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Report of the Actuary on the Annual Valuation of the Gwinnett County Defined Benefit Plan

Prepared as of January 1, 2024

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April 18, 2024

Board of Trustees
Gwinnett County Defined Benefit Plan
75 Langley Drive
Lawrenceville, GA 30046

Dear Members of the Board:

We are pleased to submit herewith the results of the annual actuarial valuation of the Gwinnett County Defined Benefit Plan prepared as of January 1, 2024. The purpose of this report is to provide a summary of the funded status of the System as of January 1, 2024 and recommend employer contributions for fiscal year ending 2025. Financial reporting requirements prescribed by Governmental Accounting Standards Board Statements Nos. 67 and 68 will be provided in separate reports. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

Since the previous valuation, the amortization period was changed from a single base over a closed period to layered amortization over 15-year amortization periods. The unfunded actuarial accrued liability (UAAL) as of January 1, 2024 is the Transitional UAAL. Each subsequent valuation will produce a New Incremental UAAL consisting of all benefit, assumption and method changes and experience gains and/or losses that have occurred since the previous valuations and will be amortized over a closed 15-year period beginning with the year it is incurred. The actuarially determined contribution (ADC) for the fiscal year ending 2025 is $45,928,627.

In determining the County's contribution requirement, we have included interest to reflect our understanding that the County makes bi-weekly contributions throughout the fiscal year. In the table below we present the County's contribution requirements if the County pays the full amount on January 1, 2025 or in bi-weekly installments throughout the 2025 fiscal year.

County contribution payable January 1, 2025	$44,312,449
Interest for bi-weekly payments during 2025 fiscal year	$1,616,178
County contribution payable in bi-weekly installments	$45,928,627

Actuarial Standard of Practice Number 4 (ASOP 4) requires the disclosure of a reasonable Actuarial Determined Contribution (ADC). Based on the assumptions and methods used in this report, the ADC is reasonable with respect to ASOP 4.

The plan's unfunded liability was projected to be $306,724,924 as of January 1, 2024, taking into account plan sponsor contributions from all sources of $53,661,000 for the year ended December 31, 2023. The actual unfunded liability is $316,949,825. The increase of $10,224,901 in the unfunded liability is primarily due to members retiring earlier than expected, larger than expected salary increases, and the change in termination rates. Further discussion of the change in the County's unfunded liability is shown in Section II.

The promised benefits of the Plan are included in the actuarially calculated employer contributions which are developed using the entry age normal cost method beginning with the January 1, 2020 valuation. Each year gains and losses are reflected in the unfunded accrued liability and are amortized by regular annual contributions as a level dollar amount over a 15-year period (beginning with the January 1, 2024 valuation). Since the previous valuation, the termination rates have been reduced by 20% of the rates in effect prior to January 1, 2021. The assumptions recommended by the actuary are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan. See the actuarial assumptions in Section VIII for more detail on the tables used.

Assuming that the actuarially determined contributions to the Plan are made by the County from year to year in the future at the contributions recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the Plan may be safely anticipated.

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

Future actuarial results may differ significantly from the current results 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 (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In addition, I certify that I am a member of the American Academy of Actuaries, that I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein, that I have experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with the standards of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actuarial experience of the Plan.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Plan.

Respectfully submitted,

Todd B. G

Todd Green ASA, EA, FCA, MAAA
President
Enrolled Actuary No. 23-8883

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Section I - Summary of Principal Results

For convenience of reference, the principal results of the current valuation are summarized below.

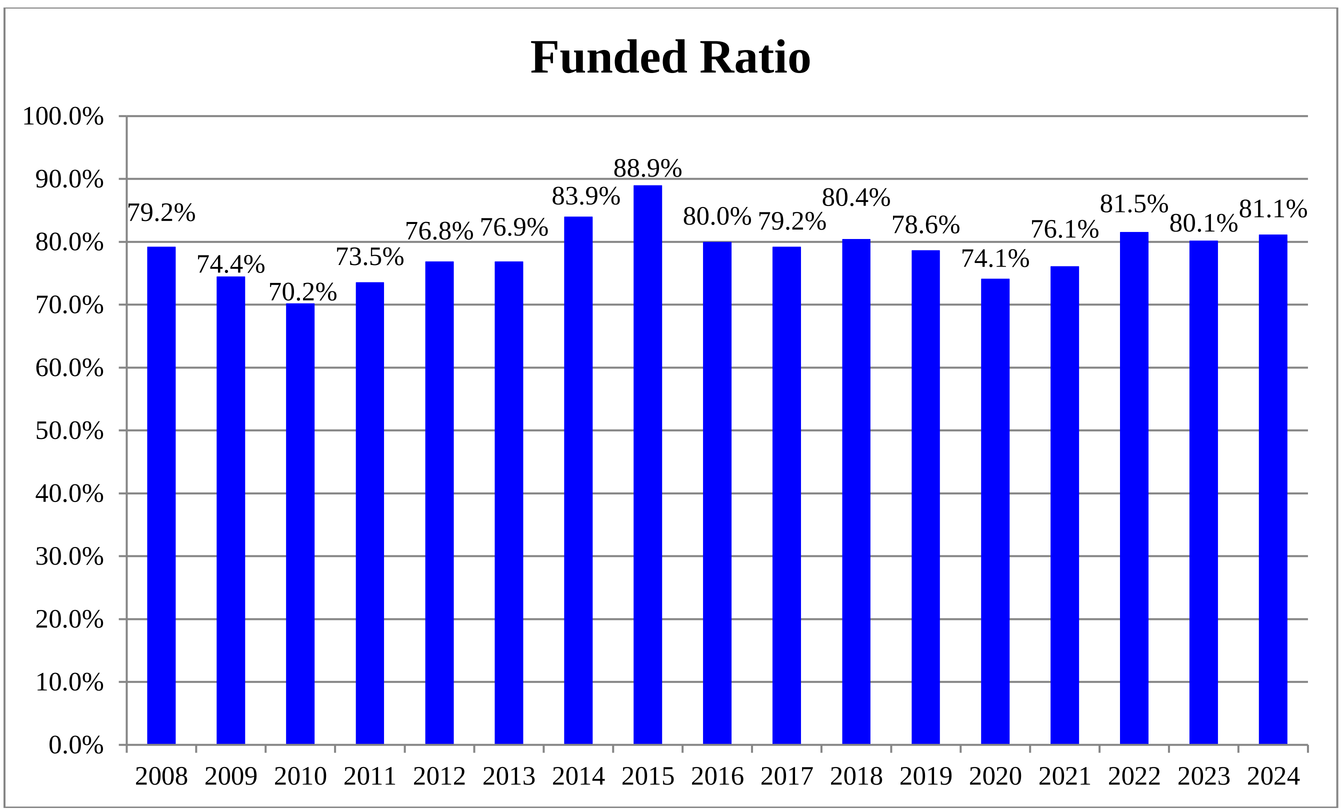
Valuation Date	January 1, 2024	January 1, 2023
Active Members:		
a. Number	638	730
b. Covered compensation	$ 72,223,997	$ 78,394,110
Retired Members, Disableds and Beneficiaries:		
a. Number	2,862	2,776
b. Total Annual Benefits	$ 99,038,900	$ 93,731,075
Number of Terminated Vested Members	673	704
Assets:		
a. Market Value	$ 1,288,515,000	$ 1,152,126,000
b. Actuarial Value	$ 1,363,114,000	$ 1,314,410,000
Actuarial Accrued Liability	$ 1,680,063,825	$ 1,640,292,319
Unfunded actuarial accrued liability (UAAL)	$ 316,949,825	$ 325,882,319
Amortization Period	15 years	10 years
Fiscal Year Ending	December 31, 2025	December 31, 2024
Total Actuarially Determined Contribution (ADC)		
a. Normal Cost	$ 12,398,510	$ 12,221,222
b. UAAL Amortization Payment	32,522,792	43,362,907
c. Administrative Expenses	1,036,000	461,000
d. Interest Adjustment	4,833,189	5,894,095
e. Total ADC	$ 50,790,491	$ 61,939,224
Total ADC		
a. Required County Contribution	$ 45,928,627	$ 56,678,727
b. Expected Employee Contribution	4,861,864	5,260,497
c. Total ADC	$ 50,790,491	$ 61,939,224

Section I - Summary of Principal Results

A. The promised benefits of the Gwinnett County Defined Benefit Plan are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method. Gains and losses are reflected in the unfunded accrued liability and are being amortized by regular annual contributions as a level dollar amount over a 15-year period. The plan was closed to new participants effective January 1, 2007. The assumptions recommended by the actuary are in the aggregate reasonably related to the experience under the Plan and to reasonable expectations of anticipated experience under the Plan.

The unfunded actuarial accrued liability (UAAL) as of January 1, 2024 is the Transitional UAAL. Each subsequent valuation will produce a New Incremental UAAL consisting of all benefit, assumption and method changes and experience gains and/or losses that have occurred since the previous valuations and will be amortized over a closed 15-year period beginning with the year it is incurred. The actuarially determined contribution for the fiscal year ending 2025 is $45,928,627.

The following table represents the County's historical funded ratio. The funded ratio represents the percentage of the plan liability that is covered by the actuarial value of plan assets as of the valuation date.



B. The major benefit and contribution provisions of the County as reflected in the valuation are summarized in Section IX. There have been no changes since the previous valuation.

C. Section VIII of this report outlines the full set of actuarial assumptions and methods used in the valuation. Since the previous valuation, the termination rates have been reduced by 20% of the rates in effect prior to January 1, 2021, and the Board has adopted a 15-year layered amortization policy to pay off the unfunded accrued liability.

D. The entry age normal cost method was used to prepare the valuation. Section VIII contains a brief description of the actuarial cost method.

E. Comments on the valuation results as of January 1, 2024 are given in Section I and further discussion of the contributions is set out in Section II.

Contributions Payable

A. The Gwinnett County Defined Benefit Plan states that each member shall contribute an amount equal to the Member's Compensation multiplied by a specified percentage based on the contribution rates associated with Schedules B and C of the plan. As of January 1, 2024, the estimated employee contributions are $4,861,864.

B. The County contribution for the 2025 fiscal year consists of three components. The first component is the normal cost which includes administrative expenses. Under the entry age normal cost method, the normal cost represents benefits that accrue over a one-year period. Thus, for this year's valuation, this number represents the value of benefits to accrue during the 2024 plan year. The normal cost is $13,434,510 which includes administrative expenses of $1,036,000. Of the $13,434,510 the employees pay $4,861,864 which leaves $8,572,646 as the employer normal cost.

C. The second component of the County contribution is an interest adjustment to reflect that the payment is determined on the valuation date and payable one year from the valuation date assuming contributions are deposited on a bi-weekly basis. This amount is $4,833,189. If the County chooses to pay the entire contribution on January 1, 2025 the interest adjustment will be reduced by $1,616,178.

D. The third component is the amortization of the unfunded liability. The unfunded liability is amortized on a level dollar basis over layered 15-year periods beginning January 1, 2024. On this basis, the amortization cost is $32,522,792.

E. The total actuarially determined contribution to the Plan for the 2025 fiscal year is $50,790,491. The employee portion of this contribution is $4,861,864, while the County's portion of this contribution is $45,928,627. Under the Official Code of Georgia 47-20-10 the minimum funding standards are deemed to have been met if the employer contribution is equal to or greater than the annual required contribution as determined in accordance with the provisions of GASB No. 25 and No. 27. The County's actuarially determined contribution satisfies Official Code of Georgia 47-20-10.

Assets

As of January 1, 2024 the total market value of assets amounted to $1,288,515,000. The actuarial value of assets used for the current valuation was $1,363,114,000. Section V shows the development of the actuarial value of assets as of January 1, 2024. The method for determining the Actuarial Value of Assets recognizes investment gains and losses over a five-year period. As of the valuation date, the market value of assets is $74,599,000 less than the actuarial value of assets, which indicates investment losses will be recognized over the next four years.

Comments on the Valuation

The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method set forth in Section VIII. The valuation shows that the System has a total actuarial accrued liability of $1,680,063,825. The liability on account of present retired members, beneficiaries of deceased members, and disabled members is $1,206,809,952. Terminated members account for $34,886,393 of the liability, and $438,367,480 of the actuarial accrued liability is associated with the active members. As of January 1, 2024, the System has actuarial value of assets of $1,363,114,000 against these liabilities.

There remains $316,949,825 as the amount of unfunded accrued liability. The amount necessary to fully amortize the unfunded liability over a 15-year period is $32,522,792. The development of the unfunded accrued liability is shown in Section II.

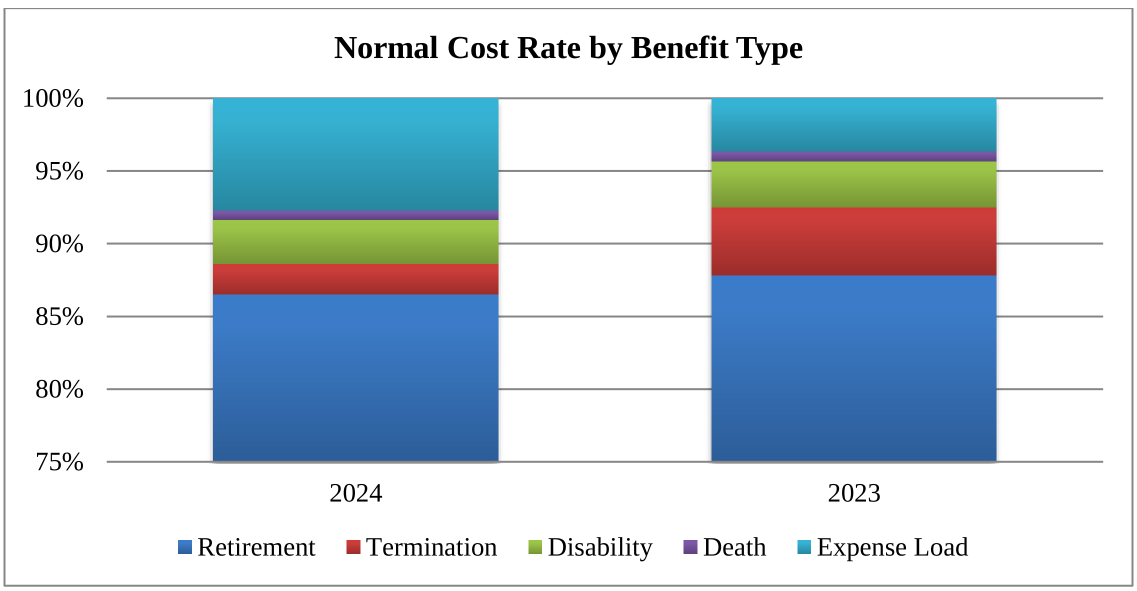
The normal cost contribution is equal to the actuarial present value of benefits accruing during the current year. For the 2024 plan year the normal cost contribution including expenses is determined to be $13,434,510 and is determined under the entry age normal method. An interest adjustment of $3,217,011 reflects that the actuarially determined contribution is determined on January 1, 2024 and payable one year from the valuation date. The additional interest adjustment of $1,616,178 reflects the County will contribute the contribution bi-weekly throughout the year. If the County elects to pay the actuarially determined contribution in full on January 1, 2025, the bi-weekly interest adjustment is not necessary.

Section II - Plan Contribution Development

Normal Cost

The Normal Cost represents active participant benefits that are to accrue during the 2024 plan year and is a component of the contribution. The following table shows the Normal Cost as it is attributable to plan benefits under the current plan.

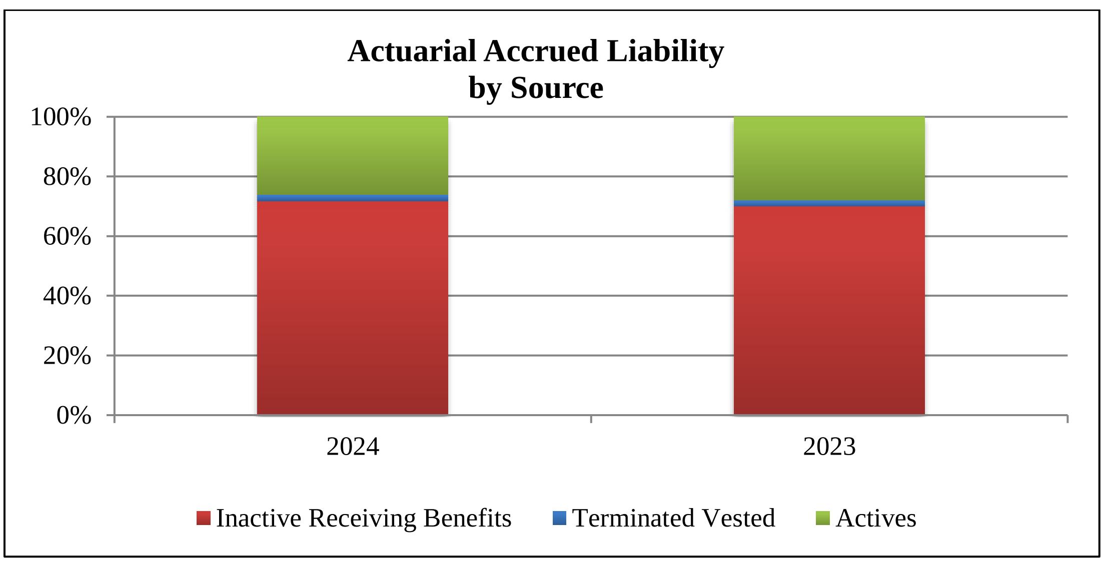
		January 1, 2024	January 1, 2023
1.	**Normal Cost**		
	a. Retirement Benefits	$ 11,623,779	$ 11,138,734
	b. Termination Benefits	284,083	593,856
	c. Disability Benefits	404,185	400,279
	d. Death Benefits	86,463	88,353
	e. Total	**$ 12,398,510**	**$ 12,221,222**
2.	**Expense Load**	**$ 1,036,000**	**$ 461,000**
3.	**Normal Cost as a Percent of Payroll**		
	(With the Expense Load)	**18.60%**	**16.18%**



Actuarial Accrued Liability

The Actuarial Accrued Liability represents the obligations of the plan as of the valuation date for active and inactive participant benefits. The following table shows the components of the liability.

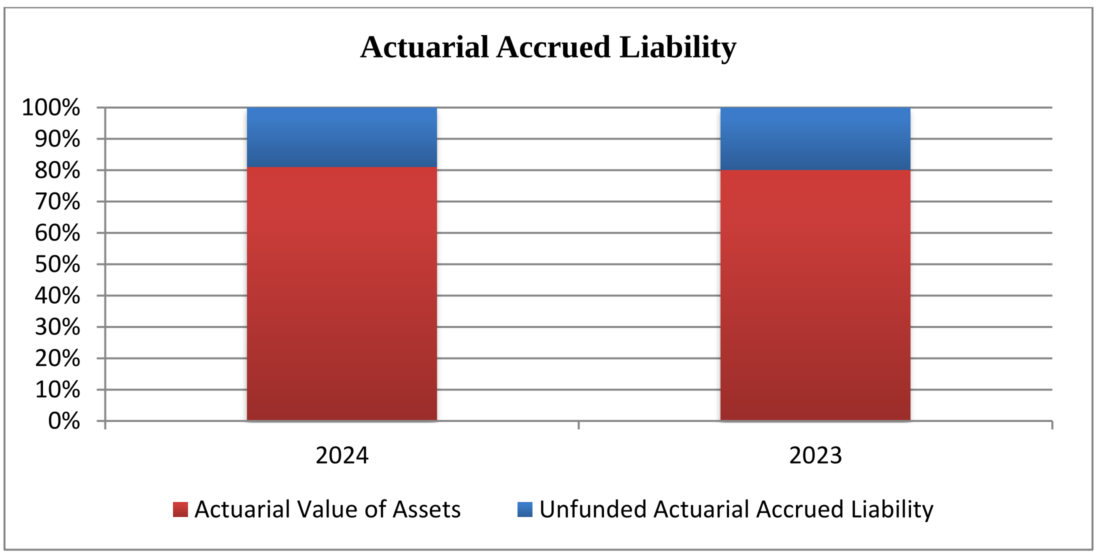
		January 1, 2024	January 1, 2023
1.	**Actuarial Accrued Liability**		
	a. Inactive Participants		
	i. Inactive Participants Receiving Benefits	$ 1,206,809,952	$ 1,148,270,075
	ii. Terminated Participant Benefits Deferred	34,886,393	35,462,485
	iii. Total Inactive Present Value	1,241,696,345	1,183,732,560
	b. Active Participants Liability	$ 438,367,480	$ 456,559,759
2.	**Total Actuarial Accrued Liability**	**$ 1,680,063,825**	**$ 1,640,292,319**



Development of the Unfunded Actuarial Accrued Liability

The Unfunded Actuarial Accrued Liability represents the Actuarial Accrued Liability over the Actuarial Value of Assets. The Unfunded Accrued Liability as of January 1, 2024 is $316,949,825, in other words, the plan liabilities exceed the plan assets by this amount as of the valuation date. The following table shows the components of the Unfunded Actuarial Accrued Liability of the plan.

		January 1, 2024	January 1, 2023
1.	**Actuarial Accrued Liability**		
	a. Present Active Members	$ 438,367,480	$ 456,559,759
	b. Present retired members, beneficiaries and former members entitled to deferred vested benefits	1,241,696,345	1,183,732,560
	c. Total	$ 1,680,063,825	$ 1,640,292,319
2.	**Actuarial Value of Assets**	$ 1,363,114,000	$ 1,314,410,000
3.	**Unfunded Actuarial Accrued Liability (1c) - (2)**	**$ 316,949,825**	**$ 325,882,319**



Section II - Plan Contribution Development

Development of the Actuarial Gain / (Loss)

The actuarial valuation process relies heavily on demographic and economic assumptions. Actuarial gains and losses occur from year to year when actual plan experience is different from assumed experience. Each year, new experience gains and losses are reflected in the Unfunded Actuarial Accrued Liability and are amortized over a closed 15-year period. Actuarial gains represent beneficial experience that reduces contribution rates while actuarial losses increase contribution rates. The table below develops the actuarial gains / (losses).

(1)	Unfunded Accrued Liability (UAL) as of January 1, 2023	$ 325,882,319
(2)	Normal Cost	12,682,222
(3)	Contributions	53,661,000
(4)	Interest	21,821,383
(5)	Expected UAL at January 1, 2024 (1) + (2) - (3) + (4)	306,724,924
(6)	Actual UAL at January 1, 2024	316,949,825
(7)	Total Gain / (Loss) (5) - (6)	(10,224,901)
(8)	Asset Gain / (Loss)	1,764,375
(9)	Assumption and Method Change	(156,942)
(10)	Liability Gain / (Loss) (7) - (8) - (9)	$ (11,832,334)

Development of the Actuarial Gain / (Loss)

1.	**Net Actuarial Gains/(Losses) During the 2023 Plan Year:**		
	a. Due to Salary	($4,172,767)	
	b. Due to Investment Performance	$1,764,375	
	c. Due to Turnover	$3,779,959	
	d. Due to New Retirements	($10,102,856)	
	e. Due to Mortality	($736,044)	
	f. Due to Disabled Retirements	($206,183)	
	g. Total		($9,673,516)
2.	**Changes During the 2023 Plan Year due to:**		
	a. Assumption changes	($156,942)	
	b. Method changes	$0	
	c. Plan changes	$0	
	d. Total change		($156,942)
3.	**Other Effects (including Data Adjustments)**		($394,443)
4.	**Total Gain / (Loss) as of January 1, 2024**		($10,224,901)

5. Comments on Gains/(Losses):

Salary/Service: Average salary increases of 5.8% compared to expected increases of 4.5%.
Investment Performance: 7.1% actual vs. 7.0% expected return on the actuarial value of assets.
Turnover: Net effect on the valuation liabilities of terminations of employment different from what was anticipated in the aggregate by the assumptions related to those events.
New retirements: Net effect of differences in expected vs. actual numbers of, and benefits for, new retirements and refund of employee contributions.
Assumption Changes: Termination Rates were reduced by 20% of the rates in effect prior to January 1, 2021
Method Changes: None
Plan Changes: None
Other Effects: Data adjustments, contribution timing, and differences between actual and expected benefit payments

Section III – Unfunded Liability Bases

Description	Original Amount	Outstanding Balance as of January 1, 2023	FYE 2024 Amortization Payment	Outstanding Balance as of January 1, 2024	FYE 2025 Amortization Payment	Years Remaining January 1, 2024
2024 Initial Unfunded Accrued Liability	$316,949,825			$316,949,825	$32,522,792	15 years
Total				**$316,949,825**	**$32,522,792**	

Date	Projected Unfunded Liability
January 1, 2024	$316,949,825
January 1, 2025	$304,336,925
January 1, 2026	$290,841,122
January 1, 2027	$276,400,613
January 1, 2039	$0

Section IV – Additional Disclosures

A. Plan Description:

The Gwinnett County Defined Benefit Plan is a single employer defined benefit plan and the contributing entity is Gwinnett County. The employees covered are general employees and public safety employees. The Plan provides retirement benefits to participants according to provisions of the plan document normally in the form of a life annuity. The Plan may be amended at any time, at the sole discretion of the County.

The distribution of the number of employees by type of membership is as follows:

Number of Participants as of January 1, 2024		
1.	Retired participants, disabled and beneficiaries currently receiving benefits	2,862
2.	Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	673
3.	Active Participants	638
4.	Total	4,173

Effective January 1, 2007 the plan is closed to new entrants.

Section IV – Additional Disclosures

B. Summary of Actuarial Methods and Assumptions:

Valuation date	January 1, 2024
Actuarial cost method	Entry Age Normal
Amortization method	Level Dollar
Amortization period	Closed
Remaining amortization period	15 years
Asset valuation method	Five-year smoothed market value
Actuarial assumptions:	
Investment rate of return (includes inflation)	7.00%
Projected salary increases (includes inflation)	4.50% - 5.50%
Price Inflation	2.50%
Wage Inflation	3.50%
Cost-of-living adjustments	1.00%
Payroll increase	0.00%

C. Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
January 1, 2024	$1,363,114,000	$1,680,063,825	$ 316,949,825	81.1%	$ 72,223,997	438.8%
January 1, 2023	$1,314,410,000	$1,640,292,319	$ 325,882,319	80.1%	$ 78,394,110	415.7%
January 1, 2022	$1,277,713,000	$1,567,610,426	$ 289,897,426	81.5%	$ 75,170,801	385.7%
January 1, 2021	$1,164,522,000	$1,529,469,600	$ 364,947,600	76.1%	$ 85,204,250	428.3%
January 1, 2020	$1,079,432,000	$1,456,369,484	$ 376,937,484	74.1%	$ 89,237,461	422.4%
January 1, 2019	$1,038,111,000	$1,319,949,399	$ 281,838,399	78.6%	$ 93,213,483	302.4%
January 1, 2018	$1,017,663,000	$1,265,966,714	$ 248,303,714	80.4%	$ 93,709,196	265.0%
January 1, 2017	$ 966,170,000	$1,220,296,657	$ 254,126,657	79.2%	$ 95,658,479	265.7%

Section V – Assets

Reconciliation of Market Value of Assets (in thousands)

1.	Market Value of Assets as of January 1, 2023	$1,152,126
2.	Adjustment	$ -
3.	Expenditures	
	a. Benefit Payments	$ (96,170)
	b. Administrative Expenses	(1,036)
	c. Total	$ (97,206)
4.	Income	
	a. Employer Contributions	$ 48,494
	b. Employee Contributions	5,167
	c. Total	$ 53,661
5.	Investment Income	
	a. Investment gains/losses	$ 184,519
	b. Investment expense	(4,585)
	c. Total	$ 179,934
6.	Market Value of Assets as of January 1, 2024	$1,288,515
7.	Rate of Return on Market Value of Assets	15.92%

Development of Actuarial Value of Assets (in thousands)

	Valuation Date January 1:	2023	2024	2025	2026	2027	2028
1.	Actuarial Value Beginning of Year	$ 1,277,713	$ 1,314,410				
2.	Market Value End of Year	1,152,126	1,288,515				
3.	Market Value Beginning of Year	$ 1,424,405	$ 1,152,126				
4.	Cash Flow						
	a. Contributions	$ 61,871	$ 53,661				
	b. Benefit Payments	(91,000)	(96,170)				
	c. Administrative Expenses	(461)	(1,036)				
	d. Investment Expenses	(4,731)	(4,585)				
	e. Net	$ (34,321)	$ (48,130)				
5.	Investment Income						
	a. Market Total	$ (237,958)	$ 184,519				
	b. Assumed Rate	7.00%	7.00%				
	c. Amount for Immediate Recognition	103,404	83,710				
	d. Amount for Phased-In Recognition	$ (341,362)	$ 100,809				
6.	Phased-In Recognition of Investment Income						
	a. Current Year: 0.20 *5d	$ (68,272)	$ 20,162	$ -	$ -	$ -	$ -
	b. First Prior Year	17,432	(68,272)	20,162	-	-	-
	c. Second Prior Year	14,713	17,432	(68,272)	20,162	-	-
	d. Third Prior Year	29,089	14,713	17,432	(68,272)	20,162	-
	e. Fourth Prior Year	(25,348)	29,089	14,713	17,432	(68,274)	20,161
	f. Total Recognized Investment Gain	$ (32,386)	$ 13,124	$ (15,965)	$ (30,678)	$ (48,112)	$ 20,161
7.	Actuarial Value End of Year	$ 1,314,410	$ 1,363,114				
8.	Difference Between Market & Actuarial Values	$ (162,284)	$ (74,599)	$ (58,629)	$ (27,951)	$ 20,161	$ -
9.	Rate of Return on Actuarial Value	5.25%	7.14%				

The actuarial value of assets recognizes assumed investment income (line 5c) fully each year. Differences between actual and assumed investment income (line 5d) are phased in over a closed 5-year period. During periods when investment performance exceeds the assumed rate, the actuarial value will tend to be less than market value. During periods when investment performance is less than assumed, the actuarial value will tend to be greater than the market value.

Section VI – Risk Assessment

Actuarial Standards of Practice are issued by the Actuarial Standards Board and are binding on credentialed actuaries practicing in the United States. These standards generally identify what the actuary should consider, document and disclose when performing an actuarial assignment. In September 2017, Actuarial Standard of Practice Number 51, Assessment and Disclosure of Risk in Measuring Pension Obligations, (ASOP 51) was issued as final with application to measurement dates on or after November 1, 2018. This ASOP, which applies to funding valuations, actuarial projections, and actuarial cost studies of proposed plan changes, was first applicable for the January 1, 2019 actuarial valuation for the Plan.

A typical retirement plan faces many different risks, but the greatest risk is the inability to make benefit payments when due. If plan assets are depleted, benefits may not be paid which could create legal and litigation risk or the plan could become "pay as you go." The term "risk" is most commonly associated with an outcome with undesirable results. However, in the actuarial world, risk can be translated as uncertainty. The actuarial valuation process uses many actuarial assumptions to project how future contributions and investment returns will meet the cash flow needs for future benefit payments. Of course, we know that actual experience will not unfold exactly as anticipated by the assumptions and that uncertainty, whether favorable or unfavorable, creates risk. ASOP 51 defines risk as the potential of actual future measurements to deviate from expected results due to actual experience that is different than the actuarial assumptions.

The various risk factors for a given plan can have a significant impact – positive or negative – on the actuarial projection of liability and contribution rates.

There are a number of risks inherent in the funding of a defined benefit plan. These include:

- economic risks, such as investment return and price inflation;
- demographic risks such as mortality, payroll growth, aging population including impact of baby boomers, and retirement ages;
- contribution risk, i.e., the potential for contribution rates to be too high for the plan sponsor/employer to pay and
- external risks such as the regulatory and political environment.

There is a direct correlation between healthy, well-funded retirement plans and consistent contributions equal to the full actuarial contribution rate each year. The Plan is primarily funded by member and employer contributions to the trust fund, together with the earnings on these accumulated contributions. These contributions fund benefit accruals for current active members and administrative expenses. The remainder of the contributions amortizes the unfunded actuarial accrued liability. The actuarially determined contribution rate is the sum of the rates for the normal cost for the plan and the amortization of the unfunded actuarial accrued liability. The actuarially determined contribution rate is sensitive to increases in the UAAL and periods of lower-than-expected returns would lead to much higher contribution rates as a percentage of payroll.

Section VI – Risk Assessment

The other significant risk factor for the Plan is investment return because of the volatility of returns and the size of plan assets compared to payroll. A perusal of historical returns over 10-20 years reveals that the actual return each year is rarely close to the average return for the same period. This is to be expected, given the underlying capital market assumptions and the Plan's asset allocation. To the extent market rates of interest affect the expected return on assets, there is a risk of change to the discount rate which determines the present value of liabilities and actuarial valuation results.

A key demographic risk for the Plan is improvements in mortality (longevity) greater than anticipated. While the actuarial assumptions reflect a margin for improvement in mortality experience and these assumptions are refined every experience study, the risk arises because there is a possibility of some sudden shift, perhaps from a significant medical breakthrough that could quickly increase liabilities. Likewise, as we have recently seen with COVID-19, a public health crisis can result in a significant number of additional deaths in a short period of time, which can influence plan liabilities and future funding needs. While either of these events could happen, it represents a small probability and thus represents much less risk than the volatility associated with investment returns.

Under the revised Actuarial Standards of Practice (ASOP) No. 4 effective for valuations after February 15, 2023, we include a low-default-risk obligation measure of the System's liability in our funding valuation report. This is an informational disclosure as described below and would not be appropriate for assessing the funding progress or health of the plan. This measure uses the unit credit cost method and reflects all the assumptions and provisions of the funding valuation except that the discount rate is derived from considering low-default-risk fixed income securities. We considered the FTSE Pension Discount Curve based on market bond rates published by the Society of Actuaries as of December 31, 2023 and with the 30-year spot rate used for all durations beyond 30. Using these assumptions, we calculate a liability of $2.0 billion. This amount approximates the termination liability if the plan (or all covered employment) ended on the valuation date and all of the accrued benefits had to be paid with cash-flow matched bonds. This assurance of funded status and benefit security is typically more relevant for corporate plans than for governmental plans since governments rarely have the need or option to completely terminate a plan.

Section VII - Data

A. Data regarding the membership of the System for use as a basis of the valuation were furnished by the County and plan administrator. The valuation included active members with annualized compensation totaling $72,223,997.

B. The following table shows the number of retired members and beneficiaries as of January 1, 2024 together with the amount of their annual retirement benefits payable under the System as of that date.

The Number and Average Annual Benefits of Retired Members, Disabled Members and Beneficiaries as of January 1, 2024

Group	Number	Average Annual Benefits
Service Retirements	2,601	$36,089
Disability Retirements	22	16,913
Beneficiaries of Deceased Members	239	20,084
Total	2,862	$34,605

C. Table 1 on the next page shows the distribution by age and years of membership service of the number of active members included in the valuation, while Table 2 shows the number and annual benefits of retired members, disabled members and beneficiaries included in the valuation, distributed by age. Table 3 shows the reconciliation of valuation data from last year's valuation carried forward to this year's valuation.

Section VII - Data

Table 1: Distribution of Active Members by Age and Service Groups as of January 1, 2024

Attained Age	Completed Years of Service									
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	> 35	Total
Under 25										
Average Pay										
25 to 29										
Average Pay										
30 to 34										
Average Pay										
35 to 39					15	1				16
Average Pay					114,022	103,768				113,381
40 to 44					37	68	7			112
Average Pay					115,211	110,719	98,512			111,440
45 to 49					31	126	45			202
Average Pay					113,330	116,538	116,095			115,947
50 to 54					23	73	43	3		142
Average Pay					112,684	106,092	132,375	99,152		114,972
55 to 59					16	41	21	11	6	95
Average Pay					98,107	109,759	124,918	143,297	115,459	115,391
60 to 64					5	23	16	4	4	52
Average Pay					72,245	95,998	101,687	119,244	93,090	97,029
65 to 69					2	7	3	2	4	18
Average Pay					78,270	107,510	89,617	116,035	172,672	116,706
70 & up							1			1
Average Pay							73,059			73,059
Total Count					129	339	136	20	14	638
Average Pay					109,811	110,684	119,104	129,139	125,414	113,204

Table 2: Number of Retired Members, Disabled, and Beneficiaries and Their Benefits

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 & Under	32	$ 1,200,183	$ 37,506
51 – 55	199	10,011,446	50,309
56 – 60	381	18,200,629	47,771
61 – 65	533	23,099,969	43,340
66 – 70	605	20,670,393	34,166
71 – 75	563	15,266,963	27,117
76 – 80	328	7,129,703	21,737
Over 80	221	3,459,614	15,654
Total	**2,862**	**$ 99,038,900**	**$ 34,605**

Section VII - Data

Table 3: Reconciliation of Plan Participants as of January 1, 2024

	Active Participants	Disabled Participants	Inactive Participants with Deferred Benefits	Inactive Participants Receiving Benefits	Total
January 1, 2023	**730**	**22**	**704**	**2,754**	**4,210**
Retirements	(79)		(44)	123	
Deaths				(61)	**(61)**
Disabled					
Nonvested Terminations					
Vested Terminations	(13)		13		
Rehires					
Survivors				22	**22**
Benefits Expired					
Transfer Out					
Transfer In					
Correction				2	**2**
Status Change					
Lump Sum/Refund of Contributions					
Net Change	**(92)**	**0**	**(31)**	**86**	**(37)**
January 1, 2024	**638**	**22**	**673**	**2,840**	**4,173**

Section VIII - Actuarial Assumptions and Methods

A. Investment Return:

7.00% per year, compounded annually.

B. Salary Increases:

Representative values of the assumed annual rates of salary increases are shown in the following table.

Years of Service	Salary Increase
Under 5	5.50%
5	5.25
6	5.25
7	5.25
8	5.00
9	5.00
10	5.00
11	5.00
12	5.00
13	4.75
14 and Over	4.50

C. Mortality:

Pre-Retirement Mortality
PubG.H-2010 Headcount Weighted General Median Employee, fully generational
Projection Scale: MP-2019

Post Retirement Healthy Mortality
PubG.H-2010 Headcount Weighted General Median Healthy Retiree, fully generational
Projection Scale: MP-2019

Post Retirement Disabled Mortality
PubNS.H-2010 Headcount Weighted Non-Safety Median Disabled Retiree, fully generational
Projection Scale: MP-2019

D. Separations from Active Service:

Representative values of the assumed annual rates of withdrawal and disability are shown in the following table.

Age	Withdrawal	Disability
Under 20	3.6 %	0.00 %
20	3.1	0.01
25	1.9	0.06
30	1.5	0.10
35	1.2	0.14
40	1.0	0.20
45	0.8	0.32
50	0.7	0.52
55	0.6	0.00
60	0.5	0.00
65 and Over	0.4	0.00

Disability: Male rates (used for both sexes) derived from a 1977 Social Security Administration study multiplied by 50%. Incidence of disability resulting in eligibility for both disability benefits under the county retirement plan and the Social Security.

Retirement: An experience based, age related set of rates; sample rates are as follows:

Age	Retirement*	Age	Retirement*
50 – 55	30%	65	50%
56 – 61	25%	66 – 69	30%
62 – 64	30%	70	100%

***** If service is at least 30 years or when member first becomes eligible for Rule of 75 and is less than age 65, the rate is 37.5%.

E. Administrative Expenses:

An expense load is determined to account for administrative expenses to be paid from the trust. Expenses are estimated to be $1,036,000 for the plan year.

F. Actuarial Value of Assets:

The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of 7.00% effective January 1, 2024. The amount recognized each year is 20% of the difference between market value and expected market value.

G. Actuarial Cost Method:

Entry Age Normal effective January 1, 2020. A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

H. Amortization of Unfunded Accrued Liability:

Layered amortization over a 15-year period.

I. Beneficiary:

The plan provides either a lump-sum benefit or an annuity to the beneficiary of a deceased inactive participant. Therefore, all participants are assumed to have a beneficiary and such beneficiary is assumed to be the same age as the participant.

J. Percent Married:

For the purposes of valuing the spouse pre-retirement survivor annuity, 50% of the plan participants are assumed married with males three years older than the spouse.

K. Load for Unused Sick Leave and Retirement Reserve Leave:

Members can apply unused sick leave or retirement reserve leave toward Credited Service in order to meet retirement eligibility requirements. The three year experience study covering the period January 1, 2006 through January 1, 2009 found that members are able to retire one year earlier than the retirement eligibility condition allowable by the Plan through conversion of unused sick leave or retirement reserve leave. Thus, retirement benefits and liabilities for Plan B and Plan C members are increased by 3.50% to estimate the increase in benefit due to the application of unused sick leave or retirement reserve leave toward Credited Service.

Section IX - Plan Provisions

A. Effective Date

January 1, 2007

B. Participation

Each Employee who was a participant in the ACCG Plan on the day before the Effective Date of this Plan shall be a participant in this plan. Each employee hired before January 1, 2007 is eligible to participate as of his employment commencement date. No employee hired on or after January, 1 2007 shall be eligible to participate in this Plan. An Employee who has a termination date prior to December 31, 2006 with a reemployment commencement date on or before December 31, 2007 shall be eligible to participate in the plan provided he has not incurred a one-year break in service. Effective January 1, 2008, only those employees participating in the plan on December 31, 2007 shall be eligible to participate in the plan.

C. Credited Service

Measurement of a participant's service as an employee after the original effective date of the plan that is used to determine the participant's accrued benefit. Credited service shall include only full-time service and shall be determined under the Elapsed Time Method. Credited service shall include service prior to the effective date of the plan, sick leave, and retirement reserve leave. The County as part of an employment contract with Appointed officials may agree to provide additional Credited Service. In no event shall the additional credited service exceed five years.

D. Compensation

Total amounts of all payments, direct or indirect, made by the County to an employee for services rendered to the County, for a calendar year which ends within a Plan Year, as defined in Code Section 3401(a) for purposes of tax withholding at the source excluding overtime, overtime premium, scheduled overtime and scheduled overtime premium. Compensation shall include before-tax or salary deferral contribution made to this plan or any other plan of the County.

E. Average Final Compensation

Arithmetic average of Compensation paid to a participant by the employer for the highest five consecutive years of Credited Service, ignoring the breaks in service, out of the employee's last 10 years of credited service earned immediately prior to termination date.

F. Schedule A

Benefit established in 2004 for the noncontributory defined benefit plan previously adopted by Gwinnett County and known as the "Pre-Amended Pension Plan"

G. Schedule B

Benefit established in 2004 for the contributory defined benefit plan previously adopted by Gwinnett County and known as the "1995 Amended Pension Plan" and subsequently amended and restated

H. Schedule C

Benefit established in 2004 for the contributory defined benefit plan adopted by Gwinnett County as of November 1, 2004

I. Normal Retirement Benefit

Eligibility

For those members with an employment date or a reemployment commencement date prior to November 1, 2004, the later of the date the Participant attains age 65 and completes three years of vesting service. For employees hired on or after November 1, 2004, the later of the date the participant attains age 65 and five years of vesting service.

Benefit Amount

Schedule A or B

2.25% of a participants Average Monthly Compensation multiplied by years of full-time Credited Service.

Schedule C

2.50% of a participants Average Monthly Compensation multiplied by years of full-time Credited Service.

J. Early Retirement Benefit

Eligibility

Schedule A: Earlier of

1) Age 60 and 10 years of service, or

2) 30 years of service, regardless of age

Schedule B or C: Earlier of

1) Age 60 and 10 years of service, or

2) 30 years of service, regardless of age, or

3) Age 50 and the Rule of 75

Benefit Amount

Schedule A, B or C

Computed as a Normal Retirement Benefit that is actuarially reduced for those members retiring with less than 30 years of service

Schedule B or C

Computed as a Normal Retirement Benefit that is actuarially reduced for those members who have not obtained age 50 and the Rule of 75

K. Late Retirement

Eligibility

Date participant actually retirees from employment with the County after his normal retirement date

Benefit Amount

Computed as a Normal Retirement Benefit

L. Disability Benefit

Eligibility

10 years of service and is determined to be totally disabled by the Social Security Administration.

Benefit Amount

Calculated as Normal Retirement Benefit

M. Pre-Retirement Death Benefit

Eligibility

If the participant dies while an Employee of the County, the Plan provides a lifetime pre-retirement survivor annuity to the spouse. If the participant is not married at the time of death, the participant's dependent child will receive the same benefit in total until the child reaches age 18 at which time the benefit will cease.

Benefit Amount

50% of the Participant's non forfeitable accrued benefit determined as of the date of the participants death.

N. Post-Retirement Death Benefit

Eligibility

If a participant dies after he retires, his beneficiary may receive a post-retirement death benefit.

Benefit Amount

If the monthly benefit was less than $100, the post-retirement death benefit is equal to $5,000.

If the monthly benefit was $100 or greater but less than $300, the post-retirement death benefit is equal to $10,000

If the monthly benefit was $300 or more, the post-retirement death benefit is equal to $15,000.

O. Vested Termination

Eligibility

Members employed prior to November 1, 2004 must have completed 3 years of service. Those members employed on or after November 1, 2004 must have completed 5 years of service upon termination.

Benefit Amount

Computed as a normal retirement benefit as of the date of termination payable upon reaching age 65.

P. Non-Vested Termination

A member terminating from the plan that is not 100% vested in the accrued benefit is entitled to a refund of employee contributions with interest.

Q. Cost-of-Living Adjustments

Schedule A

None

Schedule B and C

1.00% annually

R. Normal Form of Benefit

Single Life Annuity

S. Contributions

Member

Schedule A: None

Schedule B: Members are required to contribute 5.75% of Compensation

Schedule C: Members are required to contribute 9.00% of Compensation

County

The County contributes an actuarially determined amount which, together with member contributions, equals the sum of the normal cost and payments for the amortization of the unfunded actuarial accrued liability.