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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, 2019



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September 9, 2020

Georgia Department of Community Health 2 Peachtree Street, N.W., 34th 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, 2019.

Since the prior valuation, we have updated the healthcare trend rates and updated the actuarial assumptions used for the Teachers Retirement System of Georgia based on the results of an actuarial experience study for the five-year period from July 1, 2013 to June 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 other than plan design features and fees currently mandated by the ACA and incorporated in the plan designs, which are included in the current baseline claims costs. Continued monitoring of the ACA's impact on the Plan's liability will be required.

The impact of the COVID-19 pandemic was considered in this valuation; however, no changes were incorporated at this time due to the level of uncertainty regarding the impact on both plan costs and contribution levels going forward. Given the uncertainty regarding COVID-19 (e.g., the impact of routine care being deferred, direct COVID-19 treatment and prevention costs, changes in contribution and budget projections), continued monitoring of the impact on the Plan's liability will be required.

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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, 2020 and benefit offerings in effect on January 1, 2020. 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 President

Ben Moble

Ben Mobley, ASA, FCA, MAAA Senior Actuary

AB:JF



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GEORGIA DEPARTMENT OF COMMUNITY HEALTH STATE AND SCHOOL OPEB FUNDS REPORT OF THE ACTUARY ON THE RETIREE MEDICAL VALUATION PREPARED AS OF JUNE 30, 2019

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 other than plan design features and fees currently mandated by the ACA and incorporated in the plan designs, which are included in the current baseline claims costs. Continued monitoring of the ACA's impact on the Plan's liability will be required.

COVID-19

The impact of the COVID-19 pandemic was considered in this valuation; however, no changes were incorporated at this time due to the level of uncertainty regarding the impact on both plan costs and contribution levels going forward. Given the uncertainty regarding COVID-19 (e.g., the impact of routine care being deferred, direct COVID-19 treatment and prevention costs, changes in contribution and budget projections), continued monitoring of the impact on the Plan's liability will be required.

Total Covered Payroll Development

For the June 30, 2019 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 28 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)		6/30/2019
Pension Payroll ERS		2,611,964,531
JRS LRS (assumes annual salary of \$17,342) Total	-	60,531,960 3,832,582 2,676,329,073
Ineligible based on payroll codes		(82,668,686)
TRS that are associated with State		203,580,529
State Total Covered Payroll	\$	2,797,240,916

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

School (TRS, PSERS, Atlanta and Fulton County Schools)	6/30/2019
Pension Payroll TRS	11,882,827,605
PSERS (assumes \$27,000 average)	937,575,000
Atlanta and Fulton County Schools (estimate) Total	<u>70,274,057</u> 12,890,676,662
Ineligible Board of Regents	(1,852,373,901)
Ineligible based on payroll codes	(423,358,396)
ERS that are associated with School	10,058,349
School Total Covered Payroll	\$ 10,625,002,714



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, 2019 valuation, a discount rate of 4.50% has been used for the State Employee OPEB Fund.

The plan designs offered for the 2020 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 \$152,791,816 or 5.46% of total covered payroll, payable for the fiscal year ending June 30, 2022 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 2020 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, 2019, the assets in trust solely to provide benefits to retirees and their beneficiaries is \$1,617,205,106. 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.

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, 2019 valuation, a discount rate of 4.50% has been used for the School Personnel OPEB Fund.



The plan designs offered for the 2020 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 \$728,210,981 payable for the fiscal year ending June 30, 2022 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 2020 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, 2019, the assets in trust solely to provide benefits to retirees and their beneficiaries is \$595,128,719. 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 THE ACTUARY ON THE RETIREE MEDICAL VALUATION PREPARED AS OF JUNE 30, 2019

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, 2019 and June 30, 2018 results for the State Employee 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% in anticipation of the upcoming ERS experience study.

Valuation Date Discount Rate		June 30, 2019 4.50%		June 30, 2018 4.50%
Members Receiving SHBP Benefits				
Actives		50,509		51,623
Retirees		38,447		38,150
Spouses of Retirees	_	12,776		12,750
Total*		101,732		102,523
Total Covered Payroll	\$	2,797,240,916	\$	2,625,900,449
Actuarial Accrued Liability	\$	3,160,407,063	\$	3,351,781,850
Assets:				
Market Value		1,617,205,106		1,201,865,359
Unfunded Actuarial Accrued Liability	\$	1,543,201,957	\$	2,149,916,491
Amortization Period (Years)	30		30	
Fiscal Year		2022		2021
Pre-Funding Contribution				
Normal	\$	89,848,054	\$	93,558,678
Accrued Liability	_	62,943,762		84,864,765
Total	\$	152,791,816	\$	178,423,443
Contribution as a % of Payroll				
Normal		3.21%		3.56%
Accrued Liability		2.25%		3.23%
Total		5.46%		6.79%

*In addition, in 2019 data was collected for 14,153 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.



	-			,
Valuation Date		June 30, 2019		June 30, 2018
State Employee OPEB Fund Unfunded Actuarial Accrued Liability Pre-Funding Contribution (\$) Discount Rate	\$ \$	1,543,201,957 152,791,816 4.50%	\$ \$	2,149,916,491 178,423,443 4.50%

The following table summarizes the Unfunded Actuarial Accrued Liability and the Pre-Funding Contribution for the State Employee OPEB Fund for June 30, 2019 and June 30, 2018:

- 2. The valuation indicates that contributions of \$152,791,816 are sufficient to support current benefits of the State Employee OPEB Fund. Comments on the valuation results as of June 30, 2019 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.
- 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% and the inflation assumption has been lowered from 2.75% to 2.50% in anticipation of the upcoming ERS experience study. In addition, the ultimate healthcare trend rate assumption has been lowered from 4.75% to 4.50%. Various assumptions and methods have been revised to reflect the results of the TRS experience investigation for the five-year period ending June 30, 2018. Approximately 6% of State Employee OPEB Fund members who are included in the State Employee OPEB Fund Total OPEB Liability participate in the Georgia Teachers Retirement System. Assumptions for these members can be found in the School Employee OPEB Fund section of this report.
- 4.
- 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, 2018 Discount Rate		4.50%
June 30, 2019 Discount Rate		4.50%
June 30, 2018 UAL	\$	2,149.9
June 30, 2018 Normal Cost	\$	93.6
Pre-Funding Contribution	\$	178.4
Fiscal Year 2019 Actual Contribution	\$	534.7
1. Expected UAL Based on Pre-Funding Contribution	\$	2,162.0
2. Expected UAL Based on Actual Contributions		1,797.7
3. (Gain)/Loss due to Contribution Different from Pre-Funding Contribution = 2 1.	\$	(364.3)
4. (Gain)/Loss due to Claims and Retiree Premium Experience	\$	(123.2)
5. (Gain)/Loss due to Healthcare Trend Rate Changes		(46.4)
6. (Gain)/Loss due to Investment Experience		10.6
7. (Gain)/Loss due to Assumption Changes due to TRS Experience Study*		0.4
8. (Gain)/Loss due to Other**		(95.9)
9. Actual UAL June 30, 2019 = 1. + 3. + 4. + 5. + 6. + 7. + 8.	\$	1,543.2
June 30, 2018 Accrued Liability (AL)	\$	3,351.8
Other as a % of June 30, 2018 AL		(2.86%)

* 3,157 Active employees in the State Fund participate in TRS.

** 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

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	38,447
Number of Spouses of Retirees	12,776
Number of Actives	50,509

The valuation was based upon data furnished by the State pension retirement systems and the Georgia Department of Community Health 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. In the June 30, 2019 valuation, 568 active members out of over 50,000 total active members were missing information regarding entry age, so entry age was assumed to be equal to current age for valuation purposes. 11 active members were missing information regarding gender, so gender was assumed to be female.



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

STATE EMPLOYEE OPEB FUND

Active Employees Currently Participating in Health Plans by Age and Service

	Service							
Age	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	1,044	5	0	0	0	0	0	1,049
25 to 29	4,128	541	2	0	0	0	0	4,671
30 to 34	3,720	1,624	361	4	0	0	0	5,709
35 to 39	2,749	1,473	1,489	390	4	0	0	6,105
40 to 44	2,144	1,204	1,503	1,239	338	1	0	6,429
45 to 49	2,104	1,149	1,255	1,279	1,245	310	4	7,346
50 to 54	1,621	899	1,139	1,030	1,023	948	176	6,836
55 to 59	1,349	809	1,072	990	920	826	408	6,374
60 to 64	811	593	773	639	547	419	314	4,096
65 to 69	213	312	302	221	175	119	102	1,444
70 & Up	70	67	100	71	43	42	57	450
Total	19,953	8,676	7,996	5,863	4,295	2,665	1,061	50,509

Enrolled Retirees and Covered Spouses

	Retirees	Spouses	Total
Under 65 65 and Older	10,013 28,434	4,545 8,231	14,558 36,665
Total	38,447	12,776	51,223



SECTION III - ASSETS

Schedule B shows information regarding assets for valuation purposes. As of June 30, 2019, assets held in trust solely to provide benefits to retirees and their beneficiaries in accordance with the terms of the Fund equal \$1,617,205,106.

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, 2019 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 \$1,489,204,583 for benefits expected to be paid on account of the present active membership, based on service to the valuation date.
- The State Employee OPEB Fund's liability on account of benefits payable to retirees and covered spouses amounts to \$1,671,202,480.
- 4. The total State Employee OPEB Fund actuarial accrued liability amounts to \$3,160,407,063.
- Against these liabilities, the Fund has present assets for valuation purposes in the amount of \$1,617,205,106. Therefore, the total unfunded actuarial accrued liability for the State Employee OPEB Fund is \$1,543,201,957.
- 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 \$89,848,054.



SECTION V - CONTRIBUTIONS PAYABLE UNDER THE PLAN

PRE-FUNDING EMPLOYER CONTRIBUTION For Fiscal Year Ending June 30, 2022

Pre-Funding Contribution						
State Employee OPEB Fund Normal Accrued Liability Total	\$	89,848,054 62,943,762 152,791,816				

- The valuation indicates that the normal contribution for the State Employee OPEB Fund is determined to be \$89,848,054.
- 2. The unfunded actuarial accrued liability amounts to \$1,543,201,957 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 \$62,943,762 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.
- 4. The total Pre-Funding Contribution for the State Employee OPEB Fund is, therefore, \$152,791,816.



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 \$178,423,443 to the current valuation amount of \$152,791,816 would be needed to fund the State Employee OPEB Fund.
- 3. This contribution of \$152,791,816 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, employer contributions over the actuarially determined amount, and anticipated lower long-term healthcare trend rates. The decrease was slightly offset 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.

1. Schedule of Funding Progress and Schedule of Employer Contributions

SCHEDULE OF FUNDING PROGRESS

State Employee OPEB Fund

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>	Covered Payroll <u>(c)</u>	UAAL as a Percentage of Covered Payroll <u>((b - a) / c)</u>
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		
6/30/2013	0	3,587,913,000	3,587,913,000	0.0	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
6/30/2016	516,245,110	3,609,889,324	3,093,644,214	14.3	2,404,901,000	128.6
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
6/30/2019	1,617,205,106	3,160,407,063	1,543,201,957	51.2	2,797,240,916	55.2

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

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
6/30/2019	218,961,977	534,672,565	244.2

State Employee OPEB Fund

2. The information presented in the supplementary schedules was determined as part of the actuarial

valuation at June 30, 2019. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2019
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	7.00%
Medicare Eligible	5.25%
Ultimate trend rate	
Pre-Medicare Eligible	4.50%
Medicare Eligible	4.50%
Year of Ultimate trend rate	
Pre-Medicare Eligible	2029
Medicare Eligible	2023
*Includes inflation at	2.50%



SCHEDULE A

Benefit of Pre-Funding and Investing to Earn 6.00%

STATE EMPLOYEE OPEB FUND

(\$ shown in thousands)

	Benefit of Prefunding And Investing to Earn 6.00%			
State Employee OPEB Fund	Discount Rate 4.50%	Discount Rate 6.00%		
ACTUARIAL ACCRUED LIABILITY Present Value of Prospective Benefits Payable in Respect of: (a) Present Active Members (b) Present Retired Members and Covered Spouses (c) Total Actuarial Accrued Liability PRESENT ASSETS FOR VALUATION PURPOSES UNFUNDED ACTUARIAL ACCRUED LIABILITY	 \$ 1,489,205 <u>1,671,202</u> \$ 3,160,407 \$ 1,617,205 \$ 1,543,202 	 \$ 1,205,577 <u>1,481,917</u> \$ 2,687,494 \$ 1,617,205 \$ 1,070,289 		
CONTRIBUTIONS FOR FISCAL YEAR ENDING June 30, 2022: Normal Accrued Liability Total	\$ 89,848 <u>62,944</u> \$ 152,792	\$ 69,369 <u>52,462</u> \$ 121,831		



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, 2019, 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 \$1,617,205,106.

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, 2019 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, 2019

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 2020, 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 90% of retirees will choose UHC plans and 10% of retirees will choose Anthem plans. It is further assumed that 35% choose a Premium plan and 65% 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.



*Claims costs for current retirees with no Medicare Part A coverage were assumed to be 373% of the claims shown above.



Year	Pre-65 Retiree Claims Trend	Post-65 Retiree Claims Trend
2019	7.000%	5.250%
2020	6.750	5.125
2021	6.500	5.000
2022	6.250	4.750
2023	6.000	4.500
2024	5.750	4.500
2025	5.500	4.500
2026	5.250	4.500
2027	5.000	4.500
2028	4.750	4.500
2029 and Beyond	4.500	4.500

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%

* Sufficient experience for developing plan specific participation rates for members with less than 5 years of service on 1/1/2012 has not yet developed, so standard actuarial assumptions for participation based on level of subsidization are used. 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. The 20% assumption is based on actual experience using past 4 years of waiver data.

** Wives are assumed to be three years younger than husbands.

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 are as follows.

Annual Rates of							
	Deat	th		Disability			
			Non-Law	Enforcement	Law Enforcement		
Age	Male	Female	Male	Female			
20	0.0320%	0.0177%	0.05%	0.02%	0.02%		
25	0.0349	0.0192	0.05	0.02	0.05		
30	0.0412	0.0245	0.05	0.02	0.08		
35	0.0717	0.0441	0.05	0.02	0.16		
40	0.1001	0.0655	0.25	0.10	0.85		
45	0.1399	0.1043	0.48	0.25	1.40		
50	0.1983	0.1555	0.70	0.45	2.00		
55	0.2810	0.2228	1.05	0.73	2.70		
60	0.4092	0.3058					
65	0.5600	0.4304					

	Non-Law Enforcement					
	Annual Rates of Withdrawal					
		Years of Service				
Age	0-4	5-9	10 & Over			
		Male				
20 25	35.00% 27.50	15.00%	7 50%			
30 35 40	23.00 21.50 19.50	11.50 10.00 9.50	7.50% 6.00 4.75			
45 50	18.60 16.60	9.00 7.25	4.00 4.25			
55 60 65	14.50 14.00 15.00	7.00 6.00 10.00	4.75			
		Female				
20 25 30 35 40 45 50	30.00% 25.00 21.50 19.50 18.25 16.50 15.00	17.50% 12.50 10.50 9.50 8.00 7.25	8.25% 6.00 5.00 4.00 4.25			
55 60 65	14.00 14.50 17.00	7.00 6.25 11.00	4.50			



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

Law Enforcement					
	Annual Rate	s of Withdrawal			
Age	Years of Service 0-9 10 & Over				
20	15.00%				
25	5.75	4.00%			
30	5.75	4.00			
35	5.75	3.75			
40	5.75	3.00			
45	5.75	2.00			
50	5.75	2.00			
55					

RETIREMENT: Representative values of the assumed annual rates of service retirement are as follows.

	Non-Law Enforcement Old Plan								
Age	Early Ret	tirement	Age 60 or 30 years		34 years		More than 34 years		
	Male	Female	Male	Female	Male	Female	Male	Female	
50	2.0%	2.0%	7.5%	6.0%	100.0%	100.0%	90.0%	100.0%	
52	2.0	2.0	7.5	6.0	100.0	100.0	90.0	100.0	
55	3.0	3.5	7.5	10.0	100.0	100.0	75.0	90.0	
57	3.0	5.0	10.5	10.0	100.0	100.0	70.0	70.0	
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	
65			35.0	40.0	35.0	40.0	35.0	40.0	
67			35.0	35.0	35.0	35.0	35.0	35.0	
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	



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

		Non-Law Ei New Plan a	Law Enforcement***		
Age	Early Retirement		Normal R	etirement	
-	Male	Female	Male*	Female**	
50	7.0%	4.5%	70.0%	50.0%	
52	7.0	4.5	70.0	45.0	
55	7.0	6.5	60.0	50.0	20.0%
57	8.0	8.0	50.0	40.0	12.0
60			25.0	30.0	30.0
62			40.0	40.0	35.0
65			32.0	35.0	25.0
67			32.0	32.0	25.0
70			30.0	30.0	100.0
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.

*** In addition, 100% are assumed to retire with 30 years of service on or before age 50 and 75% are assumed to retire with 30 years of service after age 50 but before age 55.



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

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



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

	Annual Rates of						
Age	Withdrawal	Deat	th	Disability			
		Males	Females				
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.

Age	Annual Rates of Retirement
60	15%
61	10
62	12
63 – 64	10
65 – 69	15
70 – 74	25
75	100



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

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



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			
		Males	Females		
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

Note: Approximately 6% of State Employee OPEB Fund members who are included in the State Employee OPEB Fund Total OPEB Liability participate in the Georgia Teachers Retirement System. Assumptions for these members can be found in the School Employee OPEB Fund section of this report.



SCHEDULE D

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
 - 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)
 - o 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. Employees with payroll location codes less than 60000 were included in the State Employee OPEB Fund. Approximately 6% of these employees are members of the Teachers Retirement System. Information about this System can be found in the report for the School Employee OPEB 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.



2020 Plan Options

The plan designs offered for the 2020 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)

Premiums

Retiree premiums vary based on plan election, dependent coverage, Medicare eligibility and election. Premiums shown are monthly and are effective January 1, 2020.

STATE HEALTH BENEFIT PLAN ANNUITANT UNDER 65 RATES JANUARY 1 - DECEMBER 31, 2020

	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	Share of C	ree's ontribution ate
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 THE ACTUARY ON THE RETIREE MEDICAL VALUATION PREPARED AS OF JUNE 30, 2019

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, 2019 results for the School Personnel OPEB Fund.

Valuation Date Discount Rate		June 30, 2019 4.50%		June 30, 2018 4.50%
Members Receiving SHBP Benefits				
Actives		178,437		177,183
Retirees		85,749		83,709
Spouses of Retirees	_	30,026	-	29,141
Total*		294,212		290,033
Estimated Total Payroll	\$	10,625,002,714	\$	10,760,081,690
Actuarial Accrued Liability	\$	9,329,590,097	\$	9,490,548,002
Assets: Market Value		595,128,719		383,263,046
Unfunded Actuarial Accrued Liability	\$	8,734,461,378	\$	9,107,284,956
Amortization Period (Years)		30		30
Fiscal Year		2022		2021
Pre-Funding Contribution	¢	074 054 005	^	000 540 744
Normal Accrued Liability	\$	371,951,805 356,259,176	\$	382,546,714 371,465,817
Total	\$	728,210,981	\$	754,012,531
Contribution as a % of Payroll				
Normal		3.50%		3.56%
Accrued Liability		3.35%		3.45%
Total	-	6.85%	-	7.01%

*In addition, in 2019 data was collected for 51,165 School 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 School Personnel OPEB Fund for June 30, 2019 and June 30, 2018:

Valuation Date		June 30, 2019	June 30, 2018		
School Personnel OPEB Fund Unfunded Actuarial Accrued Liability Pre-Funding Contribution (\$) Discount Rate	\$ \$	8,734,461,378 728,210,981 4.50%	\$	9,107,284,956 754,012,531 4.50%	

- 2. The valuation indicates that a total contribution of \$728,210,981 is sufficient to support current benefits of the School Personnel OPEB Fund. Comments on the valuation results as of June 30, 2019 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, various assumptions and methods have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2018. These revised assumptions were adopted by the Board on May 13, 2020, and the relevant changes are summarized below. In addition, the ultimate healthcare trend rate assumption has been lowered from 4.75% to 4.50%.

	Summary of Changes in Assumptions					
	Demographic Assumptions					
WithdrawalChanged assumed rates in order to increase the overall num of expected withdrawals.						
Retirement Changed assumed rates in order to increase the overall nun of expected retirements.						
Mortality	Changed to the Pub 2010 Teachers Headcount Weighted Below Median mortality tables with ages set forward one year and increased 6%. Future improvement in mortality rates is assumed using the adjusted MP-2019 projection scale generationally.					
Disability	Lowered rates of expected disability retirement.					



- 4. 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 Personnel OPEB Fund	
June 30, 2018 Discount Rate	4.50%
June 30, 2019 Discount Rate	4.50%
June 30, 2018 UAL	\$ 9,107.3
June 30, 2018 Normal Cost	\$ 382.5
Pre-Funding Contribution	\$ 754.0
Fiscal Year 2019 Actual Contribution	\$ 538.6
1. Expected UAL Based on Pre-Funding Contribution	\$ 9,145.9
2. Expected UAL Based on Actual Contributions	 9,366.2
3. (Gain)/Loss due to Contribution Different from Pre-Funding Contribution = 2 1.	\$ 220.3
4. (Gain)/Loss due to Claims and Retiree Premium Experience	\$ (409.7)
5. (Gain)/Loss due to Healthcare Trend Rate Changes	(186.3)
6. (Gain)/Loss due to Investment Experience	4.2
 (Gain)/Loss due to Mortality Assumption Changes due to TRS Experience Study* 	73.2
 (Gain)/Loss due to Additional Assumption Changes due to TRS Experience Study* 	(47.3)
9. (Gain)/Loss due to Other**	 (65.8)
10. Actual UAL June 30, 2019 = 1. + 3. + 4. + 5. + 6. + 7. + 8. + 9.	\$ 8,734.5
June 30, 2018 Accrued Liability (AL)	\$ 9,490.5
Other as a % of June 30, 2018 AL	(0.69%)

* 26,652 Active employees in the School Fund do not participate in TRS.

** 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	85,749
Number of Spouses of Retirees	30,026
Number of Actives	178,437

The valuation was based upon data furnished by the State pension retirement systems and the Georgia Department of Community Health 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. In the June 30, 2019 valuation, 449 active members out of over 178,000 total active members were missing information regarding entry age, so entry age was assumed to be equal to current age for valuation purposes. 14 active members were missing information regarding gender, so gender was assumed to be female.



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 & Up	Total
Under 25	1,550	6	0	0	0	0	0	1,556
25 to 29	10,452	3,053	4	0	0	0	0	13,509
30 to 34	7,168	8,241	2,045	6	0	0	0	17,460
35 to 39	6,013	4,721	7,953	2,200	10	0	0	20,897
40 to 44	5,404	4,075	5,171	7,247	1,835	7	0	23,739
45 to 49	5,215	4,207	5,373	5,378	6,676	1,871	19	28,739
50 to 54	4,302	3,432	4,838	4,462	4,055	4,344	1,059	26,492
55 to 59	3,403	2,909	4,162	4,357	3,708	2,792	1,845	23,176
60 to 64	2,241	1,981	2,778	2,818	2,563	1,831	1,401	15,613
65 to 69	683	849	1,050	863	739	553	652	5,389
70 & Up	186	226	458	317	257	162	261	1,867
Total	46,617	33,700	33,832	27,648	19,843	11,560	5,237	178,437

Enrolled Retirees and Covered Spouses

	Retirees	Spouses	Total
Under 65 65 and Older	19,294 66,455	7,837 22,189	27,131 88,644
Total	85,749	30,026	115,775



SECTION III - ASSETS

Schedule B shows information regarding assets for valuation purposes. As of June 30, 2019, assets held in trust solely to provide benefits to retirees and their beneficiaries in accordance with the terms of the Fund equal \$595,128,719.

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, 2019 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 \$5,946,038,577 for benefits expected to be paid on account of the present active membership, based on service to the valuation date.
- 3. The School Personnel OPEB Fund's liability on account of benefits payable to retirees and covered spouses amounts to \$3,383,551,520.
- 4. The total School Personnel OPEB Fund actuarial accrued liability amounts to \$9,329,590,097.
- Against these liabilities, the Fund has present assets for valuation purposes in the amount of \$595,128,719. Therefore, the total unfunded actuarial accrued liability for the School Personnel OPEB Fund is \$8,734,461,378.
- 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 \$371,951,805.



SECTION V - CONTRIBUTIONS PAYABLE UNDER THE PLAN

PRE-FUNDING EMPLOYER CONTRIBUTION

For Fiscal Year Ending June 30, 2022

Pre-Funding Contribution							
School Personnel OPEB Fund Normal Accrued Liability Total	\$	371,951,805 356,259,176 728,210,981					

- 1. The valuation indicates that the normal contribution for the School Personnel OPEB Fund is determined to be \$371,951,805.
- 2. The unfunded actuarial accrued liability amounts to \$8,734,461,378 and is for employees, retirees and covered spouses that will receive benefits paid from the School Personnel OPEB Fund.
- 3. An accrued liability contribution for the School Personnel OPEB Fund of \$356,259,176 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, \$728,210,981.



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 \$754,012,531 to this year's recommended amount of \$728,210,981 is needed to fund the School Personnel OPEB Fund.
- 3. This contribution of \$728,210,981 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 and anticipated lower long-term healthcare trend rates. The decrease was slightly offset due to employer contributions less than the actuarially determined contribution amount and the incorporation of the Teachers Retirement System of Georgia actuarial experience study for the five-year period from July 1, 2013 to June 30, 2018.



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

School Personnel OPEB Fund

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	0.00%
6/30/2012	0	10,869,929,923	10,869,929,923	0.00
6/30/2013	0	10,788,794,736	10,788,794,736	0.00
6/30/2014	0	8,514,320,187	8,514,320,187	0.00
6/30/2015	30,853,207	10,543,010,090	10,512,156,883	0.29
6/30/2016	95,406,837	10,559,402,261	10,463,995,424	0.90
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
6/30/2019	595,128,719	9,329,590,097	8,734,461,378	6.38

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 <u>(b)</u>	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
6/30/2019	833,290,617	538,569,200	64.6

 The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2019. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2019
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	7.00%
Medicare Eligible	5.25%
Ultimate trend rate	
Pre-Medicare Eligible	4.50%
Medicare Eligible	4.50%
Year of Ultimate trend rate	
Pre-Medicare Eligible	2029
Medicare Eligible	2023
*Includes inflation at	2.50%



Benefit of Prefunding Actuarially Determined Employer Contributions and Invested to Earn 6.00%

SCHOOL PERSONNEL OPEB FUND (\$ shown in thousands)

	Benefit of Prefunding And Investing to Earn 6.00%			
School Personnel OPEB Fund	Di	iscount Rate 4.50%	D	iscount Rate 6.00%
ACTUARIAL ACCRUED LIABILITY Present Value of Prospective Benefits Payable in Respect of: (a) Present Active Members (b) Present Retired Members and Covered Spouses (c) Total Actuarial Accrued Liability PRESENT ASSETS FOR VALUATION PURPOSES	\$ \$ \$	5,946,038 <u>3,383,552</u> 9,329,590 595,129	\$_ \$ \$	4,686,886 2,981,080 7,667,966 595,129
UNFUNDED ACTUARIAL ACCRUED LIABILITY CONTRIBUTIONS FOR FISCAL YEAR ENDING June 30, 2022: Normal Accrued Liability Total	\$ \$	8,734,461 371,952 <u>356,259</u> 728,211	\$ \$ \$	7,072,837 279,007 <u>346,689</u> 625,696



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, 2019, 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 \$595,128,719.

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, 2019 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, 2019

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 2020, 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 90% of retirees will choose UHC plans and 10% of retirees will choose Anthem plans. It is further assumed that 35% choose a Premium plan and 65% 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*	\$ 1,246

*Claims costs for current retirees with no Medicare Part A coverage were assumed to be 373% of the claims shown above.



Year	Pre-65 Retiree Claims Trend	Post-65 Retiree Claims Trend
2019	7.000%	5.250%
2020	6.750	5.125
2021	6.500	5.000
2022	6.250	4.750
2023	6.000	4.500
2024	5.750	4.500
2025	5.500	4.500
2026	5.250	4.500
2027	5.000	4.500
2028	4.750	4.500
2029 and Beyond	4.500	4.500

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%

* Sufficient experience for developing plan specific participation rates for members with less than 5 years of service on 1/1/2012 has not yet developed, so standard actuarial assumptions for participation based on level of subsidization are used. 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. The 20% assumption is based on actual experience using past 4 years of waiver data.

** Wives are assumed to be three years younger than husbands for PSERS participants and four years younger than husbands for TRS participants.

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



SERVICE RETIREMENT:

	Annual Rate				
Age	N	Male Female		male	
	Less than 30	30 or More	Less than 30	30 or More	
	Years of Service	Years of Service*	Years of Service	Years of Service**	
50	3.00%	52.00%	2.75%	50.00%	
55	5.00	37.00	5.75	35.00	
60	20.00	34.00	25.00	40.00	
61	18.00	30.00	25.00	40.00	
62	25.00	35.00	25.00	43.00	
63	22.00	28.00	25.00	43.00	
64	22.00	28.00	24.00	43.00	
65	27.00	27.00	32.00	32.00	
66	32.00	32.00	32.00	32.00	
67	30.00	30.00	32.00	32.00	
68	30.00	30.00	30.00	30.00	
69	30.00	30.00	30.00	30.00	
70	30.00	30.00	30.00	30.00	

*An additional 10% are assumed to retire at 30 years of service for ages between 50 and 64. **An additional 15% are assumed to retire at 30 years of service for ages between 50 and 61.



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

	Annual Rate				
Age	Death*	Disability		Withdrawal	
			١	ears of Service	
			0 - 4	5 – 9	10+
			Male		
20	0.0375%	0.0000%	27.00%		
25	0.0336	0.0000	17.00	13.00%	
30	0.0437	0.0000	14.00	6.50	6.00%
35	0.0549	0.0165	14.00	6.25	3.50
40	0.0714	0.0275	13.00	6.25	2.75
45	0.1087	0.0720	13.00	6.00	2.50
50	0.1799	0.1360	11.25	5.75	2.75
55	0.2828	0.2400	11.75	5.50	3.25
60	0.4441		12.00	6.00	
64	0.6475		15.00	7.50	
			Female		
20	0.0139%	0.0000%	28.00%		
25	0.0148	0.0000	13.50	12.00%	
30	0.0235	0.0000	13.50	7.00	6.00%
35	0.0345	0.0152	13.00	7.00	4.00
40	0.0493	0.0312	12.00	6.50	3.00
45	0.0728	0.0650	10.75	6.00	2.50
50	0.1107	0.1400	10.75	5.50	3.00
55	0.1687	0.3400	10.75	5.00	3.00
60	0.2554		11.50	5.50	
64	0.3665		15.00	7.50	

SEPARATION BEFORE SERVICE RETIREMENT:

* The Pub-2010 Teachers Headcount Weighted Below Median Employee mortality table with ages set forward one year and adjusted 106% is used for death prior to retirement. Future improvement in mortality rates is assumed using the MP-2019 projection scale generationally. These rates of improvement have been reduced by 20% for all years prior to the ultimate rate. The proposed rates shown above are based on a projection to 2015. Actual mortality rates would be projected generationally.



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

DEATHS AFTER RETIREMENT: The Pub-2010 Teachers Headcount Weighted Below Median Healthy Retiree mortality table (ages set forward one year and adjusted 106%) with the MP-2019 Projection scale applied generationally is used for death after service retirement and beneficiaries. The rates of improvement have been reduced by 20% for all years prior to the ultimate rate. The Pub-2010 Teachers Mortality Table for Disabled Retirees (ages set forward one year and adjusted 106%) with the MP-2019 Projection scale applied generationally is used for death after disability retirement. The rates of improvement have been reduced by 20% for all years prior to the ultimate rate. The rates of improvement have been reduced by 20% for all years prior to the ultimate rate. The rates of improvement have been reduced by 20% for all years prior to the ultimate rate. The rates of improvement have been reduced by 20% for all years prior to the ultimate rate. The representative rates shown below are based on a projection to 2015. Actual mortality rates are projected generationally to the year of the measurement.

	Annual Rate of Death After			
Age	Service Ret	irement*	Disabled Re	tirement*
	Male	Female	Male	Female
40	0.0714%	0.0493%	0.8444%	0.7386%
45	0.1087	0.0728	1.2146	1.1004
50	0.1799	0.1107	1.8432	1.6181
55	0.5241	0.3901	2.4790	1.9679
60	0.6440	0.4136	3.0569	2.2548
65	0.8433	0.5260	3.7177	2.6170
70	1.4580	0.9329	4.6328	3.3740
75	2.7028	1.7905	6.1798	4.7842
80	4.9635	3.4310	8.8648	7.2311
85	9.0522	6.5905	13.0223	11.2015
90	16.0712	12.3050	18.8001	16.0832
95	26.1186	21.7258	27.0439	22.7586

*Rates as of 2015



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:

	Annua	I Rates of With	drawal
	`	Years of Service	е
Age	0-4	5-9	10 & Over
		Males	
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
		Females	
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

	Annual Rates of			
Age	Dea	Death		
	Males	Males Females		
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 the results of the most recent experience study adopted by the 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



SCHEDULE D

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.



2020 Plan Options

The plan designs offered for the 2020 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)

Premiums

Retiree premiums vary based on plan election, dependent coverage, Medicare eligibility and election. Premiums shown are monthly and are effective January 1, 2020.

STATE HEALTH BENEFIT PLAN ANNUITANT UNDER 65 RATES JANUARY 1 - DECEMBER 31, 2020

	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.

	Health Benefit Fund's Share of Contribution		Retiree's Share of Contribution	
Service at	Rate		Rate	
Retirement	Retiree	Spouse	Retiree	Spouse
30 & 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 & Below	0	0	100	100