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Clayton County, Georgia

Clayton County, Georgia Public Employee Retirement System

Actuarial Valuation Report

Plan Year July 1, 2015 - June 30, 2016

November 2015

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November 19, 2015

Pension Board
Clayton County, Georgia
Public Employee Retirement System
112 Smith Street
Jonesboro, GA 30236

Members of the Board:

We are pleased to submit the results of the actuarial valuation of the Clayton County, Georgia Public Employee Retirement System as of July 1, 2015. We trust that this report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Retirement Fund. We look forward to meeting with you in person to discuss these results.

There are several purposes of this valuation. One purpose is to confirm whether contributions to the Retirement System meet the minimum funding requirements under Title 47, Chapter 20 of the Official Code of Georgia. It is the Board's funding policy to keep the Retirement System in compliance with these minimum funding requirements.

Effective July 1, 2015, the contributions to the Retirement System is 21.40% from 19.90% in the prior year which included a special budgeted contribution of 1.5% paid by the County and Water Authority. This valuation's results confirm that the minimum funding requirements will be met due to these contributions 21.40% (13.90% from the County and Water Authority and 7.50% from Participants) of Eligible Employee payroll as defined under the plan.

These contributions are projected to fund the unfunded liability over a 30 year period. This period is within the acceptable period (30 years) for amortization under the minimum funding requirements. This result is dependent upon the valuation assumptions related to investment returns, payroll growth, rates of salary increase, retirement, turnover, and death.

Finally, this valuation assesses the security of benefits already earned. The Retirement System has assets of $387,761,223 at market value (after an adjustment of $598,858 for pending refunds). The actuarial value of assets is $386,601,668. The Retirement System's actuarial accrued liability for inactive participants and for active participants based on the service they have already performed is $543,816,709. This liability has been computed in accordance with the plan provisions listed in Schedule F and the actuarial assumptions listed in Schedule E.

The experience for the plan year produced an overall gain of $1,628,164. Below is a summary of the change sources of (gains) and losses.

Due to investment performance	$(2,842,070)
Due to retirement experience	(818,483)
Due to new entrants	359,485
Due to mortality experience	791,331
Due to salary increases	780,315
Due to other	101,258

Mortality assumptions were revised to better reflect current and expected plan experience; the change has increases the unfunded liability by 936,345. Following is a summary of the change in the unfunded liability due to assumption changes:

Updated mortality assumptions	$936,345

The Actuarial Value of Assets is based on a 5-year smoothing of market value gains and losses starting with the gains and losses for the period July 1, 2013 - June 30, 2014. The Actuarial Value of Assets is limited to an 80% to 120% market value corridor.

The results of this valuation are dependent upon the employee census information provided by Clayton County and the Water Authority and asset values provided by the County, and the actuarial assumptions as summarized herein. As summarized above and detailed below, there have been changes in actuarial assumptions since last year.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and 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. Because of limited scope, Buck performed no analysis of the potential range of such future differences.

Buck Consultants, LLC was retained by the Pension Board for the Clayton County, Georgia Public Employees Retirement System to prepare this report. This report is intended for the sole use of the addressee and is intended only to supply sufficient information for the addressee to comply with the stated purposes of the report and may not be appropriate for other business purposes. Reliance on information contained in this report by anyone for other than the intended purpose puts the relying entity at risk of being misled because of confusion or failure to understand applicable assumptions, methodologies, or limitations of the report’s conclusions. Accordingly, no person or entity, including the addressee, should base any representations or warranties in any business agreement on any statement or conclusions contained in this report without the written consent of Buck Consultants, LLC.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

Timothy G. Bowen, EA, MAAA, FCA
Director, Retirement Consulting Actuary
Enrolled Actuary Number 14-07204

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REPORT ON AN ACTUARIAL VALUATION
OF THE CLAYTON COUNTY, GEORGIA
PUBLIC EMPLOYEE RETIREMENT SYSTEM
PREPARED AS OF JULY 1, 2015

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the preceding valuation are summarized below:

Valuation Date	**7/1/2015**	**7/1/2014**
Number of active participants	2,449	2,447
Annual compensation for year beginning on valuation date	$ 105,822,834	$ 108,583,036
Number of retired participants and beneficiaries	1,166	1,124
Annual retirement benefits as of July 1	$ 31,035,094	$ 29,865,687
Number of former participants with deferred benefits	289	290
Present value of accrued benefits	$ 524,592,037	$ 501,012,760
Total actuarial accrued liability	$ 543,816,709	$ 519,309,712
Assets:		
Market value	$ 387,761,223	$ 385,744,668
Actuarial value of assets	$ 386,601,668	$ 364,702,111
Total unfunded actuarial accrued liability	$ 157,215,041	$ 154,607,601
Amortization period for unfunded actuarial accrued liability	30 years	30 years
Recommended annual contribution rates:		
Participants	7.50%	5.50%
County/Water Authority (normal)	13.90	12.90
County/Water Authority (special budgeted)	0.00	1.50
Total	21.40%	19.90%
County/Water Authority annual required contribution rate (ARC):		
Normal cost	4.37%	5.69%
Unfunded actuarial accrued liability	9.53	7.21
Special budgeted contribution	0.00	1.50
Total	13.90%	14.40%

2. Comments on the valuation results as of July 1, 2015 are given in Section IV and further discussion of the contributions is set out in Section V.
3. Schedule E of this report outlines the full set of actuarial assumptions and methods employed.
4. Schedule F of this report summarizes the provisions of the System as interpreted for valuation purposes.

SECTION II - PARTICIPANT DATA

1. All full time employees and elected officials of Clayton County and the Clayton County Water Authority are covered under the Plan. The valuation included 2,449 active participants as of July 1, 2015 with annual compensation on July 1, 2015 totaling $104,775,083.
2. The following table shows the number of retired participants and beneficiaries of deceased participants and their annual retirement benefits as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT BENEFITS OF RETIRED PARTICIPANTS AND BENEFICIARIES OF DECEASED PARTICIPANTS AS OF JULY 1, 2015

GROUP	NUMBER	BENEFITS
Normal and Early Retirements	984	$ 28,086,312
Beneficiaries of Deceased Participants	115	1,808,375
Disability Retirements	67	1,140,407
Total	1,166	$31,035,094

In addition, there are 289 former participants entitled to deferred annual benefits totaling $3,473,202.

SECTION III - ASSETS

1. The amount of assets taken into account in this valuation is based on the unaudited financial statements provided by Clayton County.
2. The market value of assets as of July 1, 2015 was $387,761,223. This represented a return of approximately 3.2%. The actuarial value of assets used for the current valuation was $386,601,668. Schedule B shows the development of the actuarial value of assets as of July 1, 2015.
3. Schedule C shows the reconciliation of the market value of asset balances from July 1, 2014 to July 1, 2015.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A outlines the results of the valuation. The valuation shows that the Retirement System has total actuarial accrued liabilities of $543,816,709. Of this amount, $366,743,151 is on account of benefits payable to retired participants, beneficiaries and former participants entitled to deferred vested benefits, and $177,073,558 is for benefits expected to be paid based on service to the valuation date on account of the present active participants. Against these liabilities, the System has present actuarial value of assets of $386,601,668 as of July 1, 2015. The difference of $157,215,041 between the total liabilities and the present assets represents the present value of future accrued liability contributions to be made by the County and Water Authority.
2. The regular contributions to the System consist of normal cost contributions and unfunded accrued liability amortization contributions. The normal cost contribution covers the cost of benefits accruing and Retirement System expenses during the upcoming year. The normal cost contribution rate for the County and Water Authority participants combined is determined to be 11.87% (4.37% County/Water Authority and 7.50% participants) of payroll. This compares to the 11.19% rate last year.
3. Another measure of the funding is the present value of the benefits accrued as of the valuation date. This value does not include any allowance for future salary increases affecting the benefits earned to date. This amount is $524,592,037. When compared to the market value of assets of $387,761,223, the plan has insufficient assets to cover its accrued benefits.
4. For the year, the Plan experienced an overall gain of $1,628,164. This loss is due to the net effect of a gain on the actuarial value of assets of $2,842,070 and a liability loss of $1,213,906. Schedule D shows the development of this loss.
5. The mortality assumption was changed since last year; this assumption change increased the unfunded liability by $936,345.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE RETIREMENT SYSTEM

1. The Retirement System has established a total contribution rate of 21.40% of active participants' compensation. Of this amount, the participants pay 7.50% and 13.90% is to be paid by the County/Water Authority.
2. On the basis of the present valuation, a total normal cost contribution rate of 11.87% is payable. Participants contribute 7.50% of payroll, leaving a balance of 4.37% normal cost rate to be paid by the County/Water Authority.
3. The excess of the County's and Water Authority's 13.90% contribution over the 4.37% normal cost is 9.53%. These amounts are applied toward the liquidation of the unfunded accrued liability. The total 9.53% of active participants' compensation will liquidate the unfunded accrued liability within a 30 year period. This assumes that the funds to liquidate the unfunded liability increase 3.00% per year.
4. The following table summarizes the contribution rates.

CONTRIBUTION RATES
BASED ON JULY 1, 2015 VALUATION

CONTRIBUTION	PERCENTAGE OF COMPENSATION
Payable by:	
Participants	7.50%
County and Water Authority	13.90
County and Water Authority (special budgeted)	0.00
Total	21.40%
Rate Applied To:	
Total Normal Cost	11.87%
Unfunded Actuarial Accrued Liability	9.53
Total	21.40%

SECTION VI – ENROLLED ACTUARY'S STATEMENT

The actuarial assumptions used to value the Plan for funding purposes were selected by the plan sponsor or us. The interest assumption, funding method, salary scale and asset method were selected by the plan sponsor in consideration of recommendations made by us. All other assumptions were selected by us. All assumptions (other than the salary scale which was selected by the plan sponsor) individually and in the aggregate represent my best estimate of anticipated experience under the plan. There is not sufficient information to evaluate the appropriateness of the salary scale as a long term assumption. The plan sponsor has indicated that the financial stress it is under will limit its ability for a considerable period to make salary increases in line with historical increases. Based on the foregoing, the cost results and actuarial exhibits for funding presented in this report were determined on a consistent and objective basis in accordance with applicable Actuarial Standards of Practice and generally accepted actuarial procedures.

To the best of my knowledge, the information in this report is complete and accurate and meets the requirements and intent of Georgia Public Retirement System Law, Code Title 47, Chapter 20. As is demonstrated earlier in this report, the Clayton County, Georgia Public Employees Retirement System is in compliance with the Minimum Funding Standards specified in Code Section 47-20-10 and meets the funding policy of the Fund's Board, which is to keep the Fund in compliance with such standards.

The report was prepared under the supervision of Timothy G. Bowen, the plan's Enrolled Actuary, an Associate of the Society of Actuaries, and a Member of the American Academy of Actuaries, who has met the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

BUCK CONSULTANTS, LLC.

Timothy G. Bowen, EA, MAAA, FCA
Director, Retirement Consulting Actuary
Enrolled Actuary Number 14-07204

SCHEDULE A

RESULTS OF THE VALUATION
PREPARED AS OF JULY 1, 2015

1.	Actuarial Accrued Liabilities	
	Present Value of Prospective Benefits Payable in Respect of:	
	(a) Present active participants	$177,073,558
	(b) Present retired participants, beneficiaries, and former participants entitled to deferred vested benefits	366,743,151
	(c) Total accrued actuarial liabilities	543,816,709
2.	Actuarial Value of Assets for Valuation Purposes	386,601,668
3.	Unfunded Actuarial Accrued Liability [1(c) minus 2]	157,215,041

SCHEDULE B

DEVELOPMENT OF JULY 1, 2015 ACTUARIAL VALUE OF ASSETS

(1)	Market Value of Assets on July 1, 2014 including Contributions Receivable	$ 385,744,668
(2)	2014/2015 Net Cash Flow	
	a. Contributions from Employer and Participants plus increase/(decrease) in Contributions Receivable	20,783,611
	b. Benefits + Administrative Expense Only	30,942,327
	c. Net Cash Flow (2)a - (2)b	(10,158,716)
(3)	Expected Investment Return, Net of Investment Expenses [(1) x .08] + [(2)c x .04]	30,453,225
(4)	Expected Market Value of Assets on July 1, 2014 including Contributions Receivable (1) + (2)c + (3)	406,039,177
(5)	Market Value of Assets on July 1, 2015, including Contributions Receivable	387,761,223
(6)	Gain/(Loss) on Market Value of Assets (5) - (4)	(18,277,954)
(7)	Deferred Gains/(Losses) on Market Value of Assets	

	Total Gain/(Loss)	Amount Deferred
2014	$(18,277,954)	$(14,622,363)
2013	$26,303,197	$15,781,918

		1,159,555
(8)	Preliminary Actuarial Value of Assets on July 1, 2015 (5) - (7)	386,601,668
(9)	80% of Market Value .80 x (5)	310,208,978
(10)	120% of Market Value 1.20 x (5)	465,313,468
(11)	Actuarial Value of Assets on July 1, 2015 Smaller of (10) and maximum of (8) and (9)	$ 386,601,668

SCHEDULE C

ASSETS OF THE RETIREMENT SYSTEM

Reconciliation of Market Value of Assets

Receipts				
Employer and Participant Contributions			$	20,783,611
Investment Income				
Interest and Dividends	$	8,755,774		
Net Appreciation (Depreciation) in Fair Value of Investments		4,066,818		
Total Investment Income				12,822,592
Total Receipts			$	33,606,203
Disbursements				
Benefits Paid			$	30,502,279
Increase in Pending Refunds[1]				18,037
Administrative and Investment Expenses				1,069,332
Total Disbursements			$	31,589,648
Excess of Receipts Over Disbursements			$	2,016,555
Reconciliation of Asset Balances				
Market Value at July 1, 2014, including contributions receivable			$	385,744,668
Excess of Receipts Over Disbursements				2,016,555
Market Value at July 1, 2015, including contributions receivable			$	387,761,223

[1] Unpaid Pending Refunds of $580,821 were subtracted from the July 1, 2014 Market Value of Assets, and $598,858 was subtracted from the July 1, 2015 Market Value of Assets. The difference of $18,037 was added to the annual disbursements during the year.

SCHEDULE D

DEVELOPMENT OF EXPERIENCE GAIN/(LOSS)

1.	Actual Unfunded Accrued Liability as of July 1, 2014 (before adjustment for window plan):		$	154,607,601
2.	Expected Change in Unfunded Liability During 2014/2015 Plan Year			
	a. Due to Total Normal Cost (beginning of year)	$ 11,601,493		
	b. Mortality Change	936,345		
	c. Change to Salary Scale	0		
	d. Change to retirement/termination decrements	0		
	e. Due to Plan Changes	0		
	f. Due to Interest on Normal Cost and Unfunded Liability	13,296,728		
	g. Due to Actual Employer and Participant Contributions with Interest	(21,598,962)		
	h. Total Expected Change, a. + b. + c. + d. + e. + f. + g.	$ 4,235,604		
3.	Expected Unfunded Accrued Liability as of July 1, 2015:		$	158,843,205
4.	Actual Unfunded Accrued Liability as of July 1, 2015:		$	157,215,041
5.	Experience Gain/(Loss) for the 2014/2015 Plan Year* (3) – (4)		$	1,628,164

* Liability related portion of experience Gain/(Loss):	$ (1,213,906)
Asset related portion of experience Gain/(Loss):	$ 2,842,070

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INTEREST RATE: 8% per annum, compounded annually, net of investment expenses.

SEPARATIONS BEFORE RETIREMENT: Representative values of the assumed annual rates of withdrawal, disability, and death are as follows:

Safety

	Annual Rate of					
	Withdrawal					Disability
Age	Years 0-1	Years 1-2	Years 2-3	Years 3-6	Years 7+	
25	15.00%	12.00%	10.00%	8.00%	6.75%	.07%
30	15.00	12.00	10.00	8.00	6.50	.08
35	15.00	12.00	10.00	8.00	5.75	.09
40	15.00	12.00	10.00	8.00	4.00	.11
45	15.00	12.00	10.00	8.00	3.25	.16
50	15.00	12.00	10.00	8.00	3.25	.24
55	-	-	-	-	-	.40
60	-	-	-	-	-	.84
64	-	-	-	-	-	1.49

Non-Safety

	Annual Rate of					
	Withdrawal					Disability
Age	Years 0-1	Years 1-2	Years 2-3	Years 3-6	Years 7+	
25	15.00%	12.00%	10.50%	6.75%	6.75%	.07%
30	15.00	12.00	10.50	6.75	6.25	.08
35	15.00	12.00	10.50	6.75	6.00	.09
40	15.00	12.00	10.50	6.75	4.50	.11
45	15.00	12.00	10.50	6.75	3.00	.16
50	15.00	12.00	10.50	6.75	2.25	.24
55	15.00	12.00	10.50	6.75	2.00	.40
60	15.00	12.00	10.50	6.75	2.00	.84
64	15.00	12.00	10.50	6.75	2.00	1.49

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS (continued)

RATES OF RETIREMENT: Representative values of the assumed annual rates of early and normal retirement are as follows:

	Non-Safety		Safety	
	Annual Rate of Retirement			
Age	Early	Normal*	Early	Normal*
50	.100		.040	
51	.100		.080	
52	.150		.120	
53	.250		.180	
54	.250		.250	
55	.350	.25	.085	.10
56	.160	.10	.085	.10
57	.160	.10	.085	.10
58	.160	.15	.085	.10
59	.160	.20	.085	.10
60		.55		.25
61		.65		.15
62		.65		.22
63		.65		.16
64		.65		.11
65		1.00		.60
66				.40
67				.40
68				.40
69				.40
70				1.00

* An additional 30% are assumed to retire upon attainment of 25 years of service.

Note: Employees who terminate with a vested benefit and greater than 15 years of service are assumed to commence at age 55 with a subsidized early retirement pension. Other deferred vested employees are assumed to commence at normal retirement age.

SALARY INCREASES: 2.00% per annum for 4 years, 3.00% per annum for the following 5 years, and 4.00% per annum thereafter.

MORTALITY:

Healthy Annuitants: RP2014 blue collar base rates with a load of 7.75% with fully generational mortality improvements based on the Modified Buck MP2014 projection scale.

Healthy Non-annuitants: RP2014 blue collar base rates with fully generation mortality improvements based on the Modified Buck MP2014 projection scale.

Disabled Participants: RP2014 disabled base rates with Modified Buck MP 2014 projection scale.

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS (continued)

FUTURE ADMINISTRATIVE EXPENSES: Expenses assumed to be 0.325% of payroll.

LOADING OR CONTINGENCY RESERVES: A 0.10% load on active liabilities is held to reflect potential use of accumulated sick leave upon retirement.

SPOUSES: The husband is assumed to be three years older than the wife, and it is assumed that 85% of the participants are married.

CONTINGENT ASSETS & LIABILITIES: There were none as of July 1, 2015.

VALUATION ASSETS: Actuarial Value, as developed in Schedule B. The actuarial value of assets is based on a 5-year smoothing of market value gains and losses starting with the asset gains and losses for the period July 1, 2013 - June 30, 2014. The actuarial value of assets is limited to a range between 80% and 120% of market value.

VALUATION FUNDING METHOD: Projected unit credit cost method. Gains and losses are reflected in the unfunded accrued liability.

INFLATION: 3.00% per annum (used for the amortization of unfunded liability).

CONTRIBUTION TIMING: Employee contributions are assumed to occur bi-weekly and County contributions quarterly.

HISTORICAL ASSUMPTION CHANGES:

Effective 7/1/2015: The mortality table for healthy participants was changed to the RP2014 blue collar base rates with a load of 7.75% with fully generational mortality improvements based on the Modified Buck MP 2014 projection scale. For non-annuitants, the mortality table was changed to RP2014 blue collar base rates with fully generation mortality improvements based on the Modified Buck MP 2014 projection scale. The mortality table for disabled participants was changed RP2014 disabled base rates with Modified Buck MP 2014 projection scale. The assumption for Future Administration expenses was changed to 0.325% of payroll.

Effective 7/1/2014: The assumed rates of salary increase were adjusted to 2.00% for 4 years, 3.00% for the next 5 years, and 4.00% thereafter. The mortality table for healthy participants was changed to the RP-2000 blue collar base rates increased by 7.5% to reflect actual plan experience, generationally projected using Scale BB for annuitants and the RP-2000 blue collar base rates, generationally projected using Scale BB for non-annuitants. The mortality table for disabled participants was changed to the RP-2000 disabled mortality table. The assumed rates of retirement and termination were changed to better reflect anticipated experience. The asset valuation method was changed to reflect a 5-year smoothing of market value gains and losses beginning with gains and losses for the period July 1, 2013 - June 30, 2014. The Actuarial Value of Assets is limited to an 80% - 120% market value corridor.

Effective 7/1/2013: The assumed rates of salary increase were adjusted from 3% for the next 9 years and 4% thereafter to 0% for the upcoming year for County employees, 2% for the upcoming year for Water Authority employees, 3% for the next 9 years for all employees and 4% thereafter for all employees. The mortality table was changed to the RP 2000 Mortality Table with a 10% load projected to the year 2019 with Blue Collar adjustment.

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS (continued)

Effective 7/1/2012: The assumed rates of salary increase were adjusted from 3% for the next 10 years and 4% for the following 20 years to 0% for the upcoming year for County employees, 1% for the upcoming year for Water Authority employees, 3% for the next 9 years for all employees and 4% thereafter for all employees. The mortality table was changed to the RP 2000 Mortality Table with a 10% load projected to the year 2018 with Blue Collar adjustment.

Effective 7/1/2011: The mortality table was changed from the RP 2000 Mortality Table with Blue Collar adjustments to the RP 2000 Mortality Table with a 10% load projected to the year 2017 with Blue Collar adjustment; the assumed rates of salary increase was adjusted from a flat 4% to 0% for the upcoming year, 3% for the next 10 years and 4% thereafter; and the assumed rate of inflation used as an amortization adjustment was changed from a flat 4% to 3% for the next 11 years and 4% thereafter.

Effective 7/1/2009: The salary scale assumption decreased from 5.3% annually to 4.0% annually.

Effective 7/1/2008: The mortality table for employees (both before and after retirement) changed from the 1983 Group Annuity Mortality Table to the RP-2000 Mortality Table with Blue Collar Adjustment.

Effective 7/1/2004: The expense assumption has been lowered to .20% of payroll to reflect true level of administrative expense. The retirement table has been changed to produce expected results that more closely match recent experience. The salary scale has increased from 5.0% to 5.3%.

Effective 7/1/2003: The mortality table for employees (both before and after retirement) changed from the 1971 Group Annuity Mortality Table set back 1 year to the 1983 Group Annuity Mortality Table. The withdrawal table for employees changed to a 3-year select-and-ultimate table to reflect recent plan experience.

Effective 7/1/2001: The mortality table has been set back one year.

CHANGES IN METHODS: None.

SCHEDULE F

SUMMARY OF THE MAIN BENEFIT AND CONTRIBUTION PROVISIONS

Effective Date	July 1, 1971.
Plan Year and Fiscal Year	Each July 1 to June 30.
Type of Plan	A cost-sharing multiple-employer defined benefit pension plan administered by a public employee retirement system funded by the Plan Sponsors (Clayton County and the Clayton County Water Authority) and Participant contributions.
Employees Covered	Full-time employees, including Commissioners, persons appointed by Commissioners, judicial secretaries, Probate Court Judge, magistrate, Court Clerks, Sheriff and Chief Deputy, Tax Commissioner and Deputy, and Water Authority employees and appointees. Effective November 1, 2010, any employee who is enrolled or becomes an active participant or member in the Employees Retirement System of Georgia or the Georgia State Employees Pension and Savings Plan (or any successor plan) will not be covered under this Plan. This amendment was not reflected in the July 1, 2010 valuation. Effective July 1, 2012, State Court Law Clerks are now eligible to participate in the Plan.
Credited Service	Service from employment. Effective January 1, 1999, each Participant's sick leave in excess of the allowable amount, as of the last pay period of each calendar year, shall be placed in reserve status to be used in determining Credited Service at the Participant's termination of employment. Certain employees' service with The City of Forest Park Water and Sewer Department is included as Credited Service.
Normal Retirement Benefit Eligibility	The earlier of age 60 and 7 years of participation (5 years of participation for sworn safety personnel hired prior to June 1, 2001), or age 55 and 25 years of credited service. Effective January 1, 1999, a Participant may elect to apply sick leave reserve as an age credit in determining the attainment of Normal Retirement Age.

SCHEDULE F

SUMMARY OF THE MAIN BENEFIT AND CONTRIBUTION PROVISIONS (continued)

Basic Monthly Benefit	2.5% of average monthly salary multiplied by years of credited service up to 32. Average monthly compensation is based on the 36 highest consecutive months of service during the last 60 months of service.
Cost of Living Adjustments	Annual 2.0% cost of living increase effective beginning July 1, 2009 for those who have received their 84^{th} monthly benefit payment prior to July 1.
Early Retirement Benefit Eligibility	The earlier of age 50 and 25 years of credited service or age 55 and 15 years of credited service.
Benefit	If the participant has 25 years of credited service, the benefit is reduced 1/2% for each month age is less than 55. If the participant has less than 25 years of credited service, the benefit is reduced 1/2% for each month age is less than 60.
Disability Retirement	
Eligibility	3 years of credited service for in line-of-duty; 7 years of credited service for other than in line-of-duty.
Benefit	30% of participants' monthly rate of compensation as of the date of disability.
Late Retirement Benefit	
Eligibility	Retirement after eligibility for normal retirement.
Benefit	Normal retirement benefit based on average monthly salary and service at actual date of retirement.
Deferred Vested Benefit	
Eligibility	7 years of credited service.
Benefit	100% of accrued benefit commencing at normal retirement age. If the member has 15 years of credited service, he may receive a reduced benefit commencing at early retirement age.

SCHEDULE F

SUMMARY OF THE MAIN BENEFIT AND CONTRIBUTION PROVISIONS (continued)

Pre-Retirement Death Benefit

In Line-of-Duty

Eligibility	Participation in the Plan.
Benefit	Survivor portion of the 50% Joint and Survivor benefit payable immediately (unreduced for early commencement) if married. If not married, payments are unreduced and paid for 60 months.

Other Than Line-of-Duty

Eligibility	7 years of service.
Benefit	Same as in line-of-duty benefit if greater than age 50. If under age 50, 50% of the deferred vested benefit reduced for early retirement payable at early retirement date if married. If not married, the benefit reduced for early retirement is paid for 60 months starting at early retirement age.

Excess Benefits for Water Authority Participants Only	Benefits in excess of the Internal Revenue Code 415 (m) limits are funded by the Water Authority as the benefits become payable but are not included in the valuation.
Normal Form of Payment	5 years certain and life annuity.
Optional Forms of Payment	(1) 100%, 75%, or 50% joint and survivor annuity. (2) Life annuity with 120 months certain

SCHEDULE F

SUMMARY OF THE MAIN BENEFIT AND CONTRIBUTION PROVISIONS (continued)

Participant Contributions	Each participant contributes 7.5% of compensation beginning July 1, 2015. Contribution rate from July 1, 2006 through June 30, 2014 was 5.5% of compensation. Contribution rate from August 8, 1998 through June 30, 2006 was 3.5% of compensation and for July 1, 1995 through August 7, 1998 was 2.0% of compensation. If a participant terminates employment before meeting the requirements for any of the above benefits, he is entitled to receive a return of his contributions with 5% interest. Any participant or beneficiary may elect to receive a refund of contributions with interest in lieu of any other benefit payable under the Plan. Participant contributions are “picked-up” by the County (i.e., taken out of pre-tax income).
Historical Provision Changes	**Effective 7/1/2015:** The County and Water Authority contribution rate was increased to 13.9% from 12.9%. The participant contribution rate was increased from 5.5% to 7.5%. For employees hired on or after January 1, 2016 a new tier of benefits will apply. **Effective 7/1/2012:** State Court Law Clerks are now eligible to participate in the Plan. **Effective 7/1/2008:** Eliminated the 60 month certain and 114 month certain optional forms of payment for annuity starting dates after December 31, 2008. **Effective 7/1/2007:** Adjusted accrued benefits of three people as of their normal retirement age. **Effective 7/1/2006**: Added an annual 2.0% cost of living increase effective beginning July 1, 2009 for those who have received their 84th monthly benefit payment prior to July 1. Increased participant contributions from 3.5% to 5.5%. Granted a one-time 4.0% benefit increase to current participants, spouses and beneficiaries who were receiving benefits as of January 1, 2001.

SCHEDULE F

SUMMARY OF THE MAIN BENEFIT AND CONTRIBUTION PROVISIONS (continued)

Added a minimum monthly allowance of $300 (after the above benefit increases) to any participant, spouse or beneficiary receiving benefits as of July 1, 2006.

Added an Excess Benefit Arrangement providing benefits in excess of IRS Code Sec. 415 for Water Authority employees funded entirely and separately by the Water Authority.

Historical Provision Changes (continued)

Effective 7/1/2005: Added the 60 month certain and 114 month certain optional forms of payment.

Effective 7/1/2003: The County and Water Authority contribution rate was increased to 12.9% from 12.4% and it is now applied to compensation under the plan rather than total compensation.

The definition of compensation excludes certain forms of premium pay.

The compensation limit has been increased to $200,000.

The mortality table used to convert benefits to optional forms of payment has been changed to the table prescribed under Revenue Ruling 2001-62.

The Social Security Leveling Option has been removed as an optional form of payment.

The normal form of payment for persons receiving disability payments has been changed from a life annuity to a life annuity with 60 months guaranteed. Upon death, payments to beneficiaries will continue according to the election chosen for the disability payments.

The method for computing final average earnings was clarified.

The basis for actuarial equivalence for maximum benefit limit purposes has been changed.

Effective 7/1/2001: Normal Retirement Age for non-Safety Personnel was amended from age 65 with 5 years of credited service to age 60 with 7 years of credited service.

SCHEDULE F

SUMMARY OF THE MAIN BENEFIT AND CONTRIBUTION PROVISIONS (continued)

Historical Provision Changes (continued)	For Safety Personnel hired after 6/1/2001, 7 years of credited service is required for Normal Retirement. Funding rate increased from 12.15% to 12.40%. The pre-Retirement Death Benefit was changed from 50% of the Normal Fund Payment as if employment continued to normal retirement to the survivor portion of the 50% Joint and Survivor benefit (unreduced for early commencement). If the participant is single, the Normal Fund Payment is paid as a 5-year certain only benefit.

SCHEDULE G
Member Statistics

	June 30, 2015
Active members	
Number	2,449
Average age	42.24
Average service	8.92
Terminated vested members	
Number	289
Average age	52.29
Average annual retirement benefits	$12,018
Retired members	
Number	984
Average age	67.45
Average annual retirement benefits	$ 28,543
Disabled members	
Number	67
Average age	61.84
Average annual retirement benefits	$ 17,021
Survivors and beneficiaries of members	
Number	115
Average age	65.90
Average annual retirement benefits	$ 15,725
Total Number of Members	3,904

SCHEDULE G

AGE-SERVICE TABLE

(All Active Participants)

	Completed Years of Service										
Attained Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	**52**	**63**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**116**
Avg. Pay	15,322	34,581	*	0	0	0	0	0	0	0	26,004
25 to 29	**66**	**183**	**64**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**315**
Avg. Pay	17,768	38,427	42,519	*	0	0	0	0	0	0	34,987
30 to 34	**53**	**137**	**106**	**51**	**1**	**0**	**0**	**0**	**0**	**0**	**348**
Avg. Pay	17,324	39,109	43,224	45,623	*	0	0	0	0	0	38,036
35 to 39	**26**	**96**	**79**	**50**	**30**	**2**	**0**	**0**	**0**	**0**	**283**
Avg. Pay	19,359	40,879	43,202	46,932	55,311	*	0	0	0	0	42,071
40 to 44	**24**	**79**	**96**	**63**	**54**	**18**	**4**	**0**	**0**	**0**	**338**
Avg. Pay	17,303	40,705	46,415	44,837	59,717	*	*	0	0	0	45,985
45 to 49	**21**	**73**	**84**	**38**	**64**	**43**	**48**	**3**	**0**	**0**	**374**
Avg. Pay	21,371	38,823	41,565	47,014	56,925	64,999	67,540	*	0	0	49,342
50 to 54	**22**	**47**	**72**	**38**	**30**	**38**	**62**	**16**	**1**	**0**	**326**
Avg. Pay	24,469	35,191	43,624	41,259	56,604	65,549	70,814	*	*	0	51,138
55 to 59	**14**	**40**	**49**	**47**	**29**	**17**	**15**	**1**	**3**	**0**	**215**
Avg. Pay	*	42,500	38,640	42,146	51,575	*	*	*	*	0	43,702
60 to 64	**1**	**14**	**31**	**19**	**17**	**6**	**9**	**0**	**0**	**0**	**97**
Avg. Pay	*	*	37,580	*	*	*	*	0	0	0	42,237
65 to 69	**1**	**7**	**11**	**7**	**4**	**1**	**0**	**0**	**0**	**1**	**32**
Avg. Pay	*	*	*	*	*	*	0	0	0	*	37,098
70 & up	**0**	**0**	**1**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**5**
Avg. Pay	0	0	*	*	*	0	0	0	0	0	*
Total	**280**	**739**	**594**	**316**	**232**	**125**	**138**	**20**	**4**	**1**	**2,449**
Avg. Annual Pay	18,179	38,834	42,581	44,066	55,728	62,558	67,866	71,045	*	*	42,783

*pay information for cells with less than 20 employees have not been disclosed.