

**CLAYTON COUNTY, GEORGIA
PUBLIC EMPLOYEE RETIREMENT SYSTEM
(A Pension Trust Fund of Clayton County, Georgia)**

ANNUAL FINANCIAL REPORT

Years ended June 30, 2016 and 2015



**CLAYTON COUNTY, GEORGIA
PUBLIC EMPLOYEE RETIREMENT SYSTEM**

**ANNUAL FINANCIAL REPORT
YEARS ENDED JUNE 30, 2016 AND 2015**

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I. INTRODUCTORY SECTION (UNAUDITED)

This Section Contains the Following Subsections:

LISTING OF PRINCIPAL OFFICIALS AND CONSULTANTS

LETTER OF TRANSMITTAL

**CLAYTON COUNTY, GEORGIA
PUBLIC EMPLOYEE RETIREMENT SYSTEM**

**LISTING OF PRINCIPAL OFFICIALS AND CONSULTANTS
JUNE 30, 2016**

PENSION BOARD MEMBERS

Terry Hicks, Chairman
Katherine Dodson, Vice Chairman
Ramona Bivins, Secretary/Treasurer
Detrick Stanford, Interim Member
Carl Rhodenizer, Member

CLAYTON COUNTY BOARD OF COMMISSIONERS

Jeffrey E. Turner, Chairman
Sonna Singleton Gregory, Vice Chair
Gail Hambrick, Commissioner
Shana M. Rooks, Commissioner
Michael Edmonson, Commissioner

Actuary

Buck Consultants

Investment Custodian

Transamerica Retirement Solutions

Independent Auditor

Mauldin & Jenkins, LLC



Clayton County Pension Board

112 Smith Street
Jonesboro, Georgia 30236
Phone: 770-477-3222

Terry Hicks, Chairman
Katherine S. Dodson, Vice Chairman
Ramona Thurman Bivins, Secretary
Pamela Ambles, Member
Carl G. Rhodenizer, Member

December 30, 2016

The Honorable Terry Hicks, Chairman
Members of the Clayton County Pension Board,
Employees of Clayton County and Clayton County Water Authority,
and Citizens of Clayton County, Georgia

Ladies and Gentlemen:

The Annual Financial Report of the Public Employee Retirement System (PERS) of Clayton County, Georgia for the fiscal year ended June 30, 2016, is submitted herewith. Responsibility for both the accuracy of the data and the completeness and fairness of presentation, including all disclosures, rests with the Clayton County Pension Board. We believe that the data as presented is accurate in all material respects, that it is presented in a manner designed to fairly set forth the financial position and results of operations of the Public Employee Retirement System and that all disclosures necessary to enable interested citizens to gain a reasonable understanding of the Public Employee Retirement System's financial affairs have been included.

There are five major sections presented in the Annual Financial Report: the Introductory Section, the Financial Section, the Actuarial Section, the Statistical Section, and the Compliance Section. The Introductory Section includes a Table of Contents, a Letter of Transmittal from the Chief Financial Officer, and a list of the Public Employee Retirement System's principal officials and consultants. The Transmittal Letter includes summarized financial information about the Public Employee Retirement System for the fiscal year. Also included is a discussion of the Public Employee Retirement System's current and future economic condition and outlook.

The Financial Section includes the independent auditors' report, the Management Discussion and Analysis, the basic financial statements, and required supplemental information of the Public Employee Retirement System. Notes to the financial statements and supplementary information are also included which provide additional detail of data summarized in the financial statements.

As completed by the actuarial firm, Buck Consultants, the Actuarial Section includes the actuarial certification, the comparative summary of principal valuation results, and other information from the actuarial report for fiscal year ended June 30, 2016.

The Statistical Section contains information pertaining to revenues, expenses, Plan net position, and investment results.

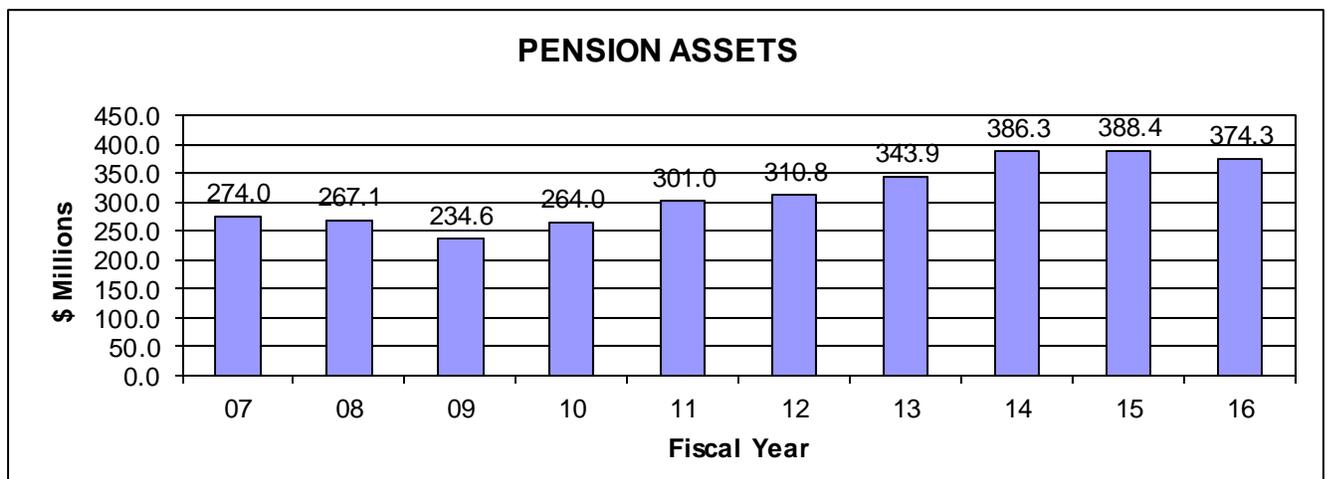
The Compliance Section includes the Auditor's report on internal controls and other matters.

ECONOMIC CONDITION AND OUTLOOK

Financial Highlights

The Public Employee Retirement System (PERS) maintains an investment policy designed to promote a strong financial future for the Plan. Our long-term objectives for the total portfolio and managers are to maintain high levels of performance over complete market cycles relative to its appropriate weighted benchmark index and within the universe of managers of its management style. Funding of the Pension Plan is adequate to secure current and future retirement benefits with the market value of Net Position Held in Trust for Pension Benefits totaling \$374,296,794 at June 30, 2016.

The growth of Plan assets is illustrated in the accompanying graph. Plan assets increased from \$274.0 million at June 30, 2007 to \$374.3 million as of June 30, 2016. This demonstrates the general strong performance of the capital markets in the last decade. The exception occurred in the period beginning September 2008 and ending April 2009, which reflects the drop in markets nationwide and a slight correction in the current year.



Annual growth increased by an average return of 5% over the last ten years. Because of the excessive National Market decline during fiscal year 2009, the Fund decreased by 12% but fully recovered the following fiscal year. It has experienced a gradual incline through fiscal year 2015, experiencing a slight market correction in the current year.

As the employer and employee contributions to the Plan are more than substantially offset by the payment of retirement benefits, the increase in Plan assets represents gains (realized and unrealized) from portfolio investments. The total returns for the Plan held at Transamerica Retirement Solutions engaged by the Pension Board are detailed in the next few paragraphs and table.

The total **gross time weighted return** for the portfolio in FY 2016 decreased by .95%, underperforming the County Custom benchmark of a 2.23% increase. Over a trailing three year period, the Plan produced an annually compounded total return of 5.89%, trailing the benchmark return of 7.04%. For the past five years, the Plan generated a return of 7.52% outperforming its benchmark of 7.09%. Since inception, the Plan has generated a return of 8.31% versus its Policy index of 8.31%. For purposes of the actuary's Valuation Report, an earnings rate of 8.0% is assumed. The asset valuation method is a

five-year smoothed market value, and projected salary increases are set at 2.0% for two more years, 3.0% for the next five years and 4.0% thereafter.

On July 1, 2013, the fund was invested in a combination of mutual funds and three separately managed accounts. Upon the recommendation of Morgan Stanley, the Pension Board’s consultant, one investment change was made during the year. In August 2015, Cornerstone – Concentrated 30 was replaced with Atlanta Capital Investment Managers.

A small allocation is made to the **Money Market Account** for purposes of funding monthly pension benefits and making refunds of Contribution Account Balances to those non-vested participants who terminate employment with the County or the Water Authority. Employee and Employer contributions are deposited into this account, as well.

The total **fund return** for the pension plan underperformed its custom benchmark for the year. The pension plan produced a negative return of 0.95% for the fiscal year ended June 30, 2016, whereas the Fund Class benchmark was 2.23%. The three-year annualized return also missed its perspective fund benchmark, but the five-year return exceeded its benchmark by 43 basis points. The custom benchmark is composed of 10% Russell 1000 Growth Index, 7% Russell 1000 Index, 13% Russell 1000 Value Index, 4% Russell Midcap Growth Index, 6 % Russell Midcap Value Index, 5% Russell 2000 Growth Index, 5% Russell 2000 Value Index, 7% MSCI EAFE Index, 3% MSCI Emerging Markets Index, 1% Citigroup 3-month T-bill Index, 32% Barclay’s US Aggregate Index, and 7% Citigroup World Government Bond Index.

The following table shows the annually compounded total returns for each of the managers and its’ benchmarks.

Investment Performance at June 30, 2016

Total Pension Plan	<u>Total Return</u>	<u>Benchmark Return</u>	<u>Benchmarks</u>
One Year	-0.95 %	2.23 %	Russell 1000 Growth Index (10%); Russell 1000 Index (7%); Russell 1000 Value Index (13%); Russell Midcap Growth Index (4%); Russell Midcap Value Index (6%); Russell 2000 Growth Index (5%); Russell 2000 Value Index (5%); MSCI EAFE Index (7%); MSCI Emerging Markets Index (3%); Citigroup 3-month T-bill Index (1%); Barclay’s US Aggregate Index (32%); Citigroup World Government Bond Index (7%)
Three Years	5.89	7.04	
Five Years	7.52	7.09	

OUTLOOK

The Great Recession, beginning in December 2007 and ending June 2009, was the deepest and longest downturn since the Great Depression, and the U.S. has slowly been emerging from this period of uncertainty and turmoil. Most Economists believe that the U.S. economy will continue to expand at a moderate pace through 2017 and return to a lower growth rate more in line with long-term potential. Economic policy developments from the upcoming administration may have a great effect on this forecast. Markets reacted positively, though, shortly after the election at the prospect of less government gridlock, reduced regulation, and lower corporate taxes. History has shown that the markets follow economic growth and profit cycles rather than political ones. Despite instability in the last decade, the U.S. economy is still the largest and most important in the world. It represents about 20% of global output and remains larger than China.

Gross Domestic Product (GDP) is the broadest indicator, and most closely watched, of the economy. It measures the value of goods and services produced in the U.S. in a given time period. Morgan Stanley forecasts global GDP to be 2.9 % for 2016, a slight increase over 2015, and U.S. real GDP at 1.7% in 2016 and 1.5% in 2017. The strongest part of GDP growth has been in Consumer Spending, up 3.8% in the last year. This growth may be due to the strengthening of the labor market, which has been expanding moderately since mid – 2016. Housing construction, particularly in multi-family starts, has increased in the current year and may continue a bit in 2017. The Federal Reserve decided to raise interest rates at their December 2016 meeting up from 0.50% to 0.75%. Their projection for 2017 calls for a modest adjustment with three rate increases.

Experts say that economic conditions point to a gradual global economic expansion in the months ahead. This is good news for corporate earnings – bad news for interest rates and inflation. The U.S. has entered the end of the market cycle. During this phase, interest rates and inflation typically rise and credit spreads widen. Bonds typically don't do well, but stocks usually advance if earnings growth is sufficient. Modest rate increases shouldn't negatively impact the market but will limit its upside potential. The greater investment risk is that the U.S. economy improves too quickly. Hopefully, improvement will take place on a slower pace.

Appointments

The Pension Board retained Buck Consultants as the Plan actuary and Bryan Cave LLP as specialized legal counsel. During the year, Buck completed the Valuation Report and consulted on other items of interest to the Pension Board. Also, Bryan Cave has assisted in reviewing legal documents and responding to other legal matters. Transamerica Retirement Solutions has served as the custodian bank and record-keeper / processor for the Plan since July 1, 2013.

Morgan Stanley Smith Barney was retained on May 2, 2010 to provide expertise in the selection of investment funds and financial analysis, as well as additional consulting services of the Pension Plan.

Plan Enhancements

The Plan was restated, effective July 1, 2013, primarily to consolidate amendments made subsequent to the last restatement on July 1, 2008. The restatement also contained clarifications pertaining to the manner in which average monthly compensation is determined for benefit calculation purposes; qualification for certain death benefits; and eligibility of certain classes of employees. It was amended

on February 17, 2015 to define “leased employee” and again on May 5, 2015 for new employees hired on or after January 1, 2016. This amendment primarily changed the pension benefit formula, vesting period, and retirement ages, having the goal of improving funding levels. It also increased Employee and Employer contribution requirements.

Prospects for the Future

Due to a change in actuarial assumptions pertaining to mortality tables and GASB 67 and 68, the Pension Board contracted Buck Consultants and Bryan Cave legal firm to conduct several studies regarding potential plan changes. These studies enabled the Pension Board to make educated decisions and recommendations to the Board of Commissioners regarding changes to the Plan. As a result, a new Plan was approved and adopted by the Board of Commissioners on May 5, 2015. The Plan increased both Employee and Employer contributions, as well as made several significant changes for new employees hired on or after January 1, 2016. Funding is expected to improve after a few years of increased contributions and implementation of these Plan changes.

REPORTING ENTITY

The Pension Board is the governing body of the Clayton County Public Employee Retirement System. The Board consists of members representing the Clayton County Board of Commissioners and the Clayton County Water Authority as well as one at-large member who is a citizen of Clayton County. Under the amended Plan, the Public Employee Retirement System maintains a contributory, defined benefit pension plan that covers all Civil Service full-time County employees, full-time Water Authority employees, department heads, certain elected officials, and certain appointed employees. The Board of Commissioners and the Water Authority fund the Plan at 13.90% of covered payroll, paid on a quarterly basis. Employees contribute 7.5% of salary to the Plan on a bi-weekly basis.

FINANCIAL INFORMATION

Accounting and Budgetary Controls

In developing and evaluating the Public Employee Retirement System's accounting system, consideration is given to the adequacy of internal accounting controls. Internal accounting controls are designed to provide reasonable, but not absolute, assurance regarding: (1) the safeguarding of assets against loss from unauthorized use or disposition; and (2) the reliability of financial records for preparing financial statements and maintaining accountability of assets.

The concept of reasonable assurance recognizes that: (1) the cost of control should not exceed the benefits likely to be derived; and (2) the evaluation of costs and benefits requires estimates and judgments by management. All internal control evaluations occur within the above framework. We believe that the Public Employees' Retirement System's internal accounting controls adequately safeguard assets and provide reasonable assurance surrounding the proper recording of financial transactions.

Accounting Method

The funds of the Public Employee Retirement System are reported on the accrual basis of accounting. The measurement focus is based upon the determination of net position and changes in financial net position.

Plan Disclosures

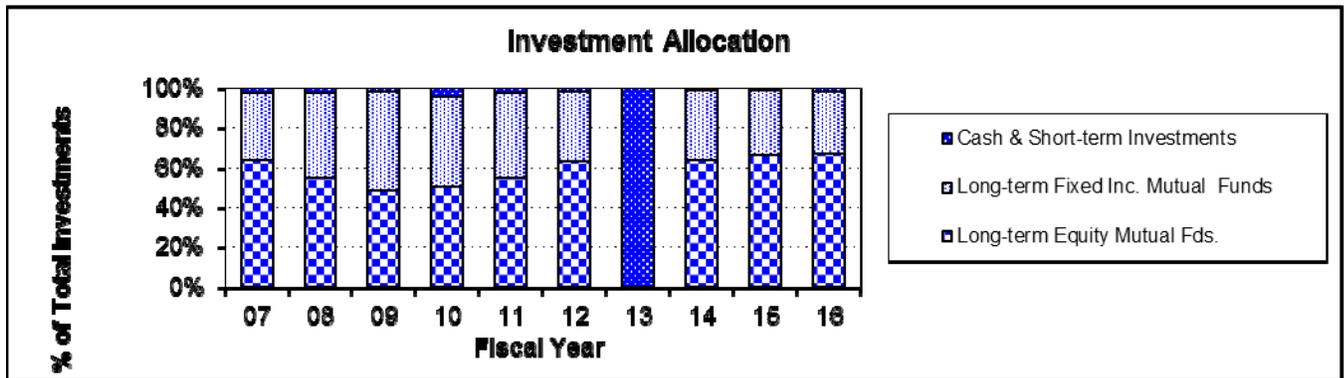
Effective July 1, 2013, the Plan implemented the provisions of GASB Statement No. 67, *Financial Reporting for Pension Plans - an amendment of GASB Statement No. 25*, which significantly changed the disclosures required related to the Plan and GASB Statement Nos. 68, *Accounting and Financial Reporting for Pensions* and 71- *an amendment of GASB Statement No. 68*, which affected required note disclosures in the Comprehensive Annual Financial Report (CAFR).

Investments and Funding

Long-term plan investments valued at cost totaled \$351,772,588 as of June 30, 2016. On a cost basis, the asset mix of long-term investments was 65.87% equity based mutual funds, as well as equities in separately managed accounts, and 34.13% fixed income mutual funds. Additionally, cash and short-term investments in the amount of \$5,531,319 made up the remaining assets.

When valued at market as of the end of the fiscal year 67.9% of the Plan's long-term investment portfolio of \$368,158,563 was held in equity based mutual funds and 32.1% in fixed income mutual funds. Note D of the Annual Financial Report provides further detail of the Plan's long-term investment allocation. Cash and short-term investments (considered cash equivalents) are reported at cost, which approximates fair value. When cash and short-term investments are added to long-term investments, the mix of assets, based on market values, are 67.1% equity based mutual funds, 31.8% fixed income mutual funds and 1.1% cash and cash equivalents.

The following chart shows the progress made toward the Plan's goal of increasing the allocation to equities. Until June 30, 1996, fixed income securities represented the majority of Plan investments. Since then, the Plan has maintained an allocation of at least 50% in equities. Although not depicted on the chart below, the allocation to fixed income securities reached a high of 81.5% at June 30, 1992 and has experienced a significant decline over the past 24 years to only 31.8% of the portfolio today. Equities have increased from their low of 8.1% at June 30, 1992 to 67.1% at June 30, 2016. Cash equivalents totaled 1.1% at the end of the current fiscal year. This category largely represents fourth quarter Employer contributions payable to the Money Market account for monthly benefit and lump sum payments. With the exception of fiscal year 2013 when the investments were liquidated to move to a different custodian and mutual fund platform, the allocation to long term equity has gradually increased, on average.



The Plan’s investment portfolio reflects a prudent, well-diversified, conservative strategy. This strategy is used to provide adequate funding for the long-term benefits for those employees covered by the Plan, while simultaneously maintaining a sound fund consistent with the requirements defined by the Plan’s actuarial firm.

The market value of the Plan Net Position decreased 3.6% from \$388,360,078 as of June 30, 2015 to \$374,296,794 at the end of the current fiscal year. In 1997, the Plan actuary recommended a change in the asset valuation method from “market value” to the “market related actuarial value of assets” which utilizes a five-year smoothed market value of assets to determine funding status. This resulted in the “Market Related Actuarial Value” of assets equaling \$402,094,096 on June 30, 2016, up 4.0% for the year. The total Actuarial Accrued Liability (AAL), a standardized measure of the Plan’s liabilities, which includes an actuarial cost estimate for non-vested participants, increased 6.1% to \$576,994,028 as of June 30, 2016 compared with \$543,816,709 last year. The unfunded actuarial accrued liability increased from \$157,215,041 (40.7% of Plan assets) at June 30, 2015 to \$174,899,932 (43.5% of Plan assets) at June 30, 2016. Over the past five years, Clayton County’s total unfunded liability has increased from \$126.1 million to \$174.9 million. One of the causes of this increase is due to the fact that experienced, higher paid employees were replaced with lesser experienced and lower paid employees and salary, as well as implementation of hiring freezes in previous years. The major cause occurred in the 2015 when actuarial assumption changes were made. This resulted in an increase in excess of \$25 million.

At fiscal year-end 2016, the County and Water Authority were required to contribute additional funds in the amount of \$662,840 and \$144,177 respectively to meet the Georgia funding requirements. Effective July 1, 2015, County and Water Authority quarterly contributions increased to 13.9% in order to improve future funding and to eventually pay off the unfunded liability. This was an increase of 1% from 12.90% which began in fiscal year 2004 to accommodate the increased expense level.

The actuarial projected investment return for the Plan is estimated at 8% per annum, substantiated by a study conducted by Morgan Stanley in 2014. Projected salary increases are estimated at 2.0% per annum for two more years, 3% for the next five years, and 4% thereafter. In addition, the projections include a 2.0% cost-of-living adjustment after the 84th payment effective July 1, 2009 and an inflation rate of 3.0% per annum.

OTHER INFORMATION

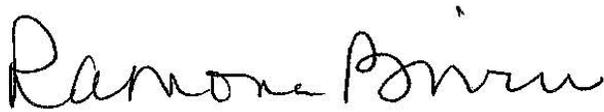
Independent Audit

The Pension Board of the Public Employee Retirement System requires an annual audit of the financial records and transactions of the PERS, conducted by independent certified public accountants as selected by the Clayton County Board of Commissioners. The financial statements for the fiscal year ended June 30, 2016 were audited by Mauldin and Jenkins, LLC. Their unmodified opinion has been included in this report. Their audit was conducted in accordance with auditing standards generally accepted in the United States of America. An unmodified opinion indicates that the financial statements are presented fairly in all material respects, as of June 30, 2016 and 2015 in accordance with U.S generally accepted accounting principles.

Acknowledgments

The preparation of this report was accomplished with the dedicated efforts of the Finance Department staff and through the cooperation of the actuarial and consulting firms employed by the Pension Board. I would also like to acknowledge the Pension Board members for their support, contributions, and guidance in the preparation of this report and the control of the financial affairs of our Public Employee Retirement System.

Respectfully submitted,

A handwritten signature in black ink that reads "Ramona Bivins". The signature is written in a cursive style with a large initial "R".

Ramona Bivins
Secretary/Treasurer



II. FINANCIAL SECTION

This Section Contains the Following Subsections:

REPORT OF INDEPENDENT AUDITORS

MANAGEMENT'S DISCUSSION AND ANALYSIS

BASIC FINANCIAL STATEMENTS

NOTES TO FINANCIAL STATEMENTS

REQUIRED SUPPLEMENTARY INFORMATION



INDEPENDENT AUDITOR'S REPORT

To the Board of Directors
Clayton County, Georgia Public
Employee Retirement System
Jonesboro, Georgia

Report on the Financial Statements

We have audited the accompanying financial statements of the **Clayton County, Georgia Public Employee Retirement System** (the "Plan") as of and for the years ended June 30, 2016 and 2015, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Plan management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to an entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Plan as of June 30, 2016 and 2015 and the changes in financial position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 15 – 18 and the Schedule of Changes in the Net Pension Liability and Related Ratios, the Schedule of Contributions, and the Schedule of Investment Returns on pages 33 – 35 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Plan's basic financial statements. The introductory section, actuarial section and statistical section listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. The introductory section, actuarial section and statistical section have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 30, 2016, on our consideration of the Plan's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Plan's internal control over financial reporting and compliance.

Mauldin & Jenkins, LLC

Macon, Georgia
December 30, 2016

Management's Discussion and Analysis (Unaudited)

This section of the annual financial report presents a narrative overview and an analysis of the financial activities of the Public Employee Retirement System (PERS) of Clayton County, Georgia for the fiscal year ended June 30, 2016. Management encourages readers to consider the information presented here in conjunction with the additional information included in the letter of transmittal, which can be found on pages 3 - 10 of this report.

Financial Highlights (2016 vs. 2015)

- Plan net position decreased \$14,063,284 during fiscal year 2016 compared to an increase of \$2,034,588 in the previous year. This represents a decrease of 3.6% for fiscal year 2016 and is primarily due to the market correction that occurred in the current fiscal year.
- The rate of return on investment assets for fiscal year 2016 was -0.95% compared with 3.30% for fiscal year ending 2015.
- The funding ratio at the end of the current fiscal year was 69.7% compared with 71.1% for fiscal year 2015. The major cause of the funding decrease is due to investment performance, retirement experience, and salary increases. The funding ratio is indicative of how well the plan is funded.

Summary of Net Position for Fiscal Years 2016 and 2015

	2016	2015
Cash and short-term investments	\$ 5,531,319	\$ 4,080,895
Receivables and prepaids	680,073	941,449
Investments	368,158,563	383,474,661
Total Assets	<u>374,369,955</u>	<u>388,497,005</u>
Liabilities	<u>73,161</u>	<u>136,927</u>
Net Position	<u>\$ 374,296,794</u>	<u>\$ 388,360,078</u>

- Additions from quarterly contributions by the Water Authority and the Board of Commissioners General, Fire, Landfill, and other special revenue funds totaled \$17,058,845 in fiscal year 2016. This is an increase of 1.18% over the previous fiscal year, 2015.
- Employee contributions from the various Board of Commissioners funds and the Water Authority totaled \$6,198,974 for fiscal year 2016. This is an increase of 44.9% from the previous fiscal year.
- Total deductions, excluding investment expenses, were \$32,511,690 for fiscal year 2016. This is an increase of 5.1% over the previous fiscal year. The increase was due mostly to retirement benefit payments of \$32,100,764, up from \$30,502,279 in fiscal year 2015. The number of retirees' receiving benefits increased by 69 in 2016.

Management's Discussion and Analysis (Unaudited)

Summary of Changes in Net Position for Fiscal Years 2016 and 2015

	<u>2016</u>	<u>2015</u>
Contributions	\$ 23,257,819	\$ 21,137,179
Net investment income	<u>(4,809,413)</u>	11,821,700
Total Additions	<u>18,448,406</u>	32,958,879
Deductions	<u>32,511,690</u>	30,924,291
Net increase	<u>(14,063,284)</u>	2,034,588
Net position, beginning	<u>388,360,078</u>	386,325,490
Net position, ending	<u><u>\$ 374,296,794</u></u>	<u><u>\$ 388,360,078</u></u>

Financial Highlights (2015 vs. 2014)

- Plan net position increased \$2,034,588 during fiscal year 2015 compared to an increase of \$42,443,615 in the previous year. This represents an increase of .5% for fiscal year 2015 and is primarily due to the flat market in the current fiscal year.
- The rate of return on investment assets for fiscal year 2015 was 3.30% compared with 15.78% for fiscal year ending 2014.
- The funding ratio at the end of the current fiscal year was 71.1% compared with 70.2% for fiscal year 2014. The major cause of the funding increase is due to the increase in Employer and Employee contributions. The funding ratio is indicative of how well the plan is funded.

Summary of Net Position for Fiscal Years 2015 and 2014

	<u>2015</u>	<u>2014</u>
Cash and short-term investments	\$ 4,080,895	\$ 3,685,634
Receivables and prepaids	941,449	526,837
Investments	<u>383,474,661</u>	382,248,698
Total Assets	<u>388,497,005</u>	386,461,169
Liabilities	<u>136,927</u>	135,679
Net Position	<u><u>\$ 388,360,078</u></u>	<u><u>\$ 386,325,490</u></u>

- Additions from quarterly contributions by the Water Authority and the Board of Commissioners General, Fire, Landfill, and other special revenue funds totaled \$16,859,316 in fiscal year 2015. This is an increase of 12.9% over the previous fiscal year, 2014.
- Employee contributions from the various Board of Commissioners funds and the Water Authority totaled \$4,277,863 for fiscal year 2015. This is an increase of 5.3% from the previous fiscal year.
- Total deductions, excluding investment expenses, were \$30,924,291 for fiscal year 2015. This is an increase of 4.4% over the previous fiscal year. The increase was due mostly to retirement benefit payments of \$30,502,279, up from \$29,230,610 in fiscal year 2014. The number of retirees' receiving benefits increased by 42 in 2015.

Management's Discussion and Analysis (Unaudited)

Summary of Changes in Net Position for Fiscal Years 2015 and 2014

	<u>2015</u>	<u>2014</u>
Contributions	\$ 21,137,179	\$ 18,993,101
Net investment income	<u>11,821,700</u>	<u>53,084,006</u>
Total Additions	<u>32,958,879</u>	<u>72,077,107</u>
Deductions	<u>30,924,291</u>	<u>29,633,492</u>
Net increase	2,034,588	42,443,615
Net position, beginning	<u>386,325,490</u>	<u>343,881,875</u>
Net position, ending	<u>\$ 388,360,078</u>	<u>\$ 386,325,490</u>

Overview of the Financial Statements

This Discussion and Analysis is intended to serve as an introduction to the PERS financial statements. These statements consist of three components: Fund financial statements, notes to the financial statements, and required supplementary information.

- Fund financial statements - There are two comparative financial statements presented for the PERS. The Statement of Plan Net Position as of June 30, 2016 and 2015 presents the net position available to pay future benefit payments. The Statement of Changes in Plan Net Position Available for Benefits for the year ended June 30, 2016 and 2015 provides a comparative view of the current and prior year's additions and deductions.
- Notes to the financial statements - The notes provide additional information that is essential for a full understanding of the data provided in the fund financial statements. The notes to the financial statements can be found on pages 21 - 32 of this report.
- Required supplementary information - The required supplementary information consists of a *Schedule of Changes in the Net Pension Liability and Related Ratios*, a *Schedule of Employer Contributions*, and a *Schedule of Investment Return*. These schedules provide historical trend information, which contributes to the understanding of changes in the funding status over time. This supplementary information can be found on pages 33 - 35 of this report.
- Actuarial Section – A complete copy of the actuarial valuation as performed by Buck Consultants has been included in this report and can be found following page 36.
- Statistical Section - The following statistical schedules are presented for the reader's additional analysis: The *Schedule of Revenue by Source, Expenses by Type and Net Position for the Last Ten Fiscal Years* and the *Schedule of Investment Results for the Last Ten Fiscal Years*. These schedules can be found on pages 38 and 39.
- Compliance Section – This section (found on pages 40 and 41) contains the Auditor's report on Internal Control over Financial Reporting and other matters.

Management's Discussion and Analysis (Unaudited)

Economic Factors

The U.S. economy picked up momentum in 3rd quarter and is predicted to remain on track for a real growth of 1.5% in 2016. Projections of Gross Domestic Product (GDP) for 2016 is 2.9%, a slight increase over 2015. Economists believe that the U.S. economy will have a cyclical rebound in 2017, and then continue to grow at a slower pace in line with long term potential. Improvement is due to a significant increase in consumer spending and attitudes. Georgia's growth should exceed that of the U.S. due to a large number of major projects, the housing recovery, and a faster population growth.

Interest rates increased in December 2016 by 0.25% from 0.50% to 0.75%, one year after the last rate hike. Forecasts are that the rates will increase in small increments up, to three times in 2017. The ultimate goal is to keep the Federal funds rate between 2 – 5 percent, which reflects a healthy economy.

After the worst start to a year ever, the market achieved new highs in 2016. The historic decision by British voters to exit the European Union shocked global capital markets in June, but risk markets emerged with a vengeance. The November election caused some fear among investors, but the day following the election, the Dow, S&P 500 and Nasdaq indexes all rallied and closed more than 1% higher. Most expect that the bull market will continue in 2017.

Unemployment reached a seven-year low of 5% in December 2015 and remains mostly unchanged in the current year, measuring slightly below a year ago. Housing continues to improve, particularly in the non-residential arena. The overall economic outlook for 2017 looks even better than this year's performance, due to continued gains in consumer spending, as well as housing and non-residential construction.

Requests for Information

This financial report is designed to provide a general overview of the Public Employee Retirement System finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed as follows:

Ramona Bivins
Chief Financial Officer
Clayton County Finance Department
112 Smith Street
Jonesboro, GA 30236

**CLAYTON COUNTY, GEORGIA
PUBLIC EMPLOYEE RETIREMENT SYSTEM**

**STATEMENTS OF PLAN NET POSITION
JUNE 30, 2016 AND 2015**

	2016	2015
Assets		
Cash and short-term investments	\$ 5,531,319	\$ 4,080,895
Receivables		
Employer contributions	664,069	926,415
Interest and dividends	626	626
Investments, at fair value		
Mutual funds		
Equity funds	249,897,711	258,302,836
Fixed income bond funds	118,260,852	125,171,825
Prepaid expenses	15,378	14,408
Total Assets	374,369,955	388,497,005
Liabilities		
Accounts payable	73,161	136,927
Total Liabilities	73,161	136,927
NET POSITION RESTRICTED FOR PENSION BENEFITS	\$ 374,296,794	\$ 388,360,078

The accompanying notes are an integral part of these statements

**CLAYTON COUNTY, GEORGIA
PUBLIC EMPLOYEE RETIREMENT SYSTEM**

**STATEMENTS OF CHANGES IN PLAN NET POSITION
FOR THE YEARS ENDED JUNE 30, 2016 AND 2015**

	<u>2016</u>	<u>2015</u>
Additions		
Contributions:		
Employer		
Clayton County	\$ 14,302,046	\$ 14,159,086
Clayton County Water Authority	2,756,799	2,700,230
Plan members		
Clayton County	4,744,079	3,284,462
Clayton County Water Authority	1,454,895	993,401
	<u>23,257,819</u>	<u>21,137,179</u>
Investment income		
Net appreciation (depreciation) in the fair value of investments	(9,998,282)	3,713,247
Interest	-	71
Dividends	5,642,990	8,755,703
	<u>(4,355,292)</u>	<u>12,469,021</u>
Less investment expense	(454,121)	(647,321)
Net investment income (loss)	<u>(4,809,413)</u>	<u>11,821,700</u>
Total Additions	<u>18,448,406</u>	<u>32,958,879</u>
Deductions		
Benefit payments	32,100,764	30,502,279
Administrative expenses	410,926	422,012
	<u>32,511,690</u>	<u>30,924,291</u>
Total Deductions	<u>32,511,690</u>	<u>30,924,291</u>
Net increase (decrease)	<u>(14,063,284)</u>	<u>2,034,588</u>
NET POSITION RESTRICTED FOR PENSION BENEFITS		
Beginning of year	<u>388,360,078</u>	<u>386,325,490</u>
End of Year	<u>\$ 374,296,794</u>	<u>\$ 388,360,078</u>

The accompanying notes are an integral part of these statements

**CLAYTON COUNTY, GEORGIA
PUBLIC EMPLOYEE RETIREMENT SYSTEM**

**NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 2016 AND 2015**

NOTE A. ORGANIZATION AND GOVERNANCE

The Clayton County Public Employee Retirement System (the Plan) is a cost-sharing multiple employer defined benefit pension plan administered by a public employee retirement system funded by the Plan Sponsors - Clayton County (the County), the Clayton County Water Authority (the Water Authority), and Participant contributions. The Plan is administered by a five-member Board of Trustees (PERS Board). This Pension Board makes recommendations to the Clayton County Board of Commissioners concerning the establishment and amending of benefit provisions. The Plan is being funded in conformity with the minimum funding standards set forth in Code Section 47-20-10 of the Public Retirement Systems standard law. The Plan is also reported as a pension trust fund in the Clayton County, Georgia Comprehensive Annual Financial Report (CAFR).

Membership of the Plan consisted of the following at July 1,

	2016	2015
Retirees and beneficiaries receiving benefits	1,235	1,166
Terminated plan members entitled to but not receiving benefits	287	289
Active plan members	2,470	2,449
Total	3,992	3,904

NOTE B. SUMMARY OF PLAN PROVISIONS

Effective Date July 1, 1971.

Plan Year/Fiscal Year Each July 1 to June 30.

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.

Effective July 1, 2012, State Court Law Clerks are now eligible to participate in the Plan.

NOTES TO FINANCIAL STATEMENTS

NOTE B. SUMMARY OF PLAN PROVISIONS (CONTINUED)

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 (five 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. For employees hired after January 1, 2016 eligibility for General members is normal retirement at age 62 with 10 years of credited service or age 60 with 25 years of credited service. For Public Safety members normal retirement is at age 60 with 10 years of service or age 55 with 25 years of service.
Basic Monthly Benefit	2.5% of average monthly salary multiplied by years of credited service up to 32. For members hired after January 1, 2016, the multiplier is 2.0%. For members hired before January 1, 2016, average monthly compensation is based on the 36 highest consecutive completed whole or partial months of service during the last 60 months of service. For members hired on or after January 1, 2016, average monthly compensation is based on the highest 60 months of service during the last 120 months.
Cost of Living Adjustments	Annual 2.00% cost of living increase effective beginning July 1, 2009 for those who have received their 84th monthly benefit payment prior to July 1. For new employees hired after 1/1/2016, COLA is discretionary and provided on an ad-hoc basis.

NOTES TO FINANCIAL STATEMENTS

NOTE B. SUMMARY OF PLAN PROVISIONS (CONTINUED)

Early Retirement Benefit

Eligibility For member hired before January 1, 2016 the earlier of age 50 and 25 years of credited service or age 55 and 15 years of credited service. For members hired on or after January 1, 2016, General members may take early retirement at age 60 with 15 years or age 55 with 25 years of service. For Public Safety members, age 55 with 15 years of service or age 50 with 25 years of service.

Benefit Members who retire early will incur a ½% reduction for each month of service less than that of normal retirement.

Disability Retirement

Eligibility 3 years of credited service for in line-of-duty; 10 years of credited service for other than in line-of-duty.

Benefit Greater of 30% of participants' monthly rate of compensation as of the date of disability or their accrued benefit.

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 Hired before 1/1/2016 - 7 years of credited service.
Hired on or after 1/1/2016 - 10 years of credited service.

Benefit 100% of accrued benefit commencing at normal retirement age. If the member has 15 years of credited service, the member may receive a reduced benefit commencing at early retirement age.

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.

NOTES TO FINANCIAL STATEMENTS

NOTE B. SUMMARY OF PLAN PROVISIONS (CONTINUED)

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.
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.
Contributions	<p>Each participant will contribute 7.5% of compensation beginning July 1, 2015. The contribution rate from July 1, 2006 through June 30, 2015 was 5.5% of compensation. The 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, they are entitled to receive a return of their contributions with 5% interest, compounded annually each June 30.</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>Employers are required to contribute at an actuarially determined rate. On the basis of the present valuation, a normal contribution rate of 11.62% of active participants' compensation is payable leaving a balance of 4.12% to be paid by the employers. In the previous valuation, the normal contribution rate was 11.87% of active participants' compensation, leaving a balance of 4.37% to be paid by employers.</p> <p>The employers also make a contribution toward the liquidation of the unfunded accrued liability. The 9.78% additional contribution made by the employers will liquidate the unfunded accrued liability within 30 years. This assumes the funds to liquidate the unfunded liability increase 3.00% each year.</p>

NOTES TO FINANCIAL STATEMENTS

NOTE B. SUMMARY OF PLAN PROVISIONS (CONTINUED)

Contributions (Continued) During the fiscal year 2016, the County and Water Authority made additional annual special contributions of \$662,840 and \$144,177, respectively, towards reducing the unfunded liability. During the fiscal year 2015, the County and Water Authority made additional annual special contributions of \$803,420 and \$383,466, respectively, towards reducing the unfunded liability.

NOTE C. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The following are the significant accounting policies followed by the Plan:

1. *Basis of Accounting.* The Plan's financial statements are prepared on the accrual basis of accounting. Contributions are recognized in the period in which the members provide services. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan. Administrative costs of the Plan are financed through investment earnings, except for certain non-investment related administrative costs which are paid by the County. Approximately \$25,000 was paid on behalf of the Plan by the County for each of the years ended June 30, 2016 and 2015.
2. *Method Used to Value Investments.* Investments are reported at fair value. Short-term investments are reported at cost which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Investments that do not have an established market are reported at estimated fair value.
3. *Use of Estimates.* The preparation of the accompanying basic financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

NOTES TO FINANCIAL STATEMENTS

NOTE D. DEPOSITS AND INVESTMENTS

At June 30, 2016, the carrying amount of deposits for the Plan was \$5,531,319 compared to \$4,080,895 in 2015.

A portion of the deposits at June 30, 2016, \$250,891, is part of a pooled cash account with Clayton County government's bank balance versus \$767,655 in 2015. The Plan's deposits are insured by Federal Depository Insurance or collateralized with securities held in the Plan's name.

The fair value of Plan investments at June 30, 2016 was \$373,438,991 of which \$5,280,428 was classified as cash equivalents due to the short-term nature of the investments. The fair value of Plan investments at June 30, 2015 was \$386,787,901 of which \$3,313,240 was classified as cash equivalents due to the short-term nature of the investments.

The Plan maintains sufficient cash to meet its immediate liquidity needs. Cash not immediately needed is invested as directed by the Clayton County Public Employees Retirement System (PERS) Board in a manner that is consistent with generally accepted standards of fiduciary responsibility, to ensure the security of principal and maximum yield on all pension fund investments through a mix of well diversified, high quality, fixed income and equity securities. The assets of the Pension Trust Fund may only be invested in eligible investments under the Public Retirement Systems Investment Authority Law, (O.C.G.A. 47-20-80) as follows:

Short-Term

- Commercial Paper, with a maturity of 270 days or less. Commercial paper is an unsecured promissory note issued primarily by corporations for a specific amount and maturing on a specific day. The System considers for investment only commercial paper of the highest quality, rated P-1 or A-1 by national credit rating agencies.
- U.S. Treasury obligations with varying terms up to 360 days.
- Repurchase Agreements, whereby the Plan invests in direct obligations of the United States Government or in obligations unconditionally guaranteed by the agencies of the United States Government. The Plan may sell or purchase such obligations under agreements to resell or repurchase such obligations at a date certain in the future, at a specific price which reflects a premium over the purchase or selling price equivalent to a stated rate of interest.
- Master Notes, an overnight security administered by a custodian bank and an obligation of a corporation whose commercial paper is rated P-1 or A-1 by national credit rating agencies.

NOTES TO FINANCIAL STATEMENTS

NOTE D. DEPOSITS AND INVESTMENTS (CONTINUED)

Long-Term

Fixed income investments are authorized in the following instruments:

- U.S. Treasury Obligations with varying terms up to 30 years.
- Corporate Bonds with at least an “A” rating by a national rating agency. Bond holdings should be diversified by issuer, sector, coupon and quality and be readily marketable. For international bonds, portfolio holdings should be diversified among countries, geographic regions and currencies. Currency-hedging strategies may be used to protect against adverse currency movements. Portfolios can be hedged back to the base currency (the U.S. dollar) or cross-hedged into other, more attractive, currencies. The use of options, futures, other derivatives, purchase of securities on margin, or other hedging strategies, which are designed to manage risk exposure, may only be made upon the prior written approval of the Pension Board.
- Mortgage investments are authorized to the extent that they are secured by first mortgages on improved real property located in the State of Georgia having a loan-to-value ratio no higher than 75%. Mortgages as a group cannot exceed 10% of total assets or 1% for any one loan.

Equity securities are also authorized for investment as a complement to the Plan’s fixed-income portfolio and as a long-term inflation hedge. No more than 75% of the total invested assets, valued at cost, may be placed in equities.

Plan assets at June 30, 2016 were held by Transamerica or with one of three separately managed funds – Atlanta Capital, DRZ and Paradigm. At June 30, 2015 plan assets were held by Transamerica or with one of three separately managed funds – Cornerstone, DRZ and Paradigm.

Investments at June 30, 2016, are as follows:

	Fair Value	%
Mutual Funds		
Invested in fixed income securities	\$ 118,260,852	32%
Invested in equities	212,622,086	58%
Invested in international equities	37,275,625	10%
Total	\$ 368,158,563	100%

NOTES TO FINANCIAL STATEMENTS

NOTE D. DEPOSITS AND INVESTMENTS (CONTINUED)

Investments at June 30, 2015, are as follows:

	Fair Value	%
Mutual Funds		
Invested in fixed income securities	\$ 125,171,825	35%
Invested in equities	219,611,758	55%
Invested in international equities	38,691,078	10%
Total	\$ 383,474,661	100%

Rate of Return

For the year ended June 30, 2016, the estimated annual money-weighted rate of return on the Plan's investments, net of pension plan investment expense, was (1.33%). The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. GASB 67 requires that the inputs to the internal rate of return calculation used to determine the annual money-weighted rate of return should be determined at least monthly. The detail necessary to provide this calculation was not available; therefore an estimate has been provided assuming mid-year cash flows.

Interest Rate Risk

As a means of limiting its exposure to fair value losses arising from rising interest rates, the Plan invests in bond mutual funds or bond index funds. This practice mitigates most of the interest rate risk associated with these types of investments because this allows the Plan to terminate its investment within 24 to 48 hours without penalty. At June 30, 2016, \$318,273,852 of Plan assets were held in mutual funds and therefore not exposed to interest rate risk. Separately managed accounts held \$49,884,710 in investments. At June 30, 2015, \$333,448,372 of Plan assets were held in mutual funds and therefore not exposed to interest rate risk. Separately managed accounts held \$50,026,289 in investments.

Custodial Credit Risk

Custodial credit risk is the risk that, in the event of the failure of the counterparty, The Plan will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. For the fiscal year ended June 30, 2016 and 2015, the Plan's investments were managed by Transamerica or one of three separate investment managers. The Pension Board on a quarterly basis reviews manager performances. At June 30, 2016 and 2015, all investments held by the managers were in the name of the Plan. Therefore, the Pension Board believes that it can recover all investments from these managers at any time.

NOTES TO FINANCIAL STATEMENTS

NOTE D. DEPOSITS AND INVESTMENTS (CONTINUED)

Concentration of Credit Risk

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of a government's investment in a single issue. At June 30, 2016 and 2015, Plan investments were held in mutual funds only. Therefore no concentration of credit risk exists.

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. The Plan is authorized under Georgia law to invest up to 15% of total fund assets in foreign investments. At June 30, 2016, \$37,275,624 or 10.13% of the Plan's investment assets were invested in mutual funds with only international equity holdings, compared to \$38,691,078 or 10.09% of the Plan's investment assets at June 30, 2015.

Fair Value Measurements

The plan has the following recurring fair value measurements, broken into the fair value hierarchy, as of June 30, 2016:

<u>Investment</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Fair Value</u>
Investments by Fair Value Level				
Mutual Funds:				
Fixed income	\$ 118,260,852	\$ -	\$ -	\$ 118,260,852
Equities	<u>162,737,375</u>	<u>49,884,711</u>	<u>-</u>	212,622,086
Total investments by fair value level	<u>\$ 280,998,227</u>	<u>\$ 49,884,711</u>	<u>\$ -</u>	\$ 330,882,938

Investments Measured at Net Asset Value (NAV)

Emerging markets opportunities funds	<u>37,275,625</u>
Total investments measured at NAV	<u>37,275,625</u>
Total investments at fair value	<u>\$ 368,158,563</u>

NOTES TO FINANCIAL STATEMENTS

NOTE D. DEPOSITS AND INVESTMENTS (CONTINUED)

Mutual fund securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. The Plan has no investments classified in Level 3.

Emerging markets opportunities funds are measured at the net asset value (NAV) per share (or its equivalent). This type includes investments in three (3) funds that invest primarily in foreign equity securities, including emerging market equity securities. One (1) of these funds is a collective investment trust.

NOTE E. TAX STATUS

The Plan had previously received determination from the Internal Revenue Service that the Plan was designed in accordance with the applicable sections of the Internal Revenue Code. The Plan received a favorable determination from the IRS on November 17, 2014 confirming its status as a Governmental plan under section 414(d) of the Internal Revenue Code.

NOTE F. NET PENSION LIABILITY

Effective July 1, 2013, the Plan implemented the provisions of GASB Statement No. 67, *Financial Reporting for Pension Plans – an amendment of GASB Statement No. 25*, which significantly changes the disclosures required related to the Plan. The information disclosed below is presented in accordance with this new standard.

The components of the net pension liability at June 30, 2016, were as follows:

Total pension liability	\$ 604,999,416
Plan fiduciary net position	<u>(374,296,944)</u>
Fund's net pension liability	<u>\$ 230,702,472</u>
Plan fiduciary net position as a percentage of the total pension liability	61.87%

The required schedule of changes in the County's net pension liability and related ratios immediately following the notes to the financial statements presents multiyear trend information about whether the value of Plan assets is increasing or decreasing over time relative to the total pension liability.

NOTES TO FINANCIAL STATEMENTS

NOTE F. NET PENSION LIABILITY (CONTINUED)

Actuarial Assumptions Used to Calculate the Net Pension Liability

The total pension liability as of June 30, 2016 was determined based on June 30, 2016 data, plan provisions, and assumptions as summarized below:

Investment rate of return	8.00%, net of pension plan investment expenses	
Salary increases	Fiscal 2017 - 2019	2%
	Fiscal 2020 - 2024	3%
	Fiscal 2025 and beyond	4%
Mortality rates	<p>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</p> <p>Non-Annuitants: RP-2014 blue collar base rates with fully generational mortality improvements based on the Modified Buck MP-2014 projection scale</p> <p>Disabled Participants: RP-2014 disabled base rates with Modified Buck MP-2014 projection scale</p>	
Inflation	3.00% per annum (used for the amortization of the unfunded liability)	

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period July 1, 2008 – June 30, 2013.

The long-term expected rate of return on pension plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentages. Estimates for the expected rates of return for each asset class have been derived through a combination of measuring historical average rates of return and applying capital market assumptions for future expected rates of return for each asset class as provided by our investment consultants. These rates of return estimates for each major asset class included in the pension plan's target asset allocation as of June 30, 2016 are: Domestic Equities (-2.06%), International Equities (-2.36%), and Fixed Income (3.00%).

REQUIRED SUPPLEMENTARY INFORMATION

**CLAYTON COUNTY, GEORGIA
PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

**SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
AND RELATED RATIOS**

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total Pension Liability			
Service cost	\$ 13,839,836	\$ 13,875,847	\$ 12,641,750
Interest on total pension liability	44,691,850	42,916,497	38,446,983
Changes of benefit terms	-	-	-
Difference between expected and actual experience	10,407,206	3,314,582	12,248,172
Changes of assumptions	(88,695,154)	18,401,577	80,992,984
Benefit payments	<u>(31,501,495)</u>	<u>(32,497,705)</u>	<u>(29,341,610)</u>
Net change in total pension liability	(51,257,757)	46,010,798	114,988,279
Total pension liability - beginning	<u>656,257,173</u>	<u>610,246,375</u>	<u>495,258,096</u>
Total pension liability - ending (a)	<u>\$ 604,999,416</u>	<u>\$ 656,257,173</u>	<u>\$ 610,246,375</u>
Plan fiduciary net position			
Contributions - employer	\$ 16,723,493	\$ 16,505,748	\$ 14,677,561
Contributions - member	6,198,563	6,255,252	4,063,519
Net investment income	(4,474,061)	12,175,272	53,084,005
Benefit payments, including increase in pending refunds	(31,501,495)	(32,497,705)	(29,341,610)
Administrative expenses	(410,779)	(422,012)	(402,882)
Other	<u>-</u>	<u>-</u>	<u>252,020</u>
Net change in plan fiduciary net position	\$ (13,464,279)	\$ 2,016,555	\$ 42,332,613
Plan net position - beginning	\$ 387,761,223	\$ 385,744,668	\$ 343,412,055
Plan net position - ending (b)	\$ 374,296,944	\$ 387,761,223	\$ 385,744,668
Fund's net pension liability- ending (a) - (b)	\$ 230,702,472	\$ 268,495,950	\$ 224,501,707
Plan net position as a percentage of the total pension liability	61.87%	59.09%	63.21%
Covered-employee payroll	\$ 115,329,415	\$ 119,600,775	\$ 108,583,036
Net pension liability as a percentage of covered-employee payroll	200.04%	224.49%	206.76%

Note to the Schedule:

The schedule will present 10 years of information once it is accumulated.

**CLAYTON COUNTY, GEORGIA
PUBLIC EMPLOYEES RETIREMENT SYSTEM**

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CONTRIBUTIONS

	2016	2015	2014
Actuarially determined contribution	\$ 16,723,493	\$ 16,505,748	\$ 14,677,561
Contributions related to the actuarially determined contribution	16,723,493	16,505,748	14,677,561
Contribution deficiency (excess)	\$ -	\$ -	\$ -

Notes to the Schedule of Contributions:

A. Changes of assumptions used to determine the actuarially determined contribution: Effective July 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 to the RP2014 disabled based rates with Modified Buck MP 2014 projection scale. The assumption for Future Administration expenses was changed to 0.325% of payroll.

B. 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, 2016 is based on the July 1, 2015 Actuarial Valuation.

C. 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 ending July 1, 2015 - June 30, 2016
Administrative expenses	0.325% of payroll
Inflation (used for the amortization of Unfunded Liability)	3.00% per annum
Salary increases	2.00% for 4 years, 3.00% for the next 5 years, and 4.00% thereafter for all employees
Investment rate of return	8.00%, net of pension plan investment expenses
Retirement and termination rate	As specified in the Actuarial Report for Clayton County, Georgia Public Employee Retirement System for the plan year July 1, 2015 - June 30, 2016
Mortality	See Changes of assumptions used to determine the actuarially determined contribution in A above

**CLAYTON COUNTY, GEORGIA
PUBLIC EMPLOYEES RETIREMENT SYSTEM
SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION**

SCHEDULE OF INVESTMENT RETURNS

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Annual money-weighted rate of return, net of investment expenses	-1.33%	3.30%	15.78%



III. ACTUARIAL SECTION (Unaudited)

Clayton County, Georgia

Clayton County, Georgia Public Employee Retirement System

Actuarial Valuation Report

Plan Year

July 1, 2016 – June 30, 2017

November 2016





Timothy G. Bowen
Principal, Retirement

Buck Consultants, LLC.
Suite 1900
200 Galleria Pkwy SE
Atlanta, GA 30339

Timothy.Bowen@xerox.com
tel 770-916-4196
fax 770-933-8336

November 2016

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 (the System) as of July 1, 2016. The purpose of this report is to provide a summary of the funded status of the plan as of July 1, 2016 and to verify that scheduled contributions will be sufficient to meet the minimum funding requirement for the fiscal year ending June 30, 2017. Use of this report for any other purpose may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, you should ask Buck to review any statement you wish to make on the results contained in this report. Buck will not accept any liability for any such statement made without prior review. We trust that this report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the System. We look forward to meeting with you in person to discuss these results.

Summary of Valuation Results

It is the Board's funding policy to keep the Retirement System in compliance with the minimum funding requirements under Title 47, Chapter 20 of the Official Code of Georgia, which requires that contributions are sufficient to fund the annual cost of benefit accruals and amortize the unfunded liability within a 30 year period. This report confirms that contributions of 21.40% (13.90% from the County and Water Authority and 7.50% from Participants) are sufficient to meet the minimum contribution requirements. This result is dependent upon the valuation assumptions related to investment returns, payroll growth, rates of salary increase, retirement, turnover, and death.

As of July 1, 2016, the actuarial accrued liability was \$576,994,028. This compares to the market value of assets of \$373,563,784 (after an adjustment of \$733,160 for pending refunds) and the actuarial value of assets of \$402,094,096. The funded ratio as measured by the actuarial value of assets was 69.7%. This funded ratio is appropriate for evaluating the need and level of future contributions. It should be noted, however, that measuring the funded ratio using the market value of assets will result in a lower ratio and the funded ratio based on the actuarial value of assets makes no assessment regarding the funded status of the plan if the plan were to settle (i.e. purchase annuities) for a portion or all of its liabilities. The liabilities have been computed in accordance with the plan provisions listed in Schedule F and the actuarial assumptions listed in Schedule E. A summary of the market and actuarial value of assets are included in Schedules B and C.

Summary of Plan Experience

The experience for the plan year produced an overall loss of \$16,271,142. Below is a summary of the sources of (gains) and losses.

Due to investment performance	\$	5,757,769
Due to retirement experience		4,579,624
Due to new entrants		1,057,866
Due to mortality experience		(1,035,814)
Due to salary increases		4,510,588
Due to other	\$	1,401,109

Further details are provided in Schedule D.

Census and Financial Data

This valuation was performed using employee and financial data supplied by Clayton County. The census data was received as of July 1, 2016. Buck did not audit this data, although it was reviewed for reasonableness and consistency with the prior year's information. The results of the valuation are dependent on the accuracy of the data. Schedule G provides a summary of the census data.

Changes in Actuarial Assumptions, Methods and Plan Provisions

There were no changes in assumptions or methods from the prior year. The plan provisions were updated to reflect changes to benefit provisions made for members hired on or after January 1, 2016. A summary of these changes is included in Schedule F.

Certification

The actuarial certification is included in Section VI of this report. Complete contents of this report are outlined in the table of Contents which immediately follow. I am available to answer any questions regarding the contents of this report.

Respectfully submitted,



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

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Section I - Summary of Principal Results

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	7/1/2016	7/1/2015
Number of active participants	2,470	2,449
Annual compensation for year beginning on valuation date	\$ 115,329,415	\$ 105,822,834
Number of retired participants and beneficiaries	1,235	1,166
Annual retirement benefits as of July 1	\$ 33,824,487	\$ 31,035,094
Number of former participants with deferred benefits	287	289
Present value of accrued benefits	\$ 556,191,803	\$ 524,592,037
Total actuarial accrued liability	\$ 576,994,028	\$ 543,816,709
Assets:		
Market value	\$ 373,563,784	\$ 387,761,223
Actuarial value of assets	\$ 402,094,096	\$ 386,601,668
Total unfunded actuarial accrued liability	\$ 174,899,932	\$ 157,215,041
Amortization period for unfunded actuarial accrued liability	30 years	30 years
Recommended annual contribution rates:		
Participants	7.50%	7.50%
County/Water Authority (normal)	13.90%	13.90%
County/Water Authority (special budgeted)	<u>0.00%</u>	<u>0.00%</u>
Total	21.40%	21.40%
County/Water Authority annual required contribution rate (ARC):		
Normal cost	4.12%	4.37%
Unfunded actuarial accrued liability	9.78%	9.53%
Special budgeted contribution	<u>0.00%</u>	<u>0.00%</u>
Total	13.90%	13.90%

- Comments on the valuation results as of July 1, 2016 are given in Section IV and further discussion of the contributions is set out in Section V.
- Schedule E of this report outlines the full set of actuarial assumptions and methods employed.
- Schedule F of this report summarizes the provisions of the System as interpreted for valuation purposes.

Section II - Participant Data

All full time employees and elected officials of Clayton County and the Clayton County Water Authority are covered under the Plan. The valuation included 2,470 active participants as of July 1, 2016 with annual compensation on July 1, 2016 totaling \$114,187,540.

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, 2016

Group	Number	Benefits
Normal and Early Retirements	1041	\$ 30,554,555
Beneficiaries of Deceased Participants	125	2,016,095
Disability Retirements	69	1,253,837
Total	1,235	\$ 33,824,487

In addition, there are 287 former participants entitled to deferred annual benefits totaling \$3,378,591.

Section III - Assets

- The amount of assets taken into account in this valuation is based on the unaudited financial statements provided by Clayton County.
- The market value of assets as of July 12016 was \$373,563,784. This represented a return of approximately -1.17%. The actuarial value of assets used for the current valuation was \$402,094,096. Schedule B shows the development of the actuarial value of assets as of July 1, 2016.
- Schedule C shows the reconciliation of the market value of asset balances from July 1, 2015 to July 1, 2016.

Section IV - Comments on Valuation

- Schedule A outlines the results of the valuation. The valuation shows that the Retirement System has total actuarial accrued liabilities of \$576,994,028. Of this amount, \$397,601,857 is on account of benefits payable to retired participants, beneficiaries and former participants entitled to deferred vested benefits, and \$ 179,392,171 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 \$402,094,096 as of July 1, 2016. The difference of \$174,899,932 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.
- 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 11.62% (4.12% County/Water Authority and 7.50% participants) of payroll. This compares to the 11.87% rate last year.
- 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 \$556,191,803. When compared to the market value of assets of \$373,563,784 the plan has insufficient assets to cover its accrued benefits.
- For the year, the Plan experienced an overall loss of \$16,271,142. This loss is due to the net effect of a loss on the actuarial value of assets of \$5,757,769 and a liability loss of \$10,513,373. Schedule D shows the development of this loss.

Section V - Contributions Payable under the Retirement System

- 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.
- On the basis of the present valuation, a total normal cost contribution rate of 11.62% is payable. Participants contribute 7.50% of payroll, leaving a balance of 4.12% normal cost rate to be paid by the County/Water Authority.
- The excess of the County's and Water Authority's 13.90% contribution over the 4.12% normal cost is 9.78%. These amounts are applied toward the liquidation of the unfunded accrued liability. The total 9.78% 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.
- The following table summarizes the contribution rates.

Contribution Rates Based on July 1, 2016 Valuation

Contribution	Percentage of Compensation
Payable by:	
Participants	7.50%
County and Water Authority	13.90
County and Water Authority (special budgeted)	<u>0.00</u>
Total	21.40%
Rate Applied To:	
Total Normal Cost	11.62%
Unfunded Actuarial Accrued Liability	<u>9.78</u>
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.

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.

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 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 at Xerox (Buck)



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

TGB/jac
Clayton County 110716 TGB_2016AVR

Schedule A - Results of the Valuation Prepared as of July 1, 2016

1. Actuarial Accrued Liabilities	
Present Value of Prospective Benefits Payable in Respect of:	
(a) Present active participants	\$ 179,392,171
(b) Present retired participants, beneficiaries, and former participants entitled to deferred vested benefits	<u>397,601,857</u>
(c) Total accrued actuarial liabilities	\$ 576,994,028
2. Actuarial Value of Assets for Valuation Purposes	<u>402,094,096</u>
3. Unfunded Actuarial Accrued Liability [1(c) minus 2]	\$ 174,899,932

Schedule B - Development of July 1, 2016 Actuarial Value of Assets

(1)	Market Value of Assets on July 1, 2015 including Contributions Receivable		\$ 387,761,223
(2)	2015/2016 Net Cash Flow		
	a. Contributions from Employer and Participants plus increase/(decrease) in Contributions Receivable		22,922,056
	b. Benefits + Administrative Expense Only		<u>32,645,434</u>
	c. Net Cash Flow (2)a - (2)b		\$ (9,723,378)
(3)	Expected Investment Return, Net of Investment Expenses [(1) x .08] + [(2)c x .04]		\$ 30,631,963
(4)	Expected Market Value of Assets on July 1, 2015 including Contributions Receivable (1) + (2)c + (3)		\$ 408,669,808
(5)	Market Value of Assets on July 1, 2016, including Contributions Receivable		\$ 373,563,784
(6)	Gain/(Loss) on Market Value of Assets (5) - (4)		\$ (35,106,024)
(7)	Deferred Gains/(Losses) on Market Value of Assets		
		Total Gain/(Loss)	Amount Deferred
	2015	\$ (35,106,024)	\$ (28,084,819)
	2014	(18,277,954)	(10,966,772)
	2013	26,303,197	<u>10,521,279</u>
(8)	Preliminary Actuarial Value of Assets on July 1, 2016 (5) - (7)		\$ 402,094,096
(9)	80% of Market Value .80 x (5)		\$ 298,851,028
(10)	120% of Market Value 1.20 x (5)		\$ 448,276,541
(11)	Actuarial Value of Assets on July 1, 2016 Smaller of (10) and maximum of (8) and (9)		\$ 402,094,096

Schedule C - Assets of the Retirement System

Reconciliation of Market Value of Assets

Receipts

Employer and Participant Contributions		\$ 22,922,056
Investment Income		
Interest and Dividends	\$ 5,642,990	
Net Appreciation (Depreciation) in Fair Value of Investments	<u>(10,385,655)</u>	
Total Investment Income		<u>(4,742,665)</u>
Total Receipts		\$ 18,179,392

Disbursements

Benefits Paid		\$ 32,100,353
Increase in Pending Refunds ¹		(134,302)
Administrative and Investment Expenses		<u>410,780</u>
Total Disbursements		\$ 32,376,830

Excess of Receipts Over Disbursements \$ (14,197,439)

Reconciliation of Asset Balances

Market Value at July 1, 2015, including contributions receivable	\$ 387,761,223
Excess of Receipts Over Disbursements	(14,197,439)
Market Value at July 1, 2016, including contributions receivable	\$ 373,563,784

¹ Unpaid Pending Refunds of \$598,858 were subtracted from the July 1, 2015 Market Value of Assets, and \$733,160 was subtracted from the July 1, 2016 Market Value of Assets. The difference of \$134,302 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, 2015 (before adjustment for window plan):		\$ 157,215,041
2. Expected Change in Unfunded Liability During 2015/2016 Plan Year		
a. Due to Total Normal Cost (beginning of year)	\$ 11,720,228	
b. Due to Assumption Changes	0	
c. Due to Plan Changes	0	
d. Due to Interest on Normal Cost and Unfunded Liability	13,514,821	
e. Due to Actual Employer and Participant Contributions with Interest	<u>(23,821,300)</u>	
f. Total Expected Change, a. + b. + c. + d. + e. + f. + g.	\$ 1,413,749	
3. Expected Unfunded Accrued Liability as of July 1, 2016:		\$ 158,628,790
4. Actual Unfunded Accrued Liability as of July 1, 2016:		\$ 174,899,932
5. Experience Gain/(Loss) for the 2015/2016 Plan Year* (3) – (4)		\$ (16,271,142)
* Liability related portion of experience Gain/(Loss):	\$ (10,513,373)	
Asset related portion of experience Gain/(Loss):	\$ (5,757,769)	

Schedule E - Outline of Actuarial Assumptions and Methods

Interest Rate

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

Separations before Retirement – Hired Before 1/1/2016

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 3-9	Years 10+	
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 3-9	Years 10+	
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)

Separations before Retirement – Hired On or After 1/1/2016

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 3-9	Years 10+	
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

Non-Safety

Age	Annual Rate of					
	Withdrawal					Disability
	Years 0-1	Years 1-2	Years 2-3	Years 3-9	Years 10+	
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

Schedule E - Outline of Actuarial Assumptions and Methods (continued)

Rates of Retirement – Hired Before 1/1/2016

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			.10	
51			.10	
52			.15	
53			.25	
54			.35	
55	.40		.16	.25
56	.10		.16	.10
57	.09		.16	.10
58	.08		.16	.15
59	.07		.16	.20
60	.06			.55
61	.05			.65
62		.25		.65
63		.16		.65
64		.11		.65
65		.60		1.00
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.

** An additional 30% are assumed to retire in the year when first eligible for normal retirement and 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.

Schedule E - Outline of Actuarial Assumptions and Methods (continued)

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.

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, 2016.

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.

Schedule E - Outline of Actuarial Assumptions and Methods (continued)

Historical Assumption Changes

For new members hired after January 1, 2016, assumed rates of retirement and termination were implemented to correspond with the new vesting and retirement eligibility requirements. Sample rates of retirement and termination are shown above.

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.

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.

Schedule E - Outline of Actuarial Assumptions and Methods (continued)

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.

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 – Hired Before 1/1/2016

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.

Eligibility – Hired On or After 1/1/2016

General Members

- Normal retirement at age 62 with 10 years of service

Public Safety Members

- Normal retirement at age 60 with 10 years of service or 55 with 25 years of service

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.

For members hired before January 1, 2016, average monthly compensation is based on the 36 highest consecutive months of service during the last 60 months of service. For members hired on or after January 1, 2016, average monthly compensation is based on 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 84th monthly benefit payment prior to July 1.

For new employees hired after 1/1/2016, COLA is discretionary and provided on an ad-hoc basis.

Early Retirement Benefit

Eligibility – Hired Before 1/1/2016

The earlier of age 50 and 25 years of credited service or age 55 and 15 years of credited service.

Eligibility – Hired On or After 1/1/2016

General Members

- Early retirement at age 60 with 15 years of service or age 55 with 25 years of service

Public Safety Members

- Early retirement at age 55 with 15 years of service or age 50 with 25 years of 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.

Schedule F - Summary of the Main Benefit and Contribution Provisions (continued)

Deferred Vested Benefit

Eligibility – Hired Before 1/1/2016

7 years of credited service.

Eligibility – Hired On or After 1/1/2016

10 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.

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

- 100%, 75%, or 50% joint and survivor annuity.
- 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).

Schedule F - Summary of the Main Benefit and Contribution Provisions (continued)

Historical Provision Changes

Effective 7/1/2016

For new members hired after January 1, 2016:

- 10 year vesting
- Final average compensation based on final 5 years of service
- Discretionary, ad-hoc COLA
- Change in normal and early retirement eligibility:

General Members

- Early retirement at age 60 with 15 years of service or age 55 with 25 years of service
- Normal retirement at age 62 with 10 years of service

Public Safety Members

- Early retirement at age 55 with 15 years of service or age 50 with 25 years of service
- Normal retirement at age 60 with 10 years of service or 55 with 25 years of service

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.

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.

Schedule F - Summary of the Main Benefit and Contribution Provisions (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.

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, 2016
Active members	
Number	2,470
Average age	42.02
Average service	8.47
Terminated vested members	
Number	287
Average age	51.90
Average annual retirement benefits	\$ 11,772
Retired members	
Number	1041
Average age	67.60
Average annual retirement benefits	\$ 29,351
Disabled members	
Number	69
Average age	61.62
Average annual retirement benefits	\$ 18,172
Survivors and beneficiaries of members	
Number	125
Average age	66.52
Average annual retirement benefits	\$ 16,129
Total Number of Members	3,992

Schedule G - Member Statistics (continued)

Age Service Table (all Active Participants)

Attained Age	Completed Years of Service										Total
	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	
Under 25	63	60	1	0	0	0	0	0	0	0	124
Avg. Pay	36,276	38,342	*	0	0	0	0	0	0	0	37,327
25 to 29	89	190	56	1	0	0	0	0	0	0	336
Avg. Pay	36,378	38,415	44,092	*	0	0	0	0	0	0	38,862
30 to 34	58	148	95	41	3	0	0	0	0	0	345
Avg. Pay	38,302	39,655	46,525	46,699	*	0	0	0	0	0	42,343
35 to 39	32	100	80	62	31	0	0	0	0	0	305
Avg. Pay	48,036	43,259	42,924	48,653	53,891	0	0	0	0	0	45,849
40 to 44	29	73	70	55	58	17	0	0	0	0	302
Avg. Pay	46,658	40,320	49,611	46,109	59,206	*	0	0	0	0	49,028
45 to 49	7	73	96	43	62	39	41	3	0	0	364
Avg. Pay	*	40,313	44,919	42,055	59,509	67,473	69,944	*	0	0	51,607
50 to 54	14	62	64	32	37	35	66	17	0	0	327
Avg. Pay	*	40,777	43,286	42,331	57,030	66,175	76,035	*	0	0	54,575
55 to 59	13	51	48	49	33	14	10	1	2	0	221
Avg. Pay	*	42,735	44,527	41,439	50,446	*	*	*	*	0	45,905
60 to 64	3	17	22	28	21	7	8	1	0	0	107
Avg. Pay	*	*	34,323	40,074	51,198	*	*	*	0	0	44,667
65 to 69	0	4	16	9	4	0	0	0	0	1	34
Avg. Pay	0	*	*	*	*	0	0	0	0	*	39,944
70 & up	0	1	3	0	1	0	0	0	0	0	5
Avg. Pay	0	*	*	0	*	0	0	0	0	0	*
Total	308	779	551	320	250	112	125	22	2	1	2,470
Avg. Annual Pay	38,885	40,328	44,564	44,344	56,120	65,879	71,750	70,444	*	*	46,230

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

Clayton County, Georgia Public Employee Retirement System

Information Required Under Governmental Accounting Standards Board Statement No. 67 and 68 as of June 30, 2016

Based on Measurement Period Ending June 30, 2016

November 2016





Timothy G. Bowen
Principal, Retirement

Buck Consultants, LLC
Suite 1900
200 Galleria Pkwy SE
Atlanta, GA 30339

timothy.bowen@xerox.com
tel 770.916.4196
fax 770.933.8336

November 30, 2016

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). 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 may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, you should ask Buck to review any statement you wish to make on the results contained in this report. Buck will not accept any liability for any such statement made without prior review.

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.

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, 2016, based on a measurement date of June 30, 2016.

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.

The information in this report was prepared using a measurement date of June 30, 2016 and the actuarial assumptions and methods used in the June 30, 2016 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
Principal, Retirement Consulting Actuary

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Section I – GASB 67 Information

Notes to the Financial Statements for the Year Ending June 30, 2016

A. Summary of Significant Accounting Policies

Methods used to value investments. Investments are reported at fair value.

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, 2016, pension plan membership consisted of the following:

Membership Status	Count
Inactive plan members or beneficiaries currently receiving	1,235
Inactive plan members entitled to but not yet receiving	287
Active plan members	2,470
Total	3,992

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, 2016, the revenue to the Fund totaled \$22,922,056, which includes \$6,198,563 of member contributions.

C. Investments

Rate of return. For the year ended June 30, 2016, the estimated annual money-weighted rate of return on the Fund's investments, net of pension plan investment expense, was -1.33%.

D. Receivables

None.

Section I – GASB 67 Information

E. Net Pension Liability

The components of the net pension liability at June 30, 2016, were as follows:

Components of Net Pension Liability	
Total pension liability	\$ 604,999,416
Plan fiduciary net position	<u>(374,296,944)</u>
Fund's net pension liability	\$ 230,702,472
Plan fiduciary net position as a percentage of the total pension liability	61.87%

F. Actuarial Assumptions

The total pension liability as of June 30, 2016 was determined based on June 30, 2016 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 2017 – 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 8.00%. 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. Contributions expected to be made by future new members are included to the extent contributions under Clayton County's ordinance are expected to exceed the normal cost for new members. Based on those assumptions, the pension plan's fiduciary net position was projected to be sufficient to cover future benefit payments for current members. Therefore, the long-term expected rate of return of 8.0% on pension plan investments was applied to all projected benefit payments.

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 8.00% as described above.

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 8.00%, 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 (7.00%) or 1-percentage-point higher (9.00%) than the current rate:

	1% Decrease (7.00%)	Current Discount Rate (8.00%)	1% Increase (9.00%)
Net Pension Liability	\$ 305,256,992	\$ 230,702,472	\$ 168,619,216

Section I – GASB 67 Information

Schedules of Required Supplementary Information

Schedule of Changes in Net Pension Liability and Related Ratios

	FYE June 30, 2016	FYE June 30, 2015
Total pension liability		
Service cost	\$ 13,839,836	\$ 13,875,847
Interest	44,691,850	42,916,497
Difference between expected and actual experience	10,407,206	3,314,582
Changes in benefit terms	0	0
Changes in assumptions	(88,695,154)	18,401,577
Benefit payments	<u>(31,501,495)</u>	<u>(32,497,705)</u>
Net change in total pension liability	\$ (51,257,757)	\$ 46,010,798
Total pension liability-beginning	656,257,173	610,246,375
Total pension liability-ending (a)	\$ 609,999,416	\$ 656,257,173
Plan fiduciary net position		
Contributions-employer	\$ 16,723,493	\$ 16,505,748
Contributions-member	6,198,563	6,255,252
Net investment income	(4,474,061)	12,175,272
Benefit payments, including refunds of employee contributions	(31,501,495)	(32,497,705)
Administrative expense	(410,779)	(422,012)
Other	<u>0</u>	<u>0</u>
Net change in plan fiduciary net position	\$ (13,464,279)	\$ 2,016,555
Plan fiduciary net position-beginning	387,761,223	385,744,668
Plan fiduciary net position-ending (b)	374,296,944	387,761,223
Plan's net pension liability-ending (a)-(b)	\$ 230,702,472	\$ 268,495,950
Plan fiduciary net position as a % of the total pension liability	61.87%	59.09%
Covered-employee payroll	\$115,329,415	\$119,600,775 ¹
Net pension liability as a percentage of covered-employee payroll	200.04%	224.49%

¹ Total earnings provided by Clayton County

Section I – GASB 67 Information

Schedule of Contributions

	FYE June 30, 2016	FYE June 30, 2015
Actuarially determined contribution	\$16,723,493	\$16,505,748
Contributions related to the actuarially determined contribution	<u>(16,723,493)</u>	<u>(16,505,748)</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, 2016 is based on the July 1, 2015 Actuarial Valuation.

Changes of assumptions used to determine the actuarially determined contribution:

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.

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, 2015 - June 30, 2016
Administrative Expenses	0.325% 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, 2015 - June 30, 2016
Mortality	Healthy participants: The RP-2014 blue collar base rates increased by 7.75% to reflect actual plan experience, generationally projected using Modified Buck MP 2014 for annuitants and the RP-2014 blue collar base rates,

Section I – GASB 67 Information

Other information	<p>generationally projected using Buck Modified MP2014 for non-annuitants.</p> <p>Disabled participants: The RP-2014 disabled mortality table generationally projected using Buck Modified MP2014.</p> <p>Please see the Actuarial Valuation Report for Clayton County, Georgia Public Employee Retirement System for the plan year July 1, 2015 - June 30, 2016</p>
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Schedule of Investment Returns

	Annual money-weighted rate of return, net of investment expenses
FYE June 30, 2016	-1.33%
FYE June 30, 2015	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
2017	\$374,297	\$8,564	\$15,965	\$36,073	\$423	\$29,478	\$391,808
2018	391,808	7,962	16,813	37,600	432	30,823	409,375
2019	409,375	7,435	17,540	39,310	440	32,164	426,764
2020	426,764	7,020	18,544	41,355	449	33,491	444,015
2021	444,015	6,640	19,281	43,311	458	34,803	460,970
2022	460,970	6,280	19,551	45,068	467	36,080	477,346
2023	477,346	5,928	19,705	46,993	476	37,299	492,808
2024	492,808	5,564	19,809	49,249	486	38,431	506,876
2025	506,876	5,245	19,893	51,654	496	39,444	519,309
2026	519,309	4,942	19,978	53,980	506	40,330	530,074
2027	530,074	4,651	20,079	55,884	516	41,101	539,505
2028	539,505	4,373	20,182	58,082	526	41,755	547,207
2029	547,207	4,110	20,293	60,065	537	42,278	553,285
2030	553,285	3,860	20,376	61,966	547	42,673	557,681
2031	557,681	3,614	20,832	64,053	558	42,942	560,458
2032	560,458	3,348	21,330	65,978	569	43,088	561,676
2033	561,676	3,094	21,849	67,637	581	43,122	561,523
2034	561,523	2,862	22,394	69,436	592	43,042	559,793
2035	559,793	2,627	22,957	70,836	604	42,851	556,788
2036	556,788	2,421	23,549	72,258	616	42,559	552,442
2037	552,442	2,210	24,159	73,408	629	42,171	546,946
2038	546,946	2,014	24,795	74,511	641	41,695	540,296

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
2039	\$540,296	\$1,815	\$25,450	\$75,613	\$654	\$41,126	\$532,420
2040	532,420	1,607	26,125	76,694	667	40,459	523,250
2041	523,250	1,397	26,821	77,667	681	39,694	512,814
2042	512,814	1,180	27,537	78,525	694	38,833	501,145
2043	501,145	980	28,283	78,938	708	37,891	488,653
2044	488,653	815	29,066	79,099	722	36,897	475,609
2045	475,609	663	29,878	78,987	737	35,870	462,297
2046	462,297	533	30,723	78,411	751	34,842	449,233
2047	449,233	428	31,604	77,640	766	33,844	436,703
2048	436,703	337	32,516	76,566	782	32,901	425,109
2049	425,109	261	33,463	75,266	797	32,044	414,814
2050	414,814	201	34,443	73,760	813	31,301	406,186
2051	406,186	152	35,458	71,890	830	30,706	399,783
2052	399,783	116	36,508	69,843	846	30,298	396,016
2053	396,016	87	37,592	67,608	863	30,109	395,332
2054	395,332	64	38,711	65,310	880	30,171	398,088
2055	398,088	47	39,866	62,918	898	30,511	404,696
2056	404,696	33	41,057	60,446	916	31,164	415,588
2057	415,588	23	42,285	57,974	934	32,161	431,148
2058	431,148	15	43,550	55,504	953	33,532	451,789
2059	451,789	10	44,855	53,014	972	35,311	477,979
2060	477,979	6	46,199	50,488	991	37,536	510,241

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
2061	\$510,241	\$4	\$47,584	\$47,943	\$1,011	\$40,248	\$549,122
2062	549,122	2	49,011	45,397	1,031	43,491	595,198
2063	595,198	1	50,481	42,848	1,052	47,309	649,089
2064	649,089	1	51,995	40,342	1,073	51,753	711,423
2065	711,423	0	53,555	37,895	1,095	56,869	782,859
2066	782,859	0	55,162	35,481	1,116	62,715	864,138
2067	864,138	0	56,817	33,115	1,139	69,345	956,046
2068	956,046	0	58,521	30,785	1,162	76,825	1,059,446
2069	1,059,446	-	60,277	28,492	1,185	85,225	1,175,270
2070	1,175,270	-	62,085	26,282	1,209	94,616	1,304,481
2071	1,304,481	-	63,948	24,138	1,233	105,076	1,448,133
2072	1,448,133	-	65,866	22,115	1,257	116,687	1,607,314
2073	1,607,314	-	67,842	20,225	1,282	129,536	1,783,185
2074	1,783,185	-	69,877	18,445	1,308	143,716	1,977,026
2075	1,977,026	-	71,974	16,766	1,334	159,332	2,190,232
2076	2,190,232	-	74,133	15,167	1,361	176,494	2,424,331
2077	2,424,331	-	76,357	13,682	1,388	195,325	2,680,942
2078	2,680,942	-	78,648	12,304	1,416	215,952	2,961,822
2079	2,961,822	-	81,007	11,014	1,444	238,520	3,268,890
2080	3,268,890	-	83,437	9,813	1,473	263,179	3,604,220
2081	3,604,220	-	85,940	8,695	1,503	290,097	3,970,060
2082	3,970,060	-	88,519	7,653	1,533	319,454	4,368,847

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
2083	\$4,368,847	\$-	\$91,174	\$6,685	\$1,563	\$351,446	\$4,803,218
2084	4,803,218	-	93,909	5,791	1,595	386,281	5,276,023
2085	5,276,023	-	96,727	4,973	1,627	424,190	5,790,340
2086	5,790,340	-	99,628	4,231	1,659	465,419	6,349,497
2087	6,349,497	-	102,617	3,564	1,692	510,232	6,957,090
2088	6,957,090	-	105,696	2,971	1,726	558,918	7,617,007
2089	7,617,007	-	108,867	2,450	1,761	611,790	8,333,453
2090	8,333,453	-	112,133	1,997	1,796	669,181	9,110,974
2091	9,110,974	-	115,497	1,609	1,832	731,458	9,954,488
2092	9,954,488	-	118,961	1,280	1,868	799,014	10,869,315
2093	10,869,315	-	122,530	1,005	1,906	872,273	11,861,208
2094	11,861,208	-	126,206	779	1,944	951,697	12,936,388
2095	12,936,388	-	129,992	596	1,983	1,037,784	14,101,586
2096	14,101,586	-	133,892	450	2,022	1,131,073	15,364,079
2097	15,364,079	-	137,909	335	2,063	1,232,146	16,731,736
2098	16,731,736	-	142,046	247	2,104	1,341,633	18,213,064
2099	18,213,064	-	146,308	179	2,146	1,460,214	19,817,261
2100	19,817,261	-	150,697	128	2,189	1,588,625	21,554,266
2101	21,554,266	-	155,218	90	2,233	1,727,663	23,434,823
2102	23,434,823	-	159,874	63	2,278	1,878,186	25,470,543
2103	25,470,543	-	164,671	43	2,323	2,041,124	27,673,971
2104	27,673,971	-	169,611	29	2,370	2,217,480	30,058,663

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 2.71%	Using a Single Discount Rate of 8.00%
2017	\$374,297	\$36,073	\$36,073	\$-	\$34,711	\$-	\$34,711
2018	391,808	37,600	37,600	-	33,501	-	33,501
2019	409,375	39,310	39,310	-	32,430	-	32,430
2020	426,764	41,355	41,355	-	31,590	-	31,590
2021	444,015	43,311	43,311	-	30,633	-	30,633
2022	460,970	45,068	45,068	-	29,515	-	29,515
2023	477,346	46,993	46,993	-	28,496	-	28,496
2024	492,808	49,249	49,249	-	27,652	-	27,652
2025	506,876	51,654	51,654	-	26,854	-	26,854
2026	519,309	53,980	53,980	-	25,984	-	25,984
2027	530,074	55,884	55,884	-	24,908	-	24,908
2028	539,505	58,082	58,082	-	23,970	-	23,970
2029	547,207	60,065	60,065	-	22,952	-	22,952
2030	553,285	61,966	61,966	-	21,925	-	21,925
2031	557,681	64,053	64,053	-	20,984	-	20,984
2032	560,458	65,978	65,978	-	20,014	-	20,014
2033	561,676	67,637	67,637	-	18,997	-	18,997
2034	561,523	69,436	69,436	-	18,058	-	18,058
2035	559,793	70,836	70,836	-	17,057	-	17,057
2036	556,788	72,258	72,258	-	16,111	-	16,111
2037	552,442	73,408	73,408	-	15,155	-	15,155
2038	546,946	74,511	74,511	-	14,243	-	14,243

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 2.71%	Using a Single Discount Rate of 8.00%
2039	\$540,296	\$75,613	\$75,613	\$-	\$13,383	\$-	\$13,383
2040	532,420	76,694	76,694	-	12,569	-	12,569
2041	523,250	77,667	77,667	-	11,786	-	11,786
2042	512,814	78,525	78,525	-	11,033	-	11,033
2043	501,145	78,938	78,938	-	10,270	-	10,270
2044	488,653	79,099	79,099	-	9,528	-	9,528
2045	475,609	78,987	78,987	-	8,810	-	8,810
2046	462,297	78,411	78,411	-	8,098	-	8,098
2047	449,233	77,640	77,640	-	7,424	-	7,424
2048	436,703	76,566	76,566	-	6,779	-	6,779
2049	425,109	75,266	75,266	-	6,171	-	6,171
2050	414,814	73,760	73,760	-	5,599	-	5,599
2051	406,186	71,890	71,890	-	5,053	-	5,053
2052	399,783	69,843	69,843	-	4,545	-	4,545
2053	396,016	67,608	67,608	-	4,074	-	4,074
2054	395,332	65,310	65,310	-	3,644	-	3,644
2055	398,088	62,918	62,918	-	3,251	-	3,251
2056	404,696	60,446	60,446	-	2,892	-	2,892
2057	415,588	57,974	57,974	-	2,568	-	2,568
2058	431,148	55,504	55,504	-	2,276	-	2,276
2059	451,789	53,014	53,014	-	2,013	-	2,013
2060	477,979	50,488	50,488	-	1,775	-	1,775

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 2.71%	Using a Single Discount Rate of 8.00%
2061	\$510,241	\$47,943	\$47,943	\$-	\$1,561	\$-	\$1,561
2062	549,122	45,397	45,397	-	1,369	-	1,369
2063	595,198	42,848	42,848	-	1,196	-	1,196
2064	649,089	40,342	40,342	-	1,043	-	1,043
2065	711,423	37,895	37,895	-	907	-	907
2066	782,859	35,481	35,481	-	786	-	786
2067	864,138	33,115	33,115	-	679	-	679
2068	956,046	30,785	30,785	-	585	-	585
2069	1,059,446	28,492	28,492	-	501	-	501
2070	1,175,270	26,282	26,282	-	428	-	428
2071	1,304,481	24,138	24,138	-	364	-	364
2072	1,448,133	22,115	22,115	-	309	-	309
2073	1,607,314	20,225	20,225	-	261	-	261
2074	1,783,185	18,445	18,445	-	221	-	221
2075	1,977,026	16,766	16,766	-	186	-	186
2076	2,190,232	15,167	15,167	-	156	-	156
2077	2,424,331	13,682	13,682	-	130	-	130
2078	2,680,942	12,304	12,304	-	108	-	108
2079	2,961,822	11,014	11,014	-	90	-	90
2080	3,268,890	9,813	9,813	-	74	-	74
2081	3,604,220	8,695	8,695	-	61	-	61
2082	3,970,060	7,653	7,653	-	49	-	49

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 2.71%	Using a Single Discount Rate of 8.00%
2083	\$4,368,847	\$6,685	\$6,685	\$-	\$40	\$-	\$40
2084	4,803,218	5,791	5,791	-	32	-	32
2085	5,276,023	4,973	4,973	-	26	-	26
2086	5,790,340	4,231	4,231	-	20	-	20
2087	6,349,497	3,564	3,564	-	16	-	16
2088	6,957,090	2,971	2,971	-	12	-	12
2089	7,617,007	2,450	2,450	-	9	-	9
2090	8,333,453	1,997	1,997	-	7	-	7
2091	9,110,974	1,609	1,609	-	5	-	5
2092	9,954,488	1,280	1,280	-	4	-	4
2093	10,869,315	1,005	1,005	-	3	-	3
2094	11,861,208	779	779	-	2	-	2
2095	12,936,388	596	596	-	1	-	1
2096	14,101,586	450	450	-	1	-	1
2097	15,364,079	335	335	-	1	-	1
2098	16,731,736	247	247	-	-	-	-
2099	18,213,064	179	179	-	-	-	-
2100	19,817,261	128	128	-	-	-	-
2101	21,554,266	90	90	-	-	-	-
2102	23,434,823	63	63	-	-	-	-
2103	25,470,543	43	43	-	-	-	-
2104	27,673,971	29	29	-	-	-	-

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, 2016, based on a measurement date of June 30, 2016 is as follows:

	FYE June 30, 2016
Service cost	\$ 13,839,836
Interest cost	44,691,850
Expected return on assets	(30,661,289)
Current period effect of benefit changes	0
Current period difference between expected and actual experience	1,734,534
Current period effect of changes in assumptions	(14,782,526)
Current period difference between projected and actual investment earnings	7,027,070
Member contributions	(6,198,563)
Administrative expenses	410,779
Current period recognition of prior years' deferred outflow of resources	7,274,951
Current period recognition of prior years' deferred inflow of resources	<u>0</u>
Total pension expense	\$ 23,336,642

The employers' allocation of pension expense to be reported for the fiscal year ended June 30, 2016 is shown in Schedule B in the Appendix.

The pension expense reported for the fiscal year end is based on the June 30, 2015 and June 30, 2016 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, 2015 (6.0 years).

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

Section II – GASB 68 Information

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

Determination of Average Remaining Expected Service Lives

Remaining Service Lives as of June 30, 2015			
Group	Number	Service	Average
Active Members	2,449	23,084.76	
Inactive Members	1,455	0.00	
Total	3,904	23,084.76	6.0

Allocation of Net Pension Liability

The allocation of net pension liability between the County and the Water Authority as of June 30, 2015 and June 30, 2016 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, 2016 recognition of the change in proportion of the June 30, 2015 amounts in accordance with paragraph 54 of GASB 68.

Allocation of Future Years' Recognition of Deferred Outflows/Inflows

The employers' allocation of June 30, 2016 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 - 2016.

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, 2016

Active members	
Number	2,470
Average age	42.02 years
Average service	8.47 years
Terminated vested members (including deferred beneficiaries)	
Number	287
Average age	51.90 years
Average annual retirement benefits	\$ 11,772
Retired members	
Number	1,041
Average age	67.60 years
Average annual retirement benefits	\$ 29,351
Disabled members (including deferred disabled members)	
Number	69
Average age	61.62
Average annual retirement benefits	\$ 18,172
Survivors and beneficiaries of members	
Number	125
Average age	66.52 years
Average annual retirement benefits	\$ 16,129
Total Number of Members	3,992

Section IV – Actuarial Methods & Assumptions

Methods used to determine the Net Pension Liability

VALUATION DATE: June 30, 2016

ASSET VALUATION METHOD: Market Value

VALUATION FUNDING METHOD: Entry Age Normal Actuarial Cost Method

Assumptions used to determine the Net Pension Liability

DISCOUNT RATE: 8.00% per annum, compounded annually, net of investment expenses.

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

Separations before Retirement – Hired Before 1/1/2016

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 3-9	Years 10+	
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

Section IV – Actuarial Methods & Assumptions

Non-Safety

Age	Annual Rate of					
	Withdrawal					Disability
	Years 0-1	Years 1-2	Years 2-3	Years 3-9	Years 10+	
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

Separations before Retirement – Hired On or After 1/1/2016

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 3-9	Years 10+	
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 Methods & Assumptions

Non-Safety

Age	Annual Rate of					
	Withdrawal					Disability
	Years 0-1	Years 1-2	Years 2-3	Years 3-9	Years 10+	
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

Rates of Retirement – Hired Before 1/1/2016

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			.10	
51			.10	
52			.15	
53			.25	
54			.35	
55	.40		.16	.25
56	.10		.16	.10
57	.09		.16	.10
58	.08		.16	.15
59	.07		.16	.20
60	.06			.55
61	.05			.65
62		.25		.65
63		.16		.65
64		.11		.65
65		.60		1.00
66		.40		
67		.40		
68		.40		
69		.40		
70		1.00		

Section IV – Actuarial Methods & Assumptions

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

** An additional 30% are assumed to retire in the year when first eligible for normal retirement and 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 3 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.

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, 2016.

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

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 – Hired Before 1/1/2016

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.

Eligibility – Hired On or After 1/1/2016

General Members

- Normal retirement at age 62 with 10 years of service

Public Safety Members

- Normal retirement at age 60 with 10 years of service or 55 with 25 years of service

Section V – Summary of Plan Provisions

Basic Monthly Benefit

2.5% of average monthly salary multiplied by years of credited service up to 32.

For members hired before January 1, 2016, average monthly compensation is based on the 36 highest consecutive months of service during the last 60 months of service. For members hired on or after January 1, 2016, average monthly compensation is based on 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 84th monthly benefit payment prior to July 1.

For new employees hired after 1/1/2016, COLA is discretionary and provided on an ad-hoc basis.

Early Retirement Benefit

Eligibility – Hired Before 1/1/2016

The earlier of age 50 and 25 years of credited service or age 55 and 15 years of credited service.

Eligibility – Hired On or After 1/1/2016

General Members

- Early retirement at age 60 with 15 years of service or age 55 with 25 years of service

Public Safety Members

- Early retirement at age 55 with 15 years of service or age 50 with 25 years of 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.

Section V – Summary of Plan Provisions

Deferred Vested Benefit

Eligibility – Hired Before 1/1/2016

7 years of credited service.

Eligibility – Hired On or After 1/1/2016

10 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.

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

- 100%, 75%, or 50% joint and survivor annuity.
- Life annuity with 120 months certain

Section V – Summary of Plan Provisions

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).

Appendix A – Net Pension Liability Allocations by Employer

	County	Water Authority	Plan Total
FYE Ending June 30, 2016:			
Total Pension Liability	\$511,164,007	\$93,835,409	\$604,999,416
Plan Fiduciary Net Position	\$316,243,488	\$58,053,456	\$374,296,944
Net Pension Liability	\$194,920,519	\$35,781,953	\$230,702,472
Portion of Net Pension Liability	84.49%	15.51%	100.00%
Plan Fiduciary Net Position as % of Total Pension Liability	61.87%	61.87%	61.87%
Covered Payroll ¹	\$95,665,3634	\$19,663,781	\$115,329,415
Net Pension Liability as % of Covered Payroll	203.75%	181.97%	200.04%
Employer Contributions	\$13,966,694	\$2,756,799	\$16,723,493
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 ²	\$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

¹ Pensionable earnings

² Total earnings provided by Clayton County

Appendix B – Pension Amounts Allocated by Employer

	County	Water Authority	Plan Total
Net Pension Liability as of June 30, 2016:			
	\$194,920,519	\$35,781,953	\$230,702,472
Deferred Outflows of Resources:			
Difference between expected and actual experience	\$9,194,535	\$1,687,859	\$10,882,394
Changes in assumptions	\$10,364,994	\$1,902,723	\$12,267,717
Difference between projected and actual investment earnings	\$33,014,511	\$6,060,540	\$39,075,051
Change in proportion	\$0	\$581,742	\$581,742
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	\$(62,448,749)	\$(11,463,849)	\$(73,912,628)
Difference between projected and actual investment earnings	\$0	\$0	\$0
Change in proportion	\$(581,742)	\$0	\$(581,742)
Pension Expense Recognized:			
Proportionate share of current year's expense	\$19,717,129	\$3,619,513	\$23,336,642
Change in proportion	\$(116,348)	\$116,348	\$0
Total	\$19,600,781	\$3,735,861	\$23,336,642

¹ Contributions made subsequent to the measurement of June 30, 2016 to the end of the fiscal year of April 30, 2017 for Clayton County Water Authority will be reported as deferred outflows.

Appendix C – Employers’ Share of June 30, 2016 Deferred Outflows/Inflows

	County	Water Authority	Plan Total
FY2017¹	\$1,059,529	TBD	TBD
FY2018	\$1,059,529	\$194,500	\$1,254,029
FY2019	\$1,059,527	\$194,500	\$1,254,027
FY2020	\$(2,029,081)	\$(372,482)	\$(2,401,563)
FY2021	\$(11,024,245)	\$(2,023,743)	\$(13,047,988)
Thereafter	\$0	\$0	\$0

¹ Contributions made subsequent to the measurement of June 30, 2016 to the end of the fiscal year of April 30, 2017 for Clayton County Water Authority will be reported as deferred outflows.

Appendix D – Contribution History

	County	Water Authority	Plan Total
FY2016	\$13,966,694	\$2,756,799	\$16,723,493
FY2015	\$13,805,519	\$2,700,229	\$16,505,748
FY2014	\$12,709,050	\$2,220,531	\$14,929,581



IV. STATISTICAL SECTION (Unaudited)

**CLAYTON COUNTY, GEORGIA
PUBLIC EMPLOYEE RETIREMENT SYSTEM**

**SCHEDULE OF REVENUE BY SOURCE, EXPENSES BY TYPE, AND PLAN NET POSITION
LAST TEN FISCAL YEARS**

Fiscal Year	Employer Contributions	Employee Contributions	Operating Expenses				Non-Operating Revenues (Expenses)		Net Increase (Decrease) in Plan Net Position
			Retirement Benefits	Investment Expense	Administrative Expenses	Total Expenses	Net Appreciation (Depreciation) in Fair Value of Investments	Interest & Dividends	
2007	13,167,340	4,532,302	16,210,390	1,075,941	201,157	17,487,488	28,334,551	6,933,210	35,479,915
2008	15,014,657	5,275,926	18,909,655	1,078,240	197,546	20,185,441	(15,306,098)	8,345,519	(6,855,437)
2009	14,553,343	4,901,325	21,210,435	840,955	267,563	22,318,953	(41,984,451)	12,264,774	(32,583,962)
2010	14,522,336	5,182,809	22,950,744	813,824	237,241	24,001,809	26,425,786	7,241,635	29,370,757
2011	14,269,403	4,617,179	24,699,414	849,358	250,255	25,799,027	30,960,324	12,876,531	36,924,410
2012	14,465,009	4,410,658	26,013,212	414,879	213,785	26,641,876	16,338,533	1,294,885	9,867,209
2013	14,816,262	4,642,790	27,155,733	189,619	169,986	27,515,338	41,169,104	3,811	33,116,629
2014	14,929,581	4,063,520	29,230,610	514,510	402,882	30,148,002	46,726,620	6,871,896	42,443,615
2015	16,859,316	4,277,863	30,502,279	647,321	422,012	31,571,612	3,713,247	8,755,774	2,034,588
2016	17,058,845	6,198,974	32,100,764	454,121	410,926	32,965,811	(9,998,282)	5,642,990	(14,063,284)

**CLAYTON COUNTY, GEORGIA
PUBLIC EMPLOYEE RETIREMENT SYSTEM**

SCHEDULE OF INVESTMENT RESULTS – LAST TEN FISCAL YEARS

<u>Fiscal Year</u>	<u>Investment Income** (Loss)</u>	<u>Average Net Position Available for Benefits (1)</u>	<u>Effective Rate of Return (2)</u>
2007	35,267,761	256,302,312	13.76%
2008	(6,960,579)	270,614,551	-2.57%
2009	(29,719,677)	250,894,851	-11.85%
2010	33,667,421	249,288,249	13.51%
2011	43,836,855	282,435,832	15.52%
2012	17,633,418	305,831,642	5.77%
2013	41,172,915	327,323,561	12.58%
2014	53,598,516	365,103,683	14.68%
2015	12,469,021	387,342,784	3.22%
2016	(4,355,292)	381,328,436	-1.14%

Notes:

(1) Average based on net position available for benefits as of the beginning and end of the respective fiscal year.

(2) Computed as "investment income" divided by "average net position available for benefits."

** Investment income includes net appreciation (depreciation) in fair value of investments.



**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL
OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED
IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

**To the Board of Directors
Clayton County, Georgia Public
Employee Retirement System
Jonesboro, Georgia**

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Clayton County, Georgia Public Employee Retirement System (the Plan) as of and for the year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements, and have issued our report thereon dated December 30, 2016.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Plan's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we do not express an opinion on the effectiveness of the Plan's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. *A material weakness* is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Plan's financial statements are free of material misstatement, we performed tests of compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Macon, Georgia
December 30, 2016

Mauldin & Jenkins, LLC



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