



Cavanaugh Macdonald
CONSULTING, LLC

The experience and dedication you deserve



EMPLOYEES'
RETIREMENT SYSTEM
OF GEORGIA

GASB STATEMENT NO. 68 REPORT

FOR THE

GEORGIA PUBLIC SCHOOL EMPLOYEES RETIREMENT SYSTEM

PREPARED AS OF JUNE 30, 2022





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

March 31, 2023

Board of Trustees
Georgia Public School 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, 2022 (the Measurement Date).

GASB Statement No. 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 (Asset), was performed as of June 30, 2021. The valuation was based upon data, furnished by the Retirement System staff, for active, inactive and retired members along with pertinent financial information.

In order to prepare the results in this report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

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 31, 2023
Page 2

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
Consulting Actuary



TABLE OF CONTENTS

<u>Section</u>	<u>Item</u>	<u>Page No.</u>
I	Introduction	1
II	Summary of Collective Amounts	3
III	Notes to Financial Statements	4
IV	Collective Pension Expense	13
V	Required Supplementary Information	15
<u>Schedule</u>		
A	Schedule of Employer Allocations	17
B	Schedule of Pension Amounts by Employer	22
C	Summary of Main Plan Provisions	27
D	Statement of Actuarial Assumptions and Methods	29
E	Funding Policy of the PSERS Board of Trustees	33



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

PREPARED AS OF JUNE 30, 2022

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 School Employees Retirement System (PSERS) is a cost-sharing multiple employer defined benefit pension plan.

This report, prepared as of June 30, 2022 (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, 2023 (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, 2021. The results of that valuation were detailed in a report dated April 21, 2022.

The Net Pension Liability (Asset) (NPL) shown in the GASB Statement No. 67 Report for the Georgia Public School Employees Retirement System prepared as of June 30, 2022 and submitted September 12, 2022 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 nonemployer 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 nonemployer 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 nonemployer 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 nonemployer contributing entities’ total proportionate share of the collective PE associated with the district.



Schedule A of this report shows the total amount of nonemployer contributions from the State as support provided to the districts for the year ending June 30, 2022. 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)

	2022
Valuation Date (VD):	June 30, 2021
Measurement Date (MD):	June 30, 2022
Reporting Date (RD):	June 30, 2023
Single Equivalent Interest Rate (SEIR):	
Long-Term Expected Rate of Return	7.00%
Municipal Bond Index Rate at Measurement Date	3.37%
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	7.00%
Net Pension Liability (Asset):	
Total Pension Liability (TPL)	\$ 1,263,626
Fiduciary Net Position (FNP)	<u>1,026,232</u>
Net Pension Liability (Asset) (NPL = TPL – FNP)	\$ 237,394
FNP as a percentage of TPL	81.21%
Collective Pension Expense (PE):	\$ 59,657
Deferred Outflows of Resources:	\$ 62,875
Deferred Inflows of Resources:	\$ 3,320



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	2.50 percent
Salary increases, including inflation	N/A
Investment Rate of Return	7.00 percent, net of pension plan investment expense, including inflation
Post-Retirement Benefit Increases	1.50 percent, semi-annually

Mortality rates are as follows:

- The Pub-2010 Below-Median General Employee Table, with no adjustments, projected generationally with the MP-2019 scale is used for both males and females while in active service.
- The Pub-2010 Family of Tables projected generationally with the MP-2019 Scale and with further adjustments are used for post-retirement mortality assumptions as follows:

Participant Type	Membership Table	Set Forward (+)/ Setback (-)	Adjustment to Rates
Service Retirees	General Healthy Below-Median Annuitant	Male: +2; Female: +2	Male: 101%; Female: 103%
Disability Retirees	General Disabled	Male: -3; Female: 0	Male: 103%; Female: 106%
Beneficiaries	General Below-Median Contingent Survivors	Male: +2; Female: +2	Male: 104%; Female: 99%

The actuarial assumptions used in the June 30, 2021 valuation were based on the results of an actuarial experience study for the period July 1, 2014 – June 30, 2019. In the experience study, the long-term assumed investment rate of return that was recommended by the actuary and adopted by the Board was 7.00%. Based on the funding policy adopted by the Board, the assumed investment rate of return used in the funding valuation will be reduced by 0.10% (10 basis points) from the immediate prior actuarial valuation, if 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, until the rate reaches the long-term assumed investment rate of return. However, for GASB purposes, the Total Pension Liability (TPL) will be based on the long-term assumed investment rate of return of 7.00%.



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 target asset allocation and best estimates of arithmetic real rates of return as provided by the System for each major asset class are summarized in the table below:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*
Fixed Income	30.0%	0.2%
US Large Stocks	46.3%	9.4%
US Small Stocks	1.2%	13.4%
Int'l Developed Mkt Stocks	12.3%	9.4%
Int'l Emerging Mkt Stocks	5.2%	11.4%
Alternatives	5.0%	10.5%
Total	100.0%	

*Net of inflation.

Discount rate. The discount rate used to measure the total pension liability was 7.00 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and that nonemployer contributions will be made equal to the actuarially determined employer contribution. 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 net pension liability (asset) to changes in the discount rate. The following presents the net pension liability (asset) of the System, calculated using the discount rate of 7.00 percent, as well as what the System's net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00 percent) or 1-percentage-point higher (8.00 percent) than the current rate_(\$ thousands):

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
System's Net Pension Liability (Asset)	\$383,919	\$237,394	\$115,123



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 nonemployer 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, 2021 is the actuarial valuation date upon which the TPL is based. An expected TPL is determined as of June 30, 2022 using standard roll forward techniques. The procedure used to determine the TPL as of June 30, 2022 is shown on page 7 of the GASB 67 report for PSERS submitted on September 12, 2022.

Paragraph 80(d): There were no changes in the assumptions that affected the measurement of the TPL since the prior measurement date.

Paragraph 80(e): Since the previous measurement date, the monthly benefit accrual rate has been increased from \$15.50 to \$15.75 per year of creditable service effective July 1, 2021 for members retiring on or after August 1, 2012.

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 the amounts 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	\$3,320
Changes of actuarial assumptions	3,559	0
Net difference between projected and actual earnings on plan investments	<u>59,316</u>	<u>0</u>
Total	<u>\$62,875</u>	<u>\$3,320</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)

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)
2022	\$0	\$5,427	2.0	\$0	\$0	\$0	\$5,427	\$0	\$2,714	\$0	\$2,713
2021	0	12,739	2.1	0	6,673	0	0	0	6,066	0	607
2020	0	12,220	2.2	0	1,110	0	0	0	1,110	0	0
2019	0	8,159	2.3	0	0	0	0	0	0	0	0
2018	0	3,943	2.4	0	0	0	0	0	0	0	0
Total				<u>\$0</u>	<u>\$7,783</u>	<u>\$0</u>	<u>\$5,427</u>			<u>\$0</u>	<u>\$3,320</u>



Collective 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)
2022	\$0	\$0	2.0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2021	74,759	0	2.1	39,159	0	0	0	35,600	0	3,559	0
2020	0	0	2.2	0	0	0	0	0	0	0	0
2019	0	0	2.3	0	0	0	0	0	0	0	0
2018	21,354	0	2.4	0	0	0	0	0	0	0	0
Total				<u>\$39,159</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>			<u>\$3,559</u>	<u>\$0</u>



Collective 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)
2022	\$220,897	\$0	5.0	\$0	\$0	\$220,897	\$0	\$44,179	\$0	\$176,718	\$0
2021	0	209,066	5.0	0	167,253	0	0	0	41,813	0	125,440
2020	17,609	0	5.0	10,565	0	0	0	3,522	0	7,043	0
2019	4,971	0	5.0	1,989	0	0	0	994	0	995	0
2018	0	14,524	5.0	0	2,904	0	0	0	2,904	0	0
Total				<u>\$12,554</u>	<u>\$170,157</u>	<u>\$220,897</u>	<u>\$0</u>			<u>\$184,756</u>	<u>\$125,440</u>
Net difference between projected and actual earnings on investments										\$59,316	



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

Year	Amortization Period	Beginning Balance	Additions	Deductions	Ending Balance
Deferred Outflows of Resources:					
Difference between expected and actual experience					
2022	2.0	\$0	\$0	\$0	\$0
2021	2.1	0	0	0	0
2020	2.2	0	0	0	0
2019	2.3	0	0	0	0
2018	2.4	0	0	0	0
Difference between expected and actual assumptions					
2022	2.0	\$0	\$0	\$0	\$0
2021	2.1	39,159	0	35,600	3,559
2020	2.2	0	0	0	0
2019	2.3	0	0	0	0
2018	2.4	0	0	0	0
Difference between projected and actual earnings					
2022	5.0	\$0	\$220,897	\$44,179	\$176,718
2021	5.0	0	(167,253)	(41,813)	(125,440)
2020	5.0	0	10,565	3,522	7,043
2019	5.0	0	1,989	994	995
2018	5.0	0	(2,904)	(2,904)	0
Subtotal					\$59,316
Total Deferred Outflows of Resources		<u>\$39,159</u>	<u>\$63,294</u>	<u>\$39,578</u>	<u>\$62,875</u>
Deferred Inflows of Resources:					
Difference between expected and actual experience					
2022	2.0	\$0	\$5,427	\$2,714	\$2,713
2021	2.1	6,673	0	6,066	607
2020	2.2	1,110	0	1,110	0
2019	2.3	0	0	0	0
2018	2.4	0	0	0	0
Difference between expected and actual assumptions					
2022	2.0	\$0	\$0	\$0	\$0
2021	2.1	0	0	0	0
2020	2.2	0	0	0	0
2019	2.3	0	0	0	0
2018	2.4	0	0	0	0
Difference between projected and actual earnings					
2022	5.0	\$0	\$0	\$0	\$0
2021	5.0	167,253	0	167,253	0
2020	5.0	(10,565)	0	(10,565)	0
2019	5.0	(1,989)	0	(1,989)	0
2018	5.0	2,904	0	2,904	0
Difference between projected and actual earnings					\$0
Total Deferred Inflows of Resources		<u>\$165,386</u>	<u>\$5,427</u>	<u>\$167,493</u>	<u>\$3,320</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.

Deferred Amounts to be Recognized in Fiscal Years Following the Reporting Date (\$ thousands):	
Year 1	\$7,122
Year 2	5,887
Year 3	2,365
Year 4	44,181
Year 5	0
Thereafter	0

Paragraph 80(j): The amount of revenue recognized for the support provided by nonemployer 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 7.00% 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, 2022, the PE recognizes the monthly benefit accrual rate increase from \$15.50 to \$15.75 per year of creditable service for members retiring on or after August 1, 2012.

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, 2022 this number of years for the active members is 6.4. 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 2.0 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 2.0 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:

Collective Pension Expense Determined as of the Measurement Date (\$ thousands)	
Service Cost at end of year	\$14,109
Interest on the TPL and net cash flow	83,301
Current-period benefit changes	16,044
Expensed portion of current-period difference between expected and actual experience in the total pension liability	(2,714)
Expensed portion of current-period changes of assumptions	0
Member contributions	(2,256)
Projected earnings on plan investments	(82,752)
Expensed portion of current-period differences between projected and actual earnings on plan investments	44,179
Administrative expense	1,523
Other	0
Recognition of beginning deferred outflows and inflows of resources as pension expense	<u>(11,777)</u>
Collective Pension Expense	<u>\$59,657</u>



SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

Paragraph 82:

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 for members retiring on or after August 1, 2012.

The monthly benefit accrual rate was increased from \$15.25 to \$15.50 per year of creditable service effective July 1, 2019 for members retiring on or after August 1, 2012.

The monthly benefit accrual rate was increased from \$15.50 to \$15.75 per year of creditable service effective July 1, 2021 for members retiring on or after August 1, 2012.

Changes of assumptions.

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 from the RP-2000 Mortality Tables 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).

A new funding policy was initially adopted by the Board on March 15, 2018, and most recently amended on December 17, 2020. 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.

On December 17, 2020, the Board adopted recommended changes to the economic and demographic assumptions utilized by the System based on the experience study prepared for the five-year period ending June 30, 2019. Primary among the changes were the updates to rates of mortality, retirement, disability, and withdrawal. This also included a change to the long-term assumed investment rate of return to 7.00%. These assumption changes were first reflected in the calculation of the June 30, 2021 Total Pension Liability.



Method and assumptions used in calculations of actuarially determined contributions. The actuarially determined contributions 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, 2022 employer contributions are based on June 30, 2019 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	19.6 years
Asset valuation method	5-year smoothed fair value
Inflation	2.75 percent
Salary increase	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



SCHEDULE A

GEORGIA PUBLIC SCHOOL EMPLOYEES RETIREMENT SYSTEM
Schedule of Employer Allocations as of June 30, 2022

Employers	2022 State Pension Support Provided To The Districts	Employer Allocation Percentage
Appling County Schools	\$ 65,327	0.201062%
Atkinson County Schools	40,829	0.125664%
Bacon County Schools	39,809	0.122522%
Baker County Schools	9,187	0.028274%
Baldwin County Schools	102,073	0.314159%
Banks County Schools	65,327	0.201062%
Barrow County Schools	279,681	0.860796%
Bartow County Schools	292,951	0.901637%
Ben Hill County Schools	67,368	0.207345%
Berrien County Schools	56,141	0.172788%
Bibb County Schools	563,446	1.734159%
Bleckley County Schools	83,700	0.257611%
Brantley County Schools	87,783	0.270177%
Brooks County Schools	61,244	0.188495%
Bryan County Schools	206,188	0.634601%
Bulloch County Schools	240,893	0.741416%
Burke County Schools	131,675	0.405265%
Butts County Schools	85,742	0.263894%
Calhoun County Schools	19,394	0.059690%
Camden County Schools	195,981	0.603186%
Candler County Schools	39,809	0.122522%
Carroll County Schools	240,893	0.741416%
Catoosa County Board of Education	286,826	0.882787%
Charlton County Schools	35,726	0.109956%
Chatham County Schools	837,002	2.576105%
Chattahoochee County Schools	17,352	0.053407%
Chattooga County Schools	65,327	0.201062%
Cherokee County Schools	670,623	2.064026%
Clarke County Schools	380,734	1.171814%
Clay County Schools	12,249	0.037699%
Clayton County Schools	1,047,274	3.223272%
Clinch County Schools	25,518	0.078540%
Cobb County Schools	1,974,102	6.075837%
Coffee County Schools	136,778	0.420973%
Colquitt County Schools	177,608	0.546637%
Columbia County Schools	595,088	1.831548%
Cook County Schools	80,638	0.248186%
Coweta County Schools	584,881	1.800132%



Employers	2022 State Pension Support Provided To The Districts	Employer Allocation Percentage
Crawford County Schools	\$ 50,016	0.153938%
Crisp County Schools	95,949	0.295310%
Dade County Schools	44,912	0.138230%
Dawson County Schools	93,907	0.289026%
Decatur County Schools	139,841	0.430398%
Dekalb County Schools	1,924,085	5.921899%
Dodge County Schools	71,451	0.219911%
Dooly County Schools	43,891	0.135088%
Dougherty County Schools	355,216	1.093274%
Douglas County Schools	414,418	1.275486%
Early County Schools	47,975	0.147655%
Echols County Schools	10,207	0.031416%
Effingham County Schools	225,582	0.694292%
Elbert County Schools	69,410	0.213628%
Emanuel County Schools	96,970	0.298451%
Evans County Schools	37,767	0.116239%
Fannin County Schools	83,700	0.257611%
Fayette County Schools	348,071	1.071283%
Floyd County Schools	140,861	0.433540%
Forsyth County Schools	974,801	3.000220%
Franklin County Schools	81,659	0.251327%
Gilmer County Schools	104,115	0.320442%
Glascocock County Schools	18,373	0.056549%
Glynn County Schools	330,718	1.017876%
Gordon County Schools	111,260	0.342433%
Grady County Schools	66,348	0.204203%
Greene County Schools	50,016	0.153938%
Gwinnett County Schools	3,421,504	10.530614%
Habersham County Schools	208,230	0.640885%
Hall County Schools	451,165	1.388583%
Hancock County Schools	39,809	0.122522%
Haralson County Schools	55,120	0.169646%
Harris County Schools	119,426	0.367566%
Hart County Schools	111,260	0.342433%
Heard County Schools	42,871	0.131947%
Henry County Schools	472,600	1.454557%
Houston County Schools	851,292	2.620087%
Irwin County Schools	20,415	0.062832%
Jackson County Schools	230,686	0.710000%
Jasper County Schools	68,389	0.210487%
Jeff Davis County Schools	92,887	0.285885%
Jefferson County Schools	72,472	0.223053%



Employers	2022 State Pension Support Provided To The Districts	Employer Allocation Percentage
Jenkins County Schools	\$ 27,560	0.084823%
Johnson County Schools	29,601	0.091106%
Jones County Schools	130,654	0.402124%
Lamar County Schools	53,078	0.163363%
Lanier County Schools	34,705	0.106814%
Laurens County Schools	161,276	0.496371%
Lee County Schools	144,944	0.446106%
Liberty County Schools	261,308	0.804247%
Lincoln County Schools	48,995	0.150796%
Long County Schools	89,825	0.276460%
Lowndes County Schools	240,893	0.741416%
Lumpkin County Schools	95,949	0.295310%
Macon County Schools	39,809	0.122522%
Madison County Schools	105,136	0.323584%
Marion County Schools	42,871	0.131947%
Mcduffie County Schools	101,053	0.311018%
Mcintosh County Schools	31,643	0.097389%
Meriwether County Schools	82,680	0.254469%
Miller County Schools	26,539	0.081681%
Mitchell County Schools	45,933	0.141372%
Monroe County Schools	142,903	0.439823%
Montgomery County Schools	29,601	0.091106%
Morgan County Schools	74,514	0.229336%
Murray County Schools	103,094	0.317301%
Muscogee County Schools	625,710	1.925796%
Newton County Schools	401,149	1.234645%
Oconee County Schools	160,255	0.493230%
Oglethorpe County Schools	61,244	0.188495%
Paulding County Schools	506,284	1.558229%
Peach County Schools	95,949	0.295310%
Pickens County Schools	89,825	0.276460%
Pierce County Schools	78,597	0.241903%
Pike County Schools	52,057	0.160221%
Polk County Schools	118,405	0.364425%
Pulaski County Schools	36,746	0.113097%
Putnam County Schools	94,928	0.292168%
Quitman County Schools	10,207	0.031416%
Rabun County Schools	72,472	0.223053%
Randolph County Schools	23,477	0.072257%
Richmond County Schools	700,224	2.155132%
Rockdale County Schools	376,651	1.159247%
Schley County Schools	21,435	0.065973%



Employers	2022 State Pension Support Provided To The Districts	Employer Allocation Percentage
Screven County Schools	\$ 50,016	0.153938%
Seminole County Schools	29,601	0.091106%
Spalding County Schools	248,039	0.763407%
Stephens County Schools	96,970	0.298451%
Stewart County Schools	9,187	0.028274%
Sumter County Schools	137,799	0.424115%
Talbot County Schools	18,373	0.056549%
Taliaferro County Schools	7,145	0.021991%
Tattnall County Schools	86,762	0.267035%
Taylor County Schools	38,788	0.119380%
Telfair County Schools	43,891	0.135088%
Terrell County Schools	54,099	0.166504%
Thomas County Schools	141,882	0.436681%
Tift County Schools	85,742	0.263894%
Toombs County Schools	53,078	0.163363%
Towns County Schools	38,788	0.119380%
Treutlen County Schools	20,415	0.062832%
Troup County Schools	364,402	1.121548%
Turner County Schools	29,601	0.091106%
Twiggs County Schools	21,435	0.065973%
Union County Schools	76,555	0.235619%
Upson County Schools	145,965	0.449248%
Walker County Schools	245,997	0.757124%
Walton County Schools	333,780	1.027300%
Ware County Schools	137,799	0.424115%
Warren County Schools	17,352	0.053407%
Washington County Board of Education	47,975	0.147655%
Wayne County Schools	124,530	0.383274%
Webster County Schools	3,062	0.009425%
Wheeler County Schools	30,622	0.094248%
White County Board of Education	70,431	0.216770%
Whitfield County Schools	175,566	0.540354%
Wilcox County Schools	33,684	0.103673%
Wilkes County Schools	66,348	0.204203%
Wilkinson County Schools	37,767	0.116239%
Worth County Schools	63,286	0.194779%
City of Bremen Schools (Haralson)	16,332	0.050265%
City of Buford Schools (Gwinnett)	108,198	0.333009%
City of Calhoun Schools (Gordon)	33,684	0.103673%
City of Carrollton Schools (Carroll)	103,094	0.317301%
City of Cartersville Schools (Bartow)	52,057	0.160221%
City of Chickamauga Schools (West)	24,498	0.075398%



Employers	2022 State Pension Support Provided To The Districts	Employer Allocation Percentage
City of Commerce Schools (Jackson)	\$ 23,477	0.072257%
City of Dalton Schools (Whitfield)	68,389	0.210487%
City of Decatur Schools (DeKalb)	113,302	0.348717%
City of Dublin Schools (Laurens)	48,995	0.150796%
City of Gainesville Schools (Hall)	112,281	0.345575%
City of Jefferson Schools (Jackson)	51,037	0.157080%
City of Marietta Schools (Cobb)	101,053	0.311018%
City of Pelham Schools (Mitchell)	22,456	0.069115%
City of Rome Schools (Floyd)	131,675	0.405265%
City of Social Circle Schools (Walton)	30,622	0.094248%
City of Thomasville Schools (Thomas)	28,581	0.087965%
City of Trion Schools (Chattooga)	20,415	0.062832%
City of Valdosta Schools (Lowndes)	172,504	0.530929%
City of Vidalia Schools (Toomb)	43,891	0.135088%
Scintilla Charter Academy	2,041	0.006283%
Southwest Georgia Stem Charter School	3,062	0.009425%
School for Arts Infused Learning	4,083	0.012566%
Furlow Charter School	8,166	0.025133%
Georgia Magnet Charter School	2,041	0.006283%
Georgia Military College	62,265	0.191637%
Kipp Metro Atlanta Collaborative Inc	51,037	0.157080%
The Globe Academy	<u>2,041</u>	<u>0.006283%</u>
Total State of Georgia	\$ <u>32,491,000</u>	<u>100.000000%</u>



SCHEDULE B

GEORGIA PUBLIC SCHOOL EMPLOYEES RETIREMENT SYSTEM
Schedule of Pension Amounts by Employer as of June 30, 2022

Employers	State's Proportionate Share Of the Net Pension Liability (Asset) Associated with the District		Employer Pension Expense and Revenue for State Support
Appling County Schools	\$	477,309	\$ 119,948
Atkinson County Schools		298,319	74,967
Bacon County Schools		290,860	73,093
Baker County Schools		67,121	16,867
Baldwin County Schools		745,795	187,418
Banks County Schools		477,309	119,948
Barrow County Schools		2,043,478	513,525
Bartow County Schools		2,140,432	537,890
Ben Hill County Schools		492,225	123,696
Berrien County Schools		410,188	103,080
Bibb County Schools		4,116,789	1,034,547
Bleckley County Schools		611,553	153,683
Brantley County Schools		641,384	161,179
Brooks County Schools		447,476	112,450
Bryan County Schools		1,506,505	378,584
Bulloch County Schools		1,760,077	442,307
Burke County Schools		962,075	241,769
Butts County Schools		626,469	157,431
Calhoun County Schools		141,700	35,609
Camden County Schools		1,431,927	359,843
Candler County Schools		290,860	73,093
Carroll County Schools		1,760,077	442,307
Catoosa County Board of Education		2,095,683	526,644
Charlton County Schools		261,029	65,596
Chatham County Schools		6,115,519	1,536,827
Chattahoochee County Schools		126,785	31,861
Chattooga County Schools		477,309	119,948
Cherokee County Schools		4,899,874	1,231,336
Clarke County Schools		2,781,816	699,069
Clay County Schools		89,495	22,490
Clayton County Schools		7,651,855	1,922,908
Clinch County Schools		186,449	46,855
Cobb County Schools		14,423,673	3,624,663
Coffee County Schools		999,365	251,140
Colquitt County Schools		1,297,683	326,107
Columbia County Schools		4,347,985	1,092,647
Cook County Schools		589,179	148,060
Coweta County Schools		4,273,405	1,073,905



Employers	State's Proportionate Share Of the Net Pension Liability (Asset) Associated with the District		Employer Pension Expense and Revenue for State Support
Crawford County Schools	\$	365,440	\$ 91,835
Crisp County Schools		701,048	176,173
Dade County Schools		328,150	82,464
Dawson County Schools		686,130	172,424
Decatur County Schools		1,021,739	256,763
Dekalb County Schools		14,058,234	3,532,828
Dodge County Schools		522,056	131,192
Dooly County Schools		320,691	80,589
Dougherty County Schools		2,595,367	652,214
Douglas County Schools		3,027,927	760,917
Early County Schools		350,524	88,087
Echols County Schools		74,580	18,742
Effingham County Schools		1,648,208	414,194
Elbert County Schools		507,140	127,444
Emanuel County Schools		708,505	178,047
Evans County Schools		275,944	69,345
Fannin County Schools		611,553	153,683
Fayette County Schools		2,543,162	639,095
Floyd County Schools		1,029,198	258,637
Forsyth County Schools		7,122,342	1,789,841
Franklin County Schools		596,635	149,934
Gilmer County Schools		760,710	191,166
Glascock County Schools		134,244	33,735
Glynn County Schools		2,416,377	607,234
Gordon County Schools		812,915	204,285
Grady County Schools		484,766	121,821
Greene County Schools		365,440	91,835
Gwinnett County Schools		24,999,047	6,282,250
Habersham County Schools		1,521,423	382,333
Hall County Schools		3,296,413	828,387
Hancock County Schools		290,860	73,093
Haralson County Schools		402,729	101,206
Harris County Schools		872,580	219,279
Hart County Schools		812,915	204,285
Heard County Schools		313,234	78,716
Henry County Schools		3,453,031	867,745
Houston County Schools		6,219,929	1,563,065
Irwin County Schools		149,159	37,484
Jackson County Schools		1,685,497	423,565
Jasper County Schools		499,684	125,570
Jeff Davis County Schools		678,674	170,550
Jefferson County Schools		529,514	133,067



Employers	State's Proportionate Share Of the Net Pension Liability (Asset) Associated with the District		Employer Pension Expense and Revenue for State Support
Jenkins County Schools	\$	201,365	\$ 50,603
Johnson County Schools		216,280	54,351
Jones County Schools		954,618	239,895
Lamar County Schools		387,814	97,457
Lanier County Schools		253,570	63,722
Laurens County Schools		1,178,355	296,120
Lee County Schools		1,059,029	266,133
Liberty County Schools		1,909,234	479,790
Lincoln County Schools		357,981	89,960
Long County Schools		656,299	164,928
Lowndes County Schools		1,760,077	442,307
Lumpkin County Schools		701,048	176,173
Macon County Schools		290,860	73,093
Madison County Schools		768,169	193,041
Marion County Schools		313,234	78,716
Mcduffie County Schools		738,338	185,544
Mcintosh County Schools		231,196	58,099
Meriwether County Schools		604,094	151,809
Miller County Schools		193,906	48,728
Mitchell County Schools		335,609	84,338
Monroe County Schools		1,044,113	262,385
Montgomery County Schools		216,280	54,351
Morgan County Schools		544,430	136,815
Murray County Schools		753,254	189,292
Muscogee County Schools		4,571,724	1,148,872
Newton County Schools		2,930,973	736,552
Oconee County Schools		1,170,898	294,246
Oglethorpe County Schools		447,476	112,450
Paulding County Schools		3,699,142	929,593
Peach County Schools		701,048	176,173
Pickens County Schools		656,299	164,928
Pierce County Schools		574,263	144,312
Pike County Schools		380,355	95,583
Polk County Schools		865,123	217,405
Pulaski County Schools		268,485	67,470
Putnam County Schools		693,589	174,299
Quitman County Schools		74,580	18,742
Rabun County Schools		529,514	133,067
Randolph County Schools		171,534	43,106
Richmond County Schools		5,116,154	1,285,687
Rockdale County Schools		2,751,983	691,572
Schley County Schools		156,616	39,358



Employers	State's Proportionate Share Of the Net Pension Liability (Asset) Associated with the District		Employer Pension Expense and Revenue for State Support
Screven County Schools	\$	365,440	\$ 91,835
Seminole County Schools		216,280	54,351
Spalding County Schools		1,812,282	455,426
Stephens County Schools		708,505	178,047
Stewart County Schools		67,121	16,867
Sumter County Schools		1,006,824	253,014
Talbot County Schools		134,244	33,735
Taliaferro County Schools		52,205	13,119
Tattnall County Schools		633,925	159,305
Taylor County Schools		283,401	71,219
Telfair County Schools		320,691	80,589
Terrell County Schools		395,271	99,331
Thomas County Schools		1,036,654	260,511
Tift County Schools		626,469	157,431
Toombs County Schools		387,814	97,457
Towns County Schools		283,401	71,219
Treutlen County Schools		149,159	37,484
Troup County Schools		2,662,488	669,082
Turner County Schools		216,280	54,351
Twiggs County Schools		156,616	39,358
Union County Schools		559,345	140,563
Upson County Schools		1,066,488	268,008
Walker County Schools		1,797,367	451,677
Walton County Schools		2,438,749	612,856
Ware County Schools		1,006,824	253,014
Warren County Schools		126,785	31,861
Washington County Board of Education		350,524	88,087
Wayne County Schools		909,869	228,650
Webster County Schools		22,374	5,623
Wheeler County Schools		223,739	56,226
White County Board of Education		514,599	129,318
Whitfield County Schools		1,282,768	322,359
Wilcox County Schools		246,113	61,848
Wilkes County Schools		484,766	121,821
Wilkinson County Schools		275,944	69,345
Worth County Schools		462,394	116,199
City of Bremen Schools (Haralson)		119,326	29,987
City of Buford Schools (Gwinnett)		790,543	198,663
City of Calhoun Schools (Gordon)		246,113	61,848
City of Carrollton Schools (Carroll)		753,254	189,292
City of Cartersville Schools (Bartow)		380,355	95,583
City of Chickamauga Schools (West)		178,990	44,980



Employers	State's Proportionate Share Of the Net Pension Liability (Asset) Associated with the District		Employer Pension Expense and Revenue for State Support
City of Commerce Schools (Jackson)	\$	171,534	\$ 43,106
City of Dalton Schools (Whitfield)		499,684	125,570
City of Decatur Schools (DeKalb)		827,833	208,034
City of Dublin Schools (Laurens)		357,981	89,960
City of Gainesville Schools (Hall)		820,374	206,160
City of Jefferson Schools (Jackson)		372,898	93,709
City of Marietta Schools (Cobb)		738,338	185,544
City of Pelham Schools (Mitchell)		164,075	41,232
City of Rome Schools (Floyd)		962,075	241,769
City of Social Circle Schools (Walton)		223,739	56,226
City of Thomasville Schools (Thomas)		208,824	52,477
City of Trion Schools (Chattooga)		149,159	37,484
City of Valdosta Schools (Lowndes)		1,260,394	316,736
City of Vidalia Schools (Toomb)		320,691	80,589
Scintilla Charter Academy		14,915	3,748
Southwest Georgia Stem Charter School		22,374	5,623
School for Arts Infused Learning		29,831	7,496
Furlow Charter School		59,664	14,994
Georgia Magnet Charter School		14,915	3,748
Georgia Military College		454,935	114,325
Kipp Metro Atlanta Collaborative Inc		372,898	93,709
The Globe Academy		14,915	3,748
Total State of Georgia	\$	<u>237,394,000</u>	\$ <u>59,657,000</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 \$15.00 multiplied by years of creditable service for members retiring before August 1, 2012 and \$15.75 multiplied by years of creditable service for members retiring on or after August 1, 2012. 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 on December 17, 2020. Valuation interest rate based on the long-term assumed investment rate of return as adopted by the Board.

VALUATION INTEREST RATE: 7.00% per annum, compounded annually, net of investment expenses, composed of a 2.50% inflation assumption and a 4.50% 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:

Annual Rates of Withdrawal				
Age	Years of Service			Disability
	<u>0-4</u>	<u>5-9</u>	<u>10 & Over</u>	
	<u>Males</u>			<u>Males</u>
20	34.00%			0.0000%
25	31.00	19.00%		0.0000
30	27.50	17.00	12.50%	0.0000
35	24.50	15.50	9.00	0.0018
40	22.00	13.50	8.25	0.0110
45	21.00	12.50	7.00	0.0330
50	18.50	11.00	7.00	0.0770
55	15.25	9.00	6.00	0.2250
60	13.50	9.00		0.2500
<u>Females</u>			<u>Females</u>	
20	35.00%			0.0000%
25	31.00	20.00%		0.0000
30	25.00	16.50	10.00%	0.0000
35	22.00	15.00	10.00	0.0018
40	20.00	14.00	9.00	0.0110
45	18.00	12.00	8.00	0.0330
50	16.25	10.00	7.00	0.0770
55	13.50	9.00	6.00	0.2250
60	13.00	9.00		0.2500



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

Age	Annual Rate	Age	Annual Rate
60	12.0%	71	25.0%
61	12.0	72	25.0
62	21.0	73	25.0
63	17.0	74	25.0
64	15.0	75	25.0
65	26.0	76	25.0
66	26.0	77	25.0
67	22.0	78	25.0
68	22.0	79	25.0
69	23.5	80 & Over	100.0
70	25.0		

RATES OF DEATH BEFORE RETIREMENT: The Pub-2010 Below-Median General Employee Table, with no adjustments, projected generationally with the MP-2019 scale 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:

Annual Rates of Death*					
Age	Males	Females	Age	Males	Females
20	0.0410%	0.0130%	45	0.1430%	0.0720%
25	0.0410	0.0120	50	0.2180	0.1070
30	0.0520	0.0190	55	0.3200	0.1570
35	0.0680	0.0300	60	0.4660	0.2380
40	0.0960	0.0470	65	0.6820	0.3800

*Base mortality rates as of 2010 before application of the improvement scale



RATES OF DEATHS AFTER RETIREMENT: The Pub-2010 Family of Tables projected generationally with the MP-2019 Scale and with further adjustments are used for post-retirement mortality assumptions as follows:

Participant Type	Membership Table	Set Forward (+)/ Setback (-)	Adjustment to Rates
Service Retirees	General Healthy Below-Median Annuitant	Male: +2; Female: +2	Male: 101%; Female: 103%
Disability Retirees	General Disabled	Male: -3; Female: 0	Male: 103%; Female: 106%
Beneficiaries	General Below-Median Contingent Survivors	Male: +2; Female: +2	Male: 104%; Female: 99%

Representative values of the assumed annual rates of mortality after retirement are as follows:

Annual Rates of Death*						
Age	Service Retirement		Disability Retirement		Beneficiaries	
	Males	Females	Males	Females	Males	Females
50	0.7989%	0.4532%	1.2576%	1.5720%	0.9984%	0.5930%
55	0.9837	0.5037	1.8725	1.8465	1.1523	0.7742
60	1.1726	0.6015	2.3484	2.0734	1.4258	1.0237
65	1.5736	0.8827	2.7573	2.3914	1.9978	1.4147
70	2.5785	1.5296	3.4536	3.0337	3.0680	2.0731
75	4.3329	2.6770	4.4743	4.2432	4.7414	3.1878
80	7.4043	4.7679	6.0986	6.3674	7.3944	5.1450
85	12.4301	8.7849	8.8220	9.8909	11.8154	8.7684
90	19.3173	15.3594	12.9831	14.4849	19.0320	14.3778

*Base mortality rates as of 2010 before application of the improvement scale

ADMINISTRATIVE EXPENSES: Administrative expenses equal to \$1,400,000 are added to the normal cost contribution.

AMORTIZATION METHOD: Level dollar amortization.



ASSET METHOD: Fair Value.

VALUATION METHOD: Entry age normal cost method.

COST-OF-LIVING ADJUSTMENT (COLA): 1.50% semi-annually.

TERMINATING VESTED MEMBERS: 25% 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.
 - Effective with the June 30, 2020 valuation date, any New Incremental UAAL which is attributable to the granting of any post-retirement benefit adjustment (PRBA), including COLAs and one-time (non-compounded) payments, shall be amortized over a closed 15-year period. The amortization period shall begin with the year such PRBA is granted by the Board.
- **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: December 17, 2020