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

Actuarial Valuation and Review as of July 1, 2022

This report has been prepared at the request of the Board of Trustees to assist in administering the Pension Fund. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety, unless expressly authorized by Segal. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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June 16, 2023

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, 2022. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for fiscal year ending June 30, 2024.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Pension Fund. The census information on which our calculations were based was prepared by Strategic Benefits Advisors and financial information was provided by Mauldin & Jenkins. That assistance is gratefully acknowledged.

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 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 Fund and reasonable expectations.

We hereby certify that the City of Atlanta General Employees' Pension Fund for the Employees of the Atlanta Board of Education 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 2022 fiscal year of the Plan.

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

Segal

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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, 2022. 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, 2022, provided by Strategic Benefits Advisors;
- The assets of the Fund as of June 30, 2022, 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, 2023 and June 30, 2022 for the Fund was provided in separate reports.

Valuation highlights

1. The July 1, 2022 valuation is used to determine the recommended contribution for the fiscal year period July 1, 2023 to June 30, 2024 (FY'24). 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 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 around 5.0 years. If the Fund earns the assumed 7.00% annual investment return, all experience matches the assumptions, and the contribution remains level, then the UAAL would be fully amortized in about 5.3 years.
6. Actual contributions made during the fiscal year ending June 30, 2022 were $60,200,000, 100% of the actuarially determined contribution (ADC). In the prior year, actual contributions were $58,400,000, 100% of the prior year ADC.
7. The actuarial loss from investment and other experience is $1,158,949, or 0.23% of actuarial accrued liability.
8. The net experience gain from sources other than investment experience was 0.1% of the actuarial accrued liability. This gain is not significant.
9. The rate of return on the market value of assets was -8.93% for the July 1, 2021 to June 30, 2022 plan year. The return on the actuarial value of assets was 6.33% 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 7.0%. 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%.

10. The actuarial value of assets is 106.94% 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 $16.0 is recognized in future years, the cost of the Pension Fund is likely to increase unless the net loss is offset by future experience.
11. Plan assets are currently roughly equal to five 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.
12. There have been no 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 48.57%, compared to the prior year funded ratio of 42.22%. 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 45.42%, compared to 46.12% as of the prior valuation date. These measurements are not necessarily appropriate for assessing the sufficiency of Fund assets to cover the estimated cost of settling the Fund's benefit obligation or the need for or the amount of future contributions.
14. The School Board's recommended contribution for FY' 24 is $63.8 million. This is an increase of $1.8 million from the prior valuation's contribution due to a mandated overall 3% increase.
15. The unfunded actuarial accrued liability is $260.8 million, which is a decrease of $36.9 since the prior valuation.

Risk

16. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2022. 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, 2022. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.

17. Since the actuarial valuation results are dependent on a given set of assumptions, there is a risk that emerging results may differ significantly as 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 Fund'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:

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

GASB

18. The disclosure information required for compliance with GASB Statement No. 67, *Financial Reporting for Pension Plans* for the fiscal year ended June 30, 2022 was released to the School Board's Finance Department on November 30, 2022. Information required for compliance with GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, for the fiscal year ended June 30, 2023, based on a June 30, 2022 measurement date was released to the School Board's Finance Department on April 13, 2023.

Summary of key valuation results

Fiscal Year		2023	2022
Contributions for fiscal year beginning July 1:	• Actuarially determined contributions	$63,800,000	$62,000,000
Plan Year		**2022**	**2021**
Actuarial accrued liability for plan year beginning July 1:	• Retired participants and beneficiaries	$428,072,851	$438,925,993
	• Inactive vested participants	2,452,360	1,764,021
	• Inactive participants due a refund of employee contributions	453,374	278,086
	• Active participants	76,064,214	74,116,700
	• Total	507,042,799	515,084,800
	• Normal cost including administrative expenses	5,446,431	5,079,183
Assets for plan year beginning July 1:	• Market value of assets (MVA)	$230,284,000	$237,561,000
	• Actuarial value of assets (AVA)	246,276,940	217,453,633
	• Actuarial value of assets as a percentage of market value of assets	106.94%	91.54%
Funded status for plan year beginning July 1:	• Unfunded actuarial accrued liability on market value of assets	$276,758,799	$277,523,800
	• Funded percentage on MVA basis	45.42%	46.12%
	• Unfunded actuarial accrued liability on actuarial value of assets	$260,765,859	$297,631,167
	• Funded percentage on AVA basis	48.57%	42.22%
	• Amortization period on an AVA basis	5.0 years	5.9 years
Key assumptions	• Net investment return	7.00%	7.00%
	• Inflation rate	2.25%	2.25%
	• Payroll increase	3.00%	3.00%
Demographic data for plan year beginning July 1:	• Number of retired participants and beneficiaries	1,627	1,713
	• Number of inactive vested participants	44	33
	• Number of inactive participants due a refund of employee contributions	306	231
	• Number of active participants	757	799
	• Covered payroll	$25,153,733	$24,894,564
	• Average payroll	$33,228	$31,157

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:

Plan provisions	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.
Participant information	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.
Financial information	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, as provided 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.
Actuarial assumptions	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

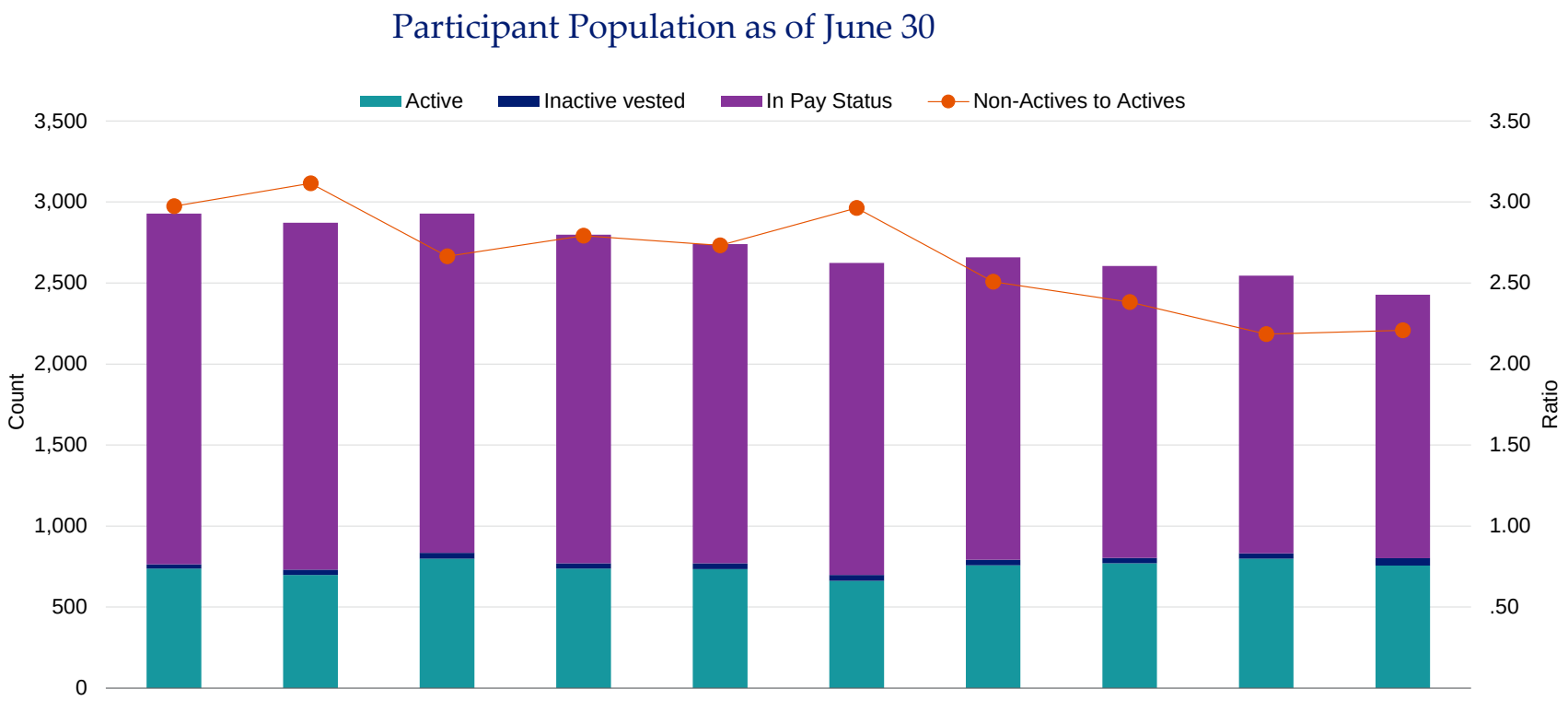
The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

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. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan 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.

As Segal has no discretionary authority with respect to the management or assets of the Fund, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Fund.

Section 2: Actuarial Valuation Results

Participant information



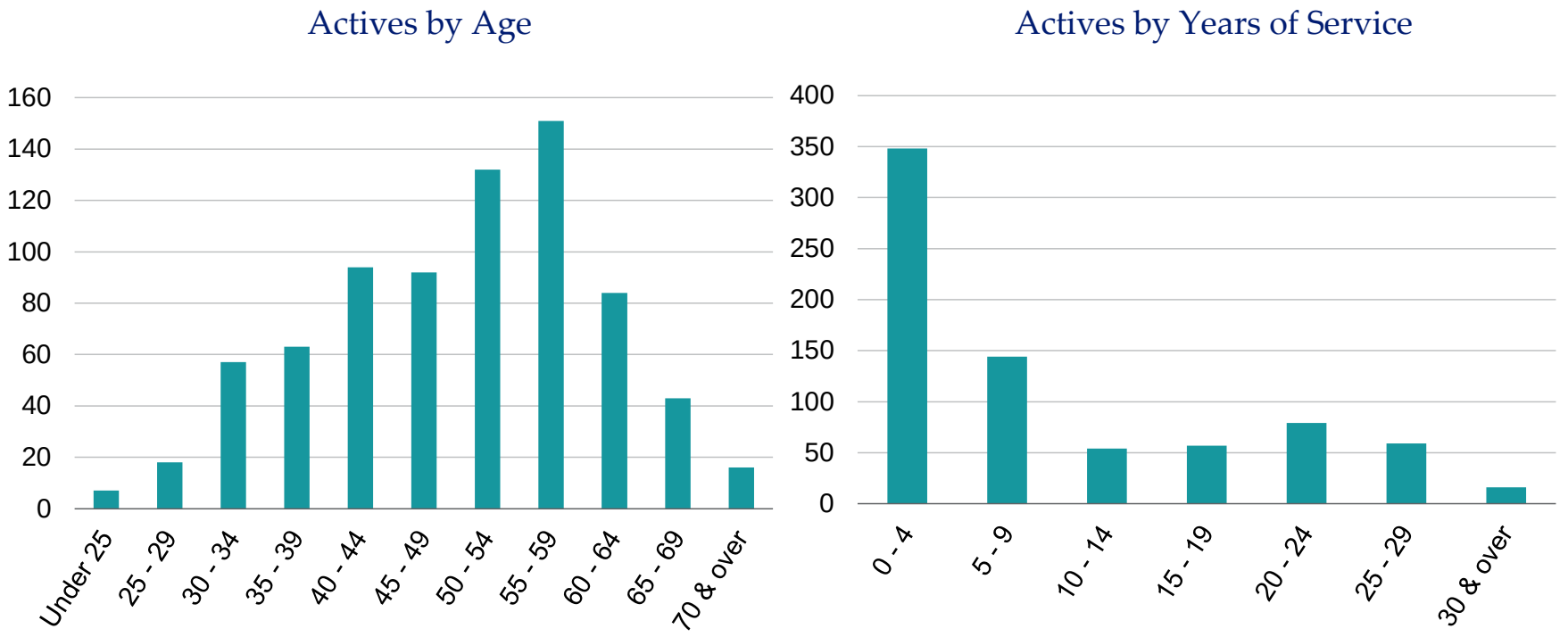
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
In Pay Status[1]	2,165	2,141	2,094	2,028	1,969	1,926	1,866	1,801	1,713	1,627
Inactive Vested[2]	27	33	35	33	37	36	35	34	33	44
Active[3]	737	698	799	738	734	662	758	770	799	757
Ratio	2.97	3.11	2.66	2.79	2.73	2.96	2.51	2.38	2.19	2.21

[1]Beginning in 2022, counts do not include suspended retirees and beneficiaries.
[2]Excludes terminated participants due a refund of employee contributions
[3]Excludes participants receiving Workers' Compensation benefits

Active participants

As of June 30,	2022	2021	Change
Active participants	757	799	-5.3%
Average age	50.5	49.8	0.7 years
Average years of service	9.9	9.7	0.2 years
Average compensation	$33,228	$31,157	6.6%

Distribution of Active Participants as of June 30, 2022



Inactive participants

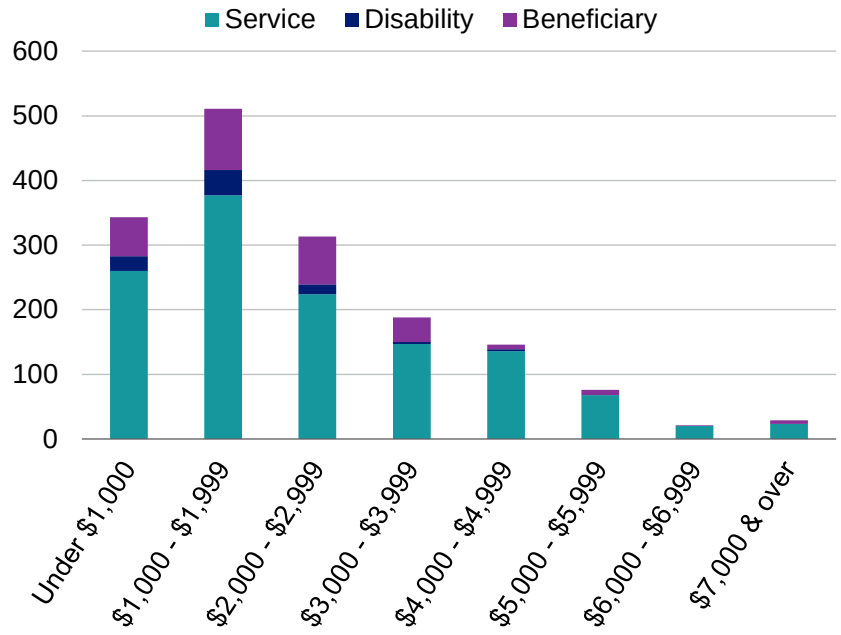
- In this year's valuation, there were 44 inactive participants with a vested right to a deferred or immediate vested benefit.
- In addition, there were 306 inactive participants entitled to a return of their employee contributions. This is an increase of over 30% from the prior year count.

Retired participants and beneficiaries

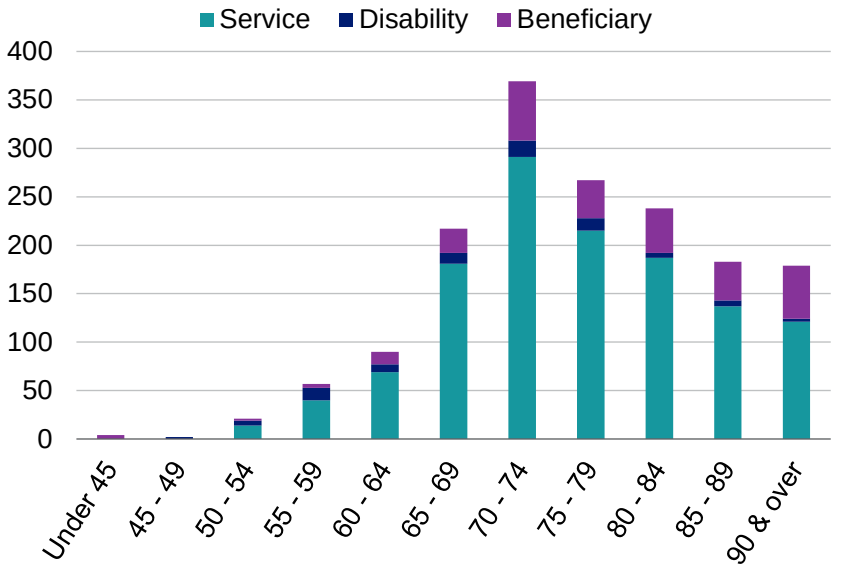
As of June 30,	2022	2021	Change
Retired participants	1,338	1,420	-5.8%
Beneficiaries	289	293	-1.4%
Average age	76.9	76.8	0.1 years
Average amount	$2,353	$2,293	2.6%
Total monthly amount	$3,828,325	$3,928,537	-2.6%

Distribution of Retired Participants and Beneficiaries as of June 30, 2022

By Type and Monthly Amount



By Type and Age



Historical plan population

Participant Data Statistics: 2013 – 2022

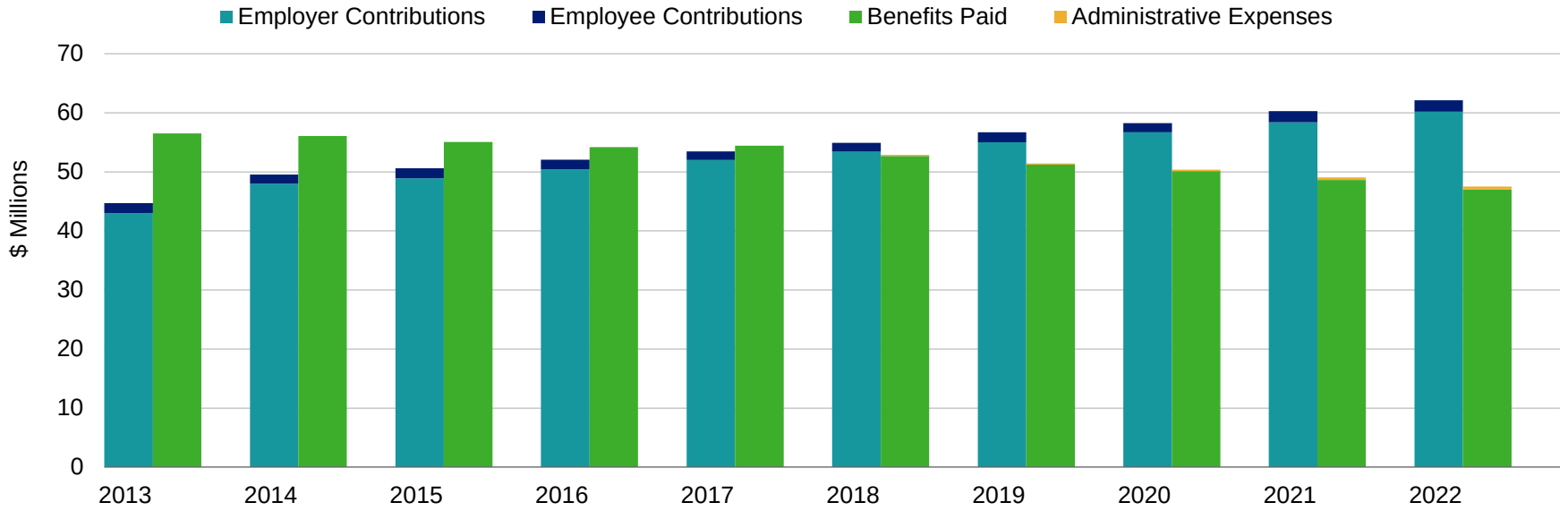
	Active Participants			Retired Participants and Beneficiaries		
Year Ended June 30	Count	Average Age	Average Service	Count[1]	Average Age	Average Monthly Amount
2013	737	50.3	13.6	2,165	74.7	$2,106
2014	698	50.6	13.8	2,141	75.0	2,128
2015	799	49.4	11.8	2,094	75.4	2,149
2016	738	49.9	12.2	2,028	75.6	2,149
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

[1]Beginning in 2022, counts do not include suspended retirees and beneficiaries.

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 Made with Benefits and Expenses Paid for Years Ended June 30, 2013 - 2022[1]



[1]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.

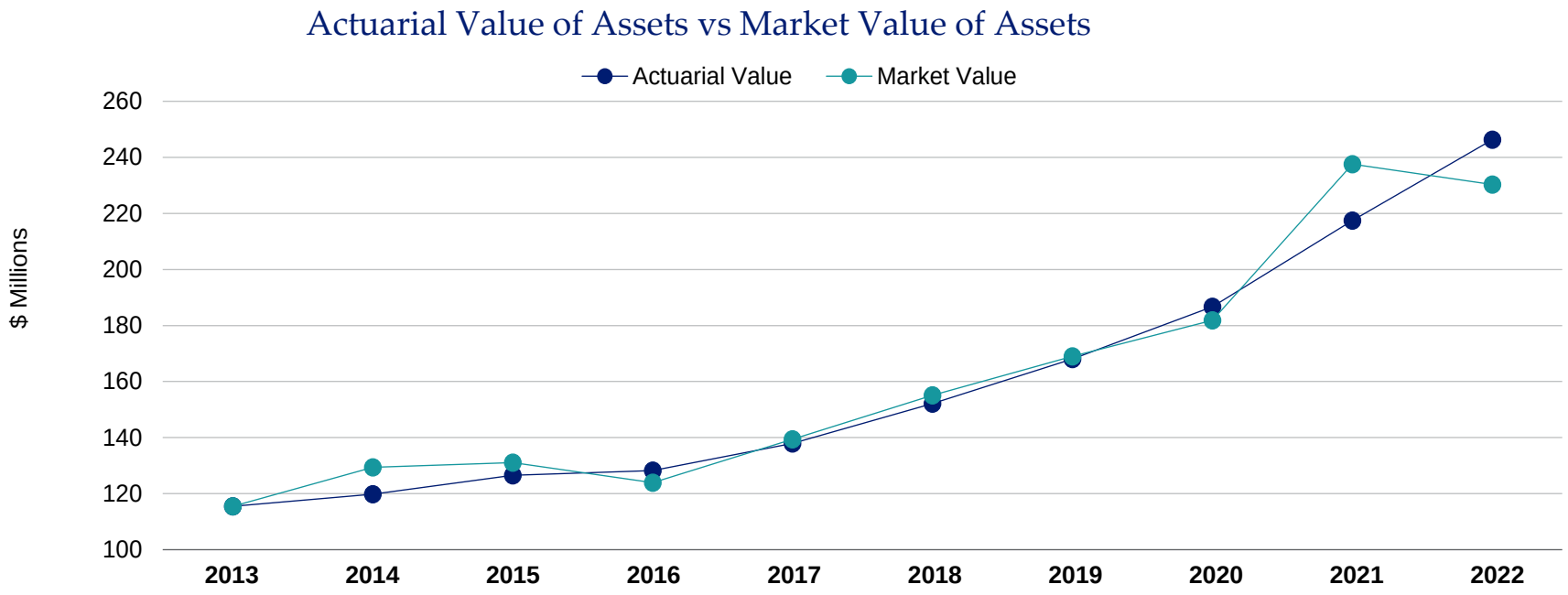
Determination of Actuarial Value of Assets for Year Ended June 30, 2022

1	Market value of assets, June 30, 2022				$230,284,000
2	Calculation of unrecognized return	**Original Amount[1]**	**Percent Deferred[2]**	**Unrecognized Amount[3]**	
	(a) Year ended June 30, 2022	-$39,008,990	80%	-$31,207,192	
	(b) Year ended June 30, 2021	31,368,200	60%	18,820,920	
	(c) Year ended June 30, 2020	-7,618,295	40%	-3,047,318	
	(d) Year ended June 30, 2019	-2,796,751	20%	-559,350	
	(e) Year ended June 30, 2018	3,512,420	0%	0	
	(f) Total unrecognized return				-$15,992,940
3	Preliminary actuarial value: (1) - (2f)				246,276,940
4	Adjustment to be within 20% corridor				0
5	Final actuarial value of assets as of June 30, 2022: (3) + (4)				$246,276,940
6	Actuarial value as a percentage of market value: (5) ÷ (1)				106.94%
7	Amount deferred for future recognition: (1) - (5)[4]				-$15,992,940

[1]Total return minus expected return on a market value basis
[2]Percent deferred applies to the current valuation year
[3]Recognition at 20% per year over five years
[4]Deferred return as of June 30, 2022 recognized in each of the next four years:

(a) Amount recognized on June 30, 2023	-$3,611,167
(b) Amount recognized on June 30, 2024	-3,051,817
(c) Amount recognized on June 30, 2025	-1,528,158
(d) Amount recognized on June 30, 2026	-7,801,798

Asset history for years ended June 30

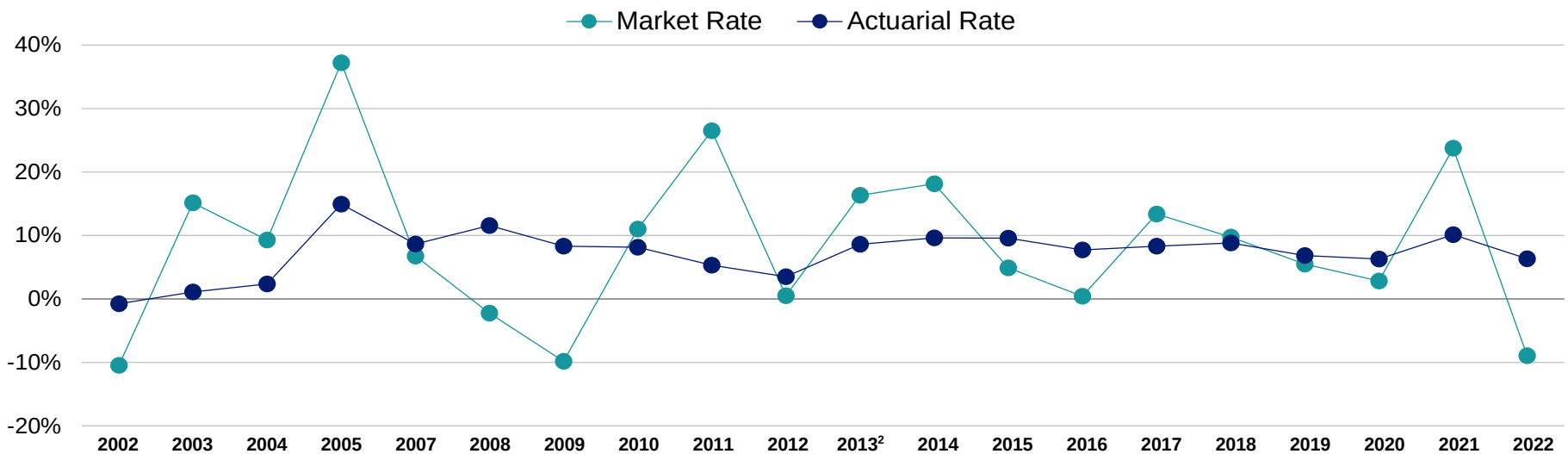


	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Actuarial Value[1]	$115.51	$119.81	$126.60	$128.26	$137.89	$152.19	$168.01	$186.72	$217.45	$246.28
Market Value[1]	115.51	129.35	131.13	123.88	139.40	155.11	169.00	181.81	237.56	230.28
Ratio	1.00	0.93	0.97	1.04	0.99	0.98	0.99	1.03	0.92	1.07

[1]In $ millions

Historical investment returns

Market and Actuarial Rates of Return for Years[1] Ended June 30, 2002 - 2022



	2002	2003	2004	2005	2007	2008	2009	2010	2011	2012	2013[2]	2014	2015	2016	2017	2018	2019	2020	2021	2022
Market rate	-10.43%	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%
Actuarial rate	-0.75%	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%
Assumed rate	8.00%	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%

Average Rates of Return	Actuarial Value	Market Value
Most recent five-year average return:	7.63%	5.52%
Most recent ten-year average return:	8.08%	7.38%
Most recent fifteen-year average return:	7.93%	6.38%
Twenty-year average return:	7.56%	7.35%

[1]Prior to 2007, financial information was based on 12-month periods ending December 31.
[2]Actuarial value rate of return before method change.

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, 2022

1	Gain/(loss) from investments[1]	-$1,501,167
2	Gain/(loss) from administrative expenses	-271,905
3	Net gain/(loss) from other experience	614,123
4	Net experience gain/(loss): **1 + 2 + 3**	-$1,158,949

[1]Details on next page

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, 2022	
		Market Value	**Actuarial Value**
1	Net investment income	-$21,869,000	$14,231,307
2	Average value of assets	244,857,000	224,749,633
3	Rate of return: **1 ÷ 2**	-8.93%	6.33%
4	Assumed rate of return	7.00%	7.00%
5	Expected investment income: **2 x 4**	17,139,990	15,732,474
6	Investment gain/(loss): **1 - 5**	-$39,008,990	-$1,501,167

Non-investment experience

Administrative expenses

Administrative expenses for the year ended June 30, 2022 totaled $489,000, as compared to the assumption of $218,617 as of the beginning of the year. This resulted in an experience loss of $271,905 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 gain from this other experience for the year ended June 30, 2022 amounted to $614,123, which is 0.1% of the actuarial accrued liability. Overall, the liability gain was not significant.

Actuarial assumptions

- There are no 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.

Unfunded Actuarial Accrued Liability

Development of Unfunded Actuarial Accrued Liability for Year Ended June 30, 2022

1	Unfunded actuarial accrued liability at beginning of year	$297,631,167
2	Normal cost at beginning of year	5,079,183
3	Total expected contributions	-62,119,000
4	Interest on 1, 2 & 3	19,015,560
5	Expected unfunded actuarial accrued liability	$259,606,910
6	Change due to experience gains and losses	$1,158,949
7	Unfunded actuarial accrued liability at end of year	$260,765,859

Actuarially determined contribution

The actuarially determined contribution for the 2023-2024 fiscal year is $63,800,000, 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 2027-2028 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 for Fiscal Year Beginning July 1

		2023	2022
		Amount	Amount
1	Total normal cost	$5,222,895	$4,860,566
2	Administrative expenses	223,536	218,617
3	Expected employee contributions	-1,922,649	-1,897,431
4	Employer normal cost: (1) + (2) + (3)	$3,523,782	$3,181,752
5	Actuarial accrued liability	$507,042,799	$515,084,800
6	Actuarial value of assets	246,276,940	217,453,633
7	Unfunded actuarial accrued liability: (5) - (6)	$260,765,859	$297,631,167
8	Payment on projected unfunded actuarial accrued liability	56,357,566	55,010,153
9	Adjustment for timing[1]	3,918,652	3,808,095
10	Actuarially determined contribution: (4) + (8) + (9)	$63,800,000	$62,000,000

[1]Actuarially determined contributions are assumed to be paid at the middle of every year. Calculated as {[(4) + (8)] x [1.07 ^ 0.50] x 1.03} – (4) – (8).

History of employer contributions

History of Employer Contributions: 2014 – 2023

Year Ended June 30	Actuarially Determined Employer Contribution (ADC)	Actual Employer Contribution	Percent Contributed
2014	$47,435,217	$48,000,000	101.19%
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	--	--

Risk

The actuarial valuation results are dependent on a single set of assumptions; however, there is a risk that emerging results may differ significantly as 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
  - Lingering direct and indirect effects of the COVID-19 pandemic
- 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 0.94%, or about $2,448,570, disregarding the asset smoothing method.

  The market value rate of return over the last 20 years has ranged from a low of -10.43% in 2002 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 Fund'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 $1,649,649 in 2020 to a gain of $6,004,468 in 2021.
  - The funded percentage on the market value of assets has ranged from a low of 17.81% as of July 1, 2013 to a high of 46.12% as of July 1, 2021.
  - The funded percentage on the actuarial value of assets has ranged from a low of 17.81% as of July 1, 2013 to a high of 48.57% as of July 1, 2022.
- 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 2.21.

  For the prior year, benefits paid and administrative expenses were $14,591,000 less than contributions received. The contribution policy adopted by the School Board is helping to mitigate maturity risk due to the steadily increasing annual contributions being paid.
- 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.

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

	2022	2021
Actuarial accrued liability (AAL)		
Active member contributions	$21,000,602	$14,931,298
Retirees and beneficiaries	428,072,851	438,925,993
Active and inactive members (employer-financed)	57,969,346	61,227,509
Total	$507,042,799	$515,084,800
Actuarial value of assets	246,276,940	217,453,633
Cumulative portion of AAL covered		
Active member contributions	100.00%	100.00%
Retirees and beneficiaries	52.63%	46.14%
Active and inactive members (employer-financed)	0.00%	0.00%

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

	Year Ended	
	June 30, 2022	**June 30, 2021**
Liabilities		
Present value of benefits for retired participants and beneficiaries	$428,072,851	$438,925,993
Present value of benefits for inactive vested participants	2,905,734	2,042,107
Present value of benefits for active participants	111,414,841	108,403,488
Total liabilities	$542,393,426	$549,371,588
Assets		
Total valuation value of assets	$246,276,940	$217,453,633
Present value of future contributions by members	13,408,501	13,666,383
Present value of future employer contributions for:		
Entry age cost	21,942,126	20,620,405
Unfunded actuarial accrued liability	260,765,859	297,631,167
Total of current and future assets	$542,393,426	$549,371,588

Actuarial Present Value of Accumulated Plan Benefits

The actuarial present value of accumulated plan benefits is shown below as of July 1, 2022 and as of July 1, 2021.

Actuarial Present Value of Accumulated Plan Benefits

	Benefit Information Date	
	July 1, 2022	**July 1, 2021**
Actuarial present value of vested accumulated plan benefits:		
➢ Participants currently receiving payments	$428,072,851	$438,925,993
➢ Other vested benefits	57,350,674	53,131,623
➢ Total vested benefits (PVVB)	485,423,525	492,057,616
Actuarial present value of non-vested accumulated plan benefits	6,164,352	5,419,957
Total actuarial present value of accumulated plan benefits (PVAB)	$491,587,877	$497,477,573
Actuarial Value of Assets (AVA)	$246,276,940	$217,453,633
Market Value of Assets (MVA)	$230,284,000	$237,561,000
Funded Ratios (PVVB):		
➢ AVA as a percentage of present value of vested accumulated benefits	50.73%	44.19%
➢ MVA as a percentage of present value of vested accumulated benefits	47.44%	48.28%
Funded Ratios (PVAB):		
➢ AVA as a percentage of present value of accumulated benefits	50.10%	43.71%
➢ MVA as a percentage of present value of accumulated benefits	46.84%	47.75%

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	$7,972,239
Benefits paid	-47,039,000
Interest	33,177,065
Total	-$5,889,696

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 5.0 years for FY 2023. 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 June 30 2022	2021	Change From Prior Year
Active participants in valuation:			
Number	757	799	-5.3%
Average age	50.5	49.8	0.7 years
Average years of service	9.9	9.7	0.2 years
Projected total payroll	$25,153,733	$24,894,564	1.0%
Projected average payroll	33,228	31,157	6.6%
Account balances[1]	21,000,602	14,931,298	40.6%
Total active vested participants	409	419	-2.4%
Inactive participants			
• Inactive vested participants	44	33	33.3%
• Inactive nonvested participants due a refund	306	231	32.5%
Retired participants:			
Number in pay status	1,255	1,333	-5.9%
Average age	76.6	76.4	0.2 years
Average monthly benefit	$2,452	$2,394	2.4%
Disabled participants:			
Number in pay status	83	87	-4.6%
Average age	70.0	71.4	-1.4 years
Average monthly benefit	$1,597	$1,524	4.8%
Beneficiaries:			
Number in pay status	289	293	-1.4%
Average age	79.8	80.3	-0.4 years
Average monthly benefit	$2,138	$2,064	3.6%

[1]Account balances for 2022 include interest. Account balances for 2021 were provided without interest.

Exhibit B: Participants in Active Service as of June 30, 2022 by Age, Years of Service, and Average Compensation[1]

		Years of Service							
Age	**Total**	**0 - 4**	**5 - 9**	**10 - 14**	**15 - 19**	**20 - 24**	**25 - 29**	**30 - 34**	**35 & over**
Under 25	7	7	- -	- -	- -	- -	- -	- -	- -
	$22,464	$22,464	- -	- -	- -	- -	- -	- -	- -
25 - 29	18	18	- -	- -	- -	- -	- -	- -	- -
	27,095	27,095	- -	- -	- -	- -	- -	- -	- -
30 - 34	57	47	10	- -	- -	- -	- -	- -	- -
	26,207	24,105	$36,090	- -	- -	- -	- -	- -	- -
35 - 39	63	45	13	2	3	- -	- -	- -	- -
	26,921	26,339	29,449			- -	- -	- -	- -
40 - 44	94	51	25	10	5	3	- -	- -	- -
	31,333	28,233	31,855	43,016	33,369		- -	- -	- -
45 - 49	92	38	26	6	8	9	5	- -	- -
	35,666	31,076	35,264	45,044	37,697	43,767	$43,552	- -	- -
50 - 54	132	51	23	6	16	19	15	2	- -
	37,362	33,185	43,847	54,845	38,984	35,184	34,812		- -
55 - 59	151	47	23	12	12	30	18	9	- -
	34,939	31,619	34,009	44,437	36,534	33,253	34,644	46,081	- -
60 - 64	84	26	11	10	7	14	13	2	1
	34,621	31,239	30,682	40,593	30,549	32,241	43,009		
65 - 69	43	14	9	5	4	4	7	- -	- -
	34,005	27,597	30,658	46,851			44,371	- -	- -
70 & over	16	4	4	3	2	- -	1	1	1
	32,144								
Total	757	348	144	54	57	79	59	14	2
	$33,228	$28,858	$34,436	$44,018	$35,382	$35,041	$38,240	$45,338	

[1]Compensation is annualized for those hired during the prior plan year.

Exhibit C: Reconciliation of Participant Data

	Active Participants	Inactive Vested Participants[1]	Disableds	Retired Participants	Beneficiaries	Total
Number as of July 1, 2021	**799**	**33**	**87**	**1,333**	**293**	**2,545**
New participants[2]	91	N/A	N/A	N/A	N/A	91
Terminations – with vested rights	-14	14	0	0	0	0
Terminations – without vested rights	-49	N/A	N/A	N/A	N/A	-49
Retirements	-22	0	N/A	22	N/A	0
New disabilities	-4	0	4	N/A	N/A	0
Return to work	0	0	0	0	N/A	0
Deceased	-6	0	-9	-96	-24	-135
New beneficiaries	0	0	0	0	23	23
Lump sum cash-outs	-37	-3	0	0	0	-40
Rehire	0	0	N/A	0	N/A	0
Certain period expired	N/A	N/A	0	0	0	0
Data adjustments[3]	-1	0	1	-1	0	-1
Exclusion of suspended participants	0	0	0	-3	-3	-6
Number as of July 1, 2022	**757**	**44**	**83**	**1,255**	**289**	**2,428**

[1]Excludes terminated participants with contributions remaining in the Fund.
[2]Two of the 91 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.
[3]The following data adjustments were made per the TPA:
One active participant was deemed a non-participant;
One healthy retiree was deemed a disabled annuitant.

Exhibit D: Summary Statement of Income and Expenses on a Market Value Basis

	Year Ended June 30, 2022		Year Ended June 30, 2021	
Net assets at market value at the beginning of the year		$237,561,000		$181,808,000
Contribution and other income:				
Employer contributions	$60,200,000		$58,400,000	
Employee contributions	1,919,000		1,857,000	
Total contribution income		*$62,119,000*		*$60,257,000*
Other income		$1,000		$60,000
Investment income:				
Investment income	-$21,348,000		$44,925,000	
Less investment fees	-521,000		-436,000	
Net investment income		*-$21,869,000*		*$44,489,000*
Total income available for benefits		**$40,251,000**		**$104,806,000**
Less benefit payments and administrative expenses:				
Administrative expenses	-$489,000		-$426,000	
Pension payments	-47,039,000		-48,627,000	
Net benefit payments and administrative expenses		*-$47,528,000*		*-$49,053,000*
Change in reserve for future benefits		**-$7,277,000**		**$55,753,000**
Net assets at market value at the end of the year		**$230,284,000**		**$237,561,000**

Exhibit E: Asset Allocation as of June 30, 2022

		General Employees	School Board	Total
1.	**Market value of assets as of July 1, 2021**	**$1,672,138,000**	**$237,561,000**	**$1,909,699,000**
2.	Employer contributions	$51,750,000	$60,200,000	$111,950,000
3.	Employee contributions	18,552,000	1,919,000	20,471,000
4.	Other income not in yields	100,000	1,000	101,000
5.	Total contributions and other income: (2) + (3) + (4)	$70,402,000	$62,120,000	$132,522,000
6.	Benefit payments and refunds	-$137,137,000	-$47,039,000	-$184,176,000
7.	Administrative expenses	-1,838,000	-489,000	-2,327,000
8.	Total benefit payments and expenses: (6) + (7)	-$138,975,000	-$47,528,000	-$186,503,000
9.	Net cash flow: (5) + (8)	-$68,573,000	$14,592,000	-$53,981,000
10.	Net investment return	-199,617,000	-21,869,000	-221,486,000
11.	**Market value of assets as of July 1, 2022: (1) + (9) + (10)**	**$1,403,948,000**	**$230,284,000**	**$1,634,232,000**

Exhibit F: Development of the Fund through June 30, 2022

Year Ended June 30	Employer Contributions	Employee Contributions	Net Investment Return[1]	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
2013	$43,013,000	$1,689,000	$17,035,000	$0	$56,511,000	$115,509,000	$115,509,000	100.00%
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[2]	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[3]	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%

[1]On a market basis, net of investment fees and administrative expenses; includes other income not in yields
[2]Includes -$5,706,000 asset adjustment
[3] Includes -$155,000 asset adjustment

Section 4: Actuarial Valuation Basis

Exhibit I: 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 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, 2022, the assumed annual expense is $223,536.

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

Section 4: Actuarial Valuation Basis

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
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 (%)[1]					
	Healthy		Disabled		Contingent Survivors	
Age	Male	Female	Male	Female	Male	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

[1]Rates shown do not include generational projection.

Section 4: Actuarial Valuation Basis

Termination Rates Before Retirement:

	Rate (%)				
	Mortality[1]		Disability		Withdrawal[2]
Age	Male	Female	Male	Female	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

[1]Rates shown do not include generational projection
[2]Withdrawal rates are amount-weighted and do not apply at or beyond the later of age 50 and 5 years of service

Retirement Rates:

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

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 annualized.

Section 4: Actuarial Valuation Basis

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 62.3, 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, 2022 actuarial valuation.
Percent Married:	Assumption based on active participant contribution rate provided with valuation data
Form of Payment:	Married participants are assumed to elect a 75% joint and survivor annuity. Unmarried participants are 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.
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.
Justification for Change in Actuarial Assumptions:	There have been no changes in actuarial assumptions since the last valuation.

Exhibit II: 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	• 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 *and* 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 Disabled Participants

- 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
- 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.

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[1]
Less than 5	0%
5	25
6	30
7	35
8	40
9	45
10 or more	100

[1]A participant is always 100% vested in his/her contributions to the Fund.

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.

Section 4: Actuarial Valuation Basis

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 as 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 Georgia Teachers' Retirement System or the Employees' Retirement System of Georgia.

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 Provision:

- 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:

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 (APV):	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: Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.) Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and Discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Appendix A: Definition of Pension Terms

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 (AVA):	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 (ADC):	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.

Appendix A: Definition of Pension Terms

Assumptions or Actuarial Assumptions:	The estimates upon which the cost of the Plan is calculated, including: Investment return - the rate of investment yield that the Plan will earn over the long-term future; Mortality rates - the rate or probability of death at a given age for employees and retirees; Retirement rates - the rate or probability of retirement at a given age or service; Disability rates - the rate or probability of disability retirement at a given age; Withdrawal rates - the rate or probability at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement; Salary increase rates - the rates of salary increase due to inflation, real wage growth and merit and promotion increases.
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.

Appendix A: Definition of Pension Terms

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.
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.