

Clayton County, Georgia Public Employee Retirement System

Information Required Under Governmental Accounting Standards Board Statement No. 67 and 68 as of June 30, 2015

Based on Measurement Period Ending June 30, 2015

December 2015





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December 10, 2015

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

Members of the Board:

This valuation provides information concerning the Clayton County, Georgia Public Employee Retirement System (the Fund) in accordance with the Governmental Accounting Standards Board Statement No. 67 (GASB 67) and No. 68 (GASB 68).

GASB 67 is an amendment of Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans effective for the fiscal year ending June 30, 2014. GASB 68 is an amendment of Statement No. 27, Accounting for Pensions by State and Local Government Employers effective for the fiscal year ending June 30, 2015.

We certify that the information contained in this report has been prepared in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information fairly presents the actuarial position of the plan in accordance with the requirements of GASB 67 and GASB 68 as of June 30, 2015, based on a measurement date of June 30, 2015.

The Board, Clayton County staff and Clayton County employers may use this report for the review of the operation of the plan. The report may also be used in preparation of audited financial statements of Clayton County employers. Use of this report for any other purpose or by anyone other than the Board, Clayton County staff or employers may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods, or inapplicability of the report for that purpose. No one may make any representations or warranties based on any statements or conclusions contained in this report without Buck Consultants' prior written consent.

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. An analysis of the potential range of such future differences is beyond the scope of this valuation.

In preparing the actuarial results, we have relied upon information provided by Clayton County's administrative staff regarding plan provisions, plan participants, plan assets, contribution rates and other matters used in the actuarial valuation. Although we did not audit the data, we reviewed the data for reasonableness and consistency with the prior year's information. The accuracy of the results presented herein is dependent on the accuracy of the data.

The information in this report was prepared using a measurement date of June 30, 2015 and the actuarial assumptions and methods used in the June 30, 2015 actuarial valuation of the plan, except as noted herein.

In our opinion, the actuarial assumptions used are appropriate for purposes of the valuation and are reasonably related to the experience of the Fund and to reasonable long-term expectations. The actuarial assumptions and methods are summarized in Section IV.

This report was prepared under the supervision of Timothy G. Bowen, a Member of the American Academy of Actuaries who meets the Academy's qualification Standards to issue this Statement of Actuarial Opinion. This report has been prepared in accordance with all applicable Actuarial Standards of Practice and we are available to answer questions about it.

Buck Consultants, LLC



Timothy G. Bowen, EA, MAAA, FCA
Director, Retirement Consulting Actuary

Table of Contents

Section I

GASB 67 Information	2
---------------------------	---

Section II

GASB 68 Information	16
---------------------------	----

Section III

Plan Member Data	18
------------------------	----

Section IV

Summary of Assumptions and Methods	19
--	----

Section V

Summary of Plan Provisions.....	22
---------------------------------	----

Appendices

Schedule A	Employers' Allocation of Net Pension Liability	25
Schedule B	Pension Amounts Allocated by Employer	26
Schedule C	Employers' Share of June 30, 2015 Deferred Outflows/Inflows.....	27
Schedule D	Contribution History	28

Section I – GASB 67 Information

Notes to the Financial Statements for the Year Ending June 30, 2015

A. Summary of Significant Accounting Policies

Methods used to value investments. Investments are reported at fair value reduced for pending refunds and increased to reflect the final receivable contribution made in July after the June 30, 2015 measurement date.

B. Plan Description

Plan administration. This is a cost-sharing multiple employer defined benefit pension plan administered by a public employee retirement system funded by participants and the plan sponsors (Clayton County and the Clayton County Water Authority). Clayton County has a June 30 fiscal year end. Clayton County Water Authority has an April 30 fiscal year end.

Plan membership. At June 30, 2015, pension plan membership consisted of the following:

Membership Status	Count
Inactive plan members or beneficiaries currently receiving	1,166
Inactive plan members entitled to but not yet receiving	289
Active plan members	2,449
Total	3,904

Benefits provided. Please see Section V of the report for a summary of plan provisions.

Contributions. The actuarially determined contribution is the estimated amount necessary to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability over a 30 year period. The plan is funded by participant and plan sponsor contributions. For the year ended June 30, 2015, the revenue to the Fund totaled \$22,761,000, which includes \$6,255,252 of member contributions.

C. Investments

Rate of return. For the year ended June 30, 2015, the estimated annual money-weighted rate of return on the Fund's investments, net of pension plan investment expense, was 3.30%.

D. Receivables

None.

Section I – GASB 67 Information

E. Net Pension Liability

The components of the net pension liability at June 30, 2015, were as follows:

Components of Net Pension Liability	
Total pension liability	\$ 656,257,173
Plan fiduciary net position	<u>(387,761,223)</u>
Fund's net pension liability	\$ (268,495,950)
Plan fiduciary net position as a percentage of the total pension liability	59.09%

F. Actuarial Assumptions

The total pension liability as of June 30, 2015 was determined based on June 30, 2015 data, plan provisions, and assumptions, as summarized below:

Actuarial Assumptions	
Investment rate of return	8.00%, net of pension plan investment expenses.
Salary increases	Fiscal 2016 – 2019 2%
	Fiscal 2020 – 2024 3%
	Fiscal 2025 and beyond 4%
Mortality Rates	Annuitants: RP-2014 blue collar base rates with a load of 7.75% with fully generational mortality improvements based on the Modified Buck MP-2014 projection scale Non-Annuitants: RP-2014 blue collar base rates with fully generation mortality improvements based on the Modified Buck MP-2014 projection scale. Disabled Participants: RP-2014 disabled base rates with Modified Buck MP-2014 projection scale.
Rates of Retirement and Withdrawal	Rates based on age and as provided in Section IV
Other	See Section IV

Discount rate. The discount rate used to measure the total pension liability was 6.83%. The projection of cash flows used to determine the discount rate is based on a projection of the Clayton County's current membership based on actuarial assumptions as specified in Section IV. Contributions are assumed to be made in accordance with Clayton County ordinance with additional contributions being made, if necessary, to meet the minimum funding statutes under Georgia state law. Based on those assumptions, the pension plan's fiduciary net position was projected to be insolvent in 40 years. Therefore, the long-term expected rate of return on pension plan investments was applied to the first 40 years of projected benefit payments and a rate of 3.73% was applied to all periods of projected benefit payments after 40 years to determine the total pension liability. The rate of 3.73% was based on the S&P municipal bond 20 year high grade rate index as of June 30, 2015.

Section I – GASB 67 Information

The Retirement System administrator, in consultation with the Retirement System’s investment manager believes 8.00% to be a reasonable assumption for the long-term rate of return on plan assets based on the Retirement System’s investment policy and current asset allocation. Under GASB 67, the audited financial statements of the Retirement System will require documentation supporting the long-term rate of return, which is not contained in this report.

Changes of assumptions used to determine the net pension liability. The discount rate was changed to 6.83% as described above. The assumed rates of salary increase were adjusted to 2.00% for 3 years, 3.00% for the next 5 years, and 4.00% thereafter. The mortality table for healthy annuitants was changed to the RP-2014 blue collar table increased by 7.75% to reflect actual plan experience, generationally projected using the Modified Buck MP-2014 improvement scale. For healthy non-annuitants, the mortality table was changed to the RP-2014 blue collar table, generationally projected using the Modified Buck MP-2014 improvement scale. The mortality table for disabled participants was changed to the RP-2014 disabled mortality table, generationally projected using the Modified Buck MP-2014 improvement scale.

Sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability, calculated using the discount rate of 6.83%, as well as what the Fund's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.83%) or 1-percentage-point higher (7.83%) than the current rate:

	1% Decrease (5.83%)	Current Discount Rate (6.83%)	1% Increase (7.83%)
Net Pension Liability	\$357,532,455	\$268,495,950	\$195,184,850

Section I – GASB 67 Information

Schedules of Required Supplementary Information

Schedule of Changes in Net Pension Liability and Related Ratios

	FYE June 30, 2015	FYE June 30, 2014
Total pension liability		
Service cost	\$ 13,875,847	\$ 12,641,750
Interest	42,916,497	38,446,983
Difference between expected and actual experience	3,314,582	12,248,172
Changes in benefit terms	0	0
Changes in assumptions	18,401,577	80,992,984
Benefit payments	<u>(32,497,705)</u>	<u>(29,341,610)</u>
Net change in total pension liability	\$ 46,010,798	\$ 114,988,279
Total pension liability-beginning	610,246,375	495,258,096
Total pension liability-ending (a)	\$ 656,257,173	\$ 610,246,375
Plan fiduciary net position		
Contributions-employer	\$ 16,505,748	\$ 14,677,561
Contributions-member	6,255,252	4,063,519 ¹
Net investment income	12,175,272	53,084,005
Benefit payments, including refunds of employee contributions	(32,497,705)	(29,341,610)
Administrative expense	(422,012)	(402,882)
Other	<u>0</u>	<u>252,020</u>
Net change in plan fiduciary net position	\$ 2,016,555	\$ 42,332,613
Plan fiduciary net position-beginning	385,744,668	343,412,055
Plan fiduciary net position-ending (b)	387,761,223	385,744,668
Plan's net pension liability-ending (a)-(b)	\$ 268,495,950	\$ 224,501,707
Plan fiduciary net position as a % of the total pension liability	59.09%	63.21%
Covered-employee payroll	\$119,600,775 ²	\$108,583,036 ³
Net pension liability as a percentage of covered-employee payroll	224.49%	206.76%

¹ Net of contribution refunds

² Total earnings provided by Clayton County

³ Pensionable earnings provided by Clayton County

Section I – GASB 67 Information

Schedule of Contributions

	FYE June 30, 2015	FYE June 30, 2014
Actuarially determined contribution	\$16,505,748	\$14,677,561
Contributions related to the actuarially determined contribution	<u>(16,505,748)</u>	<u>(14,677,561)</u>
Contribution deficiency (excess)	\$ 0	\$ 0

Notes to Schedule:

Valuation date. Actuarially determined contributions are calculated as of the beginning of the fiscal year in which contributions are made. The actuarially determined contribution for the fiscal year ending June 30, 2015 is based on the July 1, 2014 Actuarial Valuation.

Changes of assumptions used to determine the actuarially determined contribution:

Effective July 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.

Methods and assumptions used to determine the actuarially determined contribution:

Actuarial cost method:	Projected Unit Credit Cost Method
Amortization method	Level percentage of payroll, open
Amortization period	30 years
Asset valuation method	Actuarial value as specified in the Actuarial Valuation Report for Clayton County, Georgia Public Employee Retirement System for the plan year July 1, 2014 - June 30, 2015
Administrative Expenses	0.20% of Payroll
Inflation (used for the amortization of Unfunded Liability)	3.00% per annum
Salary increases	2% for 4 years, 3% for the next 5 years, and 4% thereafter for all employees.
Investment rate of return	8.00%, net of pension plan investment expenses.
Retirement and Termination Rates	As specified in the Actuarial Valuation Report for Clayton County, Georgia Public Employee Retirement System for the plan year July 1, 2014 - June 30, 2015

Section I – GASB 67 Information

Mortality	<p>Healthy participants: 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.</p> <p>Disabled participants: The RP-2000 disabled mortality table.</p>
Other information	<p>Please see the Actuarial Valuation Report for Clayton County, Georgia Public Employee Retirement System for the plan year July 1, 2014 - June 30, 2015</p>

Schedule of Investment Returns

FYE June 30, 2015	
Annual money-weighted rate of return, net of investment expenses	3.30%

Section I – GASB 67 Information

Table 1 – Projection of Fiduciary Net Position (000's omitted)

Fiscal Year Ending 6/30	Beginning Fiduciary Net Position	Member Contributions	Employer Contributions	Benefit Payments	Administrative Expenses	Investment Earnings	Ending Fiduciary Net Position
2016	\$387,761	\$7,858	\$14,564	\$33,349	\$435	\$30,566	\$406,966
2017	406,966	7,318	14,520	34,949	443	32,015	425,427
2018	425,427	6,871	14,736	36,567	452	33,418	443,433
2019	443,433	6,431	14,958	38,328	461	34,779	460,811
2020	460,811	6,070	15,432	40,403	471	36,090	477,529
2021	477,529	5,729	15,646	42,273	480	37,347	493,498
2022	493,498	5,404	15,820	44,107	490	38,545	508,670
2023	508,670	5,083	15,949	46,091	499	39,671	522,783
2024	522,783	4,759	16,019	48,447	509	40,695	535,300
2025	535,300	4,471	16,073	50,743	519	41,595	546,176
2026	546,176	4,195	16,143	52,961	530	42,368	555,391
2027	555,391	3,934	16,233	54,883	540	43,021	563,156
2028	563,156	3,688	16,308	56,963	551	43,552	569,189
2029	569,189	3,451	16,379	58,857	562	43,952	573,551
2030	573,551	3,221	16,408	60,701	574	44,218	576,124
2031	576,124	2,986	16,370	62,701	585	44,333	576,526
2032	576,526	2,737	16,355	64,528	597	44,281	574,774
2033	574,774	2,499	16,375	66,087	609	44,069	571,022
2034	571,022	2,281	16,360	67,704	621	43,694	565,032
2035	565,032	2,064	16,418	68,947	633	43,159	557,093
2036	557,093	1,875	16,409	70,210	646	42,465	546,986
2037	546,986	1,679	16,416	71,269	659	41,606	534,759

Section I – GASB 67 Information

Table 1 – Projection of Fiduciary Net Position (000's omitted)

Fiscal Year Ending 6/30	Beginning Fiduciary Net Position	Member Contributions	Employer Contributions	Benefit Payments	Administrative Expenses	Investment Earnings	Ending Fiduciary Net Position
2038	\$534,759	\$1,492	\$16,396	\$72,215	\$672	\$40,581	\$520,341
2039	520,341	1,306	16,311	73,223	685	39,376	503,426
2040	503,426	1,108	16,248	74,082	699	37,977	483,977
2041	483,977	919	16,229	74,636	713	36,390	462,167
2042	462,167	753	16,247	74,976	727	34,625	438,089
2043	438,089	609	16,312	74,974	742	32,695	411,989
2044	411,989	487	16,407	74,640	757	30,619	384,106
2045	384,106	384	16,539	74,075	772	28,412	354,593
2046	354,593	298	16,720	73,097	787	26,093	323,820
2047	323,820	232	16,920	71,937	803	23,682	291,913
2048	291,913	177	17,144	70,525	819	21,192	259,082
2049	259,082	132	17,390	68,905	836	18,638	225,502
2050	225,502	97	17,659	67,131	852	16,031	191,306
2051	191,306	70	17,948	65,046	869	13,389	156,797
2052	156,797	52	18,244	62,820	887	10,727	122,114
2053	122,114	37	18,553	60,476	904	8,058	87,382
2054	87,382	26	18,869	58,121	923	5,385	52,618
2055	52,618	18	19,193	55,700	941	2,712	17,899
2056	17,899	11	19,527	53,242	960	45	-
2057	-	7	19,866	50,788	979	(2,613)	-
2058	-	4	20,214	48,352	999	(5,263)	-
2059	-	3	20,567	45,943	1,019	(7,905)	-

Section I – GASB 67 Information

Table 1 – Projection of Fiduciary Net Position (000’s omitted)

Fiscal Year Ending 6/30	Beginning Fiduciary Net Position	Member Contributions	Employer Contributions	Benefit Payments	Administrative Expenses	Investment Earnings	Ending Fiduciary Net Position
2060	\$-	\$1	\$20,928	\$43,510	\$1,039	\$(10,538)	\$-
2061	-	1	21,294	41,082	1,060	(13,160)	-
2062	-	-	21,667	38,665	1,081	(15,770)	-
2063	-	-	22,047	36,256	1,102	(18,367)	-
2064	-	-	22,433	33,909	1,125	(20,953)	-
2065	-	-	22,826	31,627	1,147	(23,531)	-
2066	-	-	23,226	29,377	1,170	(26,104)	-
2067	-	-	23,633	27,191	1,193	(28,675)	-
2068	-	-	24,048	25,064	1,217	(31,249)	-
2069	-	-	24,469	22,981	1,242	(33,828)	-
2070	-	-	24,898	21,007	1,266	(36,419)	-
2071	-	-	25,334	19,129	1,292	(39,031)	-
2072	-	-	25,778	17,375	1,318	(41,674)	-
2073	-	-	26,230	15,765	1,344	(44,360)	-
2074	-	-	26,689	14,273	1,371	(47,102)	-
2075	-	-	27,157	12,882	1,398	(49,913)	-
2076	-	-	27,633	11,570	1,426	(52,806)	-
2077	-	-	28,117	10,360	1,455	(55,793)	-
2078	-	-	28,610	9,248	1,484	(58,889)	-
2079	-	-	29,111	8,213	1,513	(62,109)	-
2080	-	-	29,621	7,247	1,544	(65,469)	-
2081	-	-	30,140	6,350	1,575	(68,985)	-

Section I – GASB 67 Information

Table 1 – Projection of Fiduciary Net Position (000's omitted)

Fiscal Year Ending 6/30	Beginning Fiduciary Net Position	Member Contributions	Employer Contributions	Benefit Payments	Administrative Expenses	Investment Earnings	Ending Fiduciary Net Position
2082	\$-	\$-	\$30,668	\$5,520	\$1,606	\$(72,674)	\$-
2083	-	-	31,206	4,759	1,638	(76,554)	-
2084	-	-	31,753	4,067	1,671	(80,645)	-
2085	-	-	32,309	3,442	1,704	(84,969)	-
2086	-	-	32,875	2,885	1,738	(89,550)	-
2087	-	-	33,451	2,392	1,773	(94,413)	-
2088	-	-	34,037	1,962	1,809	(99,584)	-
2089	-	-	34,634	1,591	1,845	(105,092)	-
2090	-	-	35,241	1,275	1,882	(110,968)	-
2091	-	-	35,858	1,010	1,919	(117,245)	-
2092	-	-	36,487	791	1,958	(123,958)	-
2093	-	-	37,126	611	1,997	(131,144)	-
2094	-	-	37,776	468	2,037	(138,844)	-
2095	-	-	38,438	354	2,078	(147,101)	-
2096	-	-	39,112	265	2,119	(155,959)	-
2097	-	-	39,797	197	2,162	(165,470)	-
2098	-	-	40,495	145	2,205	(175,684)	-
2099	-	-	41,204	106	2,249	(186,659)	-
2100	-	-	41,926	77	2,294	(198,455)	-
2101	-	-	42,661	56	2,340	(211,139)	-
2102	-	-	43,408	40	2,387	(224,780)	-
2103	-	-	44,169	28	2,434	(239,455)	-

Section I – GASB 67 Information

Table 2 – Actuarial Present Value of Projected Benefits (000's omitted)

Fiscal Year Ending 6/30	Beginning Fiduciary Net Position	Benefit Payments			Present Value of Benefits		
		Benefit Payments	Funded Portion	Unfunded Portion	Funded Portion at 8.0%	Unfunded Portion at 3.73%	Using a Single Discount Rate of 6.83%
2016	\$387,761	\$33,349	\$33,349	\$-	\$32,090	\$-	\$32,265
2017	406,966	34,949	34,949	-	31,139	-	31,652
2018	425,427	36,567	36,567	-	30,167	-	31,000
2019	443,433	38,328	38,328	-	29,277	-	30,415
2020	460,811	40,403	40,403	-	28,576	-	30,012
2021	477,529	42,273	42,273	-	27,684	-	29,394
2022	493,498	44,107	44,107	-	26,746	-	28,708
2023	508,670	46,091	46,091	-	25,878	-	28,081
2024	522,783	48,447	48,447	-	25,186	-	27,630
2025	535,300	50,743	50,743	-	24,426	-	27,089
2026	546,176	52,961	52,961	-	23,605	-	26,466
2027	555,391	54,883	54,883	-	22,650	-	25,673
2028	563,156	56,963	56,963	-	21,767	-	24,942
2029	569,189	58,857	58,857	-	20,825	-	24,124
2030	573,551	60,701	60,701	-	19,886	-	23,289
2031	576,124	62,701	62,701	-	19,020	-	22,518
2032	576,526	64,528	64,528	-	18,124	-	21,693
2033	574,774	66,087	66,087	-	17,187	-	20,797
2034	571,022	67,704	67,704	-	16,303	-	19,943
2035	565,032	68,947	68,947	-	15,373	-	19,011
2036	557,093	70,210	70,210	-	14,495	-	18,122
2037	546,986	71,269	71,269	-	13,624	-	17,219

Section I – GASB 67 Information

Table 2 – Actuarial Present Value of Projected Benefits (000's omitted)

Fiscal Year Ending 6/30	Beginning Fiduciary Net Position	Benefit Payments			Present Value of Benefits		
		Benefit Payments	Funded Portion	Unfunded Portion	Funded Portion at 8.0%	Unfunded Portion at 3.73%	Using a Single Discount Rate of 6.83%
2038	\$534,759	\$72,215	\$72,215	-	\$12,782	-	\$16,332
2039	520,341	73,223	73,223	-	12,000	-	15,501
2040	503,426	74,082	74,082	-	11,242	-	14,680
2041	483,977	74,636	74,636	-	10,487	-	13,845
2042	462,167	74,976	74,976	-	9,754	-	13,019
2043	438,089	74,974	74,974	-	9,031	-	12,186
2044	411,989	74,640	74,640	-	8,325	-	11,356
2045	384,106	74,075	74,075	-	7,650	-	10,550
2046	354,593	73,097	73,097	-	6,990	-	9,745
2047	323,820	71,937	71,937	-	6,369	-	8,977
2048	291,913	70,525	70,525	-	5,782	-	8,238
2049	259,082	68,905	68,905	-	5,231	-	7,534
2050	225,502	67,131	67,131	-	4,718	-	6,871
2051	191,306	65,046	65,046	-	4,233	-	6,232
2052	156,797	62,820	62,820	-	3,786	-	5,634
2053	122,114	60,476	60,476	-	3,374	-	5,077
2054	87,382	58,121	58,121	-	3,003	-	4,567
2055	52,618	55,700	-	55,700	-	13,111	4,097
2056	17,899	53,242	-	53,242	-	12,082	3,666
2057	-	50,788	-	50,788	-	11,110	3,273
2058	-	48,352	-	48,352	-	10,197	2,917
2059	-	45,943	-	45,943	-	9,341	2,595

Section I – GASB 67 Information

Table 2 – Actuarial Present Value of Projected Benefits (000's omitted)

Fiscal Year Ending 6/30	Beginning Fiduciary Net Position	Benefit Payments			Present Value of Benefits		
		Benefit Payments	Funded Portion	Unfunded Portion	Funded Portion at 8.0%	Unfunded Portion at 3.73%	Using a Single Discount Rate of 6.83%
2060	\$-	\$43,510	\$-	\$43,510	\$-	\$8,528	\$2,300
2061	-	41,082	-	41,082	-	7,763	2,033
2062	-	38,665	-	38,665	-	7,043	1,791
2063	-	36,256	-	36,256	-	6,367	1,572
2064	-	33,909	-	33,909	-	5,741	1,376
2065	-	31,627	-	31,627	-	5,162	1,202
2066	-	29,377	-	29,377	-	4,622	1,045
2067	-	27,191	-	27,191	-	4,124	905
2068	-	25,064	-	25,064	-	3,665	781
2069	-	22,981	-	22,981	-	3,240	670
2070	-	21,007	-	21,007	-	2,855	574
2071	-	19,129	-	19,129	-	2,506	489
2072	-	17,375	-	17,375	-	2,194	416
2073	-	15,765	-	15,765	-	1,920	353
2074	-	14,273	-	14,273	-	1,675	299
2075	-	12,882	-	12,882	-	1,458	253
2076	-	11,570	-	11,570	-	1,262	213
2077	-	10,360	-	10,360	-	1,090	178
2078	-	9,248	-	9,248	-	938	149
2079	-	8,213	-	8,213	-	803	124
2080	-	7,247	-	7,247	-	683	102
2081	-	6,350	-	6,350	-	577	84

Section I – GASB 67 Information

Table 2 – Actuarial Present Value of Projected Benefits (000's omitted)

Fiscal Year Ending 6/30	Beginning Fiduciary Net Position	Benefit Payments			Present Value of Benefits		
		Benefit Payments	Funded Portion	Unfunded Portion	Funded Portion at 8.0%	Unfunded Portion at 3.73%	Using a Single Discount Rate of 6.83%
2082	\$-	\$5,520	\$-	\$5,520	\$-	\$483	\$68
2083	-	4,759	-	4,759	-	402	55
2084	-	4,067	-	4,067	-	331	44
2085	-	3,442	-	3,442	-	270	35
2086	-	2,885	-	2,885	-	218	27
2087	-	2,392	-	2,392	-	174	21
2088	-	1,962	-	1,962	-	138	16
2089	-	1,591	-	1,591	-	108	12
2090	-	1,275	-	1,275	-	83	9
2091	-	1,010	-	1,010	-	64	7
2092	-	791	-	791	-	48	5
2093	-	611	-	611	-	36	4
2094	-	468	-	468	-	26	3
2095	-	354	-	354	-	19	2
2096	-	265	-	265	-	14	1
2097	-	197	-	197	-	10	1
2098	-	145	-	145	-	7	1
2099	-	106	-	106	-	5	-
2100	-	77	-	77	-	3	-
2101	-	56	-	56	-	2	-
2102	-	40	-	40	-	2	-
2103	-	28	-	28	-	1	-

Section II – GASB 68 Information

(See Section I for information common to GASB 67 and 68)

Pension Expense

The components of pension expense to be reported for the fiscal year ended June 30, 2015, based on a measurement date of June 30, 2015 is as follows:

	FYE June 30, 2015
Service cost	\$ 13,875,847
Interest cost	42,916,497
Expected return on assets	(30,453,225)
Current period effect of benefit changes	0
Current period difference between expected and actual experience	552,430
Current period effect of changes in assumptions	3,066,930
Current period difference between projected and actual investment earnings	3,655,591
Member contributions	(6,255,252)
Administrative expenses	422,012
Current period recognition of prior years' deferred outflow of resources	0
Current period recognition of prior years' deferred inflow of resources	<u>0</u>
Total pension expense	\$ 27,780,830

The employers' allocation of pension expense to be reported for the fiscal year ended June 30, 2015 is shown in Schedule B in the Appendix.

The pension expense reported for the fiscal year end is based on the June 30, 2014 and June 30, 2015 actuarial valuation.

The effect of difference between expected and actual experience, changes in assumptions and the change in employers' proportion are recognized over the average expected remaining service lives of active and inactive members as of June 30, 2014 (6.0 years).

The difference between projected and actual investment earnings is recognized over 5 years.

Determination of Average Remaining Expected Service Lives

Remaining Service Lives as of June 30, 2014			
Group	Number	Service	Average
Active Members	2,447	23,108.75	
Terminated Vested Members	290	0.00	
Members Receiving Benefits	1,124	0.00	
Total	3,861	23,108.75	6.0

Section II – GASB 68 Information

(See Section I for information common to GASB 67 and 68)

Allocation of Net Pension Liability

The allocation of net pension liability between the County and the Water Authority as of June 30, 2014 and June 30, 2015 is shown in Schedule A of the Appendix.

Allocation of Deferred Outflows/Inflows of Resources

The allocation of deferred outflows/inflows of resources is shown in Schedule B in the Appendix. Schedule B also includes the FYE June 30, 2015 recognition of the change in proportion of the June 30, 2014 amounts in accordance with paragraph 54 of GASB 68.

Allocation of Future Years' Recognition of Deferred Outflows/Inflows

The employers' allocation of June 30, 2015 deferred outflows/inflows recognition for each of the next five fiscal years and thereafter is shown in Schedule C in the Appendix.

10-Year Contribution History

The 10-year history of employer contributions is shown in Schedule D in the Appendix. Amounts are only shown for 2014 and 2015.

Allocation Methodology

The allocation schedules in the Appendix show the proportionate share allocations for each employer. The allocations are based on a five year average of actual contributions made by the County and Water Authority as of the end of the fiscal year.

Section III – Plan Member Data

June 30, 2015

Active members	
Number	2,449
Average age	42.24 years
Average service	8.92 years
Terminated vested members (including deferred beneficiaries)	
Number	289
Average age	52.29 years
Average annual retirement benefits	\$ 12,018
Retired members	
Number	984
Average age	67.45 years
Average annual retirement benefits	\$ 28,543
Disabled members (including deferred 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 years
Average annual retirement benefits	\$ 15,725
Total Number of Members	3,904

Section IV – Actuarial Assumptions and Methods

Methods used to determine the Net Pension Liability

VALUATION DATE: June 30, 2015

ASSET VALUATION METHOD: Market Value

VALUATION FUNDING METHOD: Entry Age Normal Actuarial Cost Method

Assumptions used to determine the Net Pension Liability

DISCOUNT RATE: 6.83% per annum, compounded annually, net of investment expenses.

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

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

Safety

Age	Annual Rate of					
	Withdrawal					Disability
	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

Age	Annual Rate of					
	Withdrawal					Disability
	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

Section IV – Actuarial Assumptions and Methods

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

Age	Non-Safety		Safety	
	Annual Rate of Retirement			
	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: RP-2014 blue collar base rates with a load of 7.75% with fully generational mortality improvements based on the Modified Buck MP-2014 projection scale.

Healthy Non-annuitants: RP-2014 blue collar base rates with fully generation mortality improvements based on the Modified Buck MP-2014 projection scale.

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

Section IV – Actuarial Assumptions and Methods

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.

Section V – Summary of Plan 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	<p>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.</p> <p>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.</p> <p>Effective July 1, 2012, State Court Law Clerks are now eligible to participate in the Plan.</p>
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.

Section V – Summary of Plan Provisions

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.

Section V – Summary of Plan Provisions

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.
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Normal Form of Payment	5 years certain and life annuity.
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Optional Forms of Payment	(1) 100%, 75%, or 50% joint and survivor annuity. (2) Life annuity with 120 months certain
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Participant Contributions	<p>Each participant contributes 7.5% of compensation beginning July 1, 2015. Each participant contributes 5.5% of compensation beginning July 1, 2006. 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.</p> <p>Any participant or beneficiary may elect to receive a refund of contributions with interest in lieu of any other benefit payable under the Plan.</p> <p>Participant contributions are “picked-up” by the County (i.e., taken out of pre-tax income).</p>
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Appendix A – Net Pension Liability Allocations by Employer

	County	Water Authority	Plan Total
FYE Ending June 30, 2015:			
Total Pension Liability	\$556,177,954	\$100,079,219	\$656,257,173
Plan Fiduciary Net Position	\$328,627,636	\$59,133,587	\$387,761,223
Net Pension Liability	\$227,550,318	\$40,945,632	\$268,495,950
Portion of Net Pension Liability	84.75%	15.25%	100.00%
Plan Fiduciary Net Position as % of Total Pension Liability	59.09%	59.09%	59.09%
Covered Payroll ¹	\$100,574,193	\$19,026,582	\$119,600,775
Net Pension Liability as % of Covered Payroll	226.25%	215.20%	224.49%
Employer Contributions	\$13,805,519	\$2,700,229	\$16,505,748
FYE Ending June 30, 2014:			
Total Pension Liability	\$518,892,493	\$91,353,882	\$610,246,375
Plan Fiduciary Net Position	\$327,998,691	\$57,745,977	\$385,744,668
Net Pension Liability	\$190,893,801	\$33,607,906	\$224,501,707
Portion of Net Pension Liability	85.03%	14.97%	100.00%
Plan Fiduciary Net Position as % of Total Pension Liability	63.21%	63.21%	63.21%
Covered Payroll ²	\$90,813,460	\$17,769,576	\$108,583,036
Net Pension Liability as % of Covered Payroll	210.20%	189.13%	206.76%
Employer Contributions	\$12,709,050	\$2,220,531	\$14,929,581

¹ Total earnings provided by Clayton County

² Pensionable earnings

Appendix B – Pension Amounts Allocated by Employer

	County	Water Authority	Plan Total
Net Pension Liability as of June 30, 2015:			
	\$227,550,318	\$40,945,632	\$268,495,950
Deferred Outflows of Resources:			
Difference between expected and actual experience	\$2,340,924	\$421,228	\$2,762,152
Changes in assumptions	\$12,996,113	\$2,338,534	\$15,334,647
Difference between projected and actual investment earnings	\$12,392,452	\$2,229,910	\$14,622,362
Change in proportion	\$0	\$626,490	\$626,490
Contributions made subsequent to the measurement date ¹	\$0	TBD	TBD
Deferred Inflows of Resources:			
Difference between expected and actual experience	\$0	\$0	\$0
Changes in assumptions	\$0	\$0	\$0
Difference between projected and actual investment earnings	\$0	\$0	\$0
Change in proportion	\$(626,490)	\$0	\$(626,490)
Pension Expense Recognized:			
Proportionate share of current year's expense	\$23,544,253	\$4,236,577	\$27,780,830
Change in proportion	\$(125,298)	\$125,298	\$0
Total	\$23,418,955	\$4,361,875	\$27,780,830

¹ Contributions made subsequent to the measurement of June 30, 2015 to the end of the fiscal year of April 30, 2016 for Clayton County Water Authority will be reported as deferred outflows.

Appendix C – Employers’ Share of June 30, 2015 Deferred Outflows/Inflows

	County	Water Authority	Plan Total
FY2016¹	\$6,040,223	TBD	TBD
FY2017	\$6,040,223	\$1,234,728	\$7,274,951
FY2018	\$6,040,223	\$1,234,728	\$7,274,951
FY2019	\$6,040,223	\$1,234,728	\$7,274,951
FY2020	\$2,942,110	\$677,250	\$3,619,360
Thereafter	\$0	\$0	\$0

¹ Contributions made subsequent to the measurement of June 30, 2015 to the end of the fiscal year of April 30, 2016 for Clayton County Water Authority will be reported as deferred outflows.

Appendix D – Contribution History

	County	Water Authority	Plan Total
FY2015	\$13,805,519	\$2,700,229	\$16,505,748
FY2014	\$12,709,050	\$2,220,531	\$14,929,581