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**RATES OF DEATH 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 mortality while in active service are as follows:

Age	Males	Females	Age	Males	Females
20	0.0320%	0.0177%	45	0.1399%	0.1043%
25	0.0349	0.0192	50	0.1983	0.1555
30	0.0412	0.0245	55	0.2810	0.2228
35	0.0717	0.0441	60	0.4092	0.3058
40	0.1001	0.0655	65	0.5600	0.4304

**RATES OF 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

**ADMINISTRATIVE EXPENSES:** Budgeted administrative expenses are added to the normal contribution rate.

**AMORTIZATION METHOD:** Level dollar amortization.

**ASSET METHOD:** Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the fair value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The actuarial value was set equal to the fair value as of June 30, 2013. The amount recognized each year beginning June 30, 2014 is 20% of the difference between fair value and expected actuarial value.

**DEATH BENEFITS:** It is assumed that 100% of the membership will select a beneficiary with the male three years older than the female.

**VESTED TERMINATION BENEFITS:** It is assumed that 50% of active members who terminate with 10 or more years of service before retirement will receive a benefit beginning at age 60 and 50% will receive a refund of member contributions.





## **Schedule D – Outline of Actuarial Assumptions and Methods**

**SICK LEAVE:** Assumed load on service at retirement for the practice of allowing members to convert forfeited sick leave is as follows:

- Old Plan members who retire with 34 years of service – 4.0%
- Old Plan members who retire on normal retirement – 2.0%
- Old Plan members who retire on early retirement – 1.5%
- All New Plan and GSEPS retirements – 3.0%
- All Law Enforcement retirements – 5.0%

**VALUATION METHOD:** Entry age actuarial cost method. See Schedule E for a brief description of this method.





## Schedule E – Actuarial Cost Method

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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 7.30%), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.





## Schedule F – Board Funding Policy

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### FUNDING POLICY OF THE ERS BOARD OF TRUSTEES

The purpose of this Funding Policy is to state the overall objectives for the Employees' Retirement System of Georgia (System), the benchmarks that will be used to measure progress in achieving those goals, and the methods and assumptions that will be employed to develop the benchmarks. It is the intent of the ERS Board of Trustees that the Funding Policy outlined herein will remain unchanged until the objectives below are met.

#### I. Funding Objectives

The goal in requiring employer and member contributions to the System is to accumulate sufficient assets during a member's employment to fully finance the benefits the member is expected to receive throughout retirement. In meeting this objective, the System will strive to meet the following funding objectives:

- To develop a pattern of contribution rates expressed as a percentage of employer payroll and measured by valuations prepared in accordance with applicable State laws and the principles of practice prescribed by the Actuarial Standards Board.
- To maintain an increasing funded ratio (ratio of actuarial value of assets to actuarial accrued liabilities) that reflects a trend of improved actuarial condition. The long-term objective is to obtain a 100% funded ratio over a reasonable period of future years.
- To maintain adequate asset levels to finance the benefits promised to members and monitor the future demand for liquidity.
- To promote intergenerational equity for taxpayers with respect to contributions required for the benefits provided by the System.

#### II. Measures of Funding Progress

To track progress in achieving the System's funding objectives, the following measures will be determined annually as of the actuarial valuation date (with due recognition that a single year's results may not be indicative of long-term trends):

- **Funded Ratio** – The funded ratio, defined as the actuarial value of assets divided by the actuarial accrued liability, should increase over time, before adjustments for changes in benefits, actuarial methods, and/or actuarial adjustments. The target funded ratio will be 100 percent within 25 years of the valuation date for the first valuation conducted following the adoption of this Policy (i.e. the June 30, 2013 valuation date).
- **Unfunded Actuarial Accrued Liability (UAAL)**
  - **Transitional UAAL** – The UAAL established as of the initial valuation date for which this funding policy is adopted shall be known as the Transitional UAAL.
  - **New Incremental UAAL** – Each subsequent valuation will produce a New Incremental UAAL consisting of all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuations.
- **UAAL Amortization Period**
  - The transitional UAAL will be amortized over a closed 25-year period beginning on the initial valuation date for which this funding policy is adopted.
  - Each New Incremental UAAL shall be amortized over a closed 25-year period beginning with the year it is incurred.
- **Employer Contribution Rates**
  - **Employer Normal Contribution Rate** – the contribution rate determined as of the valuation date each year based on the provisions of Georgia Code Section 47-2-55 (1).
  - In each valuation subsequent to the adoption of this funding policy, the required employer contribution rate will be determined as the summation of the employer Normal Contribution Rate, a contribution rate for administrative expenses, the amortization rate for the







## Schedule F – Board Funding Policy

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Transitional UAAL and the individual amortization rate for each of the New Incremental UAAL bases.

- In no event shall the employer contribution rate be less than 0%.
- The valuation methodology, including the amortization of the Unfunded Actuarial Accrued Liability (UAAL), would be expected to maintain reasonably stable contribution rates.

### III. Methods and Assumptions

The annual actuarial valuations providing the measures to assess funding progress will utilize the actuarial methods and assumptions last adopted by the Board based upon the advice and recommendations of the actuary. These include the following primary methods and assumptions:

- The actuarial cost method used to develop the benchmarks will be the Entry Age Normal (EAN) actuarial cost method.
- The long-term annual investment rate of return assumption will be:
  - Effective with the June 30, 2013 valuation date, 7.50% net of investment expenses.
  - Effective with the June 30, 2017 valuation date, reduced by 0.10% (10 basis points) from the immediate prior actuarial valuation, as long as the following conditions are met:
    - The actual rate of return for the fiscal year ending with the current valuation date exceeds the assumed rate of return from the immediate prior actuarial valuation, and
    - The assumed rate of return does not decrease below 7.00% net of investment expenses.
- The actuarial value of assets will be determined by recognizing the annual differences between actual and expected market value of assets over a five-year period, beginning with the June 30, 2013 actuarial valuation.
  - Prior to the June 30, 2013 valuation, the differences between actual and expected market value of assets were recognized over a seven-year period. For the June 30, 2013 valuation, all then-current deferred gains and losses will be recognized immediately, and the initial new five-year period will begin immediately thereafter.

The employer contribution rates determined in an annual actuarial valuation will be at least sufficient to satisfy the annual normal cost of the System and amortize the UAAL as a level dollar amount over a period not to exceed 25 years (for the UAAL as of the June 30, 2013 valuation date, and for each successive year of gains and losses incurred in years following the June 30, 2013 valuation date). However in no event shall the employer contribution rate be less than 0%.

The actuary shall conduct an investigation into the System's experience at least every five years and utilize the results of the investigation to form the basis for recommended assumptions and methods. Any changes to the recommended assumptions and methods that are approved by the Board will be reflected in this Policy.

### IV. Funding Policy Progress

The Board will periodically have actuarial projections of the valuation results performed to assess the current and expected future progress towards the overall funding goals of the System. These periodic projections will provide the expected valuation results over at least a 30-year period. The projected measures of funding progress and the recent historical trend provided in valuations will provide important information for the Board's assessment of the System's funding progress.

Adopted: March 15, 2018





## Schedule G – Amortization of UAAL

### AMORTIZATION OF TRANSITIONAL UAAL (Dollar amounts in thousands)

<u>Valuation Date</u>	<u>Amortization Period</u>	<u>Balance of Transitional UAAL</u>	<u>Annual Amortization Payment</u>
6/30/2013	25	\$4,847,512	\$434,874
6/30/2014	22.7	4,776,202	444,599
6/30/2015	19.6	4,689,818	464,364
6/30/2016	18.4	4,577,190	466,987
6/30/2017	16.4	4,453,493	477,279
6/30/2018	15.1	4,305,773	479,102
<b>6/30/2019</b>	<b>15.0</b>	<b>4,140,992</b>	<b>463,430</b>
6/30/2020	14.0	3,979,854	463,430
6/30/2021	13.0	3,806,954	463,430
6/30/2022	12.0	3,621,431	463,430
6/30/2023	11.0	3,422,365	463,430
6/30/2024	10.0	3,208,768	463,430
6/30/2025	9.0	2,979,578	463,430
6/30/2026	8.0	2,733,657	463,430
6/30/2027	7.0	2,469,784	463,430
6/30/2028	6.0	2,186,648	463,430
6/30/2029	5.0	1,882,843	463,430
6/30/2030	4.0	1,556,861	463,430
6/30/2031	3.0	1,207,081	463,430
6/30/2032	2.0	831,768	463,430
6/30/2033	1.0	429,057	460,378
6/30/2034	0	0	0
6/30/2035	0	0	0
6/30/2036	0	0	0
6/30/2037	0	0	0
6/30/2038	0	0	0





## Schedule G – Amortization of UAAL

### AMORTIZATION OF 2014 INCREMENTAL UAAL (Dollar amounts in thousands)

<u>Valuation Date</u>	<u>Amortization Period</u>	<u>Balance of New Incremental UAAL 6/30/2014</u>	<u>Annual Amortization Payment</u>
6/30/2014	25	(\$164,722)	(\$14,777)
6/30/2015	24	(162,299)	(14,777)
6/30/2016	23	(159,694)	(14,777)
6/30/2017	22	(156,894)	(14,658)
6/30/2018	21	(153,846)	(14,542)
<b>6/30/2019</b>	<b>20</b>	<b>(150,534)</b>	<b>(14,542)</b>
6/30/2020	19	(146,981)	(14,542)
6/30/2021	18	(143,168)	(14,542)
6/30/2022	17	(139,077)	(14,542)
6/30/2023	16	(134,687)	(14,542)
6/30/2024	15	(129,977)	(14,542)
6/30/2025	14	(124,923)	(14,542)
6/30/2026	13	(119,500)	(14,542)
6/30/2027	12	(113,681)	(14,542)
6/30/2028	11	(107,438)	(14,542)
6/30/2029	10	(100,738)	(14,542)
6/30/2030	9	(93,550)	(14,542)
6/30/2031	8	(85,836)	(14,542)
6/30/2032	7	(77,560)	(14,542)
6/30/2033	6	(68,679)	(14,542)
6/30/2034	5	(59,151)	(14,542)
6/30/2035	4	(48,926)	(14,542)
6/30/2036	3	(37,956)	(14,542)
6/30/2037	2	(26,184)	(14,542)
6/30/2038	1	(13,553)	(14,542)
6/30/2039	0	0	0





## Schedule G – Amortization of UAAL

### AMORTIZATION OF 2015 INCREMENTAL UAAL (Dollar amounts in thousands)

<u>Valuation Date</u>	<u>Amortization Period</u>	<u>Balance of New Incremental UAAL 6/30/2015</u>	<u>Annual Amortization Payment</u>
6/30/2015	25	(\$107,062)	(\$9,605)
6/30/2016	24	(105,487)	(9,605)
6/30/2017	23	(103,794)	(9,525)
6/30/2018	22	(101,950)	(9,447)
<b>6/30/2019</b>	<b>21</b>	<b>(99,945)</b>	<b>(9,447)</b>
6/30/2020	20	(97,794)	(9,447)
6/30/2021	19	(95,485)	(9,447)
6/30/2022	18	(93,008)	(9,447)
6/30/2023	17	(90,350)	(9,447)
6/30/2024	16	(87,499)	(9,447)
6/30/2025	15	(84,439)	(9,447)
6/30/2026	14	(81,155)	(9,447)
6/30/2027	13	(77,632)	(9,447)
6/30/2028	12	(73,852)	(9,447)
6/30/2029	11	(69,796)	(9,447)
6/30/2030	10	(65,444)	(9,447)
6/30/2031	9	(60,774)	(9,447)
6/30/2032	8	(55,763)	(9,447)
6/30/2033	7	(50,386)	(9,447)
6/30/2034	6	(44,617)	(9,447)
6/30/2035	5	(38,427)	(9,447)
6/30/2036	4	(31,785)	(9,447)
6/30/2037	3	(24,658)	(9,447)
6/30/2038	2	(17,010)	(9,447)
6/30/2039	1	(8,805)	(9,447)
6/30/2040	0	0	0





## Schedule G – Amortization of UAAL

### AMORTIZATION OF 2016 INCREMENTAL UAAL (Dollar amounts in thousands)

<u>Valuation Date</u>	<u>Amortization Period</u>	<u>Balance of New Incremental UAAL 6/30/2016</u>	<u>Annual Amortization Payment</u>
6/30/2016	25	\$30,408	\$2,728
6/30/2017	24	29,961	2,705
6/30/2018	23	29,473	2,682
<b>6/30/2019</b>	<b>22</b>	<b>28,943</b>	<b>2,682</b>
6/30/2020	21	28,373	2,682
6/30/2021	20	27,763	2,682
6/30/2022	19	27,107	2,682
6/30/2023	18	26,404	2,682
6/30/2024	17	25,650	2,682
6/30/2025	16	24,840	2,682
6/30/2026	15	23,971	2,682
6/30/2027	14	23,039	2,682
6/30/2028	13	22,039	2,682
6/30/2029	12	20,966	2,682
6/30/2030	11	19,814	2,682
6/30/2031	10	18,579	2,682
6/30/2032	9	17,253	2,682
6/30/2033	8	15,831	2,682
6/30/2034	7	14,304	2,682
6/30/2035	6	12,666	2,682
6/30/2036	5	10,909	2,682
6/30/2037	4	9,023	2,682
6/30/2038	3	7,000	2,682
6/30/2039	2	4,829	2,682
6/30/2040	1	2,500	2,682
6/30/2041	0	0	0





## Schedule G – Amortization of UAAL

### AMORTIZATION OF 2017 INCREMENTAL UAAL (Dollar amounts in thousands)

<u>Valuation Date</u>	<u>Amortization Period</u>	<u>Balance of New Incremental UAAL 6/30/2017</u>	<u>Annual Amortization Payment</u>
6/30/2017	25	\$201,852	\$17,950
6/30/2018	24	198,839	17,796
<b>6/30/2019</b>	<b>23</b>	<b>195,559</b>	<b>17,796</b>
6/30/2020	22	192,039	17,796
6/30/2021	21	188,262	17,796
6/30/2022	20	184,210	17,796
6/30/2023	19	179,862	17,796
6/30/2024	18	175,196	17,796
6/30/2025	17	170,190	17,796
6/30/2026	16	164,818	17,796
6/30/2027	15	159,054	17,796
6/30/2028	14	152,869	17,796
6/30/2029	13	146,233	17,796
6/30/2030	12	139,113	17,796
6/30/2031	11	131,472	17,796
6/30/2032	10	123,274	17,796
6/30/2033	9	114,477	17,796
6/30/2034	8	105,039	17,796
6/30/2035	7	94,911	17,796
6/30/2036	6	84,044	17,796
6/30/2037	5	72,383	17,796
6/30/2038	4	59,872	17,796
6/30/2039	3	46,447	17,796
6/30/2040	2	32,042	17,796
6/30/2041	1	16,585	17,796
6/30/2042	0	0	0





## Schedule G – Amortization of UAAL

### AMORTIZATION OF 2018 INCREMENTAL UAAL (Dollar amounts in thousands)

<u>Valuation Date</u>	<u>Amortization Period</u>	<u>Balance of New Incremental UAAL 6/30/2018</u>	<u>Annual Amortization Payment</u>
6/30/2018	25	\$122,106	\$10,763
<b>6/30/2019</b>	<b>24</b>	<b>120,257</b>	<b>10,763</b>
6/30/2020	23	118,273	10,763
6/30/2021	22	116,144	10,763
6/30/2022	21	113,860	10,763
6/30/2023	20	111,409	10,763
6/30/2024	19	108,779	10,763
6/30/2025	18	105,958	10,763
6/30/2026	17	102,930	10,763
6/30/2027	16	99,681	10,763
6/30/2028	15	96,195	10,763
6/30/2029	14	92,455	10,763
6/30/2030	13	88,441	10,763
6/30/2031	12	84,135	10,763
6/30/2032	11	79,514	10,763
6/30/2033	10	74,555	10,763
6/30/2034	9	69,235	10,763
6/30/2035	8	63,527	10,763
6/30/2036	7	57,402	10,763
6/30/2037	6	50,829	10,763
6/30/2038	5	43,777	10,763
6/30/2039	4	36,210	10,763
6/30/2040	3	28,091	10,763
6/30/2041	2	19,379	10,763
6/30/2042	1	10,030	10,763
6/30/2043	0	0	0





## Schedule G – Amortization of UAAL

### AMORTIZATION OF 2019 INCREMENTAL UAAL (Dollar amounts in thousands)

<u>Valuation Date</u>	<u>Amortization Period</u>	<u>Balance of New Incremental UAAL 6/30/2019</u>	<u>Annual Amortization Payment</u>
<b>6/30/2019</b>	<b>25</b>	<b>\$112,729</b>	<b>\$9,936</b>
6/30/2020	24	111,022	9,936
6/30/2021	23	109,190	9,936
6/30/2022	22	107,225	9,936
6/30/2023	21	105,116	9,936
6/30/2024	20	102,854	9,936
6/30/2025	19	100,426	9,936
6/30/2026	18	97,821	9,936
6/30/2027	17	95,025	9,936
6/30/2028	16	92,026	9,936
6/30/2029	15	88,808	9,936
6/30/2030	14	85,355	9,936
6/30/2031	13	81,649	9,936
6/30/2032	12	77,674	9,936
6/30/2033	11	73,407	9,936
6/30/2034	10	68,830	9,936
6/30/2035	9	63,918	9,936
6/30/2036	8	58,648	9,936
6/30/2037	7	52,993	9,936
6/30/2038	6	46,926	9,936
6/30/2039	5	40,415	9,936
6/30/2040	4	33,429	9,936
6/30/2041	3	25,933	9,936
6/30/2042	2	17,890	9,936
6/30/2043	1	9,260	9,936
6/30/2044	0	0	0







## Schedule H – Summary of Main System Provisions

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

The Employees' Retirement System of Georgia (ERS) was established February 3, 1949 to provide retirement benefits and other benefits to employees of the State of Georgia. The commencement date was January 1, 1950. "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, and "GSEPS" means the plan applicable to members employed on or after January 1, 2009. The following summary describes the main provisions of the System.

#### Normal Retirement Benefit

**Eligibility** A member is eligible for normal retirement upon the attainment of age 60 and 10 years of creditable service (prior service plus membership service plus purchased service plus forfeited leave – minimum 960 hours) or 30 years of creditable service regardless of age. Certain Law Enforcement positions are eligible with attainment of age 55 and 10 years of creditable service.

**Benefit** Old Plan  
(A) x (B) x (C), where  
(A) = Average final compensation (the average annual compensation of a member during the 24 consecutive calendar months of his creditable service that will yield the highest average)  
(B) = Creditable service, and  
(C) = .0115 + .0003 x (creditable service up to 35 years).

The minimum benefit is 2.00% of average final compensation times years of creditable service.

New Plan  
2.00% of average final compensation multiplied by years of creditable service.

GSEPS  
1.00% of average final compensation multiplied by years of creditable service.

Uniform division and judicial members may be eligible for additional minimum benefits.

With all plans, for members with retirement dates prior to July 1, 2013, a one-time 3.0% increase on the first \$37,500 is made at time of retirement.





## Schedule H – Summary of Main System Provisions

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### Early Retirement Benefit

Eligibility	A member is eligible for early retirement upon the attainment of 25 years of creditable service regardless of age.
Benefit	The annual early retirement benefit is determined in the same manner as the normal retirement benefit based on creditable service and average final compensation as of the early retirement date. If the member is less than age 60, the retirement benefit is reduced by the lesser of: <ul style="list-style-type: none"> <li>(i) 7% for each year by which his age is less than 60, and</li> <li>(ii) 7% for each year by which his creditable service at retirement is less than 30.</li> </ul> <p>Uniform division and judicial members may be eligible for additional minimum benefits.</p>

### Disability Retirement Benefit

#### Old Plan and New Plan

Eligibility	A member is eligible for disability retirement after having at least 13 years and 4 months of service and being certified by the medical board as permanently disabled for the further performance of the duties of the position held at the time of disability.
Benefit	The annual disability retirement benefit is an immediate benefit with the amount depending upon service at the time of disability. <p>Uniform division members may be eligible for an additional benefit if disabled in line of duty.</p>

#### Service at Disability

#### Benefit

(1) 13 years 4 months to 18 years	75% of what the normal retirement benefit would have been had the member continued to work until age 60 with no further change in compensation
(2) Over 18 years to 22 years 9 months	100% of age 60 benefit





## Schedule H – Summary of Main System Provisions

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- |  |                        |
|--|------------------------|
| (3) Over 22 years 9 months<br>to 27 years 6 months | 75% of age 65 benefit  |
| (4) Over 27 years 6 months                         | 100% of age 65 benefit |

### GSEPS

- |             |   |
|-------------|---|
| Eligibility | A member is eligible for disability retirement after having at least 15 years of service and being certified by the medical board as permanently disabled for the further performance of the duties of the position held at the time of disability. |
| Benefit     | The annual disability retirement benefit is an immediate benefit equal to 1.00% of average final compensation multiplied by years of credited service at disability.  |

### Involuntary Retirement Benefit

- |             |   |
|-------------|---|
| Eligibility | Member prior to April 1, 1972, termination is involuntary and without prejudice, and member has more than 18 years of membership service.<br><br>For members prior to February 13, 1962, the service requirement is more than 18 years of creditable service. |
| Benefit     | Computed as for disability retirement.  |

### Deferred Vested Retirement Benefit

- |             |   |
|-------------|---|
| Eligibility | 10 years of creditable service. Member contributions not withdrawn. |
| Benefit     | Accrued benefit deferred to age 60.                                 |

### Death Benefit

#### Old Plan and New Plan

- | <u>Eligibility</u>  | <u>Benefit</u>  |
|---|---|
| (1) Before retirement, before age 60, before completing 13 years 4 months service | Refund of all employee contributions plus allowable interest.                     |
| (2) Before retirement, before age 60, after completing 13 years 4 months service  | Benefit equal to disability retirement immediately prior to death under Option 2. |





## Schedule H – Summary of Main System Provisions

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(3) Before retirement, after age 60, more than 10 years creditable service (5 years service if member prior to July 1, 1968)

Benefit equal to retirement immediately prior to death under Option 2.

(4) After retirement

Payments continued to spouse as determined by options (if any) elected before retirement.

### GSEPS

Eligibility

15 years of creditable service.

Benefit

Benefit equal to disability retirement immediately prior to death under Option 2.

Termination Benefit

Eligibility

Termination with less than 10 years creditable service.

Benefit

Return of all member contributions and employer contributions made on behalf of member with allowable interest. Life insurance premiums paid by the employee are not refundable.

Payment Options

At application for retirement, a member must choose one of the following methods of payment. All forms are of equivalent actuarial value.

Maximum Benefit

Life annuity, payable to members for the member's life with the final payment (for month of member's death) going to member's designated beneficiary.

Option 1

Full cash refund, paying a reduced retirement benefit to members so that, upon member's death, the beneficiary receives a lump sum cash settlement equal to the difference between the member's accumulated contributions at retirement and the benefit payments due to member contributions received prior to member's death.

Option 2

Joint and 100% to survivor. Member receives a reduced benefit for life with the same benefit continuing for life of beneficiary upon member's death.

Option 3

Joint and 50% to survivor. Member receives a reduced benefit for life with one-half members' benefit continuing to beneficiary for life upon member's death.

Other Options

Other options are available with certain restrictions.





## Schedule H – Summary of Main System Provisions

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Post-Retirement Adjustments

The Board may from time to time grant a Cost of Living Adjustment.

Contributions

By Members

Old Plan

4% of annual compensation up to \$4,200 plus 6% of annual compensation over \$4,200. A member with 34 or more years of service may cease contributing until age 65, when he must resume contributing if he continues employment and wishes to receive additional service credit. The State pays member contributions except for 1.25% of annual compensation. These State contributions paid on behalf of members are included in the member's account for refund purposes. Covered tax officials and their employees and covered employees of State Courts continue to pay their full member contributions.

New Plan and GSEPS

Member contributions are 1.25% of annual compensation

By Employers

The employers contribute at a specified percentage of active member payroll determined annually by actuarial valuation. The State contribution is not subject to refund upon member termination.





## Schedule I – Tables of Membership Data

The Number and Average Annual Compensation of Active Members  
by Age and Service as of June 30, 2019

Age	Years of Service									Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	No.	Avg. Pay
Under 25	754	1,496	19							2,269	\$29,068
25 to 29	836	4,389	795	3						6,023	\$34,828
30 to 34	548	3,540	1,963	433	15					6,499	\$39,357
35 to 39	421	2,665	1,742	1,549	505	8				6,890	\$43,122
40 to 44	322	2,175	1,475	1,514	1,385	476	7			7,354	\$44,919
45 to 49	337	2,048	1,399	1,292	1,399	1,368	463	20		8,326	\$47,278
50 to 54	260	1,649	1,142	1,230	1,171	1,083	1,105	257	3	7,900	\$48,340
55 to 59	252	1,326	983	1,220	1,161	1,011	907	444	67	7,371	\$47,043
60 to 64	105	772	752	807	741	558	448	300	71	4,554	\$49,175
65 to 69	27	210	353	318	237	174	104	68	24	1,515	\$52,035
70 & up	12	67	96	112	102	36	30	29	22	506	\$55,247
<b>Total</b>	<b>3,874</b>	<b>20,337</b>	<b>10,719</b>	<b>8,478</b>	<b>6,716</b>	<b>4,714</b>	<b>3,064</b>	<b>1,118</b>	<b>187</b>	<b>59,207</b>	<b>\$44,116</b>
<b>Avg. Pay</b>	<b>\$30,274</b>	<b>\$37,830</b>	<b>\$45,440</b>	<b>\$47,503</b>	<b>\$50,143</b>	<b>\$52,432</b>	<b>\$56,143</b>	<b>\$59,113</b>	<b>\$72,220</b>		

Average Age: 44.4  
Average Service: 9.5





## Schedule I – Tables of Membership Data

### NUMBER OF RETIRED MEMBERS AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	66	\$ 1,863,813	\$ 28,240
50-54	780	21,342,991	27,363
55-59	2,369	71,232,973	30,069
60-64	6,828	182,672,386	26,753
65-69	9,922	269,257,755	27,137
70-74	9,412	279,043,932	29,648
75-79	5,619	165,671,932	29,484
80-84	3,261	94,302,442	28,918
85-89	1,660	42,226,283	25,438
90-94	670	15,268,952	22,789
95+	195	3,714,709	19,050
Total	40,782	\$ 1,146,598,168	\$ 28,115

### NUMBER OF BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	813	\$ 6,774,724	\$ 8,333
50-54	287	2,544,813	8,867
55-59	366	4,375,584	11,955
60-64	455	6,746,193	14,827
65-69	687	12,282,498	17,878
70-74	841	16,004,886	19,031
75-79	789	15,580,027	19,747
80-84	763	12,912,876	16,924
85-89	534	9,020,017	16,891
90-94	269	4,681,112	17,402
95+	91	1,463,020	16,077
Total	5,895	\$ 92,385,750	\$ 15,672





## Schedule I – Tables of Membership Data

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

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	277	\$ 8,273,634	\$ 29,869
50-54	487	13,557,622	27,839
55-59	839	20,522,401	24,461
60-64	1,042	25,836,163	24,795
65-69	1,130	33,502,614	29,648
70-74	955	30,284,270	31,711
75-79	462	12,547,832	27,160
80-84	154	3,482,162	22,611
85-89	47	964,382	20,519
90-94	11	281,847	25,622
95+	4	63,326	15,832
Total	5,408	\$ 149,316,253	\$ 27,610

### NUMBER OF DEFERRED VESTED AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 35	48	\$ 379,613	\$ 7,909
35-39	384	3,659,863	9,531
40-44	752	8,118,092	10,795
45-49	1,150	13,858,421	12,051
50-54	1,509	18,623,862	12,342
55-59	1,816	22,053,663	12,144
60-64	574	6,497,351	11,319
65+	137	1,608,767	11,743
Total	6,370	\$ 74,799,632	\$ 11,742







## Schedule J – Special Contribution Rates

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Groups that have Age 55 Retirement and Line-of-Duty Disability Benefits:

Public Safety #466

Revenue Agents #474

DNR Conservation Rangers #462

GBI Officers/Agents #471

PLAN	Additional Rate	Total Rate
Old Plan	0.00%	19.88%
New Plan	5.80%	30.43%
GSEPS	2.18%	23.75%

Groups that have Line-of-Duty Disability Benefits:

Deputy DNR Conservation Rangers #462

Probation Officers #467

Parole Officers – Pardons and Paroles #465

PLAN	Additional Rate	Total Rate
Old Plan	0.00%	19.88%
New Plan	0.06%	24.69%
GSEPS	0.04%	21.61%

Group that has Age 55 Retirement:

Special Investigators Department of Revenue #474

PLAN	Additional Rate	Total Rate
New Plan	5.74%	30.37%
GSEPS	2.14%	23.71%

Appellate Court Judges: Total rate equal to 44.48% of payroll





## Schedule K – CAFR Schedules

GA ERS: Solvency Test							
Actuarial Accrued Liability for:							
Actuarial Valuation as of 6/30	Active Member	Retirants &	Active Members	Valuation Assets	Portion of Aggregate Accrued		
	Contributions	Beneficiaries	(Employer Funded Portion)		Liabilities Covered by Assets		
	(1)	(2)	(3)		(1)	(2)	(3)
2019	\$371,147	\$13,077,253	\$4,380,820	\$13,481,219	100%	100.0%	0.7%
2018	372,375	12,927,796	4,512,270	13,412,046	100%	100.0%	2.5%
2017	368,935	12,729,977	4,415,986	13,088,185	100%	99.9%	0.0%
2016	368,281	12,592,980	4,238,427	12,854,518	100%	99.2%	0.0%
2015	367,462	12,520,321	4,211,744	12,675,649	100%	98.3%	0.0%
2014	385,058	12,108,737	4,498,168	12,376,120	100%	99.0%	0.0%
2013	405,841	11,935,364	4,641,244	12,129,803	100%	98.2%	0.0%
2012	460,861	11,420,011	4,897,050	12,260,595	100%	100.0%	7.8%
2011	503,867	11,058,344	5,094,694	12,667,557	100%	100.0%	21.7%
2010	551,607	10,652,040	5,091,705	13,046,193	100%	100.0%	36.2%

*All dollar amounts are in thousands.*

GA ERS: Schedule of Retirants Added to and Removed from Rolls								
Year Ended	Added to Rolls		Removed from Rolls		Roll End of Year		% Increase in Annual Allowances	Average Annual Allowances
	Number	Annual Allowances (in thousands)	Number	Annual Allowances (in thousands)	Number	Annual Allowances (in thousands)		
June 30, 2019	2,777	\$58,673	1,357	\$32,574	52,085	\$1,388,300	1.9%	\$26,655
June 30, 2018	2,612	50,005	1,422	33,530	50,665	1,362,201	1.2%	26,886
June 30, 2017	2,630	45,833	1,420	32,372	49,475	1,345,726	1.0%	27,200
June 30, 2016	2,572	51,031	1,342	30,724	48,265	1,332,265	1.5%	27,603
June 30, 2015	2,656	54,003	1,350	30,927	47,035	1,311,958	1.8%	27,893
June 30, 2014	2,440	51,178	1,059	22,997	45,729	1,288,882	2.2%	28,185
June 30, 2013	3,664	88,855	1,176	26,334	44,348	1,260,701	5.2%	28,427
June 30, 2012	2,956	71,464	1,305	27,696	41,860	1,198,180	3.8%	28,624
June 30, 2011	2,797	69,031	1,170	25,347	40,209	1,154,412	3.9%	28,710
June 30, 2010	2,665	70,383	1,051	22,413	38,582	1,110,728	4.5%	28,789

