

City of Atlanta General Employees'  
Pension Fund Employees of the  
Atlanta Board of Education

**Actuarial Valuation and Review as of July 1, 2023**

Revised



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**Segal**



2727 Paces Ferry Road SE, Building  
One Suite 1400  
Atlanta, GA 30339-4053  
segalco.com  
T 678.306.3100

July 23, 2024

Board Members

City of Atlanta General Employees' Pension Fund Employees of the Atlanta Board of Education  
Atlanta, Georgia

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of July 1, 2023. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for fiscal years ending June 30, 2025.

This report has been revised from the report sent June 20, 2024 to reflect a change in the assumed salary for participants with less than one year of benefit service. Previously, the assumed salary was determined by annualizing the salary amount provided. The new assumption uses the average salary of participants with one or more years of service but less than four years of service.

This report has been prepared in accordance with generally accepted actuarial principles and practices for the exclusive use and benefit of the Board, based upon census information provided by Strategic Benefits Advisors and financial information provided by Mauldin & Jenkins.

Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan 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; and changes in plan provisions or applicable law.

The actuarial calculations were directed under the supervision of Jeanette R. Cooper. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. The assumptions used in this

actuarial valuation were selected by the Board based upon our analysis and recommendations. In our opinion, the assumptions are reasonable and take into account the experience of the Plan and reasonable expectations. In addition, in our opinion, the combined effect of these assumptions is expected to have no significant bias.

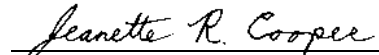
Segal makes no representation or warranty as to the future status of the Fund and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Board is encouraged to discuss any issues raised in this report with the Fund's legal, tax and other advisors before taking, or refraining from taking, any action.

***We hereby certify that the City of Atlanta General Employees' Pension Fund for the Employees of the Atlanta Board of Educations has been funded in conformity with the minimum funding standards specified in Code Section 47-20-10 of the Official Code of Georgia Annotated known as the Public Retirement Systems Standards Law. This certification covers the 2023 fiscal year of the Fund.***

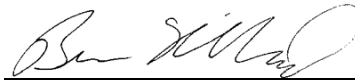
We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal



Jeanette R. Cooper, FSA, FCA, MAAA, EA  
Vice President and Consulting Actuary



Ben Kirkland, FSA, FCA, MAAA, EA  
Consulting Actuary

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# Section 1: Actuarial Valuation Summary

## Purpose and basis

This report has been prepared by Segal to present a valuation of the City of Atlanta General Employees' Pension Fund Employees of the Atlanta Board of Education as of July 1, 2023. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits.

The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Fund, as administered by the Board;
- The characteristics of covered active participants, inactive vested participants, and retired participants and beneficiaries as of June 30, 2023, provided by Strategic Benefits Advisors;
- The assets of the Fund as of June 30, 2023, provided by Mauldin & Jenkins;
- Economic assumptions regarding future salary increases and investment earnings;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. and
- The funding policy adopted by the School Board.

Certain disclosure information required by GASB Statements No. 67 and 68 as of June 30, 2024 and June 30, 2023 for the Fund was provided in a separate reports.

## Section 1: Actuarial Valuation Summary

### Valuation highlights

1. The July 1, 2023 valuation is used to determine the recommended, or actuarially determined contribution (ADC) for the fiscal year period July 1, 2024 to June 30, 2025 (FY'25). The recommended contribution is adjusted for interest to the middle of the fiscal period and satisfies the minimum funding standards under Georgia law Code Section 47-20-10.
2. The plan receives employee contributions of 7% or 8% of base salary. The School Board contributes the recommended contribution amount which is net of employee contributions. The recommended contribution amount is composed of the employer normal cost including administrative expenses and a payment to amortize the Unfunded Actuarial Accrued Liability (UAAL).
3. On June 2, 2014, the Atlanta Board of Education adopted a resolution (Report 13/14-0117) to change the funding policy. The revised policy increases the FY'14 contribution 3% annually until the Plan is fully funded.
4. Segal strongly recommends an actuarial funding method that targets 100% funding of the actuarial accrued liability. Generally, this implies payments that are ultimately at least enough to cover normal cost, interest on the unfunded actuarial accrued liability and the principal balance. The funding policy adopted by the School Board meets this standard.
5. If the Fund earns the assumed 7.00% annual investment return, all experience matches the assumptions, and the contribution increases 3.0% annually, then the UAAL would be fully amortized in 4.2 years. If the Fund earns the assumed 7.00% annual investment return, all experience matches the assumptions, and the contribution remains level, the UAAL would be fully amortized in about 4.4 years.
6. Actual contributions made during the year ending June 30, 2023 of \$62,000,000 were 100% of the actuarially determined contribution (ADC). In the prior year, actual contributions were \$60,200,000, 100% of the prior year ADC.
7. The actuarial loss of \$8,370,206, or 1.66% of actuarial accrued liability, is due to an investment loss of \$5,005,097, or 0.99% of actuarial accrued liability, and a loss from sources other than investments of \$3,365,109, or 0.67% of the actuarial accrued liability. This loss was primarily due to cost-of-living adjustments and salary increases greater than expected.
8. The rate of return on the market value of assets was 6.43% for the July 1, 2022 to June 30, 2023 plan year. The return on the actuarial value of assets was 5.04% for the same period due to the recognition of prior years' investment gains and losses. This resulted in an actuarial loss when measured against the assumed rate of return of 7.00%. Given the low fixed income interest rate environment, target asset allocation and expectations of future investment returns for various asset classes, we advise the Board to continue to monitor actual and anticipated investment returns relative to the assumed long-term rate of return on investments of 7.00%.

## Section 1: Actuarial Valuation Summary

9. The actuarial value of assets is 105.13% of the market value of assets. The investment experience in the past years has only been partially recognized in the actuarial value of assets. As the deferred net loss of \$13.5 million is recognized in future years, the cost of the Pension Fund is likely to increase unless the net loss is offset by future experience.
10. Plan assets are currently roughly equal to six years of projected benefit payments. The imbalance between benefit levels in the Fund and the resources available to pay for them must continue to be addressed. We are available to prepare solvency projections upon request.
11. There was a change in the assumed salary for participants with less than one year of benefit service. Previously, the assumed salary was determined by annualizing the salary amount provided. The new assumption uses the average salary of participants with one or more years of service but less than four years of service.
12. There have been no other changes in assumptions, plan provisions or actuarial methods since the last valuation.

### Changes from prior valuation

13. The funded ratio (the ratio of the actuarial value of assets to actuarial accrued liability) is 54.89%, compared to the prior year funded ratio of 48.57%. This ratio is one measure of funding status, and its history is a measure of funding progress. Using the market value of assets, the funded ratio is 52.21%, compared to 45.42% as of the prior valuation date. These measurements are not necessarily appropriate for assessing the sufficiency of the plan assets to cover the estimated cost of settling the Plan's benefit obligation or the need for or the amount of future contributions.
14. The School Board's recommended contribution for FY'25 is \$65.8 million. This is an increase of \$2.0 from the prior valuation's contribution due to a mandated overall 3% increase.
15. The unfunded actuarial accrued liability is \$227.0 million, which is a decrease of \$33.8 million since the prior valuation. The decrease is mainly due to the School Board's contributions to the Fund.

### Risk

16. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2023. The Fund's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Moreover, this actuarial valuation does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after June 30, 2023. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.

## Section 1: Actuarial Valuation Summary

17. Since the actuarial valuation results are dependent on a given set of assumptions, there is a risk that emerging results may differ significantly if actual experience proves to be different from the assumptions. We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Plan's future financial condition, but have included a brief discussion of some risks that may affect the Fund in Section 2. A more detailed assessment would provide the Board with a better understanding of the inherent risks and could be important for the Fund because:
- a. Retired participants account for most of the Fund's liabilities, leaving limited options for reducing costs in the event of adverse experience.
  - b. The Fund's asset allocation has potential for a significant amount of investment return volatility.
  - c. The Board has not had a detailed risk assessment in recent years.

### **GASB**

18. This disclosure information required for compliance with GASB Statement No. 67, Financial Reporting for Pension Plans for the fiscal year ended June 30, 2023 was released to the School Board's Financial Department on November 20, 2023. Information required for compliance with GASB Statement No. 68, Accounting and Financial Reporting for Pensions, for the fiscal year ended June 30, 2024, based on a June 30, 2023 measurement date was released to the School Board's Finance Department on April 12, 2024.

## Section 1: Actuarial Valuation Summary

### Summary of key valuation results

Valuation Result	Current	Prior
<b>Contributions for fiscal year beginning</b>	<b>July 1, 2024</b>	<b>July 1, 2023</b>
• Actuarially determined contributions	\$65,800,000	\$63,800,000
<b>Actuarial accrued liability for plan year beginning</b>	<b>July 1, 2023</b>	<b>July 1, 2022</b>
• Retired participants and beneficiaries	\$421,060,346	428,072,851
• Inactive vested participants	3,009,364	2,452,360
• Inactive participants due a refund of employee contributions	449,104	453,374
• Active participants	78,618,591	76,064,214
• Total	503,137,405	507,042,799
• Normal cost including administrative expenses	6,015,446	5,446,431
<b>Assets for plan year beginning July 1</b>	<b>2023</b>	<b>2022</b>
• Market value of assets (MVA)	\$262,693,000	\$230,284,000
• Actuarial value of assets (AVA)	276,172,469	246,276,940
• Actuarial value of assets as a percentage of market value of assets	105.13%	106.94%
<b>Funded status for plan year beginning July 1</b>	<b>2023</b>	<b>2022</b>
• Unfunded actuarial accrued liability on market value of assets	\$240,444,405	\$276,758,799
• Funded percentage on MVA basis	52.21%	45.42%
• Unfunded actuarial accrued liability on actuarial value of assets	\$226,964,936	\$260,765,859
• Funded percentage on AVA basis	54.89%	48.57%
• Amortization period on an AVA basis	4.2 years	5.0 years

## Section 1: Actuarial Valuation Summary

Valuation Result	Current	Prior
<b>Key assumptions for plan year beginning July 1</b>	<b>2023</b>	<b>2022</b>
• Net investment return	7.00%	7.00%
• Inflation rate	2.25%	2.25%
• Across-the-board payroll increase	3.00%	3.00%
<b>Demographic data for plan year beginning July 1</b>	<b>2023</b>	<b>2022</b>
• Number of retired participants and beneficiaries	1,572	1,627
• Number of inactive vested participants	44	44
• Number of inactive participants due a refund of employee contributions	339	306
• Number of active participants	781	757
• Covered payroll (7/1/2023 – 6/30/2024)	\$27,721,051	\$25,153,733
• Average payroll	\$35,494	\$33,228

## Section 1: Actuarial Valuation Summary

### Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Input Item	Description
<b>Plan provisions</b>	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
<b>Participant information</b>	An actuarial valuation for a plan is based on data provided to the actuary by the plan administrator. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
<b>Financial information</b>	Part of the cost of a plan will be paid from existing assets — the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the auditor. A snapshot as of a single date may not be an appropriate value for determining a single year's contribution requirement, especially in volatile markets. Plan sponsors often use an "actuarial value of assets" that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
<b>Actuarial assumptions</b>	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of participants in each year, as well as forecasts of the plan's benefits for each of those events. In addition, the benefits forecasted for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

## Section 1: Actuarial Valuation Summary

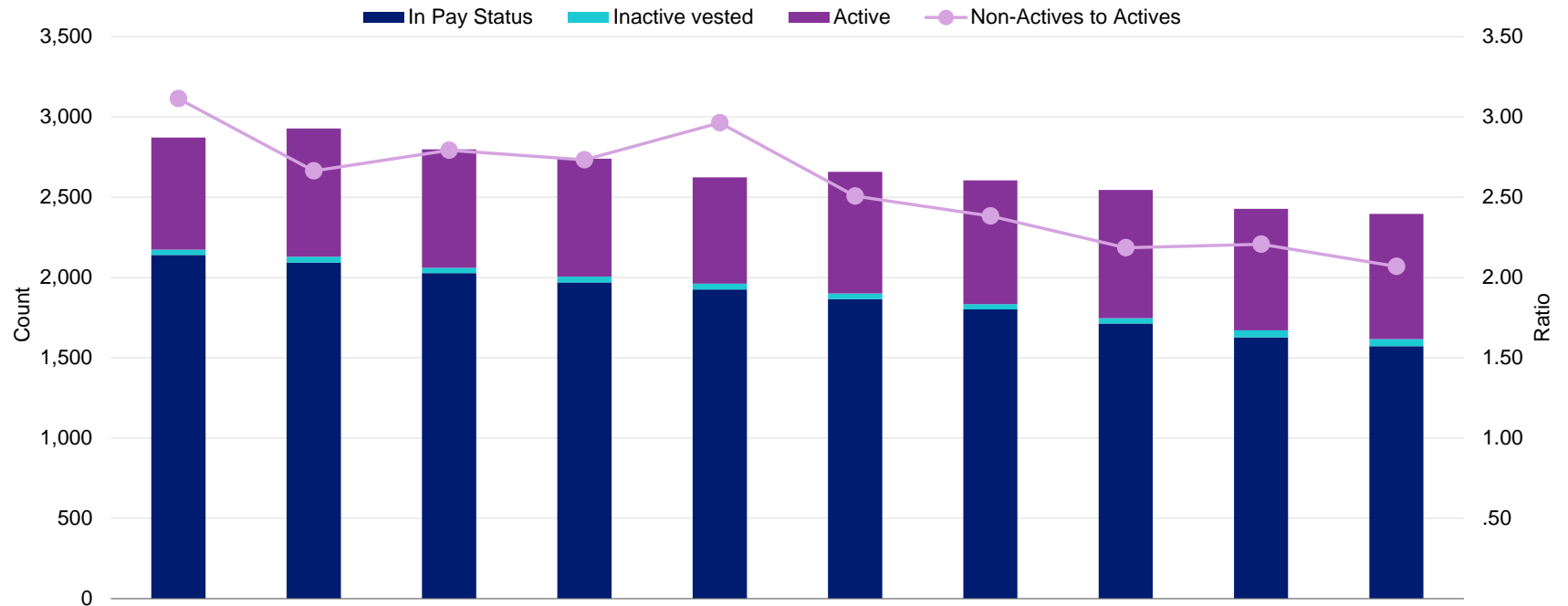
The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The actuarial valuation is prepared at the request of the Board. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement at a specific date — it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
- If the Board is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting, or tax advice and is not acting as a fiduciary to the Pension Fund. The valuation is based on Segal's understanding of applicable guidance in these areas and of the Fund's provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by the Board upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.

# Section 2: Actuarial Valuation Results

## Participant information

Participant Population as of December 31



Legend	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
In Pay Status*	2,141	2,094	2,028	1,969	1,926	1,866	1,801	1,713	1,627	1,572
Inactive Vested*	33	35	33	37	36	35	34	33	44	44
Active†	698	799	738	734	662	758	770	799	757	781
Ratio	3.11	2.66	2.79	2.73	2.96	2.51	2.38	2.19	2.21	2.07

\* Beginning in 2022, counts do not include suspended retirees and beneficiaries

\* Excluding terminated participants due a refund of employee contributions.

† Excludes participants receiving Workers' Compensation benefits

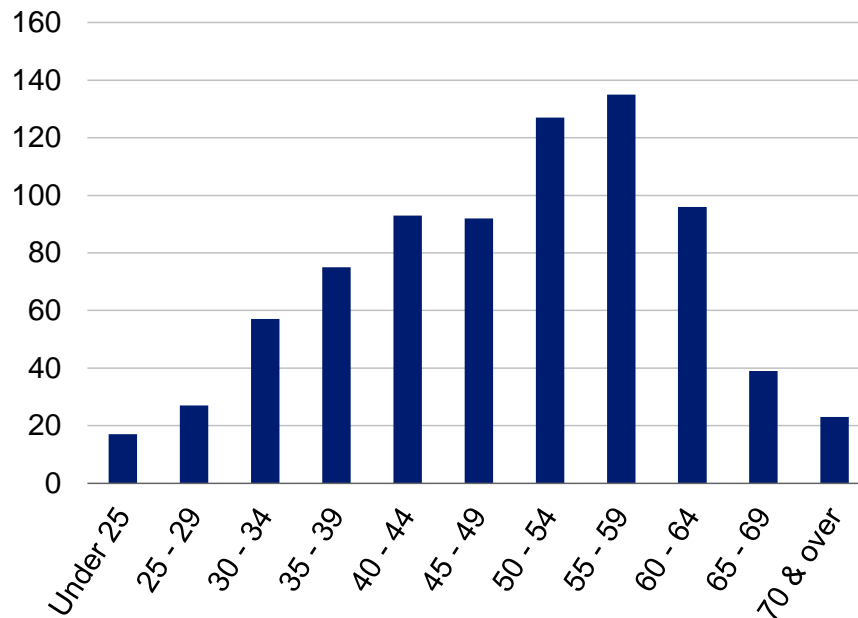
## Section 2: Actuarial Valuation Results

### Active participants

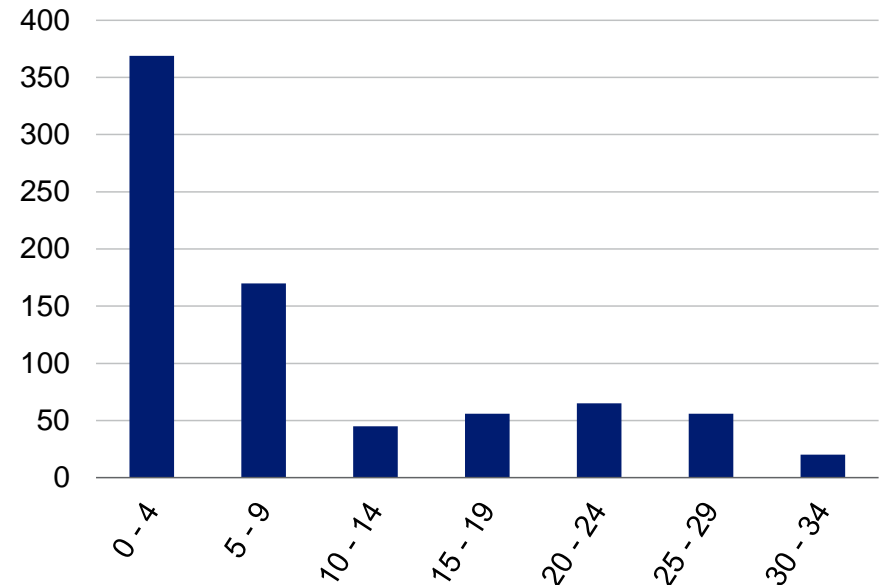
As of June 30,	2023	2022	Change
Active participants	781	757	3.2%
Average age	49.8	50.5	-0.7 years
Average years of service	9.4	9.9	-0.5 years
Average compensation	\$35,494	\$33,228	6.8%

#### Distribution of Active Participants as of June 30, 2023

Actives by Age



Actives by Years of Service



## Section 2: Actuarial Valuation Results

### Inactive participants

- In this year's valuation, there were 44 inactive participants with a vested right to a deferred or immediate vested benefit.
- In addition, there were 339 inactive participants entitled to a return of their employee contributions. This is an increase of over 10% from the prior year's count.

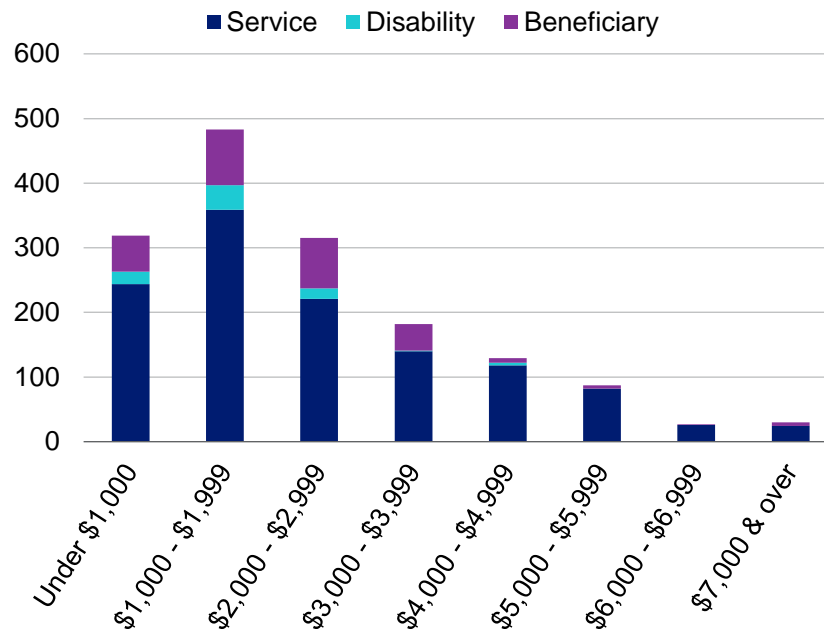
## Section 2: Actuarial Valuation Results

### Retired participants and beneficiaries

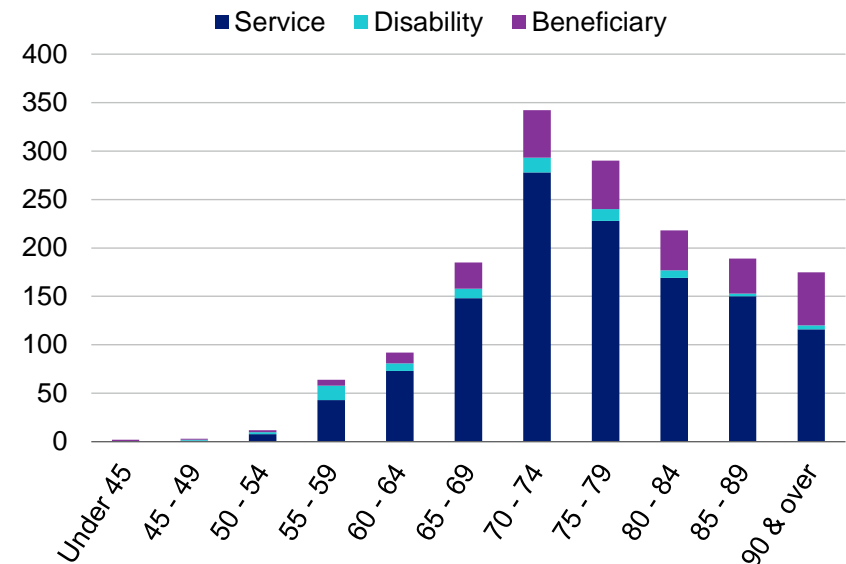
As of June 30,	2023	2022	Change
Retired participants	1,292	1,338	-3.4%
Beneficiaries	280	289	-3.1%
Average age	77.0	76.9	0.1 years
Average amount	\$2,403	\$2,353	2.1%
Total monthly amount	3,777,445	3,828,325	-1.3%

#### Distribution of Retired Participants and Beneficiaries as of June 30, 2023

By Type and Monthly Amount



By Type and Age



## Section 2: Actuarial Valuation Results

### Historical plan population

#### Participant Data Statistics: 2014– 2023

#### *Active Participants versus Retired Participants and Beneficiaries Participants*

Year Ended June 30	Active Participants Count	Active Participants Average Age	Active Participants Average Service	Retired Participants and Beneficiaries Count*	Retired Participants and Beneficiaries Average Age	Retired Participants and Beneficiaries Average Monthly Amount
2014	698	50.6	13.8	2,141	75.0	\$2,128
2015	799	49.4	11.8	2,094	75.4	2,149
2016	738	49.9	12.2	2,028	75.6	2,149
2017	734	49.7	11.2	1,969	75.8	2,173
2018	662	49.8	11.4	1,926	76.0	2,197
2019	758	49.6	10.1	1,866	76.4	2,245
2020	770	49.7	9.7	1,801	76.6	2,276
2021	799	49.8	9.7	1,713	76.8	2,293
2022	757	50.5	9.9	1,627	76.9	2,353
2023	781	49.8	9.4	1,572	77.0	2,403

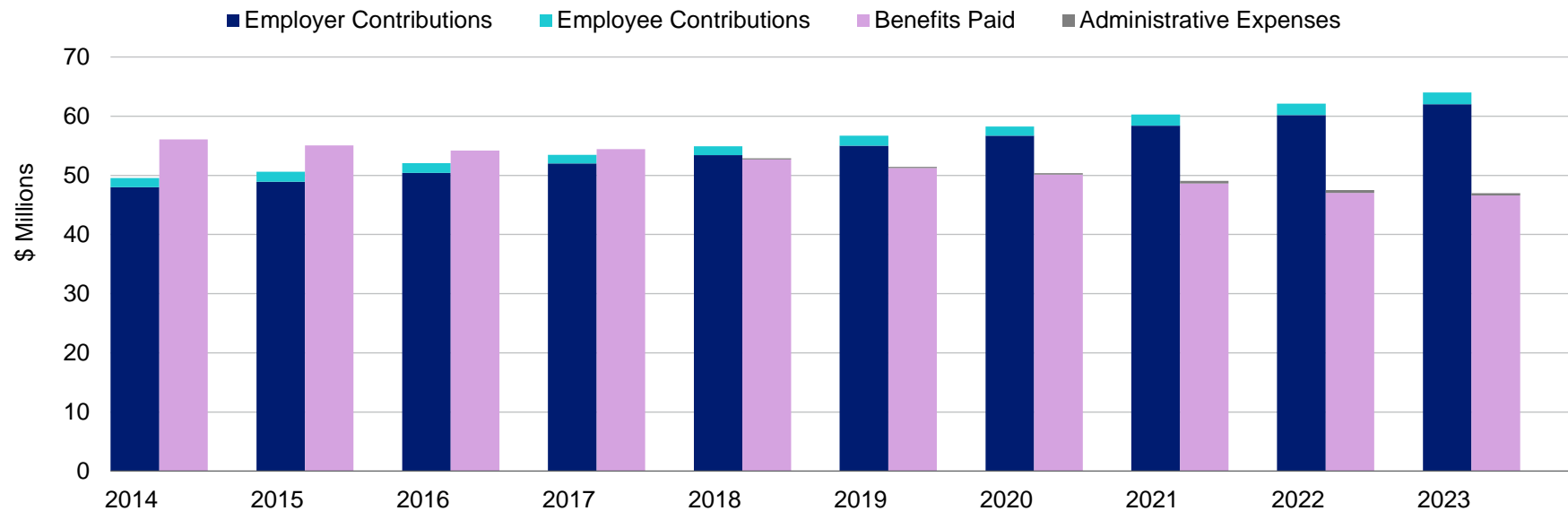
\* Beginning in 2022, counts do not include suspended retirees and beneficiaries.

## Section 2: Actuarial Valuation Results

### Financial information

Retirement plan funding anticipates that, over the long term, both contributions (less administrative expenses) and investment earnings (less investment fees) will be needed to cover benefit payments. Retirement plan assets change as a result of the net impact of these income and expense components.

Comparison of Contributions with Benefits and Expenses  
for Years Ended June 30, 2014 – 2023\*



\* Prior to 2018, investment earnings were net of investment fees and administrative expenses.

## Section 2: Actuarial Valuation Results

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

### Determination of Actuarial Value of Assets for Year Ended June 30, 2023

Step	Original Amount*	Percent Deferred†	Unrecognized Amount‡	Amount
1. Market value of assets, June 30, 2023				\$262,693,000
2. Calculation of unrecognized return				
a. Year ended June 30, 2023	-\$1,372,120	80%	-\$1,097,696	
b. Year ended June 30, 2022	-39,008,990	60%	-23,405,394	
c. Year ended June 30, 2021	31,368,200	40%	12,547,280	
d. Year ended June 30, 2020	-7,618,295	20%	-1,523,659	
e. Year ended June 30, 2019	-2,796,751	0%	0	
f. Total unrecognized return				-\$13,479,469
3. Preliminary actuarial value: (1) - (2f)				276,172,469
4. Adjustment to be within 20% corridor				0
<b>5. Final actuarial value of assets as of June 30, 2023: (3) + (4)</b>				<b>\$276,172,469</b>
6. Actuarial value as a percentage of market value: (5) ÷ (1)				105.13%
7. Amount deferred for future recognition: (1) - (5)§				-\$13,479,469

\* Total return minus expected return on a market value basis.

† Percent deferred applies to the current valuation year.

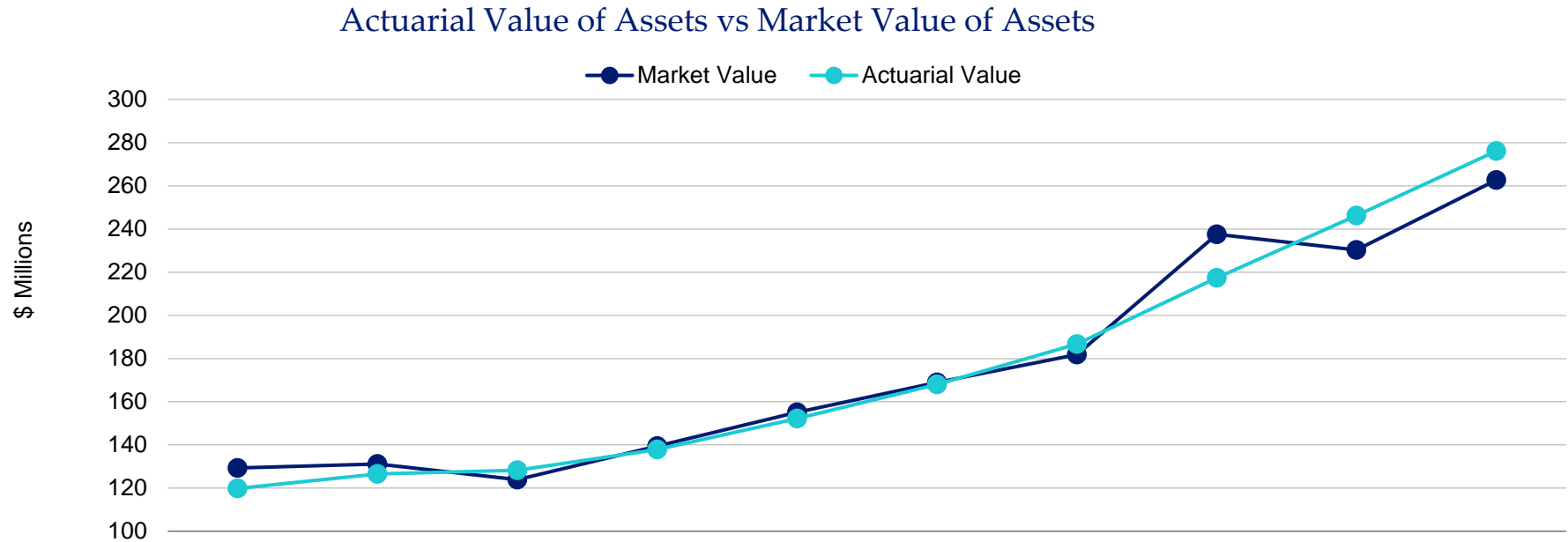
‡ Recognition at 20% per year over five years.

§ Deferred return as of June 30, 2023 recognized in each of the next four years:

a. Amount recognized on June 30, 2024	-3,326,241
b. Amount recognized on June 30, 2025	-1,802,582
c. Amount recognized on June 30, 2026	-8,076,222
d. Amount recognized on June 30, 2027	-274,424

## Section 2: Actuarial Valuation Results

### Asset history for years ended June 30



Legend	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Actuarial value*	\$119.81	\$126.60	\$128.26	\$137.89	\$152.19	\$168.01	\$186.72	\$217.45	\$246.28	\$276.17
Market value*	129.35	131.13	123.88	139.40	155.11	169.00	181.81	237.56	230.28	262.69
Ratio	0.93	0.97	1.04	0.99	0.98	0.99	1.03	0.92	1.07	1.05

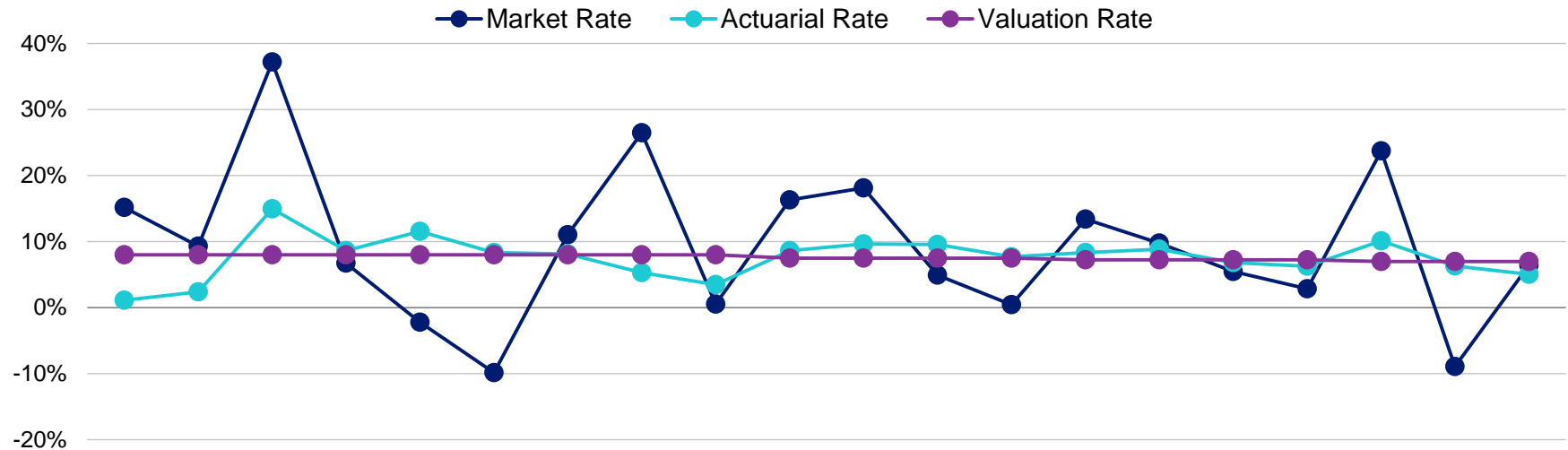
\* In \$ millions

City of Atlanta General Employees' Pension Fund Employees of the Atlanta Board of Education Actuarial Valuation as of July 1, 2023

## Section 2: Actuarial Valuation Results

### Historical investment returns

Market and Actuarial Rates of Return for Years\* Ended June 30



Legend	2003	2004	2005	2007	2008	2009	2010	2011	2012	2013†	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
■ Market rate	15.16%	9.30%	37.20%	6.74%	-2.22%	-9.82%	11.03%	26.49%	0.53%	16.32%	18.13%	4.91%	0.44%	13.40%	9.75%	5.48%	2.84%	23.74%	-8.93%	6.43%
■ Actuarial rate	1.11%	2.39%	14.95%	8.64%	11.55%	8.32%	8.14%	5.32%	3.51%	8.62%	9.63%	9.58%	7.72%	8.33%	8.83%	6.83%	6.29%	10.12%	6.33%	5.04%
■ Assumed rate	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	7.50%	7.50%	7.50%	7.50%	7.25%	7.25%	7.25%	7.25%	7.00%	7.00%	7.00%

Average Rates of Return	Actuarial Value	Market Value
Most recent five-year average return:	6.80%	5.14%
Most recent ten-year average return:	7.56%	6.67%
Most recent fifteen-year average return:	7.36%	7.04%
Twenty-year average return:	7.67%	7.95%

\* Prior to 2007, financial information was based on 12-month periods ending December 31.

† Actuarial value rate of return before method change.

City of Atlanta General Employees' Pension Fund Employees of the Atlanta Board of Education Actuarial Valuation as of July 1, 2023

## Section 2: Actuarial Valuation Results

### Actuarial experience

Assumptions should consider experience and should be based on reasonable expectations for the future.

Each year actual experience is compared to that projected by the assumptions. Differences are reflected in the actuarial valuation.

Assumptions are not changed if experience different than expected is believed to be a short-term development that will not continue over the long term. On the other hand, if experience different than expected is expected to continue, assumptions are changed.

#### Actuarial Experience for Year Ended June 30, 2023

Assumption	Amount
1. Loss from investments*	-\$5,005,097
2. Loss from administrative expenses	-156,995
3. Net loss from other experience	-3,208,114
<b>4. Net experience loss: 1 + 2 + 3</b>	<b>-\$8,370,206</b>

\* Details on next page

## Section 2: Actuarial Valuation Results

### Investment experience

Actuarial planning is long term. The obligations of a pension plan are expected to continue for the lifetime of all its participants.

The assumed long-term rate of return of 7.00% considers past experience, the asset allocation policy of the Board and future expectations.

#### Investment Experience *Year Ended June 30, 2023*

Investment	YE 2023 Market Value	YE 2023 Actuarial Value
1. Net investment income	\$15,345,000	\$12,831,529
2. Average value of assets	238,816,000	254,808,940
3. Rate of return: <b>1 ÷ 2</b>	6.43%	5.04%
4. Assumed rate of return	7.00%	7.00%
5. Expected investment income: <b>2 x 4</b>	16,717,120	17,836,626
6. Investment gain/(loss): <b>1 – 5</b>	-\$1,372,120	-\$5,005,097

## Section 2: Actuarial Valuation Results

### Non-investment experience

#### Administrative expenses

Administrative expenses for the year ended June 30, 2023 totaled \$383,000, as compared to the assumption of \$223,536 as of the beginning of the year. This resulted in an experience loss of \$156,995 for the year, including an adjustment for interest. Because it is expected that these expenses will continue to increase, the actuarial assumption includes an annual 2.25% inflationary increase.

#### Other experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- Mortality experience (more or fewer than expected deaths)
- The extent of turnover among participants
- Retirement experience (earlier or later than projected)
- The number of disability retirements (more or fewer than projected)
- Salary increases (greater or smaller than projected) , and
- Inflationary cost-of-living adjustments higher or lower than anticipated.

The net loss from this other experience for the year ended June 30, 2023 amounted to \$3,208,114, which is 0.6% of the actuarial accrued liability. Overall, the liability loss was not significant.

## Section 2: Actuarial Valuation Results

### Actuarial assumptions

- This report was revised to assume that salaries for participants with less than one year of benefit service would equal the average salary for participants with one or more years but less than four years of benefit service. There are no other assumption changes reflected in this report.
- Details on actuarial assumptions and methods are in Section 4, Exhibit I.

### Plan provisions

- There were no changes in plan provisions since the prior valuation.
- A summary of plan provisions is in Section 4, Exhibit II.

## Section 2: Actuarial Valuation Results

### Unfunded actuarial accrued liability

#### Development of Unfunded Actuarial Accrued Liability for Year Ended June 30, 2023

Unfunded Actuarial Accrued Liability	Amount
1. Unfunded actuarial accrued liability at beginning of year	\$260,765,859
2. Normal cost at beginning of year	5,446,431
3. Actual contributions	-64,012,000
4. Interest on 1, 2 & 3	16,394,440
<b>5. Expected unfunded actuarial accrued liability</b>	<b>\$218,594,730</b>
6. Changes due to experience gains and losses	\$8,370,206
<b>7. Unfunded actuarial accrued liability at end of year</b>	<b>\$226,964,936</b>

## Section 2: Actuarial Valuation Results

### Actuarially determined contribution

The actuarially determined contribution for the 2024-2025 fiscal year is \$65,800,000, a 3% increase from the prior year. This recommended contribution is based on a funding policy that increases the 2013-2014 fiscal year contribution 3% annually until the plan is fully funded. If the plan earns the assumed rate of return (7.00%) and all other experience matches the assumptions, then it will be fully funded by about the 2028-2029 fiscal year.

The payment on the unfunded actuarial accrued liability for the fiscal year beginning July 1, 2023 is based on the pre-determined contribution by ordinance, data previously described, the actuarial assumptions and Fund provisions described in *Section 4*, including all changes affecting future costs adopted at the time of the actuarial valuation, actuarial gains and losses, and changes in the actuarial assumptions.

#### Actuarially Determined Contribution

Contribution for Fiscal Year Beginning July 1	2023 Amount	2022 Amount
1. Total normal cost	\$5,786,880	\$5,222,895
2. Administrative expenses	228,566	223,536
3. Expected employee contributions	-2,103,719	-1,922,649
<b>4. Employer normal cost: (1) + (2) + (3)</b>	<b>\$3,911,727</b>	<b>\$3,523,782</b>
5. Actuarial accrued liability	\$503,137,405	\$507,042,799
6. Actuarial value of assets	276,172,469	246,276,940
<b>7. Unfunded actuarial accrued liability: (5) - (6)</b>	<b>\$226,964,936</b>	<b>\$260,765,859</b>
8. Payment on projected unfunded actuarial accrued liability	57,846,779	56,357,566
9. Adjustment for timing <sup>1</sup>	4,041,494	3,918,652
<b>10. Actuarially determined contribution: (4) + (8) + (9)</b>	<b>\$65,800,000</b>	<b>\$63,800,000</b>

<sup>1</sup>Actuarially determined contributions are assumed to be paid at the middle of every year. Calculated as  $\{[(4) + (8)] \times [1.07^{0.50}] \times 1.03\} - (4) - (8)$ .

## Section 2: Actuarial Valuation Results

The calculated employer normal cost (including expenses) is \$3,911,727. The remaining contribution of \$57,846,779 will amortize the unfunded actuarial accrued liability over a period of 4.2 years, assuming the amortization payment increases by 3.00% per year. The funding policy adopted by the School Board is designed to reduce the volatility of the actuarially determined contribution. A reasonable actuarially determined contribution can be calculated by using the same normal cost (including expenses) and a closed 10-year level percent of payroll amortization of the unfunded actuarial accrued liability. Under this approach, the reasonable actuarially determined contribution for the fiscal year ending June 30, 2025 would decrease to \$32,700,883. If all assumptions are met, the amortization payment and total contribution would increase roughly 3% per year.

Based on the current funding policy, the Actuarially Determined Contribution will increase 3% per year until the Fund is fully funded. During this period, the funded ratio is also expected to increase. The current funding policy is intended to result in predictable employer contributions that eliminate the unfunded actuarial accrued liability within five years, thereby providing benefit security to plan participants while balancing the needs of current and future contributors to the plan.

Since the funding policy contribution exceeds the reasonable actuarially determined contribution, it satisfies the goal of amortizing the unfunded liability over a reasonable time period.

## Section 2: Actuarial Valuation Results

### History of employer contributions

#### History of Employer Contributions: 2015– 2024

*Actuarially Determined Employer Contribution (ADC) versus Actual Employer Contribution (AEC)*

Year Ended June 30	ADC Amount	AEC Amount	Percent Contributed
2015	\$48,900,000	\$48,905,000	100.01%
2016	50,400,000	50,400,000	100.00%
2017	51,900,000	52,000,000	100.19%
2018	53,500,000	53,400,000	99.81%
2019	55,100,000	55,002,000	99.82%
2020	56,700,000	56,700,000	100.00%
2021	58,400,000	58,400,000	100.00%
2022	60,200,000	60,200,000	100.00%
2023	62,000,000	62,000,000	100.00%
2024	63,800,000	--	--

## Section 2: Actuarial Valuation Results

### Low-Default-Risk Obligation Measure (LDROM)

In December 2021, the Actuarial Standards Board issued a revision of Actuarial Standard of Practice No. 4 (ASOP 4) *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*. One of the revisions to ASOP 4 requires the disclosure of a Low-Default-Risk Obligation Measure (LDROM) when performing a funding valuation. The LDROM presented in this report is calculated using the same methodology and assumptions used to determine the Actuarial Accrued Liability (AAL) used for funding, except for the discount rate. The LDROM is required to be calculated using “a discount rate...derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future.”

The LDROM is a calculation assuming a plan’s assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in December of the measurement period, by The Bond Buyer ([www.bondbuyer.com](http://www.bondbuyer.com)), is 3.65% for use effective June 30, 2023. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDROM is not used to determine a plan’s funded status or Actuarially Determined Contribution. The Fund’s expected return on assets, currently 7.00%, is used for these calculations.

As of June 30, 2023, the LDROM for the Fund is \$690,557,363. The difference between the plan’s AAL of \$503,137,405 and the LDROM can be thought of as the increase in the AAL if the entire portfolio were invested in low-default-risk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the plan’s diversified portfolio compared to investing only in low-default-risk securities.

ASOP 4 requires commentary to help the intended user understand the significance of the LDROM with respect to the funded status of the plan, plan contributions, and the security of participant benefits. In general, if Fund assets were invested exclusively in low-default-risk securities, the funded status would be lower and the Reasonable Actuarially Determined Contribution of \$32,994,836 would be higher. While investing in a portfolio with low-default-risk securities may be more likely to reduce investment volatility and the volatility of employer contributions, it also may be more likely to result in higher employer contributions or lower benefits.

## Section 2: Actuarial Valuation Results

### Risk

The actuarial valuation results are dependent on a single set of assumptions; however, there is a risk that emerging results may differ significantly if actual experience proves to be different from the current assumptions.

We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Fund's future financial condition but have included a brief discussion of some risks that may affect the Fund.

- Economic and Other Related Risks. Potential implications for the Fund due to the following economic effects (that were not reflected as of the valuation date) include:

- Volatile financial markets and investment returns lower than assumed
- High inflationary environment impacting salary increases and COLAs

- Investment Risk (the risk that returns will be different than expected)

If the actual return on market value for the prior plan year were 1% different (either higher or lower), the unfunded actuarial liability would change by 1.05%, or about \$2,388,160, disregarding the asset smoothing method.

The market value rate of return over the last 20 years has ranged from a low of -9.82% in 2009 to a high of 37.20% in 2005.

- Longevity Risk (the risk that mortality experience will be different than expected)

The actuarial valuation includes an expectation of future improvement in life expectancy. Emerging plan experience that does not match these expectations will result in either an increase or decrease in the actuarially determined contribution.

Given that roughly 84% of the Fund's liability is for participants currently in pay status, longevity risk has a greater potential impact than other demographic risk factors.

- Contribution Risk (the risk that actual contributions will be different from actuarially determined contribution)

The School Board's funding policy requires payment of the actuarially determined contribution. As long as this policy is adhered to, contribution risk is negligible.

- Demographic Risk (the risk that participant experience will be different than assumed)

Examples of this risk include:

- Actual retirements occurring earlier or later than assumed. The value of retirement plan benefits is sensitive to the rate of benefit accruals and any early retirement subsidies that apply.
- More or less active participant turnover than assumed.

## Section 2: Actuarial Valuation Results

- There are external factors including legislative or financial reporting changes that could impact the Fund's funding and disclosure requirements. While we do not assume any changes in such external factors, it is important to understand that they could have significant consequences for the Fund.

- Actual Experience Over the Last Ten Years

Past experience can help demonstrate the sensitivity of key results to the Plan's actual experience. Over the past ten years:

- The investment gain(loss) on a market value basis for a year has ranged from a loss of \$39,008,990 in 2022 to a gain of \$31,368,200 in 2021.
- The investment gain(loss) on an actuarial value basis for a year has ranged from a loss of \$5,005,097 in 2023 to a gain of \$6,004,468 in 2021.
- The funded percentage on the market value of assets has ranged from a low of 20.31% as of July 1, 2014 to a high of 52.21% as of July 1, 2023.
- The funded percentage on the actuarial value of assets has ranged from a low of 18.81% as of July 1, 2014 to a high of 54.89% as of July 1, 2023.

### Maturity Measures

As pension plans mature, the cash needed to fulfill benefit obligations will increase over time. Therefore, cash flow projections and analysis should be performed to assure that the Fund's asset allocation is aligned to meet emerging pension liabilities.

Currently the Fund has a non-active to active participant ratio of 2.07.

For the prior year, benefits paid and administrative expenses were \$17,055,000 less than contributions received. Plans with high levels of negative cash flows may have a need for a larger allocation to income generating assets, which can create a drag on investment return.

- Detailed Risk Assessment

A more detailed assessment of the risks would provide the Board with a better understanding of the risks inherent in the Fund. This assessment may include scenario testing, sensitivity testing, stress testing, and stochastic modeling.

A detailed risk assessment could be important for the Fund because:

- Retired participants account for most of the Fund's liabilities, leaving limited options for reducing plan costs in the event of adverse experience.
- The Fund's asset allocation has potential for a significant amount of investment return volatility.
- The Board has not had a detailed risk assessment in recent years.

## Section 2: Actuarial Valuation Results

### GFOA funded liability by type

The Actuarial Accrued Liability represents the present value of benefits earned, calculated using the Plan's actuarial cost method. The Actuarial Value of Assets reflects the financial resources available to liquidate the liability. The portion of the liability covered by assets reflects the extent to which accumulated plan assets are sufficient to pay future benefits, and is shown for liabilities associated with employee contributions, pensioner liabilities, and other liabilities. The Government Finance Officers Association (GFOA) recommends that the funding policy aim to achieve a funded ratio of 100 percent.

#### GFOA Funded Liability by Type as of June 30

Type	2023	2022
<b>Actuarial accrued liability (AAL)</b>		
Active member contributions	\$21,234,409	\$21,000,602
Retirees and beneficiaries	421,060,346	428,072,851
Active and inactive members (employer-financed)	60,842,650	57,969,346
<b>Total</b>	<b>\$503,137,405</b>	<b>\$507,042,799</b>
Actuarial value of assets	276,172,469	246,276,940
<b>Cumulative portion of AAL covered</b>		
Active member contributions	100.00%	100.00%
Retirees and beneficiaries	60.55%	52.63%
Active and inactive members (employer-financed)	0.00%	0.00%

## Section 2: Actuarial Valuation Results

### Actuarial balance sheet

An overview of the Plan's funding is given by an Actuarial Balance Sheet. In this approach, first the amount and timing of all future payments that will be made by the Fund for current participants is determined. Then these payments are discounted at the valuation interest rate to the date of the valuation, thereby determining the present value, referred to as the "liability" of the Fund.

Second, this liability is compared to the assets. The "assets" for this purpose include the net amount of assets already accumulated by the Fund, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments for the unfunded actuarial accrued liability.

#### Actuarial Balance Sheet

Description	Year Ended June 30, 2023	Year Ended June 30, 2022
<b>Liabilities</b>		
Present value of benefits for retired participants and beneficiaries	\$421,060,346	\$428,072,851
Present value of benefits for inactive vested participants	3,458,468	2,905,734
Present value of benefits for active participants	117,832,637	111,414,841
<b>Total liabilities</b>	<b>\$542,351,451</b>	<b>\$542,393,426</b>
<b>Assets</b>		
Total valuation value of assets	\$276,172,469	\$246,276,940
Present value of future contributions by members	14,833,233	13,408,501
Present value of future employer contributions for:		
• Entry age cost	24,380,813	21,942,126
• Unfunded actuarial accrued liability	226,964,936	260,765,859
<b>Total of current and future assets</b>	<b>\$542,351,451</b>	<b>\$542,393,426</b>

## Section 2: Actuarial Valuation Results

### Actuarial Present Value of Accumulated Plan Benefits

The actuarial present value of accumulated plan benefits is shown below as of July 1, 2023 and as of July 1, 2022.

#### Actuarial Present Value of Accumulated Plan Benefits

Description	Year Ended June 30, 2023	Year Ended June 30, 2022
<b>Actuarial present value of vested accumulated plan benefits:</b>		
Participants currently receiving payments	\$421,060,346	\$428,072,851
Other vested benefits	59,879,077	57,350,674
<b>Total vested benefits (PVVB)</b>	<b>\$480,948,966</b>	<b>\$485,423,525</b>
Actuarial present value of non-vested accumulated plan benefits	7,447,610	6,164,352
<b>Total actuarial present value of accumulated plan benefits (PVAB)</b>	<b>\$488,396,576</b>	<b>\$491,587,877</b>
<b>Actuarial value of Assets (AVA)</b>	<b>\$276,172,469</b>	<b>\$246,276,940</b>
<b>Market value of Assets (MVA)</b>	<b>\$262,693,000</b>	<b>\$230,284,000</b>
<b>Funded Ratios (PVVB):</b>		
• AVA as a percentage of present value of vested accumulated benefits	57.42%	50.73%
• MVA as a percentage of present value of vested accumulated benefits	54.62%	47.44%
<b>Funded Ratios (PVAB):</b>		
• AVA as a percentage of present value of accumulated benefits	56.55%	50.10%
• MVA as a percentage of present value of accumulated benefits	53.79%	46.84%

Note: The amounts stated as vested benefits include employee contribution amounts, which are considered 100% vested.

## Section 2: Actuarial Valuation Results

The factors that affected the change in the actuarial present value of accumulated plan benefits from the preceding to the current benefit information date are as follows:

Factors	Change in Actuarial Present Value of Accumulated Plan Benefits
Benefits accumulated, net experience gain or loss, changes in data	\$10,601,638
Benefits paid	-46,574,000
Interest	32,781,061
<b>Total</b>	<b>-\$3,191,301</b>

## Section 2: Actuarial Valuation Results

### State minimum requirements

Under Georgia minimum funding requirements, liability may be amortized as a percent of payroll, rather than a fixed dollar amount. In general, with fixed dollar amortization, actual experience close to the assumptions will result in a total contribution requirement (the normal cost plus the payment on the unfunded actuarial liability) that decreases over time as a percentage of payroll. With percentage of payroll amortization, given expected experience, the total contribution requirement should remain level as a percentage of payroll if the aggregate payroll increases as assumed.

The Board has adopted a policy for amortizing the unfunded actuarial liability, and the amortization period is 4.2 years for FY 2024. The contributions determined under this method continue to meet the Georgia minimum funding requirements by virtue of Georgia Code Section 47-20-10(b).

# Section 3: Supplemental Information

## Exhibit A: Table of plan demographics

Category	Year Ended December 31, 2023	Year Ended December 31, 2022	Change From Prior Year
<b>Active participants in valuation:</b>			
• Number	781	757	3.2%
• Average age	49.8	50.5	-0.7 years
• Average years of service	9.4	9.9	-0.5 years
• Covered payroll for July 1, 2023 to June 30, 2024	\$27,721,051	\$25,153,733	10.2%
• Average covered payroll	35,494	33,228	6.8%
• Account balances	21,234,409	21,000,602	1.1%
• Total active vested participants	412	409	0.7%
<b>Inactive participants</b>			
• Inactive vested participants	44	44	0.0%
• Inactive nonvested participants due a refund	339	306	10.8%
<b>Retired participants:</b>			
• Number in pay status	1,214	1,255	-3.3%
• Average age	76.9	76.6	0.3 years
• Average monthly benefit	\$2,504	\$2,452	2.1%
<b>Disabled participants:</b>			
• Number in pay status	78	83	-6.0%
• Average age	70.5	70.0	0.5 years
• Average monthly benefit	\$1,637	\$1,597	2.5%

## Section 3: Supplemental Information

Category	Year Ended December 31, 2023	Year Ended December 31, 2022	Change From Prior Year
<b>Beneficiaries:</b>			
• Number in pay status	280	289	-3.1%
• Average age	79.7	79.8	-0.1 years
• Average monthly benefit	\$2,176	\$2,138	1.8%

## Section 3: Supplemental Information

### Exhibit B: Participants in active service as of June 30, 2023 by age, years of service, and average compensation\*

Age	Years of Service									
	Total	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 & over
Under 25	17	17	—	—	—	—	—	—	—	—
	\$29,719	\$29,719	—	—	—	—	—	—	—	—
25 - 29	27	25	2	—	—	—	—	—	—	—
	28,936	28,730	31,510	—	—	—	—	—	—	—
30 - 34	57	47	10	—	—	—	—	—	—	—
	30,699	29,349	37,046	—	—	—	—	—	—	—
35 - 39	75	56	14	2	3	—	—	—	—	—
	29,342	28,741	31,129	41,391	24,201	—	—	—	—	—
40 - 44	93	50	29	6	6	2	—	—	—	—
	34,093	31,859	33,855	45,538	40,912	38,621	—	—	—	—
45 - 49	92	34	29	5	10	8	6	—	—	—
	37,817	30,545	39,517	48,976	42,495	40,921	49,572	—	—	—
50 - 54	127	51	29	6	11	14	14	2	—	—
	37,757	33,400	39,616	55,158	42,311	38,032	37,280	46,060	—	—
55 - 59	135	44	25	9	11	20	18	7	1	—
	38,109	34,157	40,370	48,864	36,976	36,661	36,264	48,018	\$64,006	—
60 - 64	96	29	18	9	7	18	10	4	—	1
	37,994	35,838	36,661	48,554	37,625	31,471	46,901	40,932	—	\$48,638
65 - 69	39	10	7	6	4	3	6	2	1	—
	37,269	32,533	33,026	47,344	28,556	32,770	35,898	71,505	41,984	—
70 & over	23	6	7	2	4	0	2	1	—	1
	34,497	27,505	31,457	36,168	40,371	0	33,628	53,548	—	53,578
<b>Total</b>	<b>781</b>	<b>369</b>	<b>170</b>	<b>45</b>	<b>56</b>	<b>65</b>	<b>56</b>	<b>16</b>	<b>2</b>	<b>2</b>
	<b>\$35,494</b>	<b>\$31,382</b>	<b>\$36,861</b>	<b>\$48,111</b>	<b>\$38,469</b>	<b>\$35,924</b>	<b>\$39,710</b>	<b>\$49,283</b>	<b>\$52,995</b>	<b>\$51,108</b>

\* Compensation for those hired in the prior plan year is based on the average salary of participants with more than one year of benefit service but less than four years of benefit service.

## Section 3: Supplemental Information

### Exhibit C: Reconciliation of participant data

	Active Participants	Inactive Vested Participants*	Disableds	Retired Participants	Beneficiaries	Total
<b>Number as of July 1, 2022</b>	<b>757</b>	<b>44</b>	<b>83</b>	<b>1,255</b>	<b>289</b>	<b>2,428</b>
New participants†	118	N/A	N/A	N/A	N/A	118
Terminations — with vested rights	-8	8	0	0	0	0
Terminations — without vested rights	-31	N/A	N/A	N/A	N/A	-31
Retirements	-26	0	N/A	26	N/A	0
New disabilities	-1	0	1	N/A	N/A	0
Return to work	1	-1	0	0	N/A	0
Deceased	-1	-1	-5	-67	-24	-98
New beneficiaries	0	0	0	0	15	15
Lump sum cash-outs	-27	-6	-1	0	0	-34
Rehire	0	0	N/A	0	N/A	0
Certain period expired	N/A	N/A	0	0	-1	-1
Data adjustments‡	-1	0	0	1	0	0
Exclusion of suspended participants	0	0	0	-1	1	0
<b>Number as of July 1, 2023</b>	<b>781</b>	<b>44</b>	<b>78</b>	<b>1,214</b>	<b>280</b>	<b>2,397</b>

\* Excludes terminated participants with contributions remaining in the Fund.

† Four of the 118 new active participants are rehired participants; the remainder were included in the data for the first time this year have less than one year of credited service.

‡ The following data adjustments were made per the TPA:

One active participant was deemed a non-participant;

One healthy retiree was included for the first time with this valuation.

## Section 3: Supplemental Information

### Exhibit D: Summary statement of income and expenses on a market value basis

Year Ended June 30, 2023 versus Year Ended June 30, 2022

Item	Income and Expenses	Assets as of YE 2023	Income and Expenses	Assets as of YE 2022
<b>Net assets at market value at the beginning of the year</b>		<b>\$230,284,000</b>		<b>\$237,561,000</b>
<b>Contribution and other income:</b>				
Employer contributions	\$62,000,000		\$60,200,000	
Employee contributions	2,012,000		1,919,000	
Total contribution income		\$64,012,000		\$62,119,000
Other income		\$9,000		\$1,000
<b>Investment income:</b>				
Investment income	\$15,789,000		-\$21,348,000	
Less investment fees	-444,000		-521,000	
Net investment income		\$15,345,000		-\$21,869,000
Total income available for benefits		\$79,366,000		\$40,251,000
<b>Less benefit payments and administrative expenses:</b>				
Administrative expenses	-\$383,000		-\$489,000	
Pension payments	-46,574,000		-47,039,000	
Net benefit payments and administrative expenses		-\$46,957,000		-\$47,528,000
<b>Change in market value of assets</b>		<b>\$32,409,000</b>		<b>-\$7,277,000</b>
<b>Net assets at market value at the end of the year</b>		<b>\$262,693,000</b>		<b>\$230,284,000</b>

## Section 3: Supplemental Information

### Exhibit E: Asset allocation as of June 30, 2023

Year Ended June 30, 2023

Item	General Employees	School Board	Total
1. Market Value of assets as of July 1, 2022	\$1,403,948,000	230,284,000	\$1,634,232,000
2. Employer contributions	\$48,330,000	\$62,000,000	\$110,330,000
3. Employee contributions	19,547,000	2,012,000	21,559,000
4. Other income not in yields	83,000	9,000	92,000
5. Total contributions and other income: (2) + (3) + (4)	67,960,000	64,021,000	131,981,000
6. Benefit payments and refunds	-142,434,000	-46,574,000	-189,008,000
7. Administrative expenses	-1,162,000	-383,000	-1,545,000
8. Total benefit payments and expenses: (6) + (7)	-143,596,000	-46,957,000	-190,553,000
9. Net cash flow: (5) + (8)	-75,636,000	17,064,000	-58,572,000
10. Net investment return	138,393,000	15,345,000	153,738,000
11. Market value of assets as of July 1, 2023: (1) + (9) + (10)	\$1,466,705,000	\$262,693,000	\$1,729,398,000

## Section 3: Supplemental Information

### Exhibit F: Development of the fund through June 30, 2023

Year Ended June 30	Employer Contributions	Employee Contributions	Net Investment Return*	Admin. Expenses	Benefit Payments	Market Value of Assets at Year-End	Actuarial Value of Assets at Year-End	Actuarial Value as a Percent of Market Value
2014	\$48,000,000	\$1,554,000	\$20,355,000	\$0	\$56,063,000	\$129,355,000	\$119,806,270	92.62%
2015	48,905,000	1,684,000	6,247,000	0	55,058,000	131,133,000	126,601,083	96.54%
2016	50,400,000	1,663,000	5,143,000†	0	54,177,000	123,876,000	128,256,838	103.54%
2017	52,000,000	1,441,000	16,529,000	0	54,450,000	139,396,000	137,889,959	98.92%
2018	53,400,000	1,513,000	13,692,000‡	212,000	52,677,000	155,112,000	152,185,281	98.11%
2019	55,002,000	1,686,000	8,639,000	227,000	51,216,000	168,996,000	168,011,240	99.42%
2020	56,700,000	1,541,000	4,920,000	204,000	50,145,000	181,808,000	186,720,491	102.70%
2021	58,400,000	1,857,000	44,489,000	426,000	48,627,000	237,561,000	217,453,633	91.54%
2022	60,200,000	1,919,000	-21,869,000	489,000	47,039,000	230,284,000	246,276,940	106.94%
2023	62,000,000	2,012,000	15,345,000	383,000	46,574,000	262,693,000	276,172,469	105.13%

\* On a market basis, net of investment fees; does not include other income not in yields which is included in the market and actuarial value of assets at year-end

† Includes -\$5,706,000 asset adjustment

‡ Includes -\$155,000 asset adjustment

# Section 4: Actuarial Valuation Basis

## Exhibit 1: Actuarial assumptions, methods and models

### Rationale for assumptions

The information and analysis used in selecting methods and each economic and mortality assumption that has a significant effect on this actuarial valuation is shown in the Review of Actuarial Experience for the five-year period ended June 30, 2019 dated March 17, 2021. The information used in selecting each other demographic assumption that has a significant effect on this valuation is shown in the Review of Actuarial Experience for the five-year period ended June 30, 2019 dated April 20, 2022.

### Net investment return

7.00%, the investment return rate is assumed to be net of investment expenses.

The net investment return assumption was chosen by the Pension Fund's Board of Trustees, with input from the actuary. This assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment. As part of the analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each of the portfolio's asset classes as provided by Marquette and Segal Marco Advisors, as well as the Fund's target asset allocation.

### Administrative Expenses

\$200,000 per year, projected annually with 2.25% inflation. As of July 1, 2023, the assumed annual expense is \$228,566.

## Section 4: Actuarial Valuation Basis

### Salary increases

Age	Rate (%)
Under 25	8.00%
25 - 29	7.00%
30 - 34	6.00%
35 - 39	5.50%
40 - 44	4.50%
45 - 49	3.50%
50 - 54	3.25%
55 - 59	3.25%
60 - 64	3.00%
65 & over	3.00%

Salary increases include an assumed inflation rate of 2.25% and 0.75% productivity.

### Sick leave pay adjustment

Retirement benefits are increased by 2.00%.

### Payroll growth

3.00%, compounded annually

### Cost-of-living adjustments

2.25%, compounded annually after retirement

## Section 4: Actuarial Valuation Basis

### Mortality rates

**Pre-Retirement:** Sex-distinct Pri-2012 Blue Collar Employee Amount-weighted Mortality Table with rates increased by 6%, projected generationally with scale MP-2020

**Healthy Annuitants and Beneficiaries of Living Retirees:** Sex-distinct Pri-2012 Blue Collar Healthy Retiree Amount-weighted Mortality Table with rates increased by 6%, projected generationally with scale MP-2020

**Disabled Annuitants:** Sex-distinct Pri-2012 Disabled Retiree Amount-weighted Mortality Table with rates increased by 6%, projected generationally with scale MP-2020

**Contingent survivors:** Sex-distinct Pri-2012 Blue Collar Healthy Contingent Survivor Amount-weighted Mortality Table with rates increased by 6%, projected generationally with scale MP-2020

The underlying tables with the generational projection to the ages of participants as of the measurement date reasonably reflect the mortality experience of the Fund as of the measurement date. These mortality tables were then adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

### Annuitant mortality rates

Rate (%)<sup>\*</sup>

Age	Healthy Male	Healthy Female	Disabled Male	Disabled Female	Contingent Survivors Male	Contingent Survivors Female
55	0.68	0.52	2.30	1.56	1.79	0.87
60	0.99	0.75	2.49	1.82	2.17	1.16
65	1.35	1.14	3.04	2.26	2.75	1.62
70	2.18	1.74	4.17	3.01	3.62	2.31
75	3.53	2.77	6.15	4.28	4.99	3.40
80	6.06	4.61	9.46	6.52	7.19	5.11
85	10.37	7.94	14.53	10.46	10.81	8.14
90	17.53	13.83	21.75	17.08	17.30	13.83

\* Rates shown do not include generational projection.

## Section 4: Actuarial Valuation Basis

### Termination rates before retirement

Age	Rate (%)				
	Mortality* Male	Mortality* Female	Disability Male	Disability Female	Withdrawal (All Lives)†
20	0.07	0.02	0.03	0.01	18.00
25	0.07	0.03	0.03	0.02	18.00
30	0.07	0.03	0.04	0.03	15.00
35	0.08	0.04	0.06	0.06	5.00
40	0.09	0.06	0.09	0.09	3.00
45	0.12	0.09	0.14	0.13	2.00
50	0.19	0.14	0.23	0.21	9.00
55	0.30	0.21	0.41	0.34	6.00
60	0.47	0.32	0.61	0.42	10.00

### Retirement rates

Age	Rates for Less than 30 Years of Service at Retirement (%)	Rates for More than 30 Years of Service at Retirement (%)
50-52	2%	30%
53-54	3	30
55-59	5	25
60	25	35
61-62	25	25
63-64	15	25
65-69	30	25
70 & over	100	100

\* Mortality rates shown do not include generational projection.

† Withdrawal rates are amount-weighted and do not apply at or beyond the later of age 50 and 5 years of service

## Section 4: Actuarial Valuation Basis

### Retirement Age for Vested Inactive Participants

Age 65 for participants in vested inactive status as of the valuation date; age 60 for active participants assumed to terminate prior to retirement eligibility.

### Unknown Data for Participants

There were no records that were missing both service amounts and dates of hire. For participants with less than one year of benefit service, salaries were based on the average salary for participants with at least one year of benefit service but less than four years of benefit service.

### Additional Accumulated Unused Sick Leave at Retirement

Additional 0.50 years if service included in total service (prior to application of maximum)

### Weighted average retirement age

Age 62.2, determined as follows: The weighted average retirement age for each participant is calculated as the sum of the product of each potential current or future retirement age times the probability of surviving from current age to that age and then retiring at that age, assuming no other decrements. The overall weighted retirement age is the average of the individual retirement ages based on all the active participants included in the July 1, 2023 actuarial valuation.

### Percent married

Assumption based on active participant contribution rate provided with valuation data

### Form of Payment

Married participants	Assumed to elect a 75% joint and survivor annuity
Unmarried participants	Assumed to elect a single life annuity

### Age of Spouse

Male Participants	Assumed to be three years older than their female spouses
Female Participants	Assumed to be one year younger than their male spouses

## Section 4: Actuarial Valuation Basis

### **Refunds of Employee Contributions for Terminated Vested Participants**

90% of participants elect a refund of their employee contribution balances.

### **Actuarial value of assets**

Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the market value.

### **Actuarial cost method**

Entry Age Actuarial Cost Method. Entry Age is current age minus years of service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salary, with Normal Cost determined as if the current plan of benefits had always been in effect using the plan of benefits applicable to each participant.

### **Justification for change in actuarial assumptions**

The salary assumption for participants with less than one year of benefit service was changed from annualizing the pay provided to using the average salary for participants with at least one year but less than four years of benefit service. The approach was changed to avoid participants who may not have pay reported or who may have overstated earnings for very short service periods.

There have been no other changes in actuarial assumptions since the last valuation.

## Section 4: Actuarial Valuation Basis

### Exhibit 2: Summary of plan provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

#### Plan year

July 1 through June 30

#### Plan status

Ongoing

#### Normal retirement/Unreduced Early Eligibility

##### Eligibility

A participant may retire at:

- (a) age 60 after completing 10 years of service, or
- (b) age 65 after completing 5 years of service, or
- (c) any age after completing 30 years of service

##### Monthly Amount

2.5% of average monthly salary for each year of credited service. This amount cannot be less than \$17 per month for each year of service and is capped at 80% of average monthly salary

##### Average Monthly Salary

Average of the highest consecutive 36 months of salary

##### Normal Form of Payment

75% joint and survivor annuity (no reduction in benefit for providing survivor coverage)

#### Early retirement

##### Service Requirement

10 years credited service or age 60 with five years

##### Monthly Amount

Normal pension monthly amount reduced by 1/2 of 1% per month for the first 60 months and by 1/4 of 1% per month for the remaining months by which age at retirement is less than 60. More favorable early retirement adjustments may apply to participants in prior plans.

## Section 4: Actuarial Valuation Basis

### Disability

Service Requirement	5 years credited service for non-job-related disability. None for job-related disability.
Monthly Amount Payable until Normal Retirement -	Greater of 50% of highest consecutive 36 months of salary at disability <i>and</i> benefit calculated as 2.50% times service accrued times average of the highest consecutive 36 months of salary at disability; benefit payable immediately
Recalculated Monthly Amount Payable at Normal Retirement for Surviving Disable Participants	<p>2.50% times service (accrued at disability plus imputed through Normal Retirement) times average of the highest consecutive 36 months of salary; benefit payable at age 60</p> <p>Benefit amount at Normal Retirement cannot exceed 80% of final average salary and can be less than what participant was receiving during period of disability</p>

### Vesting

An employee who terminates employment may receive a percentage of his accrued benefit payable at age 60 as determined below:

Completed Years of Service	Percentage Vesting*
Less than 5	0%
5	25
6	30
7	35
8	40
9	45
10 or more	100

\* A participant is always 100% vested in his/her contributions to the Fund.

## Section 4: Actuarial Valuation Basis

### Termination

A participant terminating employment may elect a refund of their own contributions with interest or leave contributions in the fund and receive a monthly benefit to commence at normal retirement date equal to the accrued benefit as of the date of termination. A refund will cause the forfeiture of any other vested accrued benefit from the Fund

### Pre-Retirement Death Benefits

- 75% of 2.50% times service accrued times vested percentage times average of the highest consecutive 36 months of salary at death
- Benefit prior to application of 75% cannot exceed 80% of final average salary.
- Eligible beneficiaries are the spouse or children under age 23 (18 if not in post-secondary school).
- Beneficiaries can elect to receive a refund of employee contributions in lieu of an annuity benefit.

### Death Benefits after Retirement Eligibility

If an active participant who is eligible to retire, or a disabled or retired participant dies, 75% of the accrued pension benefit is payable to the beneficiary. Eligible beneficiaries are the spouse or unmarried children under 23 (18 if not in post-secondary school). If the spouse is more than five years younger than the participant, the amount payable is reduced by 2% per year by which the spouse is younger.

### Credited Service

Service is credited for employment as an employee of the Atlanta Board of Education or a general employee of the City of Atlanta. Additional credit is granted for accumulated sick leave and for other prior service as specified in the plan.

### Participation

All employees of the Atlanta Board of Education, who are not covered by the Teachers' Retirement System or the Employees' Retirement System of Georgia.

## Section 4: Actuarial Valuation Basis

### Employee Contributions

Employee	% of Base Salary
Unmarried employees without beneficiaries	7%
Unmarried employees with beneficiaries	8%
Married employees	8%

### Interest on Employee Contributions

Employee contributions earn 5% interest each year.

### Cost of living adjustments (COLAs)

Benefits for retirees and beneficiaries are adjusted annually on January 1 of each year based on the change in the Consumer Price Index from November 1 through October 31 of the preceding year. Such annual adjustment cannot exceed 3%. The COLA is compounded annually.

### Changes in plan provisions

There have been no changes in plan provisions since the last valuation.

# Appendix A: Definition of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Term	Definition
Actuarial accrued liability for actives	The equivalent of the accumulated normal costs allocated to the years before the valuation date.
Actuarial accrued liability for retirees and beneficiaries	Actuarial Present Value of lifetime benefits to existing retirees and beneficiaries. This sum takes account of life expectancies appropriate to the ages of the annuitants and the interest that the sum is expected to earn before it is entirely paid out in benefits.
Actuarial cost method	A procedure allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability that are used to determine the actuarially determined contribution.
Actuarial gain or loss	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield actuarial liabilities that are larger than projected.
Actuarially equivalent	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial present value	<p>The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. Each such amount or series of amounts is:</p> <p>Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)</p> <p>Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and</p> <p>Discounted according to an assumed rate (or rates) of return to reflect the time value of money.</p>

## Appendix A: Definition of Pension Terms

Term	Definition
Actuarial present value of future benefits	The Actuarial Present Value of benefit amounts expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The Actuarial Present Value of Future Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund of member contributions or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan, as well as Actuarially Determined Contributions.
Actuarial value of assets	The value of the Plan's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the Actuarially Determined Contribution.
Actuarially determined	Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the Plan.
Actuarially determined contribution	The employer's contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under the Plan's funding policy. The ADC consists of the Employer Normal Cost and the Amortization Payment.
Amortization method	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the Unfunded Actuarial Accrued Liability. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the Unfunded Actuarial Accrued Liability. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
Amortization payment	The portion of the pension plan contribution, or ADC, that is intended to pay off the Unfunded Actuarial Accrued Liability.
Assumptions or actuarial assumptions	<p>The estimates upon which the cost of the Plan is calculated, including:</p> <p><b>Investment return</b> — the rate of investment yield that the Plan will earn over the long-term future;</p> <p><b>Mortality rates</b> — the rate or probability of death at a given age for employees and retirees;</p> <p><b>Retirement rates</b> — the rate or probability of retirement at a given age or service;</p> <p><b>Disability rates</b> — the rate or probability of disability retirement at a given age;</p> <p><b>Withdrawal rates</b> — the rate or probability at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement;</p> <p><b>Salary increase rates</b> — the rates of salary increase due to inflation, real wage growth and merit and promotion increases.</p>

## Appendix A: Definition of Pension Terms

Term	Definition
Closed amortization period	A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 20 years, it is 19 years at the end of one year, 18 years at the end of two years, etc. See Open Amortization Period.
Decrements	Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal.
Defined benefit plan	A retirement plan in which benefits are defined by a formula based on the member's compensation, age and/or years of service.
Defined contribution plan	A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.
Employer normal cost	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Experience study	A periodic review and analysis of the actual experience of the Plan that may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified based on recommendations from the Actuary.
Funded ratio	The ratio of the Actuarial Value of Assets (AVA) to the Actuarial Accrued Liability (AAL). Plans sometimes also calculate a market funded ratio, using the Market Value of Assets (MVA), rather than the AVA.
GASB 67 and GASB 68	Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.
Investment return	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.
Net Pension Liability (NPL)	The Net Pension Liability is equal to the Total Pension Liability minus the Plan Fiduciary Net Position.
Normal cost	The portion of the Actuarial Present Value of Future Benefits and expenses, if applicable, allocated to a valuation year by the Actuarial Cost Method. Any payment with respect to an Unfunded Actuarial Accrued Liability is not part of the Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of member contributions and employer Normal Cost unless otherwise specifically stated.
Open amortization period	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in each future year in determining the Amortization Period.

## Appendix A: Definition of Pension Terms

Term	Definition
Plan Fiduciary Net Position	Market value of assets.
Service costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Total Pension Liability (TPL)	The actuarial accrued liability under the entry age normal cost method and based on the blended discount rate as described in GASB 67 and 68.
Unfunded actuarial accrued liability	The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative, in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus or an Overfunded Actuarial Accrued Liability.
Valuation date or actuarial valuation date	The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

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