

Schedule B – Summary of Benefit Provisions Valued

Approximately 7% of these employees are members of the Teachers Retirement System. Information about this System can be found in the GASB 74 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.



Schedule B – Summary of Benefit Provisions Valued (continued)

2018 Plan Options

The plan designs offered for the 2018 plan year are as follows:

For Medicare-eligible members

- UnitedHealthcare Medicare Advantage (MA) Plan Options (Standard and Premium)
- Blue Cross and Blue Shield of Georgia (BCBSGa) Medicare Advantage (MA) Plan Options (Standard and Premium)

Non-MA Plan Options

- BCBSGa Gold, Silver, Bronze Health Reimbursement Arrangement (HRA) Plan Options
- BCBSGa, 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, 2018 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	\$ 25.38
UHC Premium MA	\$ 128.22
BCBSGa Standard MA	\$ 44.88
BCBSGa Premium MA	\$ 155.81



Schedule B – Summary of Benefit Provisions Valued (continued)

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

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 Retirement	Health Benefit Fund’s Share of Contribution Rate		Retiree’s Share of Contribution Rate	
	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%



Schedule C – Statement of Actuarial Assumptions and Methods

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

VALUATION DATE: June 30, 2017

DISCOUNT RATE: 5.22% per annum, compounded annually, net of expenses.

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 future provisions such as 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.

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.

Pre-Medicare*	\$ 12,625

*Retirees selecting one of the HRA plans will also receive annual credits to use for eligible medical expenses. For 2017, the credits are \$400 for the Gold Plan, \$200 for the Silver Plan and \$100 for the Bronze plan. For members participating in the BCBSGa 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.



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The Medicare Advantage Plan monthly retiree premiums for members with Medicare Parts A and B as of January 1, 2018 are as follows:

Medicare Advantage Plan	Retiree Premium
UHC Standard MA	\$ 25.38
UHC Premium MA	\$ 128.22
BCBSGa Standard MA	\$ 44.88
BCBSGa Premium MA	\$ 155.81

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 BCBSGa plans. It is further assumed that 40% choose a Premium plan and 60% choose a Standard plan.

Medicare Advantage	\$ 1,525



Schedule C – Statement of Actuarial Assumptions and Methods

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

Year	Pre-65 Retiree Claims Trend	Post-65 Retiree Claims Trend
2017	7.50%	5.500%
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%

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%



Schedule C – Statement of Actuarial Assumptions and Methods

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 VALUE OF ASSETS: Market Value



Schedule C – Statement of Actuarial Assumptions and Methods

**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.

Age	Annual Rates of			
	<u>Death</u>		<u>Disability</u>	
	<u>Males</u>	<u>Females</u>	<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	--	--



Schedule C – Statement of Actuarial Assumptions and Methods

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



Schedule C – Statement of Actuarial Assumptions and Methods

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.

Age	Old Plan							
	Early Retirement		Age 60 or 30 years		34 years		More than 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

Age	New Plan and GSEPS			
	Early Retirement		Normal Retirement	
	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.



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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. 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



Schedule C – Statement of Actuarial Assumptions and Methods

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:

Age	Annual Rates of			
	Withdrawal	Death		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.

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



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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 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



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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:

Age	Annual Rates of		
	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



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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 7% of State Employee OPEB Fund members participate in the Georgia Teachers Retirement System. Assumptions for these members can be found in the GASB 74 report for the School Employee OPEB Fund.



Schedule D – Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 5.22% for disclosure), of each participant’s expected retiree health benefit at retirement or death based on his age and service. The calculations take into account the probability of a participant’s death or termination of employment prior to becoming eligible for a benefit, as well as the probability of his terminating with a service, disability or survivor’s benefit. The present value of the expected benefits payable on account of the active participants is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of participants and beneficiaries.
2. The service cost is determined using the “entry age normal” method. Using this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of each participant during the entire period of his anticipated covered service, would be required in addition to the contributions of the participant to meet the cost of all benefits payable on his behalf.
3. The present value of future unfunded accrued liability contributions is determined by subtracting the present value of prospective normal contributions together with the current assets held, from the present value of expected benefits to be paid from the Plan.