



Deferred Outflows and Inflows for Differences from Assumption Changes (\$ thousands)

Year	Initial Balance of Losses / Deferred Outflow	Initial Balance of Gains / Deferred Inflow	Amortization Period	Beginning Balance Deferred Outflows (a)	Beginning Balance Deferred Inflows (b)	Losses / Deferred Outflows (c)	Gains / Deferred Inflows (d)	Amounts Recognized in Pension Expense / Deferred Outflow (e)	Amounts Recognized in Pension Expense / Deferred Inflow (f)	Ending Balance Deferred Outflows (a) + (c) - (e)	Ending Balance Deferred Inflows (b) + (d) - (f)
2019	\$0	\$0	2.4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2018	447	0	2.5	268	0	0	0	179	0	89	0
2017	0	0	2.5	0	0	0	0	0	0	0	0
2016	938	0	2.5	0	0	0	0	0	0	0	0
2015	0	0	2.4	0	0	0	0	0	0	0	0
Total				<u>\$268</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>			<u>\$89</u>	<u>\$0</u>



Deferred Outflows and Inflows for Differences in Investment Experience (\$ thousands)

Year	Initial Balance of Losses / Deferred Outflow	Initial Balance of Gains / Deferred Inflow	Amortization Period	Beginning Balance Deferred Outflows (a)	Beginning Balance Deferred Inflows (b)	Losses / Deferred Outflows (c)	Gains / Deferred Inflows (d)	Amounts Recognized in Pension Expense / Deferred Outflow (e)	Amounts Recognized in Pension Expense / Deferred Inflow (f)	Ending Balance Deferred Outflows (a) + (c) - (e)	Ending Balance Deferred Inflows (b) + (d) - (f)
2019	\$199	\$0	5.0	\$0	\$0	\$199	\$0	\$40	\$0	\$159	\$0
2018	0	554	5.0	0	443	0	0	0	111	0	332
2017	0	1,483	5.0	0	889	0	0	0	297	0	592
2016	1,998	0	5.0	798	0	0	0	400	0	398	0
2015	1,210	0	5.0	242	0	0	0	242	0	0	0
Total				<u>\$1,040</u>	<u>\$1,332</u>	<u>\$199</u>	<u>\$0</u>			<u>\$557</u>	<u>\$924</u>
Net difference between projected and actual earnings on investments											\$367



Summary of Deferred Outflows and Inflows (\$ thousands)

Year	Amortization Period	Beginning Balance	Additions	Deductions	Ending Balance
Deferred Outflows of Resources:					
Difference between expected and actual experience					
2019	2.4	\$0	\$0	\$0	\$0
2018	2.5	0	0	0	0
2017	2.5	0	0	0	0
2016	2.5	0	0	0	0
2015	2.4	0	0	0	0
Difference between expected and actual assumptions					
2019	2.4	\$0	\$0	\$0	\$0
2018	2.5	268	0	179	89
2017	2.5	0	0	0	0
2016	2.5	0	0	0	0
2015	2.4	0	0	0	0
Difference between projected and actual earnings					
2019	5.0	\$0	\$0	\$0	\$0
2018	5.0	0	0	0	0
2017	5.0	0	0	0	0
2016	5.0	0	0	0	0
2015	5.0	0	0	0	0
Subtotal					0
Total Deferred Outflows of Resources		<u>\$268</u>	<u>\$0</u>	<u>\$179</u>	<u>\$89</u>

Year	Amortization Period	Beginning Balance	Additions	Deductions	Ending Balance
Deferred Inflows of Resources:					
Difference between expected and actual experience					
2019	2.4	\$0	\$428	\$178	\$250
2018	2.5	\$289	0	192	97
2017	2.5	\$131	0	131	0
2016	2.5	\$0	0	0	0
2015	2.4	\$0	0	0	0
Difference between expected and actual assumptions					
2019	2.4	\$0	\$0	\$0	\$0
2018	2.5	0	0	0	0
2017	2.5	0	0	0	0
2016	2.5	0	0	0	0
2015	2.4	0	0	0	0
Difference between projected and actual earnings					
2019	5.0	\$0	(\$199)	(\$40)	(\$159)
2018	5.0	\$443	0	111	332
2017	5.0	889	0	297	592
2016	5.0	(798)	0	(400)	(398)
2015	5.0	(242)	0	(242)	0
Subtotal					367
Total Deferred Inflows of Resources		<u>\$712</u>	<u>\$229</u>	<u>\$227</u>	<u>\$714</u>



Paragraph 45 (i): Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in Pension Expense as follows:

Deferred Amounts to be Recognized in Fiscal Years Following the Reporting Date

Year:	
1	\$(156)
2	(438)
3	(70)
4	39
5	0
Thereafter	0



SECTION IV – PENSION EXPENSE

As noted earlier, the Pension Expense (PE) consists of a number of different items. GASB 68 refers to the first as Service Cost which is the Normal Cost using the Entry Age Normal (EAN) actuarial funding method. The second item is interest on the beginning of year TPL and the cash flows during the year at the 7.30% rate of return in effect as of the previous measurement date.

The next three items refer to any changes that occurred in the TPL due to:

- benefit changes,
- actual versus expected experience or
- changes in actuarial assumptions.

Benefit changes, which are reflected immediately in PE, can be positive, if there is a benefit improvement for existing Plan members, or negative if there is a benefit reduction. For the year ended June 30, 2019 there were no benefit changes to be recognized.

The next item to be recognized is the portion of current year changes in TPL due to actual versus expected experience for the year. The portion to recognize in the current year is determined by spreading the total change over the average expected remaining service life of the entire Plan membership. The remaining service life of active members is the average number of years the active members are expected to remain active. For the year ended June 30, 2019, this number is 7.0. The remaining service life of the inactive members is zero. The figure to use for the amortization is the weighted average of these two amounts, or 2.4.

The last item under changes in TPL are changes in actuarial assumptions. The portion to recognize in the current year is determined by spreading the total change over the average expected remaining service life of the entire Plan membership, or 2.4.

Member contributions for the year and projected earnings on the FNP, again at the rate used to calculate the liabilities, are subtracted from the amount determined thus far. One-fifth of current period differences between actual and projected earnings on the FNP are recognized in the pension expense.

The current year portions of previously determined experience, assumption, and earnings amounts, recognized as deferred inflows and outflows (see Section III) are included next. Deferred inflows are subtracted from the PE while deferred outflows are added to the PE. Finally, administrative expenses and other miscellaneous items are included.

The calculation of the Pension Expense is shown in the following table.



Pension Expense
Determined as of the Measurement Date
(\$ thousands)

Service Cost	\$366
Interest	1,850
Current-period benefit changes	0
Expensed portion of current-period difference between expected and actual experience in the total pension liability	(178)
Expensed portion of current-period changes of assumptions	0
Member contributions	(339)
Projected earnings on plan investments	(2,427)
Expensed portion of current-period differences between actual and projected earnings on plan investments	40
Administrative expense	290
Other	0
Recognition of beginning deferred outflows and inflows of resources as pension expense	90
Pension Expense	<u>\$(308)</u>



SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

There are several tables of Required Supplementary Information (RSI) that need to be included in the System's financial statements.

Paragraph 46: The required tables are provided in Schedule A.

Paragraph 47: In addition the following should be noted regarding the RSI:

Changes of benefit terms: None.

Changes of assumptions: In 2010 and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2010. In 2010, rates of withdrawal and mortality were adjusted to more closely reflect actual experience.

On December 17, 2015, the Board adopted recommended changes to the economic and demographic assumptions utilized by the System. Primary among the changes were the updates to rates of mortality, retirement, and withdrawal. The expectation of retired life mortality was changed to the RP-2000 Combined Mortality Table projected to 2025 with projection scale BB and set forward 2 years for both males and females.

Subsequent to the June 30, 2017 Measurement Date, the Board adopted a new funding policy. Because of this new funding policy, the assumed investment rate of return was reduced from 7.50% to 7.40% for the June 30, 2017 actuarial valuation. In addition, based on the Board's new funding policy, the assumed investment rate of return was further reduced by 0.10% from 7.40% to 7.30% as of the June 30, 2018 Measurement Date.

Method and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, three years prior to the end of the fiscal year in which contributions are reported (June 30, 2019 employer contributions were determined in the June 30, 2016 valuation). The following actuarial methods and assumptions were used to determine the most recent contributions reported in that schedule:

Actuarial cost method	Entry age
Amortization method	Level dollar, open
Remaining amortization period	N/A
Asset valuation method	5-year smoothed market
Inflation	2.75 percent
Salary increase	N/A
Investment rate of return	7.50 percent, net of pension plan investment expense, including inflation
Cost-of-living adjustments	1.50 percent semi-annually



SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

**SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
(\$ in Thousands)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total pension liability												
Service Cost	\$ 344	\$ 338	\$ 331	\$ 357	\$ 359	\$ 366						
Interest	1,799	1,824	1,829	1,892	1,875	1,850						
Benefit changes	0	0	0	0	0	0						
Difference between expected and actual experience	0	(325)	(465)	(655)	(481)	(428)						
Changes of assumptions	0	0	938	0	447	0						
Benefit payments	(1,801)	(1,756)	(1,724)	(1,763)	(1,772)	(1,856)						
Refunds of contributions	(30)	(26)	(38)	(75)	(22)	(70)						
Net change in total pension liability	312	55	871	(244)	406	(138)						
Total pension liability - beginning	24,904	25,216	25,271	26,142	25,898	26,304						
Total pension liability - ending (a)	\$ 25,216	\$ 25,271	\$ 26,142	\$ 25,898	\$ 26,304	\$ 26,166						
Plan net position												
Contributions - employer	\$ 45	\$ -	\$ -	\$ -	\$ -	\$ -						
Contributions - member	282	327	328	327	323	339						
Net investment income	4,969	1,189	363	3,741	2,962	2,228						
Benefit payments	(1,801)	(1,756)	(1,724)	(1,763)	(1,772)	(1,856)						
Administrative expense	(152)	(169)	(313)	(224)	(283)	(290)						
Refunds of contributions	(30)	(26)	(38)	(75)	(22)	(70)						
Other	0	0	0	0	0	0						
Net change in plan net position	3,313	(435)	(1,384)	2,006	1,208	351						
Plan net position - beginning	29,481	32,794	32,359	30,975	32,981	34,189						
Plan net position - ending (b)	\$ 32,794	\$ 32,359	\$ 30,975	\$ 32,981	\$ 34,189	\$ 34,540						
Net pension liability - ending (a) - (b)	\$ (7,578)	\$ (7,088)	\$ (4,833)	\$ (7,083)	\$ (7,885)	\$ (8,374)						



SCHEDULE OF THE NET PENSION LIABILITY
(\$ in Thousands)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total pension liability	\$ 25,216	\$ 25,271	\$ 26,142	\$ 25,898	\$ 26,304	\$ 26,166					
Plan net position	32,794	32,359	30,975	32,981	34,189	34,540					
Net pension liability	\$ (7,578)	\$ (7,088)	\$ (4,833)	\$ (7,083)	\$ (7,885)	\$ (8,374)					
Ratio of plan net position to total pension liability	130.05%	128.05%	118.49%	127.35%	129.98%	132.00%					
Covered-employee payroll	N/A	N/A	N/A	N/A	N/A	N/A					
Net pension liability as a percentage of covered-employee payroll	N/A	N/A	N/A	N/A	N/A	N/A					

SCHEDULE OF EMPLOYER CONTRIBUTIONS
(\$ in Thousands)



	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Actuarially determined employer contribution	\$ -	\$ -	\$ -	-	-	-	-	-	-	-
Actual employer contributions	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>45</u>	<u>128</u>	<u>76</u>	<u>75</u>	<u>75</u>
Annual contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>-</u>	<u>-</u>	<u>(45)</u>	<u>(128)</u>	<u>(76)</u>	<u>(75)</u>	<u>(75)</u>
Covered-employee payroll*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Actual contributions as a percentage of covered-employee payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



SCHEDULE B

SUMMARY OF BENEFIT PROVISIONS EVALUATED

The Georgia Legislative Retirement System (LRS) is a cost-sharing multiple employer defined benefit pension plan established by the Georgia General Assembly in 1979 for the purpose of providing retirement allowances and other benefits for all members of the Georgia General Assembly.

Normal Retirement Benefit

Eligibility	Age 65 and 8 years of creditable service or age 62 and 8 years of membership service (for eligible purposes, 4 legislative terms are equivalent to 8 years of membership service).
Benefit	Monthly benefit is \$36 multiplied by years of creditable service. For members with retirement dates prior to July 1, 2014, a one-time 1.75% increase is made at time of retirement.

Early Retirement Benefit

Eligibility	Age 60 and 8 years of membership service.
Benefit	Accrued benefit reduced by 5% for each year member is under age 62.

Disability Retirement Benefit

No special benefit. Benefit is same as early or normal retirement.

Involuntary Retirement Benefit

N/A

Deferred Vested Retirement Benefit

Eligibility	8 years of creditable service. Member contributions not withdrawn.
Benefit	Accrued benefit deferred to age 65 or reduced benefit payable at age 60.

Death Benefit

Eligibility	If less than 15 years of creditable service, a refund of accumulated contributions. If at least 15 years of creditable service or eligible for retirement, the benefit below.
Benefit	Benefit equal to retirement benefit immediately prior to death under 100% joint and survivorship option.

Termination Benefit

Eligibility	Termination with less than 8 years of creditable service.
Benefit	Return of the member's accumulated contributions.



Payment Options

- (1) Life annuity. Guaranteed payment of accumulated member contributions.
- (2) 100% joint and survivorship annuity.
- (3) 50% joint and survivorship annuity.

Post-Retirement Adjustments

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

Contributions

By Members

Members contribute 8 ½ % of salary.

By Employers

Employer contributions are actuarially determined and approved and certified by the Board to the legislative fiscal officer.



SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

Adopted by the Board December 17, 2015. Valuation interest rate adopted by the Board March 15, 2018.

VALUATION INTEREST RATE: 7.30% per annum, compounded annually, net of investment expenses, composed of a 2.75% inflation assumption and a 4.55% real rate of investment return assumption.

SALARY INCREASES: None.

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	
		Men	Women
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	Men	Women	Age	Men	Women
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

ADMINISTRATIVE EXPENSES: Budgeted administrative expenses for the fiscal year are added to the normal cost.

AMORTIZATION METHOD: Level dollar amortization.

ASSET METHOD: Market value.

COST-OF-LIVING ALLOWANCE (COLA): 1.5% semi-annually.

PERCENT MARRIED: 90% of active members are assumed to be married with the male three years older than his spouse.

VALUATION METHOD: Entry age actuarial cost method.



SCHEDULE D

FUNDING POLICY OF THE LRS BOARD OF TRUSTEES

The purpose of this Funding Policy is to state the overall objectives for the Georgia Legislative Retirement System (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 LRS 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 contributions expressed as both a total dollar amount and as a dollar amount per active member and measured by valuations prepared in accordance with applicable State laws and the principles of practice prescribed by the Actuarial Standards Board.
- To maintain a stable funded ratio (ratio of actuarial value of assets to actuarial accrued liabilities) that reflects a trend of strong actuarial condition. The long-term objective is to maintain a 100% funded ratio; in the event that the funded ratio falls below 100%, the objective will be 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 remain reasonably stable over time, before adjustments for changes in benefits, actuarial methods, and/or actuarial adjustments. The target funded ratio will be 100 percent. In the event that the funded ratio falls below 100%, the targeted funded ratio will be 100% within 20 years of the date the funded ratio first falls below 100%.
- **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 20 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 20 year period beginning with the year it is incurred.



- **Employer Contributions**

- **Employer Normal Contributions** – the contribution determined as of the valuation date each year to fund the employer portion of the annual normal cost of the System based on the assumptions and methods adopted by the Board.
- In each valuation subsequent to the adoption of this funding policy the required employer contributions will be determined as the summation of the employer Normal Contribution, a contribution for administrative expenses, the amortization cost for the Transitional UAAL and the individual amortization cost for each of the New Incremental UAAL bases.
- Employer Contributions will be expressed as both a total dollar amount and as a dollar amount per active member. In no event shall the employer contributions be less than \$0.
- The valuation methodology, including the amortization of the Unfunded Actuarial Accrued Liability (UAAL), would be expected to maintain reasonably stable contributions as a dollar per active member.
- In no event will the employer contribution as determined above be less than \$0.

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 any UAAL as a level dollar amount over a period not to exceed 20 years. However in no event shall the employer contributions 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