



**Cavanaugh Macdonald**  
CONSULTING, LLC

*The experience and dedication you deserve*



**GASB Statement No. 67 Report**

**For the**

**Gwinnett County**

**Board of Education's Retirement System**

**Prepared as of**

**December 31, 2022**





# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

September 27, 2023

Administrative Committee  
Gwinnett County Board  
of Education's Retirement System  
437 Old Peachtree Road, NW  
Suwanee, GA 30024-2978

Administrative Committee Members:

Presented in this report is information to assist the Gwinnett County Board of Education's Retirement System (System) in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67. The information is presented for the period ending December 31, 2022.

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of January 1, 2022. The valuation was based upon data, furnished by the System concerning active, inactive and retired members along with pertinent financial information.

To the best of our knowledge, this report is complete and accurate. The necessary calculations were performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The calculations were prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, and, in our opinion, meet the requirements of GASB 67.

In order to prepare the results in this report we have utilized appropriate actuarial models that were developed for this purpose. These models use assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.



Administrative Committee  
September 27, 2023  
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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, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the System. In addition, the calculations were completed in compliance with the laws governing the System. The undersigned is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Respectfully submitted,

A handwritten signature in blue ink that reads "Todd B. Green" followed by a horizontal flourish.

Todd B. Green, ASA, EA, FCA, MAAA  
President

A handwritten signature in blue ink that reads "Beverly V. Bailey" in a cursive style.

Beverly V. Bailey, ASA, EA, FCA, MAAA  
Senior Actuary

TBG:bvb



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## Section I - Introduction

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**REPORT OF THE ANNUAL GASB STATEMENT NO. 67  
REQUIRED INFORMATION FOR THE  
GWINNETT COUNTY BOARD OF EDUCATION RETIREMENT SYSTEM  
PREPARED AS OF DECEMBER 31, 2022**

This report, prepared as of December 31, 2022 (the Measurement Date), presents information to assist the Gwinnett County Board of Education's Retirement System in meeting the requirements of the Governmental Accounting Standards Board issued Statement No. 67 (GASB 67). Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of the Gwinnett County Board of Education's Retirement System as of January 1, 2022.

GASB 67 divorces accounting and funding, creating disclosure and reporting requirements that may or may not be consistent with the basis used for funding the System.

GASB 67 requires the determination of the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial funding method. If, as is the case here, the valuation date at which the TPL is determined is before the Measurement Date, the TPL must be rolled forward to the Measurement Date. The Net Pension Liability (NPL) is then set equal to the TPL minus the System's Fiduciary Net Position (FNP) (the market values of assets) as of the Measurement Date. The benefit provisions recognized in the calculation of the TPL are summarized in Schedule C.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR). To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the System's provision applicable to the membership and beneficiaries of the System on the Measurement Date. If the FNP is projected to not be depleted at any point in the future, the long term expected rate of return on System investments expected to be used to finance the benefit payments may be used as the SEIR.



## Section I - Introduction

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If, however, the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. The rate used, if necessary, for this purpose is the monthly average of the Bond Buyers General Obligation 20-year Municipal Bond Index Rate published weekly by The Bond Buyer ([www.bondbuyer.com](http://www.bondbuyer.com)). The Municipal Bond Index Rate as of the measurement date is 3.65%.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 67 for note disclosure and Required Supplementary Information (RSI).



## Schedule II – Financial Statement Notes

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The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

**Paragraphs 30(a) (1)-(3):** The information required is to be supplied by the System.

**Paragraph 30(a) (4):** The data required regarding the membership of the Gwinnett County Board of Education Retirement System was furnished by the System. The following table summarizes the membership of the System as of January 1, 2022, the Valuation Date.

### Membership

	Number
Inactive Members Or Their Beneficiaries Currently Receiving Benefits	10,945
Inactive Members Entitled To But Not Yet Receiving Benefits	4,953
Active Members	21,668
Total	37,566

**Paragraphs 30(a)(5)-(6) and Paragraphs 30(b)-(f):** The information required is to be supplied by the System.



## Schedule II – Financial Statement Notes

**Paragraphs 31(a) (1)-(4):** The information is provided in the following table. As stated above, the NPL is equal to the TPL minus the FNP. That result as of December 31, 2022, the measurement date, is presented in the table below.

	Fiscal Year Ending
	December 31, 2022
Total Pension Liability	\$2,826,556,572
Fiduciary Net Position	<u>2,390,802,564</u>
Net Pension Liability	\$435,754,008
Ratio of Fiduciary Net Position to Total Pension Liability	84.58%

**Paragraph 31(b):** This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The actuarial assumptions utilized in developing the TPL are outlined in Schedule B. The total pension liability was determined by an actuarial valuation as of December 31, 2021, using the following actuarial assumptions, applied to all periods included in the measurement:

Price Inflation	2.40 percent
Salary increases	3.25% - 6.86% percent for TRS members, average, 3.25 % for non-TRS members including inflation
Investment rate of return	7.15 percent, net of pension System investment expense, including inflation
Cost-of-living adjustments	2.40 percent annually
Mortality	Pre-Retirement Mortality:

**TRS Members:** The Pub-2010 Teachers Headcount Weighted Below Median Healthy Retiree mortality table (ages set forward one year and adjusted 106%) with the MP-2019 Projection scale applied generationally is used for pre-



## Schedule II – Financial Statement Notes

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retirement deaths. The rates of improvement have been reduced by 20% for all years prior to the ultimate rate.

**PSERS Members:** RP-2000 Blue Collar Mortality Table projected to 2025 using the BB projection scale.

Post-Retirement Health Mortality:

**TRS Members:** The Pub-2010 Teachers Headcount Weighted Below Median Healthy Retiree mortality table (ages set forward one year and adjusted 106%) with the MP-2019 Projection scale applied generationally is used for death after service retirement and beneficiaries.

**PSERS Members:** RP-2000 Blue Collar Mortality Table projected to 2025 using the BB projection scale.

Post-Retirement Disabled Mortality:

**TRS Members:** The Pub-2010 Teachers Mortality Table for Disabled Retirees (ages set forward one year and adjusted 106%) with the MP-2019 Projection scale applied generationally is used for death after disability retirement. The rates of improvement have been reduced by 20% for all years prior to the ultimate rate.

**PSERS Members:** The RP-2000 Disability Mortality Table projected to 2025 using the BB projection.

The actuarial assumptions used in the January 1, 2022 valuation were based on the results of the last actuarial experience study, dated May 5, 2017.



## Schedule II – Financial Statement Notes

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### Paragraph 31.b.(1)

- (a) **Discount rate:** The discount rate used to measure the total pension liability was 7.15%
- (b) **Projected cash flows:** The projection of cash flows used to determine the discount rate assumed the County would contribute the actuarially determined contribution rate to the System.
- (c) **Long term rate of return:** The long-term expected rate of return on pension System investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension System investment expense and 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.
- (d) **Municipal bond rate:** the discount rate determination does not use a municipal bond rate
- (e) **Periods of projected benefit payments:** projected future benefit payments for all current System members were projected through 2128
- (f) **Assumed Asset Allocation:** The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Large Cap U.S. Equities	30.50%	5.37%
Small Cap U.S. Equities	6.50%	6.53%
Non-U.S. Equity - Developed	14.00%	6.22%
Non-U.S. Equity - Emerging	8.00%	8.22%
Real Estate	5.00%	4.87%
U.S. Treasuries (Cash Equivalents)	5.00%	-0.45%
TIPS (Inflation-Protected)	5.00%	0.39%
U.S. Corporate Bonds - Core	21.00%	1.57%
Private Equity	4.00%	10.05%
Private Debt	1.00%	5.38%
Total	100.00%	



## Schedule II – Financial Statement Notes

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**Sensitivity analysis:** This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the System, calculated using the discount rate of 7.15 percent, as well as what the System’s net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

	1% Decrease 6.15%	Current scout 15%	1% Increase 8.15%
System’s net pension liability	\$828,575,22754,008	\$112,757,938	



## Schedule II – Financial Statement Notes

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**Paragraph 31(c):** January 1, 2022 is the actuarial valuation date upon which the TPL is based. The result was rolled forward using standard actuarial techniques to the measurement date. The roll forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds and then applies the expected investment rate of return for the year. The procedure was used to determine the TPL as of December 31, 2022, as shown in the following table:

<b>Changes in the Total Pension Liability</b>		
<b>Total Pension Liability as of December 31, 2021</b>	\$	2,680,741,301
<b>Changes for the year:</b>		
Service Cost		73,874,881
Interest		187,475,722
Change in benefit terms	\$	-
Difference between expected and actual experience		1,871,121
Changes of assumptions or other inputs	\$	-
Benefit payments		(117,406,453)
Other		
<b>Net changes</b>	\$	145,815,271
<b>Total Pension Liability as of December 31, 2022</b>	\$	2,826,556,572



## Schedule III – Required Supplementary Information

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

**Paragraphs 32(a)-(c):** The required tables are provided in Schedule A.

**Paragraph 32(d):** The money-weighted rates of return required are to be supplied by the System.

**Paragraph 34:** The following changes were adopted by the Board and reflected in the valuation performed as of January 1:

### *Changes of benefit terms:*

2012

- The vesting requirement for new hires and non-vested former employees who are rehired will be 10 years instead of 5 years.
- The normal form of payment for retirees will be a single life annuity but retirees will have the option of selecting an actuarially equivalent optional form of payment.

### *Changes of assumption:*

2012

- The assumed investment rate of return was increased from 7.5% to 8.0%.
- Retirement, withdrawal, disability, and mortality rates were changed to more closely reflect recent experience.
- The rate of salary inflation was temporarily lowered for a ten year period beginning with the January 1, 2012 valuation.
- The salary scale was changed to more closely reflect recent experience.

2017

- The assumed investment rate of return was decreased from 8.0% to 7.5%.
- The inflation rate was reduced from 3.50% to 2.75%.
- The wage inflation rate was reduced from 4.50% to 3.50%.
- Retirement, withdrawal, disability, and mortality rates were changed to more closely reflect recent experience.

2019

- The assumed investment rate of return was decreased from 7.50% to 7.25%.
- The inflation rate was reduced from 2.75% to 2.40%.
- The wage inflation rate was reduced from 3.50% to 3.25%.



## Schedule III – Required Supplementary Information

- The mortality assumption for TRS employees was changed to Pub-2010 Teachers Headcount Weighted Below Median Healthy Retiree mortality table (ages set forward one year and adjusted 106%) with the MP-2019 Projection scale applied generationally.
- The mortality assumption for disabled retirees was changed to Pub-2010 Teachers Mortality Table for Disabled Retirees (ages set forward one year and adjusted 106%) with the MP-2019 Projection scale applied generationally.

2020

- The assumed investment rate of return was decreased from 7.25% to 7.15%.

*Method and assumptions used in calculations of actuarially determined contributions.* The actuarially determined contribution rates are determined January 1<sup>st</sup> on an annual basis payable in the fiscal year beginning 18 months following the valuation date. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

Actuarial cost method	Entry age normal
Amortization method	Level dollar closed
Remaining amortization period	5 - 30 years
Asset valuation method	5-year smoothed market
Cost of Living Adjustments	2.40% Annually
Projected salary increase	
TRS members	3.25% - 6.86%
Non-TRS members	3.25%



## Schedule A – Required Supplementary Information Tables

### REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY GASB 67 Paragraph 32(a)

	2022	2021	2020	2019	2018	2017	2016	2015	2014
<b>Total pension liability</b>									
Service Cost	\$ 73,874,881	\$ 68,721,437	\$ 67,649,500	\$ 63,390,509	\$ 61,557,129	\$ 60,171,491	\$ 52,049,400	\$ 50,520,177	\$ 48,847,625
Interest	187,475,722	177,960,720	167,236,290	164,774,003	155,305,044	147,192,765	138,877,901	129,344,957	120,802,106
Benefit changes	0	0	0	0	0	0	0	0	0
Difference between expected and actual experience	1,871,121	(623,291)	17,441,431	5,063,077	(1,454,949)	(17,065,904)	4,773,132	8,122,156	0
Changes of assumptions	0	0	34,264,851	(27,036,557)	0	0	106,212,281	0	0
Benefit payments	(117,406,453)	(108,557,371)	(100,119,431)	(92,821,158)	(85,487,700)	(78,781,560)	(71,851,007)	(65,799,965)	(59,928,226)
Refunds of contributions	0	0	0	0	0	0	0	0	0
<b>Net change in total pension liability</b>	<b>\$ 145,815,271</b>	<b>\$ 137,501,495</b>	<b>\$ 186,472,641</b>	<b>\$ 113,369,874</b>	<b>\$ 129,919,524</b>	<b>\$ 111,516,792</b>	<b>\$ 230,061,707</b>	<b>\$ 122,187,325</b>	<b>\$ 109,721,505</b>
<b>Total pension liability - beginning</b>	<b>\$2,680,741,301</b>	<b>\$2,543,239,806</b>	<b>\$2,356,767,165</b>	<b>\$2,243,397,291</b>	<b>\$2,113,477,767</b>	<b>\$2,001,960,975</b>	<b>\$1,771,899,268</b>	<b>\$ 1,649,711,943</b>	<b>\$1,539,990,438</b>
<b>Total pension liability - ending (a)</b>	<b>\$2,826,556,572</b>	<b>\$2,680,741,301</b>	<b>\$2,543,239,806</b>	<b>\$2,356,767,165</b>	<b>\$2,243,397,291</b>	<b>\$2,113,477,767</b>	<b>\$2,001,960,975</b>	<b>\$ 1,771,899,268</b>	<b>\$1,649,711,943</b>
<b>Plan net position</b>									
Contributions - employer	\$ 88,097,797	\$ 80,353,739	\$ 74,094,655	\$ 63,225,396	\$ 49,586,529	\$ 35,524,525	\$ 31,198,113	\$ 35,212,803	\$ 36,197,168
Contributions - member	13,358,154	12,208,170	11,269,565	11,181,548	10,493,763	10,069,213	9,778,682	9,275,103	8,871,597
Net investment income	(407,009,180)	353,832,868	246,101,645	355,227,655	(126,574,064)	266,331,938	131,574,198	(9,075,544)	88,905,608
Benefit payments	(117,406,453)	(108,557,371)	(100,119,431)	(92,821,158)	(85,487,700)	(78,781,560)	(71,851,007)	(65,799,965)	(59,928,226)
Administrative expense	(1,759,930)	(1,619,745)	(1,526,911)	(1,582,368)	(1,520,979)	(1,543,927)	(1,476,662)	(1,584,879)	(1,504,701)
Refunds of contributions	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0
<b>Net change in plan net position</b>	<b>\$ (424,719,612)</b>	<b>\$ 336,217,661</b>	<b>\$ 229,819,523</b>	<b>\$ 335,231,073</b>	<b>\$ (153,502,451)</b>	<b>\$ 231,600,189</b>	<b>\$ 99,223,324</b>	<b>\$ (31,972,482)</b>	<b>\$ 72,541,446</b>
<b>Plan net position - beginning (a)</b>	<b>\$2,815,522,176</b>	<b>\$2,479,304,515</b>	<b>\$2,249,484,992</b>	<b>\$1,914,253,919</b>	<b>\$2,067,756,370</b>	<b>\$1,836,156,181</b>	<b>\$1,736,932,857</b>	<b>\$ 1,768,905,339</b>	<b>\$1,696,363,893</b>
<b>Plan net position - ending (b)</b>	<b>\$2,390,802,564</b>	<b>\$2,815,522,176</b>	<b>\$2,479,304,515</b>	<b>\$2,249,484,992</b>	<b>\$1,914,253,919</b>	<b>\$2,067,756,370</b>	<b>\$1,836,156,181</b>	<b>\$ 1,736,932,857</b>	<b>\$1,768,905,339</b>
<b>Net pension liability - ending (a) - (b)</b>	<b>\$ 435,754,008</b>	<b>\$ (134,780,875)</b>	<b>\$ 63,935,291</b>	<b>\$ 107,282,173</b>	<b>\$ 329,143,372</b>	<b>\$ 45,721,397</b>	<b>\$ 165,804,794</b>	<b>\$ 34,966,411</b>	<b>\$ (119,193,396)</b>



## Schedule A – Required Supplementary Information Tables

### SCHEDULE OF THE NET PENSION LIABILITY GASB 67 Paragraph 32(b)

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability	2,826,556,572	2,680,741,301	2,543,239,806	2,356,767,165	2,243,397,291	2,113,477,767	2,001,960,975	1,771,899,268	1,649,711,943
Plan net position	<u>2,390,802,564</u>	<u>2,815,522,176</u>	<u>2,479,304,515</u>	<u>2,249,484,992</u>	<u>1,914,253,919</u>	<u>2,067,756,370</u>	<u>1,836,156,181</u>	<u>1,736,932,857</u>	<u>1,768,905,339</u>
Net pension liability	435,754,008	(134,780,875)	63,935,291	107,282,173	329,143,372	45,721,397	165,804,794	34,966,411	(119,193,396)
Ratio of plan net position to total pension liability	84.58%	105.03%	97.49%	95.45%	85.33%	97.84%	91.72%	98.03%	107.23%
Covered-employee payroll	1,310,795,912	1,191,983,789	1,117,073,924	1,123,025,427	1,081,566,000	1,031,160,000	948,765,393	945,144,580	895,915,264
Net pension liability as a percentage of covered-employee payroll	33.24%	-11.31%	5.72%	9.55%	30.43%	4.43%	17.48%	3.70%	-13.30%



## Schedule A – Required Supplementary Information Tables

### SCHEDULE OF EMPLOYER CONTRIBUTIONS GASB 67 Paragraph 32(c)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially determined employer contribution	\$ 88,097,797	\$ 80,353,799	\$ 74,094,655	\$ 63,225,396	\$ 49,586,529	\$ 35,524,525	\$ 31,198,113	\$ 35,212,803	\$ 36,197,168	\$ 26,544,249
Actual employer contributions	<u>88,097,797</u>	<u>80,353,799</u>	<u>74,094,655</u>	<u>63,225,396</u>	<u>49,586,529</u>	<u>35,524,525</u>	<u>31,198,113</u>	<u>35,212,803</u>	<u>36,197,168</u>	<u>26,544,249</u>
Annual contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered-employee payroll	\$ 1,310,795,912	\$ 1,191,983,789	\$ 1,117,073,924	\$ 1,123,025,427	\$ 1,081,566,000	\$ 1,031,160,000	\$ 948,765,393	\$ 945,144,580	\$ 895,915,264	\$ 853,986,466
Actual contributions as a percentage of covered-employee payroll	6.72%	6.74%	6.63%	5.63%	4.58%	3.45%	3.29%	3.73%	4.04%	3.11%



## Schedule B - Actuarial Assumptions and Methods

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### OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INTEREST RATE: 7.15% per annum, compounded annually, net of investment expenses and including inflation at 2.40%.

SALARY INCREASES: Sample rates below, plus an annual wage inflation rate of 2.40% and wage growth rate of 0.85%

<u>Service</u>	<u>Annual Merit Rates</u>	
	<u>TRS Members</u>	<u>Non-TRS Members</u>
0	3.50%	0.00%
1	2.25	0.00
2	2.00	0.00
3	1.75	0.00
4	1.50	0.00
5	1.25	0.00
6	1.00	0.00
7	0.75	0.00
8	0.50	0.00
9 - 14	0.25	0.00
15+	0.000	0.00



## Schedule B - Actuarial Assumptions and Methods

### SERVICE RETIREMENT:

<u>Age</u>	<u>Annual Rates</u>		
	<u>TRS Members</u>		<u>Non-TRS Members</u>
	< 30 years of Service	30+ years of Service	
40	10.0%	20.0%	
45	10.0	20.0	
50	10.0	35.0	
55	10.0	35.0	
60	26.0	40.0	13.0%
65	36.0	40.0	18.0
70	100.0	100.0	18.0
75	100.0	100.0	100.0

### DISABILITY RETIREMENT:

<u>Age</u>	<u>Annual Rates of Disability</u>	
	<u>TRS</u>	<u>PSERS</u>
	20	0.01%
25	0.02	0.10
30	0.04	0.10
35	0.05	0.20
40	0.07	0.30
45	0.10	0.40
50	0.13	0.50
55	0.16	0.60
60	0.20	0.70
64	0.20	0.70
65	0.20	0.70



## Schedule B - Actuarial Assumptions and Methods

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WITHDRAWAL:

<u>Service</u>	<u>Annual Rates of Withdrawal</u>	
	<u>TRS Members</u>	<u>Non-TRS Members</u>
0	15.63%	20.00%
1	13.00	16.00
2	11.00	12.10
3	9.44	9.90
4	8.09	8.50
5	7.04	6.82
6	6.28	6.09
7	5.52	5.64
8	4.76	5.18
9	4.25	4.82
10	3.75	4.45
11	3.75	4.70
12	3.75	4.40
13	3.75	4.20
14	3.75	4.00
15+	3.75	3.80



## Schedule B - Actuarial Assumptions and Methods

### MORTALITY RATES:

**TRS Members:** The Pub-2010 Teachers Headcount Weighted Below Median Healthy Retiree mortality table (ages set forward one year and adjusted 106%) with the MP-2019 Projection scale applied generationally is used for death after service retirement and beneficiaries. The rates of improvement have been reduced by 20% for all years prior to the ultimate rate. The Pub-2010 Teachers Mortality Table for Disabled Retirees (ages set forward one year and adjusted 106%) with the MP-2019 Projection scale applied generationally is used for death after disability retirement. The rates of improvement have been reduced by 20% for all years prior to the ultimate rate. The representative rates shown below are based on a projection to 2015. Actual mortality rates are projected generationally to the year of the measurement.

Age	Service Retirement *		Disability Retirement *	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
40	0.07%	0.05%	0.84%	0.74%
45	0.11	0.07	1.21	1.10
50	0.18	0.11	1.84	1.62
55	0.52	0.39	2.48	1.97
60	0.64	0.41	3.06	2.25
65	0.84	0.53	3.72	2.62
70	1.46	0.93	4.63	3.37
75	2.70	1.79	6.18	4.78
80	4.96	3.43	8.86	7.23
85	9.05	6.59	13.02	11.20
90	16.07	12.31	18.80	16.08
95	26.12	21.73	27.04	22.76

\* Rates as of 2015



## Schedule B - Actuarial Assumptions and Methods

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### Non-TRS Members:

The RP-2000 Blue Collar Mortality Table projected to 2025 using the BB projection is used for deaths. The RP-2000 Disability Mortality Table projected to 2025 using the BB projection is used for death after disability retirement. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Service Retirement		Disability Retirement	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
40	.13%	.08%	2.09%	.69%
45	.17	.13	2.09	.69
50	.22	.18	2.69	1.07
55	.39	.25	3.29	1.46
60	.69	.38	3.53	1.70
65	1.15	.77	3.71	2.07
70	1.83	1.38	4.29	2.78
75	2.96	2.28	5.62	3.86
80	4.83	3.62	7.50	5.35
85	7.89	6.15	9.70	7.41
90	13.78	10.37	13.91	10.62
95	22.32	16.57	23.01	16.73



## **Schedule B - Actuarial Assumptions and Methods**

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**POST RETIREMENT INCREASES:** Increases of 2.40% annually after the current year were anticipated.

**ASSETS:** For purposes of GASB 67, the value of assets is equal to the market value of assets. For funding purposes, the value of assets is equal to the actuarial value. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between actual market value return and expected market value return.

**SPOUSES:** 100% of active members were assumed to be married with the husband 3 years older than his wife.

**ADMINISTRATIVE EXPENSES LOAD:** The administrative expenses from the previous year are added to the normal cost.



## Schedule C - System Provisions

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

Effective January 1, 1983, the Board of Education of Gwinnett County Public Schools withdrew from coverage under the Social Security System and the Gwinnett County Board of Education's Retirement System was adopted to provide certain replacement benefits for those which would have been provided by Social Security.

The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

Years of Service	Aggregate period of employment consisting of years of service and parts thereof.
Earnings	Total compensation paid to an employee by employer during a calendar year, as reported on the Employee's Federal Withholding Tax Form W-2.
Accrued Retirement Benefit	2.2% of Earnings up to the Earnings Breakpoint for the year plus 1.6% of earnings in excess of such Earnings Break Point.
Earnings Break Point	\$9,000
Service Retirement Benefit	
Condition for Allowance	Any member may retire on a service retirement allowance upon the attainment of age 65.
Amount of Allowance	Accrued Retirement Benefit.



## Schedule C - System Provisions

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### Early Retirement

Condition for Allowance	A participant may retire early on the first day of any month on or after attaining eligibility for early retirement under the Teachers' Retirement System of Georgia or Public School Employees' Retirement System of Georgia, or any successors thereto.
Amount of Allowance	Accrued retirement benefit multiplied by the applicable early retirement commencement factor.

### Death Benefit

Condition for Allowance	5 years of service if hired before July 1, 2012.  9 years and 9 months of service if hired after July 1, 2012 or if a non-vested former employee who is rehired after July 1, 2012.
Amount of Allowance	The spouse's monthly benefit shall be the actuarial equivalent of 50% of the participants accrued retirement benefits as of the time of death.

### Vesting Benefit

Condition for Allowance	5 years of service if hired before July 1, 2012.  9 years and 9 months of service if hired after July 1, 2012 or if a non-vested former employee who is rehired after July 1, 2012.
Amount of Allowance	Accrued retirement benefit commencing as of the member's normal retirement date.

### Disability Benefit

Condition for Allowance	None.
Amount of Allowance	60% of the participants earnings in the calendar year preceding disability. Benefits of this plan shall be the amounts necessary, when added to benefits available under other plans, to provide the 60% benefit level. Other plans shall include Teacher's



## **Schedule C - System Provisions**

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Retirement System, Public Schools Employees Retirement Systems, Workers' Compensation, Social Security and any successor thereto.

A person entitled to Disability Benefits shall continue to receive retirement benefit accruals. His earnings shall be considered equal to his earnings in the last complete calendar year preceding disability.



## Schedule C - System Provisions

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Normal Form of Retirement Income	The normal form of retirement income payable under this Plan is a single life annuity. Participants may elect to receive an actuarially equivalent joint and survivor optional form of payment.
Cost-of-Living Adjustment	The retirement allowances of members or of any beneficiary of a member shall be subject to an adjustment every July 1 <sup>st</sup> . The committee shall determine a current average cost of living index calculated by averaging the 12 preceding monthly consumer price indices for all urban consumers for the previous calendar year. The maximum increase in retirement allowances shall not exceed 3%.
Contributions by Employer	The actuary shall calculate the amount of contributions which are sufficient to fund the benefits provided by the Retirement Fund. The employer may rely upon the amounts determined by the actuary of the amount of contributions needed to carry out the Plan.
Contributions by Employee	1.00% of compensation for the purpose of funding the long term disability benefit in which they are immediately vested.