10	20%
Spouse Coverage:	
If retiree had 5 years of service on 1/1/2012	40%
If retiree had less than 5 years of service on 1/1/2012:	
Years of Retiree Service at Retirement:	
30+	32%
25-29	30%
20-24	26%
15-19	20%
10-14	18%
Under 10	8%

\* Active employees currently waiving health coverage are assumed to join the plan at a later date at the rate of 20% and then participate in the same pattern as current participating members.

**ACTUARIAL METHOD:** Costs were determined using the Projected Unit Credit Actuarial Cost Method. The annual service cost is the present value of the portion of the projected benefit attributable to participation service during the upcoming year, and the actuarial accrued liability (AAL) is equal to the present value of the portion of the projected benefit attributable to service before the valuation date. Service from hire date through the date of full retirement eligibility was used in allocating costs.

ACTUARIAL VALUE OF ASSETS: Market Value



# State Employee OPEB Fund Members Participating in the Employees Retirement System of Georgia

**SEPARATIONS BEFORE RETIREMENT**: The RP-2000 Employee Mortality Table projected to 2025 with projection scale BB is used for both males and females while in active service. Representative values of the assumed annual rates of separation other than retirement for non-law enforcement officers are as follows. Special rates of retirement, disability and termination apply to law enforcement officers.

		Annual Rates	of	
	Deat	<u>th</u>	<u>Disal</u>	<u>oility</u>
Age	<u>Males</u>	<b>Females</b>	<u>Males</u>	<u>Females</u>
20	0.0320%	0.0177%	0.05%	0.02%
25	0.0349	0.0192	0.05	0.02
30	0.0412	0.0245	0.05	0.02
35	0.0717	0.0441	0.05	0.02
40	0.1001	0.0655	0.25	0.10
45	0.1399	0.1043	0.48	0.25
50	0.1983	0.1555	0.70	0.45
55	0.2810	0.2228	1.05	0.73
60	0.4092	0.3058		
65	0.5600	0.4304		
69	0.6518	0.5390		

	<u>An</u>	nual Rates of Withdraw Years of Service	al
<u>Age</u>	<u>0-4</u>	<u>5-9</u> <u>Males</u>	<u>10 &amp; Over</u>
20 25 30 35 40 45 50 55 60 65	35.00% 27.50 23.00 21.50 19.50 18.60 16.60 14.50 14.00 15.00	15.00% 11.50 10.00 9.50 9.00 7.25 7.00 6.00 10.00	7.50% 6.00 4.75 4.00 4.25 4.75
20 25 30 35 40 45 50 55 60 65	30.00% 25.00 21.50 19.50 18.25 16.50 15.00 14.00 14.50 17.00	Females   17.50%   12.50   10.50   9.50   8.00   7.25   7.00   6.25   11.00	8.25% 6.00 5.00 4.00 4.25 4.50



	Old Plan							
Age	Early Ret	irement	Age 60 or	30 years	34 y	ears	More tha	n 34 years
	Male	Female	Male	Female	Male	Female	Male	Female
55	3.0%	3.5%	7.5%	10.0%	100.0%	100.0%	75.0%	90.0%
56	3.0	5.0	7.5	10.0	100.0	100.0	70.0	70.0
57	3.0	5.0	10.5	10.0	100.0	100.0	70.0	70.0
58	4.5	5.0	14.0	14.0	97.5	100.0	70.0	65.0
59	6.0	5.0	17.5	16.0	97.5	95.0	70.0	65.0
60			15.0	20.0	97.5	95.0	40.0	55.0
62			32.0	40.0	97.5	95.0	40.0	65.0
64			20.0	25.0	90.0	90.0	15.0	50.0
66			35.0	40.0	35.0	40.0	35.0	40.0
68			35.0	25.0	35.0	25.0	35.0	25.0
70			35.0	35.0	35.0	35.0	35.0	35.0
75			100.0	100.0	100.0	100.0	100.0	100.0

**RETIREMENT**: Representative values of the assumed annual rates of service retirement for non-law enforcement officers are as follows. Special retirement rates apply to law enforcement officers.

	New Plan and GSEPS			
Age	Early Re	tirement	Normal R	etirement
	Male	Female	Male*	Female**
55	7.0%	6.5%	60.0%	50.0%
56	7.0	7.0	60.0	40.0
57	8.0	8.0	50.0	40.0
58	9.0	9.0	45.0	40.0
59	11.0	12.0	35.0	40.0
60			25.0	30.0
62			40.0	40.0
64			25.0	27.0
66			32.0	35.0
68			25.0	25.0
70			30.0	30.0
75			100.0	100.0

- \* An additional 10% for ages below 55 and 20% for ages 55 to 59 are assumed to retire in the first year eligible for unreduced retirement with 30 years of service.
- \*\* An additional 20% are assumed to retire in the first year eligible for unreduced retirement with 30 years of service before age 60.



**DEATHS AFTER RETIREMENT**: The RP-2000 Combined Mortality Table projected to 2025 with projection scale BB and set forward 2 years for both males and females is used for the period after service retirement and for dependent beneficiaries. The RP-2000 Disabled Mortality Table projected to 2025 with projection scale BB and set back 7 years for males and set forward 3 years for females is used for the period after disability retirement. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on December 17, 2015, the numbers of expected future deaths are 9-12% less than the actual number of deaths that occurred during the study period for service retirements and beneficiaries and for disability retirements.

We are aware that the Society of Actuaries has released a new public sector mortality table, and although we will look at the fit of this table to actual rates of retired member mortality under ERS during the next experience study, we believe that the current assumed rates of mortality remain appropriate for use at this time. The next experience study for ERS will be for the period ending June 30, 2019.

Representative values of the assumed annual rates of mortality after service retirement are as follows:

Age	Males	Females	Age	Males	Females
40	0.1127%	0.0790%	65	1.1300%	0.8994%
45	0.1609	0.1230	70	1.8697	1.5281
50	0.2474	0.1872	75	3.2147	2.5220
55	0.4246	0.2918	80	5.5160	4.1628
60	0.6985	0.4923	85	9.5631	7.1239



## State Employee OPEB Fund Members Participating in the Georgia Judicial Retirement System

**SEPARATIONS BEFORE SERVICE RETIREMENT:** Representative values of the assumed annual rates of separation before service retirement are as follows:

	Annual Rates of				
Age	Withdrawal	Dea	th	Disability	
		<u>Males</u>	<u>Females</u>		
20	4.0%	.032%	.018%	.03%	
25	4.0	.035	.019	.03	
30	4.0	.041	.025	.05	
35	4.0	.072	.044	.08	
40	6.0	.100	.066	.10	
45	4.0	.140	.104	.18	
50	3.0	.198	.156	.25	
55	2.5	.281	.223	.45	
60	2.5	.409	.306	.73	
65	2.5	.560	.430	1.18	

**RETIREMENT:** The assumed annual rates of retirement are shown below.

<u>Age</u>	Annual Rates <u>of Retirement</u>
60 61	15% 10
62	10
63 – 64	10
65 – 69	15
70 – 74	25
75	100



**DEATHS AFTER RETIREMENT:** Since the System has minimal post-retirement mortality experience, the System uses the same mortality tables used for the Employees' Retirement System of Georgia. The RP-2000 Combined Mortality Table projected to 2025 with projection scale BB and set forward 2 years for both males and females is used for the period after retirement and for dependent beneficiaries. For the period after disability retirement, the RP-2000 Disabled Mortality Table projected to 2025 with projection scale BB and set forward 2 years for the period after disability retirement, the RP-2000 Disabled Mortality Table projected to 2025 with projection scale BB and set back 7 years for males and set forward 3 years for females is used. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on December 17, 2015, the numbers of expected future deaths are 9-12% less than the actual number of deaths that occurred during the study period for healthy retirees and disabled retirees. Representative values of the assumed annual rates of mortality for service retirements and beneficiaries are as follows:

Age	Males	Females	Age	Males	Females
40	0.113%	0.079%	65	1.130%	0.899%
45	0.161	0.123	70	1.870	1.528
50	0.247	0.187	75	3.215	2.522
55	0.425	0.292	80	5.516	4.163
60	0.699	0.492	85	9.563	7.124



## State Employee OPEB Fund Members Participating in the Georgia Legislative Retirement System

**SEPARATIONS BEFORE SERVICE RETIREMENT:** Representative values of the assumed annual rates of separation before service retirement are as follows:

	Annual Rates of			
Age	Withdrawal	Death		
		<u>Males</u>	<u>Females</u>	
20	8.0%	.032%	.018%	
25	8.0	.035	.019	
30	8.0	.041	.025	
35	8.0	.072	.044	
40	8.0	.100	.066	
45	8.5	.140	.104	
50	8.5	.198	.156	
55	9.0	.281	.223	
60	9.0	.409	.306	
65	9.0	.560	.430	

**SERVICE RETIREMENT:** The assumed annual rates of retirement are shown below:

Age	Annual Rate	Age	Annual Rate
60	10%	66	12%
61	10%	67	15%
62	15%	68	12%
63	10%	69	12%
64	10%	70-74	20%
65	12%	75	100%

**DEATHS AFTER RETIREMENT:** Since the System has minimal post-retirement mortality experience, the System uses the same mortality tables used for the Employees' Retirement System of Georgia. The RP-2000 Combined Mortality Table projected to 2025 with projection scale BB and set forward 2 years for both males and females is used for the period after service retirement and for dependent beneficiaries. Since there are no disability retirements in the System, there are no disability mortality rates utilized at this time. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on December 17, 2015, the numbers of expected future deaths are 9-12% less than the actual number of deaths that occurred during the study period for healthy retirees.

Representative values of the assumed annual rates of mortality after service retirement are as follows:

Age	Males	Females	Age	Males	Females
40	.113%	.079%	65	1.130%	.899%
45	.161	.123	70	1.870	1.528
50	.247	.187	75	3.215	2.522
55	.425	.292	80	5.516	4.163
60	.699	.492	85	9.563	7.124



#### SUMMARY OF MAIN PLAN PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

#### State Employee OPEB Fund Eligibility

Retiree medical eligibility is attained when an employee retires, and is immediately eligible to draw a retirement annuity from any of the retirement systems listed below. "Old Plan" means the plan applicable to members beginning employment prior to July 1, 1982. "New Plan" means the plan applicable to members employed on or after July 1, 1982 and before January 1, 2009. "GSEPS" means the plan applicable to members employed on or after January 1, 2009.

- Employees' Retirement System (GSEP Non-Police)
  - Service Retirement: 25 years of service or age 60 with 10 years of service
  - Disability Retirement: 15 years of service
  - Active Death Surviving Spouse: 15 years of service
- Employees' Retirement System (GSEP Police)
  - Service Retirement: 30 years of service or age 55 with 10 years of service
  - Disability Retirement: 15 years of service
    - Active Death Surviving Spouse: 13 years and 4 months of service
- Employees' Retirement System (Police)
  - Service Retirement: 30 years of service or age 55 with 10 years of service
  - o Disability Retirement: 13 years and 4 months of service
  - Active Death Surviving Spouse: 13 years and 4 months of service
- Employees' Retirement System (Old & New Plan Non-Police)
  - Service Retirement: 25 years of service or age 60 with 10 years of service
  - Disability Retirement: 13 years and 4 months of service
  - Active Death Surviving Spouse: 13 years and 4 months of service or age 60 with 10 years of service
- Judicial Retirement System
  - Service Retirement: age 60 with 10 years of service
  - Disability Retirement: 4 years of service
  - Active Death Surviving Spouse: 10 years of service
- Legislative Retirement System
  - Service Retirement: age 60 with 8 years of service
  - Disability Retirement: age 60 with 8 years of service
  - Active Death Surviving Spouse: 15 years of service or age 60 with 8 years of service

Retirees from other systems who may be eligible for post-employment benefits other than pensions were included in the valuation if they were included in the DCH census data.

Coverage starts immediately at retirement, provided the retiree makes proper premium payments or has the premiums deducted from the annuity check. If elected, dependent coverage starts on the same day as retiree coverage. A change from single to family coverage as a retiree is allowed only with a qualified change in status.

A tobacco surcharge of \$80 per month is charged to those tobacco users not participating in the Medicare Advantage plans. Of the retirees not participating in the Medicare Advantage plans, it is assumed that 2.5% pay the tobacco surcharge.



#### 2019 Plan Options

The plan designs offered for the 2019 plan year are as follows. Please note that Medicare Advantage premium rates for the 2020 plan year are available and are used in the valuation.:

For Medicare-eligible members

- UnitedHealthcare Medicare Advantage (MAPD) Plan Options (Standard and Premium)
- Anthem Blue Cross and Blue Shield Medicare Advantage (MAPD) Plan Options (Standard and Premium)

Non-MA Plan Options

- Anthem Gold, Silver, Bronze Health Reimbursement Arrangement (HRA) Plan Options
- Anthem, Kaiser Permanente (KP) and UnitedHealthcare Health Maintenance Organization (HMO) Plan Options
- UnitedHealthcare High Deductible Health Plan (HDHP)

#### Premiums

Retiree premiums vary based on plan election, dependent coverage, Medicare eligibility and election. Premiums shown are monthly and are effective January 1, 2019.

#### STATE HEALTH BENEFIT PLAN ANNUITANT UNDER 65 RATES JANUARY 1 - DECEMBER 31, 2019

	YOU	YOU + CHILD(REN)	YOU + SPOUSE	YOU + FAMILY
Anthem Gold	\$168.73	\$307.13	\$418.09	\$556.50
Anthem Silver	\$110.89	\$208.80	\$296.62	\$394.54
Anthem Bronze	\$72.45	\$143.46	\$215.91	\$286.92
Anthem HMO	\$135.65	\$250.90	\$348.63	\$463.89
UHC HMO	\$172.56	\$313.65	\$426.14	\$567.22
UHC HDHP	\$58.03	\$118.94	\$185.62	\$246.54
Kaiser HMO	\$142.71	\$262.59	\$362.49	\$482.37

The Medicare Advantage Plan monthly retiree premiums for members with Medicare Parts A and B as of January 1, 2020 are as follows. The Fund pays the Medicare Part B late enrollment penalty for members who were required to pay the penalty when the Medicare Advantage plans were first implemented. Future retirees are required to enroll in Medicare Part B when first eligible to avoid the penalty, or be responsible for paying the late enrollment penalty if applicable.

Medicare Advantage Plan	Retiree Premium
UHC Standard MA	\$ 20.00
UHC Premium MA	\$ 128.22
Anthem Standard MA	\$ 146.15
Anthem Premium MA	\$ 182.82

For active employees with less than 5 years of service, premiums will be subject to the service based schedule shown on the next page.



**CONTRIBUTIONS (Actives with less than five years of service as of January 1, 2012):** The Health Benefit Fund will pay a portion of the blended contribution rate for the Bronze Plan or the UHC Standard MA Plan based on the retirees' service at retirement. The retiree or spouse will pay the remainder of the premium for the chosen plan, not less than the premium paid by those with more than five years of service as of January 1, 2012.

Service at	Share of C	efit Fund's ontribution ate	Retiree's Share of Contribution Rate	
Retirement	Retiree	Spouse	Retiree	Spouse
30 and above	75%	55%	25%	45%
29	72%	53%	28%	47%
28	69%	51%	31%	49%
27	66%	49%	34%	51%
26	63%	47%	37%	53%
25	60%	45%	40%	55%
24	57%	43%	43%	57%
23	54%	41%	46%	59%
22	51%	39%	49%	61%
21	48%	37%	52%	63%
20	45%	35%	55%	65%
19	42%	33%	58%	67%
18	39%	31%	61%	69%
17	36%	29%	64%	71%
16	33%	27%	67%	73%
15	30%	25%	70%	75%
14	27%	23%	73%	77%
13	24%	21%	76%	79%
12	21%	19%	79%	81%
11	18%	17%	82%	83%
10	15%	15%	85%	85%
9 and below	0%	0%	100%	100%



### SCHOOL PERSONNEL OPEB FUND



#### GEORGIA DEPARTMENT OF COMMUNITY HEALTH SCHOOL PERSONNEL OPEB FUND REPORT OF ACTUARY ON THE RETIREE MEDICAL VALUATION PREPARED AS OF JUNE 30, 2018

#### SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation are summarized below. The following table summarizes the June 30, 2018 results for the School Personnel OPEB Fund. Since the previous valuation, the payroll growth assumption used to amortize the unfunded liability has been lowered from 3.25% to 3.00%.

Valuation Date	June 30, 2018	June 30, 2017	
	School	School	
Discount Rate	4.50%	4.50%	
Members Receiving SHBP			
Benefits			
Actives	177,183	175,610	
Retirees	83,709	81,449	
Spouses of Retirees	<u>    29,141</u>	28,234	
Total	290,033	285,293	
Estimated Total Payroll	\$10,760,081,690	\$10,516,260,733	
Actuarial Accrued Liability	\$ 9,490,548,002	\$ 10,089,949,795	
Assets:			
Market value	\$ 383,263,046	\$ 229,684,553	
Unfunded Actuarial Accrued Liability	\$ 9,107,284,956	\$ 9,860,265,242	
Amortization period (years)	30	30	
Fiscal Year	2021	2020	
Pre-Funding Contribution) \$			
Normal	\$ 382,546,714	\$ 397,692,168	
Accrued Liability	<u>371,465,817</u> \$754,012,531	<u>389,219,348</u>	
Total	\$ 754,012,531	\$ 786,911,516	
ADEC as % of payroll			
Normal	3.56%	3.78%	
Accrued Liability	<u>3.45%</u>	<u>3.70%</u>	
Total	7.01%	7.48%	
*In addition, in 2018, data was collect waived health coverage under SHBP SHBP coverage before retirement and	It is assumed 20% of thes	e members will elect	



Valuation Date	June 30, 2018	June 30, 2017
<b>School Personnel OPEB Fund</b> Unfunded Actuarial Accrued Liability Pre-Funding Contribution(\$) Discount Rate	\$ 9,490,548,002 \$ 754,012,531 4.50%	\$ 9,860,265,242 \$ 786,911,516 4.50%

The following table summarizes the Unfunded Actuarial Accrued Liability and the Pre-Funding Contribution for the School Personnel OPEB Fund for June 30, 2018 and June 30, 2017:

- 2. The valuation indicates that a total contribution of \$754,012,531 is sufficient to support current benefits of the School Personnel OPEB Fund. Comments on the valuation results as of June 30, 2018 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI. If the contributions are not increased to the required levels, the Fund will not be projected to cover the costs of all future benefits. If contributions are made at the required levels and the assets are invested in such a way as to earn more than 4.50%, then the discount rates for valuing liabilities could be increased. The impact of this change, using a discount rate of 6.00% for illustrative purposes, is shown on Schedule A.
- 3. Schedule C of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. Since the previous valuation, the payroll growth assumption used to amortize the unfunded liability has been lowered from 3.25% to 3.00%.
- Schedule D of this report outlines the summary of plan provisions as interpreted for valuation purposes.



5. The following table details the change in the Unfunded Accrued Liability (UAL). All dollar amounts are expressed in millions.

School Employee OPEB Fund	
June 30, 2017 Discount Rate	4.50%
June 30, 2018 Discount Rate	4.50%
June 30, 2017 UAL	\$ 9,860.3
June 30, 2017 Normal Cost	\$ 397.7
Pre-Funding Contribution	\$ 786.9
Fiscal Year 2018 Actual Contribution	\$ 518.3
1. Expected UAL based on Pre-Funding Contribution	\$ 9,915.0
2. Expected UAL based on Actual Contributions	\$ 10,189.6
3. (Gain)/Loss due to contribution different from Pre-Funding Contribution = $2 1$ .	\$ 274.6
4. (Gain)/Loss due to claims and retiree premium experience and trend	\$ (1,287.8)
5. (Gain)/Loss due to investment experience	\$ 9.1
6. (Gain)/Loss due to Other*	\$ 196.4
7. Actual UAL June 30, 2018 = 1. + 3. + 4. + 5. + 6.	\$ 9,107.3
June 30, 2017 Accrued Liability (AL)	\$ 10,089.9
Other as a % of June 30, 2017 AL	1.95%

\* Other category includes changes due to such sources as retirements, terminations, deaths, etc, differing from the assumed rates, new entrants entering the plan with a partial year of service credit at the valuation date, and actual cash flow and investment timing different from assumed.



#### **SECTION II - MEMBERSHIP DATA**

1. Data regarding the membership of the plans for use as a basis of the valuation were furnished by the Department of Community Health. Census from the Teachers' Retirement System, the Public School Employees' Retirement System, the Atlanta Public Schools and Fulton County Schools was used to obtain additional information as appropriate. The following table shows the number of retirees, spouses of retirees and active employees currently participating the SHBP health plans on the basis of which the valuation was prepared.

School Personnel OPEB Fund	Total
Number of Retirees	83,709
Number of Spouses of Retirees	29,141
Number of Actives	177,183



2. Detailed membership summaries are shown in the following tables:

# SCHOOL PERSONNEL OPEB FUND

# Active Employees by Age and Service

				Service				
Age	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 and Up	Total
Under 25	1,636	7	-	-	-	-	-	1,643
25 to 29	10,993	2,588	9	-	-	-	-	13,590
30 to 34	7,238	7,306	2,636	11	-	-	-	17,191
35 to 39	6,164	4,151	8,491	2,231	7	-	-	21,044
40 to 44	5,476	3,612	5,810	7,169	1,746	8	-	23,821
45 to 49	5,310	3,764	5,943	5,369	6,529	1,750	19	28,684
50 to 54	4,254	3,149	5,286	4,428	3,739	3,983	1,078	25,917
55 to 59	3,380	2,584	4,392	4,289	3,643	2,702	1,897	22,887
60 to 64	2,176	1,777	3,015	2,778	2,423	1,899	1,421	15,489
65 to 69	623	754	1,098	897	671	542	562	5,147
70 & up	164	202	474	292	214	158	266	1,770
Total	47,414	29,894	37,154	27,464	18,972	11,042	5,243	177,183

# **Enrolled Retirees and Covered Spouses**

	Retirees	Spouses	Total
Under 65	19,785	7,880	27,665
65 and Older	63,924	21,261	85,185
Total	83,709	29,141	112,850



# SECTION III - ASSETS

Schedule B shows information regarding assets for valuation purposes. As of June 30, 2018, assets held in trust solely to provide benefits to retirees and their beneficiaries in accordance with the terms of the Fund equal \$383,263,046.

Although the School Employee OPEB Fund intends to begin pre-funding benefits, there is no funding policy in place to fund the full actuarially determined contribution every year. Therefore, the discount rate used to determine the present value of benefits needs to be reflective of the blend between the expected investment return on long term investments and on cash and other very short-term investments. For the June 30, 2018 valuation, a discount rate of 4.50% has been used for the School Employee OPEB Fund.



# SECTION IV - COMMENTS ON VALUATION

- Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule C, and the summary of plan provisions, which are described in Schedule D.
- The valuation shows that the School Personnel OPEB Fund has an actuarial accrued liability of \$5,981,621,786 for benefits expected to be paid on account of the present active membership, based on service to the valuation date.
- The School Personnel OPEB Fund's liability on account of benefits payable to retirees and covered spouses amounts to \$3,508,926,216.
- 4. The total School Personnel OPEB Fund actuarial accrued liability amounts to \$9,490,548,002.
- Against these liabilities, the Fund has present assets for valuation purposes in the amount of \$383,263,046. Therefore, the total unfunded actuarial accrued liability for the School Personnel OPEB Fund is \$9,107,284,956.
- The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the School Personnel OPEB Fund is determined to be \$382,546,714.



# SECTION V - CONTRIBUTIONS PAYABLE UNDER THE PLAN

# PRE-FUNDING EMPLOYER CONTRIBUTION

#### For Fiscal Year Ending June 30, 2021

Pre-Funding Contribution:	
School Personnel OPEB Fund	
Normal	\$ 382,546,714
Accrued Liability	371,465,817
Total	\$ 754,012,531

- 1. The valuation indicates that the normal contribution for the School Personnel OPEB Fund is determined to be \$382,546,714.
- 2. The unfunded actuarial accrued liability amounts to \$9,490,548,002 and is for employees, retirees and covered spouses that will receive benefits paid from the School Personnel OPEB Fund.
- An accrued liability contribution for the School Personnel OPEB Fund of \$371,465,817 is sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the contribution will increase by 3.00% annually.
- The total Pre-Funding Contribution for the School Personnel OPEB Fund is, therefore, \$754,012,531.



#### **SECTION VI - COMMENTS ON LEVEL OF FUNDING**

- 1. The monthly contribution for retirees to opt into the medical plan is based on plan election, Medicare eligibility and election, and dependent coverage election. Claims, premiums and associated costs paid by the employer, on behalf of the retiree, as well as contributions placed in trust will be considered as contributions towards the pre-funding contribution. All employer contributions shown in this report are net of retiree monthly contributions, which are shown in Schedule D as Retiree Premiums.
- The valuation indicates that a decrease in the recommended employer contribution rate for the School Personnel OPEB Fund from last year's recommended amount of \$786,911,516 to this year's recommended amount of \$754,012,531 is needed to fund the School Personnel OPEB Fund.
- 3. This contribution of \$754,012,531 is needed to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years.
- 4. The decrease in the recommended contribution is primarily due to lower than expected healthcare benefit costs for Medicare Advantage members. The decrease is somewhat offset by employer contributions less than the actuarially determined contribution amount.



# SECTION VII - ACCOUNTING INFORMATION

The information required under the Governmental Accounting Standards Board (GASB) Statements No. 74 and 75 will be issued in separate reports. The following information is provided for informational purposes only.

# 1. Schedule of Funding Progress and Schedule of Employer Contributions

# SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation <u>Date</u>	Actuarial Value of Assets <u>(a)</u>	Actuarial Accrued Liability (AAL) Projected Unit Credit <u>(b)</u>	Unfunded AAL (UAAL) <u>(b-a)</u>	Funded Ratio <u>( a / b )</u>
6/30/2011	0	11,143,125,071	11,143,125,071	0.0%
6/30/2012	0	10,869,929,923	10,869,929,923	0.0%
6/30/2013	0	10,788,794,736	10,788,794,736	0.0%
6/30/2014	0	8,514,320,187	8,514,320,187	0.0%
6/30/2015	30,853,207	10,543,010,090	10,512,156,883	0.3%
6/30/2016	95,406,837	10,559,402,261	10,463,995,424	0.9%
6/30/2017	229,684,553	10,089,949,795	9,860,265,242	2.28%
6/30/2018	383,263,046	9,490,548,002	9,107,284,956	4.04%

#### School Personnel OPEB Fund

A data audit was performed and data collection procedures and assumptions were changed beginning with the 6/30/2012 valuation. Assumptions were changed beginning with the 6/30/2015 valuation to reflect the retirement systems' experience studies. In 2017, the methodology used to split members between State and School was changed and the participation and tobacco use assumptions were changed.

# SCHEDULE OF EMPLOYER CONTRIBUTIONS

#### School Personnel OPEB Fund

Fiscal Year Ending <u>Date</u>	Pre-Funding Contribution <u>( a )</u>	Actual Employer Contribution (b)	Percentage of Pre-Funding Contribution Contributed <u>(b) / (a)</u>
6/30/2011	1,050,850,962	339,220,960	32.3%
6/30/2012	1,054,708,002	380,858,538	36.1%
6/30/2013	982,120,099	362,527,218	36.9%
6/30/2014	943,310,062	408,422,277	43.3%
6/30/2015	873,277,873	408,537,847	46.8%
6/30/2016	873,735,876	432,437,545	49.5%
6/30/2017	669,894,206	521,407,903	77.8%
6/30/2018	824,872,368	518,290,365	62.8%



 The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2018. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2018
Actuarial cost method	Projected unit credit
Amortization method	Level percent of pay, open
Remaining amortization period	30
Asset valuation method	Market Value of Assets
Actuarial assumptions:	
Investment Rate of Return*	4.50%
Healthcare cost trend rate*	
Pre-Medicare Eligible	7.25%
Medicare Eligible 5.375%	
Ultimate trend rate	
Pre-Medicare Eligible	4.75%
Medicare Eligible	4.75%
Year of Ultimate trend rate	
Pre-Medicare Eligible	2028
Medicare Eligible	2022
*Includes inflation at	2.50%



# Benefit of Prefunding Actuarially Determined Employer Contributions and Invested to Earn 6%

# SCHOOL PERSONNEL OPEB FUND (\$ shown in thousands)

	Benefit of Prefunding		
	Discount Rate	Discount Rate	
	4.50%	6.00%	
ACTUARIAL ACCRUED LIABILITY			
Present value of prospective benefits payable in respect of:			
(a) Present active members	\$ 5,981,622	\$ 4,680,147	
(b) Present retired members and covered spouses	3,508,926	3,073,037	
(c) Total actuarial accrued liability	\$ 9,490,548	\$ 7,753,184	
PRESENT ASSETS FOR VALUATION PURPOSES	\$     383,263 \$   9,107,285	\$ 383,263 \$ 7,369,921	
CONTRIBUTIONS FOR FISCAL YEAR ENDING JUNE 30, 2021:			
Normal	\$382,547	\$285,011	
Accrued Liability	<u>\$371,466</u>	<u>\$361,252</u>	
Total	\$754,013	\$646,263	



#### SCHEDULE B

#### PLAN ASSETS

GASB defines plan assets as resources, usually in the form of stocks, bonds, and other classes of investments, that have been segregated and restricted in a trust, or equivalent arrangement, in which (a) employer contributions to the plan are irrevocable, (b) assets are dedicated to providing benefits to retirees and their beneficiaries, and (c) assets are legally protected from creditors of the employers or plan administrator, for the payment of benefits in accordance with the terms of the plan. Assets in the trust may be used to pay health benefits to current retirees and their beneficiaries.

As of June 30, 2018, assets held in trust solely to provide benefits to retirees and their beneficiaries in accordance with the terms of the State Personnel OPEB Fund equal \$383,263,046.

Although the School Employee OPEB Fund intends to begin pre-funding benefits, there is no funding policy in place to fund the full actuarially determined contribution every year. Therefore, the discount rate used to determine the present value of benefits needs to be reflective of the blend between the expected investment return on long term investments and on cash and other very short-term investments. For the June 30, 2018 valuation, a discount rate of 4.50% has been used for the School Employee OPEB Fund.



#### SCHEDULE C

#### OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

VALUATION DATE: June 30, 2018

DISCOUNT RATE: 4.50% per annum, compounded annually

ANNUAL EXPECTED MEDICAL/RX CLAIMS (AGE ADJUSTED TO AGE 65):

#### PRE-MEDICARE

Following is a chart detailing expected claims for pre-65 retirees blended based on assumed plan elections and normalized to age 65.



\*Retirees selecting one of the HRA plans will also receive annual credits to use for eligible medical expenses. For 2019, the credits are \$400 for the Gold Plan, \$200 for the Silver Plan and \$100 for the Bronze plan. For members participating in the Anthem or UnitedHealthcare plans, wellness credits up to \$480 are available to those completing certain wellness requirements. It is assumed that 50% of eligible plan participants receive the additional wellness credits.

#### MEDICARE ELIGIBLE

Effective January 1, 2010, the Medicare Advantage Plans are mandatory for Medicare-eligible retirees to receive the State subsidy.

The Medicare Advantage Plan monthly retiree premiums for members with Medicare Parts A and B as of January 1, 2020 are as follows:

Medicare Advantage Plan	Retiree Premium
UHC Standard MA	\$ 20.00
UHC Premium MA	\$ 128.22
Anthem Standard MA	\$ 146.15
Anthem Premium MA	\$ 182.82

Following is a chart detailing expected claims costs for Medicare Advantage Plan retirees blended based on assumed plan elections and normalized to age 65. It is assumed that 95% of retirees will choose UHC plans and 5% of retirees will choose Anthem plans. It is further assumed that 40% choose a Premium plan and 60% choose a Standard plan.

2020 premium rates, trended to the valuation date, were used to develop the expected claims costs for Medicare Advantage Plan retirees.

Medicare Advantage*	\$ 1,261

\*An adjustment is made for current retirees with no Medicare Part A coverage.



Year	Pre-65 Retiree Claims Trend	Post-65 Retiree Claims Trend
2018	7.25%	5.375%
2019	7.00%	5.250%
2020	6.75%	5.125%
2021	6.50%	5.000%
2022	6.25%	4.750%
2023	6.00%	4.750%
2024	5.75%	4.750%
2025	5.50%	4.750%
2026	5.25%	4.750%
2027	5.00%	4.750%
2028 and beyond	4.75%	4.750%

#### **HEALTH CARE COST TREND RATES:** Following is a chart detailing trend assumptions:

**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
Under 30	0.00%
30 – 34	1.00%
35 – 39	1.50%
40 – 44	2.00%
45 – 49	2.60%
50 – 54	3.30%
55 – 59	3.60%
60 - 64	4.20%
65 – 69	3.00%
70 – 74	2.50%
75 – 79	2.00%
80 - 84	1.00%
85 – 89	0.50%
90 and over	0.00%



**ANTICIPATED PARTICIPATION:** Representative values of the assumed annual rates of member participation and spouse coverage by future retirees are as follows:

	State
Member Participation*:	
If 5 years of service on 1/1/2012	95%
If least them Excess of semicer on 4/4/0040:	
If less than 5 years of service on 1/1/2012:	
Years of Service at Retirement:	
30+	95%
25-29	90%
20-24	80%
15-19	65%
10-14	50%
Under 10	20%
Spouse Coverage:	
If retiree had 5 years of service on 1/1/2012	40%
If retiree had less than 5 years of service on 1/1/2012:	
Years of Retiree Service at Retirement:	
30+	32%
25-29	30%
20-24	26%
15-19	20%
10-14	18%
Under 10	8%

\* Active employees currently waiving health coverage are assumed to join the plan at a later date at the rate of 20% and then participate in the same pattern as current participating members.

**ACTUARIAL METHOD:** Costs were determined using the Projected Unit Credit Actuarial Cost Method. The annual service cost is the present value of the portion of the projected benefit attributable to participation service during the upcoming year, and the actuarial accrued liability (AAL) is equal to the present value of the portion of the projected benefit attributable to service before the valuation date. Service from hire date through the date of full retirement eligibility was used in allocating costs.

ACTUARIAL VALUE OF ASSETS: Market Value



# School Personnel OPEB Fund Members Participating in the Teachers Retirement System of Georgia

# SERVICE RETIREMENT:

	Annual Rate				
	Ma	le	Fem	nale	
<u>AGE</u>	Less than 30 years of service	30 or more years of service	Less than 30 years of service	30 or more years of service	
50	3.5 %	60.0 %	3.0 %	55.0 %	
55	5.0	40.0	5.5	37.0	
60	20.0	36.0	25.0	43.0	
61	18.0	32.0	25.0	43.0	
62	26.0	36.0	25.0	43.0	
63	22.0	33.0	25.0	43.0	
64	22.0	32.0	25.0	43.0	
65	30.0	30.0	31.0	31.0	
66	32.0	32.0	33.0	33.0	
67	30.0	30.0	30.0	30.0	
68	30.0	30.0	30.0	30.0	
69	28.0	28.0	30.0	30.0	
70	30.0	30.0	30.0	30.0	



# School Personnel OPEB Fund Members Participating in the Teachers Retirement System of Georgia

# SEPARATION BEFORE SERVICE RETIREMENT:

			Annual Rate of		
<u>Age</u>	<u>Death*</u>	<u>Disability</u>		<u>Withdrawal</u> Years of Service	
			<u>0-4</u>	<u>5-9</u>	<u>10+</u>
		Male			
20	0.0320%	0.0135%	25.00%	-	-
25	0.0349	0.0135	17.00	12.00%	-
30	0.0412	0.0210	13.50	7.00	8.00%
35	0.0717	0.0330	13.50	6.00	3.00
40	0.1001	0.0550	13.00	6.00	2.50
45	0.1399	0.0900	12.00	6.00	2.30
50	0.1983	0.1700	11.00	5.50	2.50
55	0.2810	0.3000	11.00	5.50	3.00
60	0.4092	-	12.00	5.50	-
64	0.5330	-	13.00	6.50	
		Fema	ام		
		<u>r enta</u>			
20	0.0177%	0.0100%	28.00%	-	-
25	0.0192	0.0130	13.50	16.00%	-
30	0.0245	0.0140	13.50	8.00	6.00%
35	0.0441	0.0190	13.00	7.00	3.50
40	0.0655	0.0390	11.00	6.50	3.00
45	0.1043	0.0650	10.50	6.00	2.30
50	0.1555	0.1400	10.00	5.00	2.40
55	0.2228	0.3400	10.00	5.00	2.75
60	0.3058	-	10.50	5.50	-
64	0.4015	-	13.00	6.50	-

\* The RP-2000 Employee Mortality Table projected to 2025 with projection scale BB is used for death prior to service retirement.



# School Personnel OPEB Fund Members Participating in the Teachers Retirement System of Georgia

DEATHS AFTER RETIREMENT: The RP-2000 White Collar Mortality Table projected to 2025 with projection scale BB (set forward 1 year for males) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table projected to 2025 with projection scale BB (set forward two years for males and four years for females) is used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on November 18, 2015, the numbers of expected future deaths are 8-11% less than the actual number of deaths that occurred during the study period for healthy retirees and 9-11% less than expected under the selected table for disabled retirees.

We are aware that the Society of Actuaries has released a new public sector mortality table, and although we will look at the fit of this table to actual rates of retired member mortality under TRS during the next experience study, we believe that the current assumed rates of mortality remain appropriate for use at this time. The next experience study for TRS will be for the period ending June 30, 2018.

		Annual Rate	of Death After	
	Service F	Retirement	Disability	Retirement
<u>Age</u>	<u>Males</u>	Females	Males	Females
40	0.0889%	0.0598%	2.0938%	0.6911%
45	0.1352	0.0942	2.3306	0.9865
50	0.2136	0.1474	2.9279	1.4019
55	0.3478	0.2281	3.4400	1.6567
60	0.5197	0.3638	3.5881	1.9670
65	0.9071	0.6397	3.8275	2.6129
70	1.4666	1.1229	4.7566	3.6157
75	2.5894	1.9017	6.3153	5.0131
80	4.5768	3.1857	8.3527	6.9358
85	8.0034	5.4864	10.9122	9.6851
90	15.1656	9.5675	17.2787	15.3358
95	25.0467	16.0813	27.1263	21.4644

Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:



# School Personnel OPEB Fund Members Participating in the Georgia Public School Employees Retirement System

**SEPARATIONS BEFORE SERVICE RETIREMENT:** Representative values of the assumed annual rates of separation before service retirement are as follows:

		I Rates of With ears of Service	
Age	<u>0-4</u>	<u>5-9</u> <u>Males</u>	<u>10 &amp; Over</u>
20 25 30 35 40 45 50 55 60	37.0% 28.0 25.0 23.0 21.0 19.0 17.0 15.0 12.0	17.0% 15.0 13.0 12.0 11.0 9.0 9.0 7.5	12.0% 9.0 7.5 6.5 6.5 6.0
		<u>Females</u>	
20 25 30 35 40 45 50 55 60	32.0% 28.0 23.0 19.0 17.0 15.5 14.0 12.0 11.0	18.0% 15.0 13.0 12.0 10.0 8.5 8.0 7.5	10.0% 10.0 8.0 7.0 6.0 5.5



# School Personnel OPEB Fund Members Participating in the Georgia Public School Employees Retirement System

		nnual Rates of	Disability
Age	Dea	tn	Disability
	<u>Males</u>	<u>Females</u>	
20	0.0320%	0.0177%	0.0000%
25	0.0349	0.0192	0.0000
30	0.0412	0.0245	0.0000
35	0.0717	0.0441	0.0025
40	0.1001	0.0655	0.0110
45	0.1399	0.1043	0.0370
50	0.1983	0.1555	0.0865
55	0.2810	0.2228	0.2250
60	0.4092	0.3058	0.3500
65	0.5600	0.4304	0.0000

# **RETIREMENT:**

Age	Annual Rate	Age	Annual Rate
60	13.0%	68	23.0%
61	13.0	69	26.0
62	22.0	70	27.0
63	17.5	71	27.0
64	17.0	72	27.0
65	28.0	73	27.0
66	27.0	74	27.0
67	23.0	75 & Over	100.0

DEATHS AFTER RETIREMENT: The RP-2000 Blue-Collar Mortality Table projected to 2025 with projection scale BB (set forward 3 years for males and 2 years for females) is used for the period after service retirement and for beneficiaries of deceased members. The RP-2000 Disabled Mortality projected to 2025 with projection scale BB (set forward 5 years for both males and females) is used for the period after disability retirement. There is a margin for future mortality improvement in the tables used by the System. Based on of the most recent experience study adopted by the the results Board on December 17, 2015, the numbers of expected future deaths are 9-11% less than the actual number of deaths that occurred during the study period for healthy retirees and 9-11% less than expected under the selected table for disabled retirees. Representative values of the assumed annual rates of mortality for service retirements and beneficiaries are as follows:

Age	Males	Females	Age	Males	Females
40	0.1476%	0.0995%	65	1.4859%	0.9774%
45	0.1974	0.1484	70	2.4262	1.7054
50	0.3057	0.2084	75	3.9830	2.7288
55	0.5644	0.2844	80	6.5238	4.4542
60	0.9575	0.5014	85	10.9551	7.5727



#### SUMMARY OF MAIN PLAN PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

# School Personnel OPEB Fund Eligibility

Retiree medical eligibility is attained when an employee retires, and is immediately eligible to draw a retirement annuity from any of these systems:

- Teachers Retirement System
  - Service Retirement: 25 years of service or age 60 with 10 years of service
  - Disability Retirement: 10 years of service
  - Active Death Surviving Spouse: 10 years of service
- Public School Employees Retirement System
  - Service Retirement: age 60 with 10 years of service
  - Disability Retirement: 15 years of service
  - Active Death Surviving Spouse: age 60 with 10 years of service

TRS eligibility requirements were assumed for members in the Other category of the School Fund.

Coverage starts immediately at retirement, provided the retiree makes proper premium payments or has the premiums deducted from the annuity check. If elected, dependent coverage starts on the same day as retiree coverage. A change from single to family coverage as a retiree is allowed only with a qualified change in status.

A tobacco surcharge of \$80 per month is charged to those tobacco users not participating in the Medicare Advantage plans. Of the retirees not participating in the Medicare Advantage plans, it is assumed that 2.5% pay the tobacco surcharge.



#### 2019 Plan Options

The plan designs offered for the 2019 plan year are as follows. Please note that Medicare Advantage premium rates for the 2020 plan year are available and are used in the valuation.:

For Medicare-eligible members

- UnitedHealthcare Medicare Advantage (MAPD) Plan Options (Standard and Premium)
- Anthem Blue Cross and Blue Shield Medicare Advantage (MAPD) Plan Options (Standard and Premium)

Non-MA Plan Options

- Anthem Gold, Silver, Bronze Health Reimbursement Arrangement (HRA) Plan Options
- Anthem, Kaiser Permanente (KP) and UnitedHealthcare Health Maintenance Organization (HMO) Plan Options
- UnitedHealthcare High Deductible Health Plan (HDHP)

#### **Premiums**

Retiree premiums vary based on plan election, dependent coverage, Medicare eligibility and election. Premiums shown are monthly and are effective January 1, 2019.

# STATE HEALTH BENEFIT PLAN ANNUITANT UNDER 65 RATES JANUARY 1 - DECEMBER 31, 2019

	YOU	YOU + CHILD(REN)	YOU + SPOUSE	<b>YOU + FAMILY</b>
Anthem Gold	\$168.73	\$307.13	\$418.09	\$556.50
Anthem Silver	\$110.89	\$208.80	\$296.62	\$394.54
Anthem Bronze	\$72.45	\$143.46	\$215.91	\$286.92
Anthem HMO	\$135.65	\$250.90	\$348.63	\$463.89
UHC HMO	\$172.56	\$313.65	\$426.14	\$567.22
UHC HDHP	\$58.03	\$118.94	\$185.62	\$246.54
Kaiser HMO	\$142.71	\$262.59	\$362.49	\$482.37

The Medicare Advantage Plan monthly retiree premiums for members with Medicare Parts A and B as of January 1, 2020 are as follows. The Fund pays the Medicare Part B late enrollment penalty for members who were required to pay the penalty when the Medicare Advantage plans were first implemented. Future retirees are required to enroll in Medicare Part B when first eligible to avoid the penalty, or be responsible for paying the late enrollment penalty if applicable.

Medicare Advantage Plan	Retiree Premium
UHC Standard MA	\$ 20.00
UHC Premium MA	\$ 128.22
Anthem Standard MA	\$ 146.15
Anthem Premium MA	\$ 182.82

For active employees with less than 5 years of service, premiums will be subject to the service based schedule shown on the next page.



**CONTRIBUTIONS (Actives with less than five years of service as of January 1, 2012):** The Health Benefit Fund will pay a portion of the blended contribution rate for the Bronze Plan or the UHC Standard MA Plan based on the retirees' service at retirement. The retiree or spouse will pay the remainder of the premium for the chosen plan, not less than the premium paid by those with more than five years of service as of January 1, 2012.

Service at	Health Benefit Fund's Share of Contribution Rate		Retiree's Share of Contribution Rate	
Retirement	Retiree	Spouse	Retiree	Spouse
30 and above	75%	55%	25%	45%
29	72%	53%	28%	47%
28	69%	51%	31%	49%
27	66%	49%	34%	51%
26	63%	47%	37%	53%
25	60%	45%	40%	55%
24	57%	43%	43%	57%
23	54%	41%	46%	59%
22	51%	39%	49%	61%
21	48%	37%	52%	63%
20	45%	35%	55%	65%
19	42%	33%	58%	67%
18	39%	31%	61%	69%
17	36%	29%	64%	71%
16	33%	27%	67%	73%
15	30%	25%	70%	75%
14	27%	23%	73%	77%
13	24%	21%	76%	79%
12	21%	19%	79%	81%
11	18%	17%	82%	83%
10	15%	15%	85%	85%
9 and below	0%	0%	100%	100%