



**Cavanaugh Macdonald**  
CONSULTING, LLC

*The experience and dedication you deserve*



**EMPLOYEES'**  
**RETIREMENT SYSTEM**  
OF GEORGIA

**GASB STATEMENT NO. 68 REPORT**

**FOR THE**

**GEORGIA PUBLIC SCHOOLS EMPLOYEES RETIREMENT SYSTEM**

**PREPARED AS OF JUNE 30, 2019**





# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

March 13, 2020

Board of Trustees  
Georgia Public Schools Employees Retirement System  
Two Northside 75, Suite 300  
Atlanta, GA 30318-7701

Members of the Board:

Presented in this report is information to assist the Georgia Public School Employees Retirement System (PSERS) in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 68 and to identify the information to be provided by the actuary, Cavanaugh Macdonald Consulting (CMC). The information is presented for the period ending June 30, 2019 (the Measurement Date).

GASB Statement Number 68 established accounting and financial reporting requirements for governmental employers that provide pension benefits to their employees through a trust.

The annual actuarial valuation used as a basis for much of the information presented in this report, including the Net Pension Liability, was performed as of June 30, 2018. The valuation was based upon data, furnished by the Retirement System staff, for active, inactive and retired members along with pertinent financial information.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the System, and on actuarial assumptions that are internally consistent and individually reasonable based on the actual experience of the System. In addition, the calculations were completed in compliance with the laws governing the System and, in our opinion, meet the requirements of GASB 68. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



Board of Trustees  
March 13, 2020  
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These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 and GASB 68 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

Sincerely yours,

A handwritten signature in blue ink that reads "Edward J. Koebel".

Edward J. Koebel, EA, FCA, MAAA  
Chief Executive Officer

A handwritten signature in blue ink that reads "Cathy Turcot".

Cathy Turcot  
Principal and Managing Director

A handwritten signature in blue ink that reads "Ben Mobley".

Ben Mobley, ASA, FCA, MAAA  
Senior Actuary



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**REPORT OF THE ANNUAL GASB STATEMENT NO. 68  
REQUIRED INFORMATION FOR THE  
EMPLOYERS PARTICIPATING IN THE  
GEORGIA PUBLIC SCHOOLS EMPLOYEES RETIREMENT SYSTEM**

**PREPARED AS OF JUNE 30, 2019**

**SECTION I – INTRODUCTION**

The Governmental Accounting Standards Board issued Statement No. 68 (GASB 68), *Accounting and Financial Reporting For Pensions* in June 2012. The Georgia Public Schools Employees Retirement System (PSERS) is a cost-sharing multiple employer defined benefit pension plan.

This report, prepared as of June 30, 2019 (the Measurement Date), presents information to assist the employers participating in PSERS in meeting the requirements of GASB 68 for the fiscal year ending June 30, 2020 (Reporting Date). Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of PSERS as of June 30, 2018. The results of that valuation were detailed in a report dated April 18, 2019.

The NPL shown in the GASB Statement No. 67 Report for the Georgia Public Schools Employees Retirement System prepared as of June 30, 2019 and submitted September 12, 2019 is the collective NPL used for purposes of GASB 68. Please refer to that report for the derivation of the collective NPL.

Pension Expense (PE) includes amounts for service cost (the normal cost under the Entry Age Normal actuarial cost method for the year), interest on the Total Pension Liability (TPL), changes in benefit structure, amortization of increases/decreases in liability due to actuarial experience and actuarial assumption changes, and amortization of investment gains/losses. The actuarial experience and assumption change impacts are amortized over the average expected remaining service life of the Plan membership as of the Measurement Date, and investment gains/losses are amortized over five years. The development of the collective PE is shown in Section IV.

The unamortized portions of each year's experience, assumption changes and investment gains/losses are used to develop deferred inflows and outflows, which also must be included in the employer's and non-employer contributing entities' financial statements. The development of the collective deferred inflows and outflows is shown in Section III.

These collective amounts have been allocated based on employer contributions made to PSERS during the measurement period to determine the proportionate share associated with each participating employer. The State makes all contributions to PSERS on behalf of employees of the participating districts. Therefore, these employers are considered to be in a special funding situation as defined by GASB 68 and the State is treated as a non-employer contributing entity in PSERS. Since the districts do not contribute directly to the PSERS, there is no NPL or deferred inflows or outflows to report in the financial statements of the districts. However, the notes to the financial statements must disclose the portion of the non-employer contributing entities' total proportionate share of the collective NPL that is associated with the employer. In addition, each district must recognize the total PE associated with the district as well as revenue in an amount equal to the non-employer contributing entities' total proportionate share of the collective PE associated with the district.



Schedule A of this report shows the total amount of employer contributions from the State as support provided to the districts for the year ending June 30, 2019. Schedule A also shows the proportionate share percentages that have been determined based on these contributions.

Based on these percentages we have determined the proportionate share amounts of the NPL associated with each participating employer and the employer PE and revenue for State support for each participating employer. These amounts are shown in Schedule B.

Section II of this report is a summary of the principal results of the collective amounts under GASB 68. Section III provides the results of all the necessary calculations, presented in the order laid out in GASB 68 for note disclosure and Section V shows the Required Supplementary Information (RSI).



**SECTION II - SUMMARY OF COLLECTIVE AMOUNTS**  
**(\$ IN THOUSANDS)**

	<b>2019</b>
<b>Valuation Date (VD):</b>	June 30, 2018
<b>Measurement Date (MD):</b>	June 30, 2019
<b>Reporting Date (RD):</b>	June 30, 2020
<b>Single Equivalent Interest Rate (SEIR):</b>	
Long-Term Expected Rate of Return	7.30%
Municipal Bond Index Rate at Measurement Date	3.50%
Fiscal Year in which Plan's Fiduciary Net Position is projected to be depleted from future benefit payments for current members	N/A
Single Equivalent Interest Rate	7.30%
<b>Net Pension Liability:</b>	
Total Pension Liability (TPL)	\$1,107,495
Fiduciary Net Position (FNP)	<u>941,587</u>
Net Pension Liability (NPL = TPL – FNP)	\$ 165,908
FNP as a percentage of TPL	85.02%
<b>Collective Pension Expense (PE):</b>	\$51,164
<b>Deferred Outflows of Resources:</b>	\$3,558
<b>Deferred Inflows of Resources:</b>	\$15,313



### **SECTION III –NOTES TO FINANCIAL STATEMENTS**

The material presented herein will follow the order presented in GASB 68. Paragraph numbers are provided for ease of reference. Amounts are shown in aggregate. Please refer to Schedule B of this report for the proportionate share of certain pension amounts as required by GASB 68.

**Paragraphs 77 and 78(a)-(f):** These paragraphs require information to be disclosed regarding the actuarial assumptions used to measure the TPL. The complete set of actuarial assumptions utilized in developing the TPL are outlined in Schedule D. The key actuarial assumptions are summarized below:

Inflation	2.75 percent
Salary increases, including inflation	N/A
Investment Rate of Return	7.30 percent, net of pension plan investment expense, including inflation
Post-Retirement Benefit Increases	1.50 percent, semi-annually

Post-retirement mortality rates were based on 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) for the period after service retirements and for dependent beneficiaries. The RP-2000 Disabled Mortality projected to 2025 with projection scale BB (set forward 5 years for both males and females) was used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on 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. Rates of mortality in active service were based on the RP-2000 Employee Mortality Table projected to 2025 with projection scale BB.

The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period July 1, 2009 – June 30, 2014, with the exception of the assumed investment rate of return. 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 and further reduced from 7.40% to 7.30% for the June 30, 2018 actuarial valuation.





The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected nominal returns, net of pension plan investment expense and the assumed rate of inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The most recent target asset allocation and best estimates of arithmetic real rates of return for each major asset class based on the most recent experience study are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*
Fixed Income	30.00%	-0.10%
US Large Stocks	46.20%	8.90%
US Small Stocks	1.30%	13.20%
Int'l Developed Mkt Stocks	12.40%	8.90%
Int'l Emerging Mkt Stocks	5.10%	10.90%
Alternatives	5.00%	12.00%
Total	100.00%	

\*Net of inflation.

*Discount rate.* The discount rate used to measure the total pension liability was 7.30 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**Paragraph 78 (g):** This paragraph requires disclosure of the sensitivity of the NPL to changes in the discount rate. The following presents the NPL of the System, calculated using the discount rate of 7.30 percent, as well as what the System's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.30 percent) or 1-percentage-point higher (8.30 percent) than the current rate (\$ thousands):

	1% Decrease (6.30%)	Current Discount Rate (7.30%)	1% Increase (8.30%)
System's Net Pension Liability	\$287,322	\$165,908	\$63,677



**Paragraph 80(a):** This paragraph requires disclosure of the employer’s proportionate share of the collective NPL and if an employer has a special funding situation the portion of the non-employer contributing entities’ proportional share of the collective NPL that is associated with the employer. These amounts are shown in Schedule B.

**Paragraph 80(b):** This paragraph requires disclosure of the employer’s proportion (percentage) of the collective NPL and the changes in proportion since the prior measurement date. 100% of the collective NPL is allocated to the State.

**Paragraph 80(c):** June 30, 2018 is the actuarial valuation date upon which the TPL is based. An expected TPL is determined as of June 30, 2019 using standard roll forward techniques. The procedure used to determine the TPL as of June 30, 2019 is shown on page 7 of the GASB 67 report for PSERS submitted on September 12, 2019.

**Paragraph 80(d) and (e):** Since the previous measurement date, the monthly benefit accrual rate has been increased from \$15.00 to \$15.25 per year of creditable service.

**Paragraph 80(f):** Not applicable.

**Paragraph 80(g):** Please see Section IV of this report for the development of the collective pension expense. The PE for each employer is shown in Schedule B.

**Paragraph 80(h):** Since certain expense items are amortized over closed periods each year, the deferred portions of these items must be tracked annually. If the amounts serve to reduce collective pension expense they are labeled deferred inflows. If they will increase collective pension expense they are labeled deferred outflows. The amortization of these amounts is accomplished on a level dollar basis, with no interest included in the deferred amounts. Experience gains/losses and the impact of changes in actuarial assumptions, if any, are amortized over the average expected remaining service life of the active and inactive Plan members at the beginning of the fiscal year. Investment gains and losses are amortized over a fixed five year period.

The table below provides a summary of the collective deferred inflows and outflows as of the Measurement Date. 100% of these amounts are allocated to the State.

	Collective Deferred Outflows of Resources (\$ thousands)	Collective Deferred Inflows of Resources (\$ thousands)
Differences between expected and actual experience	\$0	\$5,269
Changes of actuarial assumptions	3,558	0
Net difference between projected and actual earnings on plan investments	<u>0</u>	<u>10,044</u>
Total	<u>\$3,558</u>	<u>\$15,313</u>

The following tables show the components of the collective deferred outflows of resources and the collective deferred inflows of resources by year.



**Collective Deferred Outflows and Inflows for Differences between Expected and Actual Experience (\$ thousands)**

<b>Year</b>	<b>Initial Balance of Losses / Deferred Outflow</b>	<b>Initial Balance of Gains / Deferred Inflow</b>	<b>Amortization Period</b>	<b>Beginning Balance Deferred Outflows (a)</b>	<b>Beginning Balance Deferred Inflows (b)</b>	<b>Losses / Deferred Outflows (c)</b>	<b>Gains / Deferred Inflows (d)</b>	<b>Amounts Recognized in Pension Expense / Deferred Outflow (e)</b>	<b>Amounts Recognized in Pension Expense / Deferred Inflow (f)</b>	<b>Ending Balance Deferred Outflows (a) + (c) - (e)</b>	<b>Ending Balance Deferred Inflows (b) + (d) - (f)</b>
2019	\$0	\$8,159	2.3	\$0	\$0	\$0	\$8,159	\$0	\$3,547	\$0	\$4,612
2018	0	3,943	2.4	0	2,300	0	0	0	1,643	0	657
2017	0	3,665	2.3	0	479	0	0	0	479	0	0
2016	0	9,483	1.9	0	0	0	0	0	0	0	0
2015	0	6,858	1.9	0	0	0	0	0	0	0	0
<b>Total</b>				<u>\$0</u>	<u>\$2,779</u>	<u>\$0</u>	<u>\$8,159</u>			<u>\$0</u>	<u>\$5,269</u>



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

<b>Year</b>	<b>Initial Balance of Losses / Deferred Outflow</b>	<b>Initial Balance of Gains / Deferred Inflow</b>	<b>Amortization Period</b>	<b>Beginning Balance Deferred Outflows (a)</b>	<b>Beginning Balance Deferred Inflows (b)</b>	<b>Losses / Deferred Outflows (c)</b>	<b>Gains / Deferred Inflows (d)</b>	<b>Amounts Recognized in Pension Expense / Deferred Outflow (e)</b>	<b>Amounts Recognized in Pension Expense / Deferred Inflow (f)</b>	<b>Ending Balance Deferred Outflows (a) + (c) - (e)</b>	<b>Ending Balance Deferred Inflows (b) + (d) - (f)</b>
2019	\$0	\$0	2.3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2018	21,354	0	2.4	12,456	0	0	0	8,898	0	3,558	0
2017	0	0	2.3	0	0	0	0	0	0	0	0
2016	33,215	0	1.9	0	0	0	0	0	0	0	0
2015	0	0	1.9	0	0	0	0	0	0	0	0
<b>Total</b>				<u>\$12,456</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>			<u>\$3,558</u>	<u>\$0</u>



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

<b>Year</b>	<b>Initial Balance of Losses / Deferred Outflow</b>	<b>Initial Balance of Gains / Deferred Inflow</b>	<b>Amortization Period</b>	<b>Beginning Balance Deferred Outflows (a)</b>	<b>Beginning Balance Deferred Inflows (b)</b>	<b>Losses / Deferred Outflows (c)</b>	<b>Gains / Deferred Inflows (d)</b>	<b>Amounts Recognized in Pension Expense / Deferred Outflow (e)</b>	<b>Amounts Recognized in Pension Expense / Deferred Inflow (f)</b>	<b>Ending Balance Deferred Outflows (a) + (c) - (e)</b>	<b>Ending Balance Deferred Inflows (b) + (d) - (f)</b>
2019	\$4,971	\$0	5.0	\$0	\$0	\$4,971	\$0	\$994	\$0	\$3,977	\$0
2018	0	14,524	5.0	0	11,619	0	0	0	2,905	0	8,714
2017	0	38,683	5.0	0	23,209	0	0	0	7,737	0	15,472
2016	50,833	0	5.0	20,332	0	0	0	10,167	0	10,165	0
2015	30,424	0	5.0	6,084	0	0	0	6,084	0	0	0
<b>Total</b>				<u>\$26,416</u>	<u>\$34,828</u>	<u>\$4,971</u>	<u>\$0</u>			<u>\$14,142</u>	<u>\$24,186</u>
<b>Net difference between projected and actual earnings on investments</b>											\$10,044



**Summary of Collective Deferred Outflows and Inflows (\$ thousands)**

<b>Year</b>	<b>Amortization Period</b>	<b>Beginning Balance</b>	<b>Additions</b>	<b>Deductions</b>	<b>Ending Balance</b>
<b>Deferred Outflows of Resources:</b>					
Difference between expected and actual experience					
2019	2.3	\$0	\$0	\$0	\$0
2018	2.4	0	0	0	0
2017	2.3	0	0	0	0
2016	1.9	0	0	0	0
2015	1.9	0	0	0	0
Difference between expected and actual assumptions					
2019	2.3	\$0	\$0	\$0	\$0
2018	2.4	12,456	0	8,898	3,558
2017	2.3	0	0	0	0
2016	1.9	0	0	0	0
2015	1.9	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
<b>Total Deferred Outflows of Resources</b>		<u>\$12,456</u>	<u>\$0</u>	<u>\$8,898</u>	<u>\$3,558</u>
<b>Deferred Inflows of Resources:</b>					
Difference between expected and actual experience					
2019	2.3	\$0	\$8,159	\$3,547	\$4,612
2018	2.4	2,300	0	1,643	657
2017	2.3	479	0	479	0
2016	1.9	0	0	0	0
2015	1.9	0	0	0	0
Difference between expected and actual assumptions					
2019	2.3	\$0	\$0	\$0	\$0
2018	2.4	0	0	0	0
2017	2.3	0	0	0	0
2016	1.9	0	0	0	0
2015	1.9	0	0	0	0
Difference between projected and actual earnings					
2019	5.0	\$0	(\$4,971)	(\$994)	(\$3,977)
2018	5.0	11,619	0	2,905	8,714
2017	5.0	23,209	0	7,737	15,472
2016	5.0	(20,332)	0	(10,167)	(10,165)
2015	5.0	(6,084)	0	(6,084)	0
Difference between projected and actual earnings					\$10,044
<b>Total Deferred Inflows of Resources</b>		<u>\$11,191</u>	<u>\$3,188</u>	<u>(\$934)</u>	<u>\$15,313</u>



**Paragraph 80(i):** Collective amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in the collective pension expense as follows. 100% of these amounts are allocated to the State.

<b>Deferred Amounts to be Recognized in Fiscal Years Following the Reporting Date (\$ thousands):</b>	
Year 1	\$(129)
Year 2	(10,711)
Year 3	(1,910)
Year 4	995
Year 5	0
Thereafter	0

**Paragraph 80(j):** The amount of revenue recognized for the support provided by non-employer contributing entities for the participating employers is provided in Schedule B.



## **SECTION IV – COLLECTIVE PENSION EXPENSE**

As noted earlier, the collective 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 actuarial funding method. The second item is interest on the beginning Total Pension Liability (TPL) and the cash flow 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, or
- 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, the monthly benefit accrual rate was increased from \$15.00 to \$15.25 per year of creditable service.

The next item to be recognized is the portion of current year changes in TPL due to actual versus expected Plan 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 determined at the beginning of the year. The average expected 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 of years for the active members is 6.7. The average expected remaining service life of the inactive members is zero. The number of years to use for the amortization is the weighted average for all active and inactive members, or 2.3 years.

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 2.3 years.

Member contributions for the year and projected earnings on the Fiduciary Net Position (FNP), again at the discount rate used to calculate the liabilities, are subtracted from the amount determined thus far. One-fifth of current period differences between projected and actual investment 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 outflows and inflows (see Section III) are included also. Deferred outflows are added to the PE while deferred inflows are subtracted from the PE. Finally, administrative expenses and other miscellaneous items are included.

The calculation of the Collective Pension Expense determined as of the measurement date is shown in the following table:





<b>Collective Pension Expense Determined as of the Measurement Date (\$ thousands)</b>	
Service Cost at end of year	\$13,762
Interest on the TPL and net cash flow	75,923
Current-period benefit changes	18,050
Expensed portion of current-period difference between expected and actual experience in the total pension liability	(3,547)
Expensed portion of current-period changes of assumptions	0
Member contributions	(2,256)
Projected earnings on plan investments	(65,524)
Expensed portion of current-period differences between projected and actual earnings on plan investments	994
Administrative expense	1,377
Other	0
Recognition of beginning deferred outflows and inflows of resources as pension expense	12,385
<b>Collective Pension Expense</b>	<b><u>\$51,164</u></b>



## **SECTION V – REQUIRED SUPPLEMENTARY INFORMATION**

### **Paragraph 82:**

**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, retirement, disability 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 Blue Collar Mortality Table projected to 2025 with projection scale BB (set forward 3 years for males and 2 years for females).

On March 15, 2018, 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 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.

**Changes of benefit terms.** The member contribution rate was increased from \$4 to \$10 per month for members joining the System on or after July 1, 2012. The monthly benefit accrual rate was increased from \$14.75 to \$15.00 per year of creditable service effective July 1, 2017. The monthly benefit accrual rate was increased from \$15.00 to \$15.25 per year of creditable service effective July 1, 2018.

**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 are based on June 30, 2016 valuation). The following actuarial methods and assumptions were used to determine the most recent contribution rate reported in that schedule:

Actuarial cost method	Entry age
Amortization method	Level dollar, closed
Remaining amortization period	21.9 years
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
Post-Retirement Benefit Increases	1.50 percent, semi-annually



**SCHEDULE A**

**GEORGIA PUBLIC SCHOOLS EMPLOYEES RETIREMENT SYSTEM  
Schedule of Employer Allocations as of June 30, 2019**

<b>Employers</b>	<b>2019 State Pension Support Provided To The Districts</b>	<b>Employer Allocation Percentage</b>
Atlanta Metropolitan College	\$ 870	0.002876%
Appling County Schools	58,320	0.192711%
Atkinson County Schools	33,077	0.109299%
Bacon County Schools	31,336	0.103546%
Baker County Schools	9,575	0.031639%
Baldwin County Schools	107,066	0.353784%
Banks County Schools	77,470	0.255990%
Barrow County Schools	204,556	0.675928%
Bartow County Schools	261,135	0.862887%
Ben Hill County Schools	61,802	0.204217%
Berrien County Schools	51,357	0.169701%
Bibb County Schools	562,312	1.858084%
Bleckley County Schools	73,988	0.244485%
Brantley County Schools	94,009	0.310639%
Brooks County Schools	47,875	0.158196%
Bryan County Schools	161,034	0.532114%
Bulloch County Schools	255,042	0.842753%
Burke County Schools	122,734	0.405557%
Butts County Schools	80,082	0.264619%
Calhoun County Schools	17,409	0.057526%
Camden County Schools	181,925	0.601145%
Candler County Schools	34,818	0.115052%
Carroll County Schools	235,022	0.776598%
Catoosa County Board of Education	257,654	0.851382%
Charlton County Schools	31,336	0.103546%
Chatham County Schools	809,520	2.674950%
Chattahoochee County Schools	26,984	0.089165%
Chattooga County Schools	45,263	0.149567%
Cherokee County Schools	617,150	2.039290%
Clarke County Schools	385,610	1.274197%
Clay County Schools	8,705	0.028763%
Clayton County Schools	1,045,413	3.454425%
Clinch County Schools	23,502	0.077660%
Cobb County Schools	1,972,444	6.517675%
Coffee County Schools	116,641	0.385423%
Colquitt County Schools	193,240	0.638537%
Columbia County Schools	546,644	1.806311%
Cook County Schools	60,932	0.201340%



Employers	2019 State Pension Support Provided To The Districts	Employer Allocation Percentage
Coweta County Schools	\$ 530,105	1.751661%
Crawford County Schools	48,745	0.161072%
Crisp County Schools	93,138	0.307763%
Dade County Schools	41,782	0.138062%
Dawson County Schools	76,600	0.253114%
Decatur County Schools	136,661	0.451578%
Dekalb County Schools	1,878,435	6.207035%
Dodge County Schools	64,414	0.212846%
Dooly County Schools	42,652	0.140938%
Dougherty County Schools	352,533	1.164898%
Douglas County Schools	439,578	1.452527%
Early County Schools	46,134	0.152443%
Echols County Schools	13,057	0.043144%
Effingham County Schools	201,074	0.664423%
Elbert County Schools	64,414	0.212846%
Emanuel County Schools	96,620	0.319268%
Evans County Schools	40,041	0.132309%
Fannin County Schools	77,470	0.255990%
Fayette County Schools	330,772	1.092990%
Floyd County Schools	148,847	0.491846%
Forsyth County Schools	851,302	2.813012%
Franklin County Schools	89,657	0.296258%
Gilmer County Schools	74,859	0.247361%
Glascocock County Schools	16,539	0.054650%
Glynn County Schools	308,140	1.018207%
Gordon County Schools	89,657	0.296258%
Grady County Schools	84,434	0.279000%
Greene County Schools	51,357	0.169701%
Gwinnett County Schools	3,050,064	10.078525%
Habersham County Schools	174,961	0.578134%
Hall County Schools	440,449	1.455403%
Hancock County Schools	33,077	0.109299%
Haralson County Schools	46,134	0.152443%
Harris County Schools	110,547	0.365289%
Hart County Schools	93,138	0.307763%
Heard County Schools	31,336	0.103546%
Henry County Schools	490,064	1.619352%
Houston County Schools	673,730	2.226249%
Irwin County Schools	20,891	0.069031%
Jackson County Schools	198,463	0.655794%
Jasper County Schools	57,450	0.189835%
Jeff Davis County Schools	61,802	0.204217%



Employers	2019 State Pension Support Provided To The Districts	Employer Allocation Percentage
Jefferson County Schools	\$ 67,895	0.224351%
Jenkins County Schools	29,595	0.097794%
Johnson County Schools	30,466	0.100670%
Jones County Schools	126,215	0.417062%
Lamar County Schools	46,134	0.152443%
Lanier County Schools	30,466	0.100670%
Laurens County Schools	154,941	0.511980%
Lee County Schools	148,847	0.491846%
Liberty County Schools	241,986	0.799609%
Lincoln County Schools	40,041	0.132309%
Long County Schools	80,952	0.267495%
Lowndes County Schools	240,245	0.793856%
Lumpkin County Schools	94,009	0.310639%
Macon County Schools	39,170	0.129433%
Madison County Schools	80,952	0.267495%
Marion County Schools	28,725	0.094918%
Mcduffie County Schools	92,268	0.304887%
Mcintosh County Schools	28,725	0.094918%
Meriwether County Schools	96,620	0.319268%
Miller County Schools	28,725	0.094918%
Mitchell County Schools	44,393	0.146691%
Monroe County Schools	134,920	0.445825%
Montgomery County Schools	20,020	0.066155%
Morgan County Schools	60,932	0.201340%
Murray County Schools	101,843	0.336526%
Muscogee County Schools	641,523	2.119826%
Newton County Schools	403,890	1.334599%
Oconee County Schools	145,366	0.480341%
Oglethorpe County Schools	62,673	0.207093%
Paulding County Schools	420,428	1.389248%
Peach County Schools	47,875	0.158196%
Pickens County Schools	83,563	0.276124%
Pierce County Schools	50,486	0.166825%
Pike County Schools	57,450	0.189835%
Polk County Schools	100,972	0.333650%
Pulaski County Schools	34,818	0.115052%
Putnam County Schools	81,822	0.270371%
Quitman County Schools	10,445	0.034515%
Rabun County Schools	61,802	0.204217%
Randolph County Schools	20,891	0.069031%
Richmond County Schools	637,171	2.105445%
Rockdale County Schools	328,160	1.084362%



Employers	2019 State Pension Support Provided To The Districts	Employer Allocation Percentage
Schley County Schools	\$ 20,891	0.069031%
Screven County Schools	52,227	0.172577%
Seminole County Schools	41,782	0.138062%
Spalding County Schools	236,763	0.782351%
Stephens County Schools	99,231	0.327897%
Stewart County Schools	12,186	0.040268%
Sumter County Schools	120,122	0.396928%
Talbot County Schools	16,539	0.054650%
Taliaferro County Schools	6,093	0.020134%
Tattnall County Schools	74,859	0.247361%
Taylor County Schools	34,818	0.115052%
Telfair County Schools	34,818	0.115052%
Terrell County Schools	40,041	0.132309%
Thomas County Schools	117,511	0.388299%
Tift County Schools	96,620	0.319268%
Toombs County Schools	53,098	0.175454%
Towns County Schools	34,818	0.115052%
Treutlen County Schools	19,150	0.063278%
Troup County Schools	396,056	1.308712%
Turner County Schools	26,114	0.086289%
Twiggs County Schools	20,020	0.066155%
Union County Schools	69,636	0.230103%
Upson County Schools	127,086	0.419938%
Walker County Schools	249,820	0.825495%
Walton County Schools	298,565	0.986568%
Ware County Schools	154,941	0.511980%
Warren County Schools	20,020	0.066155%
Washington County Board of Education	56,579	0.186959%
Wayne County Schools	120,993	0.399804%
Webster County Schools	2,611	0.008629%
Wheeler County Schools	31,336	0.103546%
White County Board of Education	71,377	0.235856%
Whitfield County Schools	171,479	0.566629%
Wilcox County Schools	26,984	0.089165%
Wilkes County Schools	53,968	0.178330%
Wilkinson County Schools	39,170	0.129433%
Worth County Schools	60,061	0.198464%
City of Bremen Schools (Haralson)	13,927	0.046021%
City of Buford Schools (Gwinnett)	67,895	0.224351%
City of Calhoun Schools (Gordon)	28,725	0.094918%
City of Carrollton Schools (Carroll)	77,470	0.255990%
City of Cartersville Schools (Bartow)	47,004	0.155320%



Employers	2019 State Pension Support Provided To The Districts	Employer Allocation Percentage
City of Chickamauga Schools (West)	\$ 20,891	0.069031%
City of Commerce Schools (Jackson)	19,150	0.063278%
City of Dalton Schools (Whitfield)	86,175	0.284753%
City of Decatur Schools (DeKalb)	93,138	0.307763%
City of Dublin Schools (Laurens)	45,263	0.149567%
City of Gainesville Schools (Hall)	97,491	0.322145%
City of Jefferson Schools (Jackson)	41,782	0.138062%
City of Marietta Schools (Cobb)	87,916	0.290505%
City of Pelham Schools (Mitchell)	20,020	0.066155%
City of Rome Schools (Floyd)	73,988	0.244485%
City of Social Circle Schools (Walton)	20,891	0.069031%
City of Thomasville Schools (Thomas)	24,373	0.080536%
City of Trion Schools (Chattooga)	19,150	0.063278%
City of Valdosta Schools (Lowndes)	177,572	0.586763%
City of Vidalia Schools (Toomb)	37,430	0.123681%
Scintilla Charter Academy	1,741	0.005753%
Southwest Georgia Stem Charter School	3,482	0.011505%
School for Arts Infused Learning	2,611	0.008629%
Furlow Charter School	870	0.002876%
Georgia Magnet Charter School	870	0.002876%
Georgia Military College	60,061	0.198464%
Kipp Metro Atlanta Collaborative Inc	30,466	0.100670%
The Globe Academy	<u>870</u>	<u>0.002876%</u>
Total State of Georgia	\$ <u>30,263,000</u>	<u>100.000000%</u>



**SCHEDULE B**

**GEORGIA PUBLIC SCHOOLS EMPLOYEES RETIREMENT SYSTEM  
Schedule of Pension Amounts by Employer as of June 30, 2019**

<b>Employers</b>	<b>State's Proportionate Share Of the Net Pension Liability Associated with the District</b>		<b>Employer Pension Expense and Revenue for State Support</b>
Atlanta Metropolitan College	\$	4,772	\$ 1,471
Appling County Schools		319,723	98,599
Atkinson County Schools		181,336	55,922
Bacon County Schools		171,791	52,978
Baker County Schools		52,492	16,188
Baldwin County Schools		586,956	181,010
Banks County Schools		424,708	130,975
Barrow County Schools		1,121,419	345,832
Bartow County Schools		1,431,599	441,488
Ben Hill County Schools		338,812	104,486
Berrien County Schools		281,548	86,826
Bibb County Schools		3,082,710	950,670
Bleckley County Schools		405,620	125,088
Brantley County Schools		515,375	158,935
Brooks County Schools		262,460	80,939
Bryan County Schools		882,820	272,251
Bulloch County Schools		1,398,195	431,186
Burke County Schools		672,852	207,499
Butts County Schools		439,024	135,390
Calhoun County Schools		95,440	29,433
Camden County Schools		997,348	307,570
Candler County Schools		190,880	58,865
Carroll County Schools		1,288,438	397,339
Catoosa County Board of Education		1,412,511	435,601
Charlton County Schools		171,791	52,978
Chatham County Schools		4,437,956	1,368,611
Chattahoochee County Schools		147,932	45,620
Chattooga County Schools		248,144	76,524
Cherokee County Schools		3,383,345	1,043,382
Clarke County Schools		2,113,995	651,930
Clay County Schools		47,720	14,716
Clayton County Schools		5,731,166	1,767,423
Clinch County Schools		128,844	39,734
Cobb County Schools		10,813,343	3,334,705
Coffee County Schools		639,448	197,198
Colquitt County Schools		1,059,384	326,701
Columbia County Schools		2,996,814	924,181
Cook County Schools		334,039	103,014





Employers	State's Proportionate Share Of the Net Pension Liability Associated with the District		Employer Pension Expense and Revenue for State Support	
Coweta County Schools	\$	2,906,146	\$	896,220
Crawford County Schools		267,231		82,411
Crisp County Schools		510,603		157,464
Dade County Schools		229,056		70,638
Dawson County Schools		419,936		129,503
Decatur County Schools		749,204		231,045
Dekalb County Schools		10,297,967		3,175,769
Dodge County Schools		353,129		108,901
Dooly County Schools		233,827		72,110
Dougherty County Schools		1,932,659		596,008
Douglas County Schools		2,409,858		743,171
Early County Schools		252,915		77,996
Echols County Schools		71,579		22,074
Effingham County Schools		1,102,331		339,945
Elbert County Schools		353,129		108,901
Emanuel County Schools		529,691		163,350
Evans County Schools		219,511		67,695
Fannin County Schools		424,708		130,975
Fayette County Schools		1,813,358		559,217
Floyd County Schools		816,012		251,648
Forsyth County Schools		4,667,012		1,439,249
Franklin County Schools		491,516		151,577
Gilmer County Schools		410,392		126,560
Glascok County Schools		90,669		27,961
Glynn County Schools		1,689,287		520,955
Gordon County Schools		491,516		151,577
Grady County Schools		462,883		142,748
Greene County Schools		281,548		86,826
Gwinnett County Schools		16,721,077		5,156,579
Habersham County Schools		959,171		295,796
Hall County Schools		2,414,630		744,642
Hancock County Schools		181,336		55,922
Haralson County Schools		252,915		77,996
Harris County Schools		606,044		186,896
Hart County Schools		510,603		157,464
Heard County Schools		171,791		52,978
Henry County Schools		2,686,635		828,525
Houston County Schools		3,693,525		1,139,038
Irwin County Schools		114,528		35,319
Jackson County Schools		1,088,015		335,530
Jasper County Schools		314,951		97,127
Jeff Davis County Schools		338,812		104,486



Employers	State's Proportionate Share Of the Net Pension Liability Associated with the District		Employer Pension Expense and Revenue for State Support	
Jefferson County Schools	\$	372,216	\$	114,787
Jenkins County Schools		162,248		50,035
Johnson County Schools		167,020		51,507
Jones County Schools		691,939		213,386
Lamar County Schools		252,915		77,996
Lanier County Schools		167,020		51,507
Laurens County Schools		849,416		261,949
Lee County Schools		816,012		251,648
Liberty County Schools		1,326,615		409,112
Lincoln County Schools		219,511		67,695
Long County Schools		443,796		136,861
Lowndes County Schools		1,317,071		406,168
Lumpkin County Schools		515,375		158,935
Macon County Schools		214,740		66,223
Madison County Schools		443,796		136,861
Marion County Schools		157,477		48,564
Mcduffie County Schools		505,832		155,992
Mcintosh County Schools		157,477		48,564
Meriwether County Schools		529,691		163,350
Miller County Schools		157,477		48,564
Mitchell County Schools		243,372		75,053
Monroe County Schools		739,659		228,102
Montgomery County Schools		109,756		33,848
Morgan County Schools		334,039		103,014
Murray County Schools		558,324		172,180
Muscogee County Schools		3,516,961		1,084,588
Newton County Schools		2,214,207		682,834
Oconee County Schools		796,924		245,762
Oglethorpe County Schools		343,584		105,957
Paulding County Schools		2,304,874		710,795
Peach County Schools		262,460		80,939
Pickens County Schools		458,112		141,276
Pierce County Schools		276,776		85,354
Pike County Schools		314,951		97,127
Polk County Schools		553,552		170,709
Pulaski County Schools		190,880		58,865
Putnam County Schools		448,567		138,333
Quitman County Schools		57,263		17,659
Rabun County Schools		338,812		104,486
Randolph County Schools		114,528		35,319
Richmond County Schools		3,493,102		1,077,230
Rockdale County Schools		1,799,043		554,803



Employers	State's Proportionate Share Of the Net Pension Liability Associated with the District		Employer Pension Expense and Revenue for State Support	
Schley County Schools	\$	114,528	\$	35,319
Screven County Schools		286,319		88,297
Seminole County Schools		229,056		70,638
Spalding County Schools		1,297,983		400,282
Stephens County Schools		544,007		167,765
Stewart County Schools		66,808		20,603
Sumter County Schools		658,535		203,084
Talbot County Schools		90,669		27,961
Taliaferro County Schools		33,404		10,301
Tattnall County Schools		410,392		126,560
Taylor County Schools		190,880		58,865
Telfair County Schools		190,880		58,865
Terrell County Schools		219,511		67,695
Thomas County Schools		644,219		198,669
Tift County Schools		529,691		163,350
Toombs County Schools		291,092		89,769
Towns County Schools		190,880		58,865
Treutlen County Schools		104,983		32,376
Troup County Schools		2,171,258		669,589
Turner County Schools		143,160		44,149
Twiggs County Schools		109,756		33,848
Union County Schools		381,759		117,730
Upton County Schools		696,711		214,857
Walker County Schools		1,369,562		422,356
Walton County Schools		1,636,795		504,768
Ware County Schools		849,416		261,949
Warren County Schools		109,756		33,848
Washington County Board of Education		310,180		95,656
Wayne County Schools		663,307		204,556
Webster County Schools		14,316		4,415
Wheeler County Schools		171,791		52,978
White County Board of Education		391,304		120,673
Whitfield County Schools		940,083		289,910
Wilcox County Schools		147,932		45,620
Wilkes County Schools		295,864		91,241
Wilkinson County Schools		214,740		66,223
Worth County Schools		329,268		101,542
City of Bremen Schools (Haralson)		76,353		23,546
City of Buford Schools (Gwinnett)		372,216		114,787
City of Calhoun Schools (Gordon)		157,477		48,564
City of Carrollton Schools (Carroll)		424,708		130,975
City of Cartersville Schools (Bartow)		257,688		79,468



Employers	State's Proportionate Share Of the Net Pension Liability Associated with the District		Employer Pension Expense and Revenue for State Support	
City of Chickamauga Schools (West)	\$	114,528	\$	35,319
City of Commerce Schools (Jackson)		104,983		32,376
City of Dalton Schools (Whitfield)		472,428		145,691
City of Decatur Schools (DeKalb)		510,603		157,464
City of Dublin Schools (Laurens)		248,144		76,524
City of Gainesville Schools (Hall)		534,464		164,822
City of Jefferson Schools (Jackson)		229,056		70,638
City of Marietta Schools (Cobb)		481,971		148,634
City of Pelham Schools (Mitchell)		109,756		33,848
City of Rome Schools (Floyd)		405,620		125,088
City of Social Circle Schools (Walton)		114,528		35,319
City of Thomasville Schools (Thomas)		133,616		41,205
City of Trion Schools (Chattooga)		104,983		32,376
City of Valdosta Schools (Lowndes)		973,487		300,211
City of Vidalia Schools (Toomb)		205,197		63,280
Scintilla Charter Academy		9,545		2,943
Southwest Georgia Stem Charter School		19,088		5,886
School for Arts Infused Learning		14,316		4,415
Furlow Charter School		4,772		1,471
Georgia Magnet Charter School		4,772		1,471
Georgia Military College		329,268		101,542
Kipp Metro Atlanta Collaborative Inc		167,020		51,507
The Globe Academy		<u>4,772</u>		<u>1,471</u>
Total State of Georgia	\$	<u>165,908,000</u>	\$	<u>51,164,000</u>



## **SCHEDULE C**

### **SUMMARY OF MAIN PLAN PROVISIONS**

The Georgia Public School Employees Retirement System (PSERS) is a cost-sharing multiple employer defined benefit pension plan established by the Georgia General Assembly in 1969 for the purpose of providing retirement allowances and other benefits for public school employees who are not eligible for membership in the Teachers Retirement System of Georgia.

#### Normal Retirement Benefit

Eligibility	Age 65 and 10 years of creditable service.
Benefit	Monthly benefit is \$15.25 multiplied by years of creditable service. For members with retirement dates prior to July 1, 2013, a one-time 1.75% increase is made at time of retirement.

#### Early Retirement Benefit

Eligibility	Age 60 and 10 years of creditable service.
Benefit	Accrued benefit reduced by 6% for each year member is under age 65.

#### Disability Retirement Benefit

Eligibility	15 years of creditable service.
Benefit	Accrued benefit payable immediately.

#### Deferred Vested Retirement Benefit

Eligibility	10 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	Death in service and the member is at least age 60 and has at least 10 years of creditable service.
Benefit	Benefit payable to beneficiary under the joint and survivor annuity payment option.

If the member dies in service under age 60 or with less than 10 years of creditable service his beneficiary receives a refund of the member's accumulated contributions.



Termination Benefit

- Eligibility Less than 10 years of creditable service.
- Benefit Return of the member's accumulated contributions.
- Payment Options
- (1) Life annuity. Guaranteed payment of accumulated member contributions.
  - (2) Joint and survivorship annuity.
  - (3) Certain and life annuity.

Post-Retirement Adjustments

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

Contributions

- By Members Members who joined the System prior to July 1, 2012 contribute \$4 per month. Members joining the System on or after July 1, 2012 contribute \$10 per month.
- By Employers Employer contributions are actuarially determined and approved and certified by the Board.



**SCHEDULE D**

**STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS**

**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.

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

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

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



**RETIREMENT:**

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

**DEATHS AFTER RETIREMENT:** The RP-2000 Blue-Collar Mortality Table projected to 2025 with projection scale BB (set forward 3 years for males and 2 years for females) is used for the period after service retirement and for beneficiaries of deceased members. The RP-2000 Disabled Mortality Table 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	Men	Women	Age	Men	Women
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

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

**AMORTIZATION METHOD:** Level dollar amortization.

**ASSET METHOD:** Market value.

**VALUATION METHOD:** Entry age actuarial cost method.

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

**TERMINATING VESTED MEMBERS:** 50% of active vested members who terminate are assumed to elect a refund in lieu of a benefit. Benefits are assumed to begin at age 65.





## SCHEDULE E

### FUNDING POLICY OF THE PSERS BOARD OF TRUSTEES

The purpose of this Funding Policy is to state the overall objectives for the Public School Employees 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 PSERS 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 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 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.

### 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 contributions 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 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