A G E N D A
JAMES CITY SERVICE AUTHORITY BOARD OF DIRECTORS
REGULAR MEETING
County Government Center Board Room
101 Mounts Bay Road, Williamsburg, VA 23185
December 10, 2019
5:00 PM

A. CALL TO ORDER

B. ROLL CALL

C. PRESENTATIONS

1. JCSA Audit Report

D. PUBLIC COMMENT

E. CONSENT CALENDAR

1. Changes to the Regulations Governing Utility Service - Meter for Private Water Supply

F. PUBLIC HEARING(S)

G. BOARD CONSIDERATION(S)

H. BOARD REQUESTS AND DIRECTIVES

I. GENERAL MANAGER'S UPDATE

1. Report

J. ADJOURNMENT

1. Adjourn until 4 p.m. on January 2, 2020 for the Organizational Meeting

AGENDA ITEM NO. C.1.

ITEM SUMMARY

DATE:	12/10/2019
TO:	The Board of Directors
FROM:	Leslie Roberts, Audit Partner with Brown Edwards
SUBJECT:	JCSA Audit Report

ATTACHMENTS:

	Description	Type
🗋	Memorandum	Cover Memo
🗋	Comprehensive Financial Report	Exhibit
🗋	Auditor's Report	Exhibit

REVIEWERS:

Department	Reviewer	Action	Date
Board Secretary	Fellows, Teresa	Approved	11/27/2019 - 8:59 AM

M E M O R A N D U M

DATE: December 10, 2019

TO: The Board of Directors

FROM: Cheryl Cochet, Assistant Director of Financial & Management Services

SUBJECT: Review of Fiscal Year 2019 Financial Statement Audit for James City Service Authority – Brown, Edwards & Company, LLP

Included are the Fiscal Year 2019 audited financial statements for the James City Service Authority. Leslie Roberts, Partner at Brown, Edwards & Company, LLP, will present an overview of the results to the Board.

No Board action is needed.

CC/nb
AnnualFinReportJCSAFY19-mem

Attachment

JAMES CITY SERVICES AUTHORITY

A Component Unit of the County of James City, Virginia

THE COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED JUNE 30, 2019

James City County, Virginia · jamescitycountyva.gov/jcsa

Prepared by the Department of Financial & Management Services

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JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Comprehensive Annual Financial Report
(*With Independent Auditor's Report Thereon*)

For the Fiscal Years Ended
June 30, 2019 and 2018

Prepared by:
Department of Financial and Management Services
James City County, Virginia

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INTRODUCTORY SECTION

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JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

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JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Authority Officials
June 30, 2019

Board of Directors

Sue Sadler, Chair

Ruth Larson, Vice-Chair

Michael J. Hipple

Jim Icenhour

John J. McGlennon

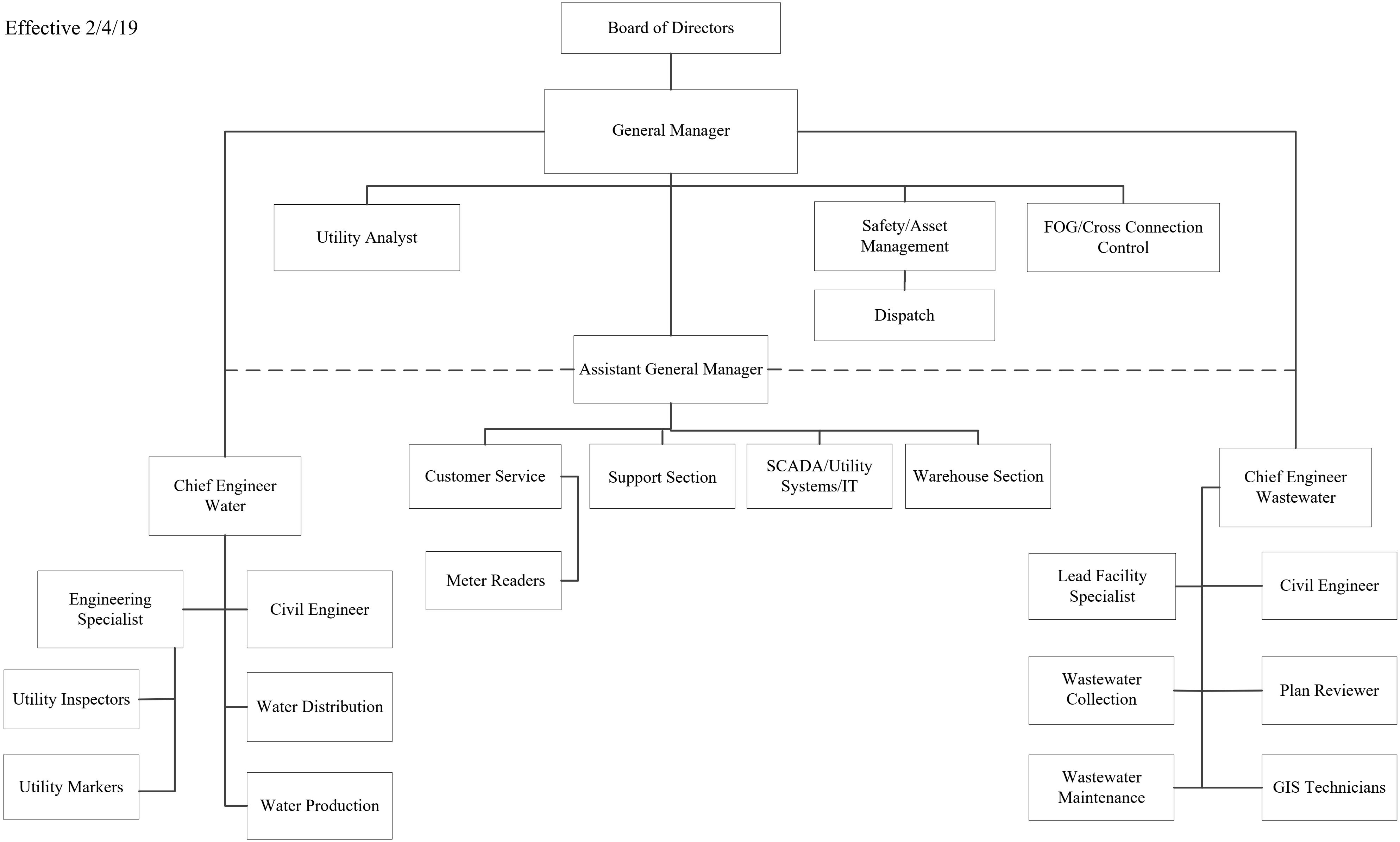
Officials

M. Douglas Powell
General Manager

Stephanie A. Luton
Assistant Manager/Treasurer

JCSA Organizational Chart

Effective 2/4/19



JCSA
JAMES CITY SERVICE AUTHORITY

Operations Center
119 Tewning Road
Williamsburg, VA 23188-2639
P: 757-229-7421
F: 757-229-2463
jcsa@jamescitycountyva.gov

November 26, 2019

The Members of the Board of Directors and the Citizens of James City County:

The Comprehensive Annual Financial Report of the James City Service Authority, a component unit of the County of James City, Virginia, for the fiscal years ending June 30, 2019 and 2018, is hereby submitted. This report presents the financial position of all fund types of the James City Service Authority (JCSA) and the results of operations for the years then ended.

The JCSA financial records have been audited by Brown, Edwards & Company LLP. Their opinion and management's accompanying statements comprise the Financial Section of this report. This report was prepared by the JCSA, and responsibility for both the accuracy of the information presented and the completeness and fairness of the presentation, including all disclosures, rests with the JCSA. We believe the information 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 JCSA as measured by the financial activity of its various legal funds; and that all disclosures necessary to enable the reader to gain the maximum understanding of the JCSA's financial activity have been included. The funds included in our Comprehensive Annual Financial Report are controlled solely by the JCSA.

Generally accepted accounting principles require that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. JCSA's MD&A can be found on pages 4-8, immediately following the independent auditor's report.

The Reporting Entity and Its Service

The James City Service Authority is a public body politic and corporate of the Commonwealth of Virginia. The JCSA was created in 1969 by the James City County Board of Supervisors pursuant to the Virginia Water and Sewer Authorities Act (Code of Virginia, 1950, as amended). The JCSA was created to acquire, construct, operate and maintain, to the extent determined by the JCSA to be financially feasible, an integrated water system and an integrated sewer collection system in James City County (County). The Board of Directors is appointed by the Board of Supervisors. Since 1976, the Board of Supervisors has appointed its members as Directors of the JCSA to more fully coordinate JCSA activities with those of the County in the planning and development of utility systems.

The Board of Supervisors has authorized water and sewer operations for the JCSA within the Primary Service Area (PSA) in the County. With the approval of the County, the JCSA has extended services beyond the PSA to several public sites in the County, including three public schools, Freedom Park and two major planned communities, Greensprings West and Governor's Land. The JCSA also provides water and/or sewer service to limited sections of York County and the City of Williamsburg with the concurrence of the appropriate governing bodies.

The JCSA's water system includes the central water system and Five Forks Water Treatment Facility with 10 water production facilities, and 8 independent water production facilities that are located outside the PSA. There are approximately 414 miles of water transmission and distribution lines throughout the entire system. The water system facilities supply approximately 4.8 million gallons of water per day to 22,832 water customers.

The JCSA's sewer system includes 76 pump stations with approximately 446 miles of sewer collection lines. The sewer system facilities collect and move approximately 5.2 million gallons of sewage per day for 24,573 sewer customers. The JCSA has no sewage treatment facilities. Sewage treatment for areas served by the JCSA, as well as for other Hampton Roads communities, is provided by the Hampton Roads Sanitation District (HRSD).

As of June 30, 2019, the JCSA had 96 full-time employees with the responsibility to operate and maintain its utility facilities and lines. The JCSA's operating funds are self-supporting and the JCSA receives no share of any local or property tax levies. The Board of Directors has the sole power to set water and sewer utility rates and related fees. The Board of Directors adopted an inverted-block or inclining rate structure in 1996 for residential customers which incorporates a unit charge that increases with increasing consumption. The primary objective of the inverted-block rate structure is to promote water conservation, particularly from large-volume residential customers.

Economic Condition and Outlook

The County has a strong, diverse, and growing economic base. The County is located near the Cities of Hampton, Newport News and Williamsburg, and York County. Major employers within commuting distance include Busch Gardens, Anheuser-Busch, Owens-Illinois, Ball Metal, Newport News Shipbuilding, Langley Air Force Base, Fort Eustis, the Colonial Williamsburg Foundation, and the National Aeronautics and Space Administration. The County's population grew 13.2% from 2010 to 2018 while the Commonwealth of Virginia's population increased 6.5% during the same time period. A historically fast-growing population and expanding commercial base enhances the long-term economic outlook for the Authority.

Major Initiatives

Rate Structure - As a result of a comprehensive water and sewer rate study in fiscal year 2015, the Board of Directors adopted a new rate structure in fiscal year 2016 that included a fixed charge for water and sewer service and proposed incremental service rate increases in subsequent fiscal years to ensure the long-term financial stability of the Authority. The goals of this initiative are to reduce revenue variability and adequately provide for both current water and wastewater operating needs and future capital infrastructure repairs, upgrades and expansion required by asset age and regulations. Fixed charges and service rates increased in fiscal year 2019 in accordance with the plan. The rationale behind the fixed charge is JCSA incurs significant costs to maintain infrastructure regardless of usage and JCSA should not be completely reliant on variable revenue to cover these fixed costs. The water and sewer fixed charges are based on meter size. For a typical residential customer in fiscal year 2019, the quarterly water fixed charge was $10.56 and the quarterly sewer fixed charge was $5.95.
The first tier (0-15,000 gallons per quarter) water service rate for a typical single family residential customer increased from $3.18 per 1,000 gallons to $3.61. The second tier (15,001-30,000 gallons per quarter) rate increased from $6.36 per 1,000 gallons to $7.22, and the third tier (30,000+ gallons per quarter) rate increased from $14.93 to $16.95. The water service rate for non-residential and multi-family residential customers increased from $4.70 per 1,000 gallons to $5.33. The sewer service rate increased from $3.05 to $3.08 per 1,000 gallons of water consumed. The rate changes increased a typical 5,000 gallons per month residential customer's bill by $2.74 per month from $36.21 to $38.95.

Capital Projects - Major multi-year projects continuing into 2019 are upgrading the existing Supervisory Control and Data Acquisition (SCADA) communication and control system for 107 remote sites, asset management program development, water meter replacement, future water source alternatives evaluations, the Joint Permit Application for the Chickahominy River surface water withdrawal, design of the College Creek directional drill water main replacement project, and a corrosion control evaluation of the water distribution system. Major multi-year water projects begun in fiscal year 2019 are design for replacement of the water mains and service lines in the White Oaks area neighborhoods, replacement of variable frequency drives that control electric motor speed and power for production wells and the reverse osmosis treatment process at the Five Forks Water Treatment Plant and upsizing approximately 3,700 feet of the existing 12-inch water main to a 16-inch water main along Longhill Road in conjunction with a Virginia Department of Transportation road widening project. Major wastewater projects completed in fiscal year 2019 include manhole raising and rehabilitation, extensive easement inspection and clearing, closed circuit television (CCTV) pipeline inspections, and repairs to pipe defects identified during the CCTV inspections. Substantial construction work was also completed in fiscal year 2019 for upgrading and flood proofing Lift Station 5-4 on Merrimac Trail and the replacement of four air ejector lift stations along the Jamestown Road corridor and Lift Station 1-7 on Pocahontas Trail that are reaching the end of their service lives.

Water - The Authority currently has a groundwater permit for its central water system through 2027 to withdraw up to 8.4 million gallons per day (mgd) to support its residential and commercial customers. The permit is based on a tiered system with varying tiers starting at 6 mgd and increasing to 8.4 mgd based on residential and commercial growth. Facilities currently provide ample resources and treatment capacity through at least 2027. The Virginia Department of Environmental Quality has expressed an interest in reducing the withdrawal of groundwater within the Eastern Virginia Groundwater Management Area, of which the Authority is a part. The Authority is currently evaluating options for alternative sources of water should the groundwater withdrawal permit be reduced after the current permit expires in 2027.

Wastewater - In 2007, the Board of Directors authorized the JCSA to enter into a Consent Agreement with the Virginia Department of Environmental Quality (DEQ) to address sanitary sewer overflows (SSOs). Thirteen other Hampton Roads localities entered into similar agreements during the same timeframe. In February 2014, Hampton Roads Sanitation District (HRSD) and fourteen Hampton Roads localities, including the JCSA, entered into a Regional Hybrid Consolidation Plan for meeting Consent Agreement requirements. This regional approach to capital construction is estimated to save approximately $1 billion regionally compared to the cost of each locality individually fulfilling its Consent Agreement responsibilities. HRSD will fund the work through a regional HRSD rate. In addition, HRSD will also assume liability for wet weather sewer overflows due to inadequate capacity. JCSA keeps ownership and control of its local sewer infrastructure and is still responsible for monitoring and maintaining the local sewer system to Consent Agreement standards and fixing significant defects.

Accounting System and Budgetary Control

The JCSA's accounting records are maintained on a full accrual basis incorporating the principles of enterprise fund accounting. Basically, this approach presents the statements on a profit and loss basis, including a provision for depreciation, which is comparable to private industry.

In developing and evaluating the JCSA's accounting system, consideration is given to the adequacy of internal accounting controls. The 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 the financial statements.

All internal control evaluations occur within the above framework using the concept of reasonable assurance and recognizing: (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.

We believe the JCSA's internal accounting controls adequately safeguard assets and provide reasonable assurance of the proper recording of financial transactions.

Budgetary controls are maintained to ensure compliance with the budget adopted by the Board of Directors. Encumbrances are used to reserve a portion of the applicable appropriation for purchase orders, contracts and commitments of the JCSA.

Awards of Achievement

The Government Finance Officers' Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to James City Service Authority for its component unit financial report for the fiscal year ended June 30, 2018. This was the thirty-fourth year that the JCSA has received this prestigious award.

In order to be awarded a Certificate of Achievement, the JCSA must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such reports must satisfy both accounting principles generally accepted in the United States of America and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe our current report continues to conform to Certificate of Achievement Program requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Acknowledgments

We would like to thank the members of the Board of Directors for their continued support in the planning and implementation of the financial affairs and setting policy for water and sewer development of the JCSA. Also we wish to express our appreciation to the staff of the James City County Department of Financial and Management Services who participated in the preparation of the report.

Sincerely,

M. Douglas Powell
General Manager

Stephanie A. Luton
Assistant General Manager/Treasurer

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

James City Service Authority
Virginia

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2018

Christopher P. Morrill

Executive Director/CEO

FINANCIAL SECTION

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BROWNEDWARDS
certified public accountants

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors
James City Service Authority
Williamsburg, Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of the James City Service Authority (the "Authority"), a component unit of the County of James City, Virginia, as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, as listed in the table of contents. These financial statements are the responsibility of the James City Service Authority's management.

Management's Responsibility for the Financial Statements

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; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and *Specifications for Audits of Authorities, Boards and Commissions* issued by the Auditor of Public Accounts of the Commonwealth of Virginia. 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 the 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.

701 Town Center Drive, Suite 700 • Newport News VA 23606 • 757-873-1033 • Fax 757-873-1106 • www.BEcpas.com

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the James City Service Authority as of June 30, 2019, and the changes in net position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Adjustments to Prior Period Financial Statements

The financial statements of James City Service Authority as of and for the year ended June 30, 2018, were audited by other auditors whose report dated October 31, 2018, expressed an unmodified opinion on those statements. As discussed in Note 9 to the 2019 financial statements, the Authority has adjusted its 2018 financial statements to retrospectively apply a restatement. The other auditors reported on the financial statements before the retrospective adjustment.

As part of our audit of the 2019 financial statements, we also audited the adjustments to the 2018 financial statements to retrospectively apply the restatement as described in Note 9. In our opinion, such adjustments are appropriate and have been properly applied. We were not engaged to audit, review, or apply any procedures to James City Service Authority's 2018 financial statements other than with respect to the adjustments and, accordingly, we do not express an opinion or any other form of assurance on the 2018 financial statements as a whole.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis (MD&A) on pages 4 - 8 and the required supplementary information other than MD&A as listed in the table of contents 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 them to be essential parts of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context and disclosing additional plan information. 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 James City Service Authority's basic financial statements. The schedule of net position – by activity, schedule of revenues, expenses, and changes in net position - by activity, and schedule of operating revenues and expenses - budget to actual - by activity on pages 64 - 66 are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, this information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory section and statistical sections 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 November 25, 2019, on our consideration of the James City Service Authority'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 solely 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 the 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 James City Service Authority's internal control over financial reporting and compliance.

Brown, Edwards & Company, L.L.P.

CERTIFIED PUBLIC ACCOUNTANTS

Newport News, Virginia
November 25, 2019

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Management's Discussion and Analysis
June 30, 2019 and 2018

This section of the James City Service Authority's (the Authority or JCSA) comprehensive annual financial report presents management's discussion and analysis of the Authority's financial performance during fiscal years ended June 30, 2019 and 2018. The information presented in this section should be read in conjunction with the letter of transmittal, which begins on page v.

Financial Highlights

- The Authority's total net position was $184,466,209 and $178,000,381 at June 30, 2019 and 2018, respectively.

- Capital assets increased by 1.7% in 2019 from 2018, primarily attributable to the dedications of water and sewer systems. For fiscal year 2019, there was formal acceptance of 10 new water system dedications and 11 new sewer system dedications.

  Capital assets decreased by 3.4% in 2018 from 2017, primarily attributable to depreciation expense incurred that year. For fiscal year 2018, there was formal acceptance of 3 new water system dedications and 4 new sewer system dedications.

- The Authority's total operating expenses before depreciation and amortization increased by 3.8% in 2019 from 2018 and by 0.6% in 2018 from 2017. The changes were primarily attributable to an increase in infrastructure maintenance expenses related to the DEQ Consent Agreement and future water source studies and planning.

- The Authority's total operating revenues increased by 0.9% from 2018 and by 9.2% from 2017. The increases were primarily attributable to an increase in water and sewer rates.

- The Authority had a restatement of 2018 beginning net position in fiscal year 2019 as a result of an adjustment to the Authority's capital assets for construction in progress as well as an adjustment to the liability for water meter agreement deposits. Additional information can be found in Note 9 to the basic financial statements.

Overview of the Financial Statements

The Comprehensive Annual Financial Report consists of three sections: introductory, financial, and statistical. The financial section includes the basic financial statements, which are comprised of the statements of net position, statements of revenues, expenses, and changes in net position, statements of cash flows, and notes to the basic financial statements. Required supplementary information is included in addition to the basic financial statements.

Transactions are accounted for under the economic resources measurement focus and the accrual basis of accounting utilizing an enterprise fund. Accordingly, revenues are recognized in the period earned and expenses are recognized when they are incurred. Enterprise funds are used to account for activities that are financed and operated similar to those often found in the private sector.

The *statements of net position* present information on the Authority's (1) assets and deferred outflows of resources and (2) liabilities and deferred inflows of resources as of June 30, 2019 and 2018, with the difference between the two reported as net position.

The *statements of revenues, expenses, and changes in net position* present information showing how the Authority's net position changed during the fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of cash flows.

The *statements of cash flows* supplement the above two statements by presenting the changes in cash position as a result of the Authority's activities over the last two years.

Notes to the financial statements provide additional information that is essential for a full understanding of the data provided in the financial statements. The notes to the financial statements begin on page 13.

In addition to the basic financial statements and accompanying notes, this report also presents certain *required supplementary information* concerning the Authority's progress in funding its obligation to provide pension benefits to its employees. The required supplementary information begins on page 55.

Net position is a financial measure that compares an entity's assets and deferred outflows of resources to its liabilities and deferred inflows of resources. Over time, increases and decreases in net position are one indicator of whether the Authority's financial health is improving or deteriorating. However, it is also important to consider other nonfinancial factors, such as changes in economic conditions, industry trends, population and service area growth, and new or changed legislation.

Financial Analysis

Condensed Statements of Net Position

	6/30/2019	6/30/2018 (as restated)	6/30/2017 (as restated)
Current and other assets	$ 55,006,467	$ 51,034,603	$ 45,806,328
Capital assets	154,679,418	152,112,763	157,417,384
Total assets	209,685,885	203,147,366	203,223,712
Deferred charge on refunding, net	1,586,907	1,663,079	1,739,250
Deferred pension/OPEB outflows	401,016	410,997	799,769
Total assets and deferred outflows	$ 211,673,808	$ 205,221,442	$ 205,762,731
Current liabilities	$ 4,046,801	$ 3,011,072	$ 3,096,593
Noncurrent liabilities	22,675,019	23,455,494	25,486,347
Total liabilities	26,721,820	26,466,566	28,582,940
Deferred pension/OPEB inflows	485,779	754,495	82,431
Net position:			
Net investment in capital assets	134,359,937	131,175,547	135,887,432
Restricted for debt service	569,708	567,011	677,614
Unrestricted	49,536,564	46,257,823	40,532,314
Total net position	184,466,209	178,000,381	177,097,360
Total liabilities, deferred inflows and net position	$ 211,673,808	$ 205,221,442	$ 205,762,731

The largest portion of the Authority's net position at June 30, 2019 (72.8%), reflects its investment in capital assets, less related outstanding debt used to acquire those assets. The Authority uses these capital assets to provide services to customers; consequently, these assets are not available for future spending. Although the Authority's investment in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources since the capital assets themselves cannot be used to liquidate these liabilities. The unrestricted portion of net position at June 30, 2019 (26.9%) may be used to meet the Authority's ongoing obligations.

The change in net position can also be determined by reviewing the following condensed statements of revenues, expenses, and changes in net position information.

Condensed Statements of Revenues, Expenses and Changes in Net Position for the Year Ended

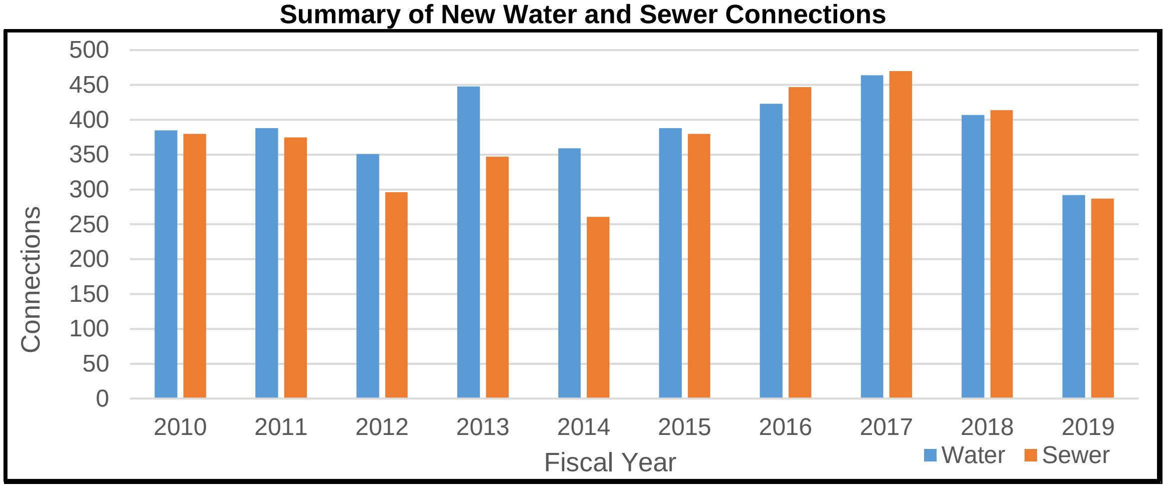
	6/30/2019	6/30/2018 (as restated)	6/30/2017 (as restated)
Water and sewer services	$ 16,299,006	$ 15,942,612	$ 14,400,361
Other	480,685	692,932	834,851
Total operating revenues	16,779,691	16,635,544	15,235,212
Operating expenses	11,669,089	11,241,739	11,178,338
Depreciation and amortization	7,922,613	7,992,438	8,194,083
Total expenses	19,591,702	19,234,177	19,372,421
Facility charges	2,949,130	3,581,360	4,664,316
Other non-operating revenue (expenses), net	1,190,884	(875,941)	(637,907)
Total nonoperating revenues, net	4,140,014	2,705,419	4,026,409
Income (loss) before capital contributions	1,328,003	106,786	(110,800)
Capital contributions	5,137,825	796,235	1,509,214
Change in net position	6,465,828	903,021	1,398,414
Net position, beginning of year (as restated)	178,000,381	177,097,360	175,698,946
Net position, end of year	$ 184,466,209	$ 178,000,381	$ 177,097,360

In fiscal year 2019, water and sewer service revenue increased by 2.2% over 2018, primarily a result of the water and sewer rate increase. The Authority received $213,825 in proffers from developers to fund capital improvements, which was a decrease of 27.2% from the amount received in 2018. There was a decrease in facility charges of 17.7% during 2019, primarily attributable to higher than normal rainfall that delayed new construction.

In fiscal year 2018, water and sewer service revenue increased by 10.7% over 2017, primarily a result of the water and sewer rate increase. The Authority received $293,900 in proffers from developers to fund capital improvements, which was comparable to the amount received in 2017. There was also a decrease in the facility charges of 23.2% during 2018, as 2017 included a large master metered multi-use project and three assisted living facilities.

The Authority's net position increased by $6,465,828 in 2019 from 2018, which was primarily a result of capital asset contributions received. The Authority's net position increased by $903,021 in 2018 from 2017. This was primarily a result of increases in service revenue.

Summary of New Water and Sewer Connections



Capital Assets

The following table summarizes the Authority's capital assets at June 30, 2019, 2018 and 2017:

Summary of Capital Assets, Net

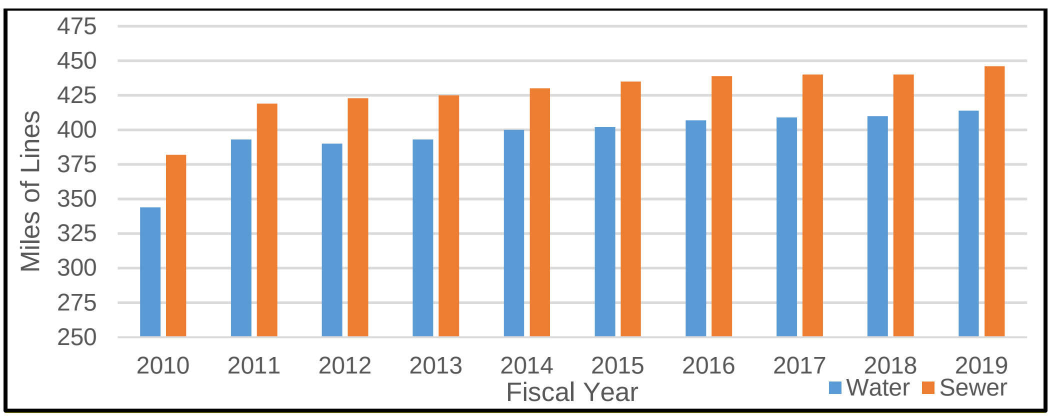
	6/30/2019	6/30/2018 (as restated)	6/30/2017 (as restated)
Utility plant	$ 265,265,911	$ 256,238,922	$ 254,746,923
Nonutility plant	11,690,170	11,272,960	11,926,666
Intangible assets	25,004,570	25,004,570	25,004,570
Construction in progress	3,464,970	2,552,479	1,589,026
Less accum. depreciation and amortization	150,746,203	142,956,168	135,849,801
Net capital assets	$ 154,679,418	$ 152,112,763	$ 157,417,384

At the end of fiscal year 2019, the Authority had invested $154,679,418 (net of accumulated depreciation) in a broad range of capital assets. This was an increase of $2,566,655 from 2018, which was primarily the result of dedications of water and sewer systems.

At the end of fiscal year 2018, the Authority had invested $152,112,763 (net of accumulated depreciation) in a broad range of capital assets. This was a decrease of $5,304,621 from 2017, which was primarily the result of depreciation expense.

Further information related to the Authority's capital assets can be found in Note 4 to these financial statements.

Water and Sewer Lines



Debt Administration

In August 2008, the Authority issued revenue bonds totaling $27,120,000 to finance the purchase from the City of Newport News, Virginia of a "safe yield share" of treated water capacity from the King William Reservoir Project or an alternate water supply source. In April 2016, the Authority issued revenue refunding bonds totaling $22,595,000 to advance refund the outstanding 2008 revenue bonds. The net proceeds were deposited in an irrevocable trust with an escrow agent to provide funds for the future debt service payments on the refunded bonds. Consequently, the 2008 revenue bonds are considered defeased and the liability for those bonds was removed from the statement of net position. In April 2016, Standard & Poor's upgraded its rating of AA+ to AAA, and Moody's Investors Service upgraded its rating of Aa2 to Aa1 for the Authority's outstanding bonded debt. At the close of the fiscal years 2019 and 2018, the Authority's total outstanding bonded debt was $20,575,000 (before premiums) and $21,205,000 respectively.

Further information on the Authority's outstanding debt can be found in Note 6 to these financial statements.

Economic Factors and Next Year Budgets and Rates

During the current fiscal year, the unrestricted net position increased by $3,278,741 from 2018, to approximately $49.5 million.

The JCSA's budget consists of five separate funds: Administration, Water, Sewer, Capital Improvements Program, and Debt Service. The Administration fund is allocated 50% to the Water Fund and 50% to the Sewer Fund. For financial reporting purposes, the Capital Improvements Program (CIP) and Debt Service funds are allocated between the Water and Sewer funds, as applicable.

The fiscal year 2020 budget focuses on obtaining a sustainable long-term water supply and maintaining modern infrastructure and technology. Contributions to the Alternative Water Supply Reserve Fund (found in Unrestricted-Net Position) build dedicated funding for future water sources and reduce future borrowing costs. JCSA's Asset Management program has shown that costs to maintain modern infrastructure and technology will increase significantly in the future as more pipes, wells, and pump stations reach the end of their useful lives. CIP projects such as meter replacement and contributions to the Repair and Replacement Reserve Fund will allow JCSA to fix aging infrastructure both now and in the future.

Sixty percent of the annual debt service payment will be made from Water Fund operating revenue, up from forty percent in fiscal year 2019, and a larger proportion of the fiscal year 2020 CIP will be funded with operating revenue than in previous years. These two initiatives reduce reliance on facility charge revenue as required by the JCSA Financial Policy.

The fiscal year 2020 Capital Improvements Program budget decreases slightly from $7,548,528 in fiscal year 2019 to $7,247,799.

The fiscal year 2020 budget contains increases in the water and sewer fixed charges and service rates that reflect the multi-year plan from the 2015 comprehensive rate study. Incremental increases are required to successfully manage aging infrastructure, fixed costs and debt service coverage and prepare for substantial future water permitting and water sourcing challenges. The total monthly water and sewer bill for a typical 5,000 gallons per month residential user will increase by $3.10 per month from $38.95 to $42.05.

The philosophy of the fixed charge is that the Authority incurs significant costs to maintain infrastructure regardless of usage and the Authority should not be completely reliant on variable revenue to cover these fixed costs. The water and sewer fixed charges are based on meter size. For a typical residential customer, the quarterly fixed charge for water increases to $11.99 from $10.56 and for sewer increases to $6.01 from $5.95.

The fiscal year 2020 budget contains new water and sewer service rates. In the Water Fund, the first tier (0-15,000 gallons per quarter) service rate for a typical single family residential customer increases from $3.61 per 1,000 gallons to $4.10. The second tier (15,001-30,000 gallons per quarter) rate increases from $7.22 per 1,000 gallons to $8.19, and the third tier (30,000+ gallons per quarter) rate increases from $16.95 to $19.24. The water service rate for non-residential and multi-family residential customers increases from $5.33 per 1,000 gallons to $6.05. The sewer service rate increases from $3.08 per 1,000 gallons to $3.11.

Contacting the Authority's Financial Management

This financial report is designed to provide our customers and creditors with a general overview of the Authority's finances and to demonstrate the Authority's accountability for the money it receives. Questions concerning this report or requests for additional information should be directed to the James City County Department of Financial and Management Services, 101-F Mounts Bay Road, P.O. Box 8784, Williamsburg, Virginia 23187-8784.

BASIC FINANCIAL STATEMENTS

Exhibit 1

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Statements of Net Position

June 30, 2019 and 2018

	2019	2018 (as restated)
Assets		
Current assets:		
Cash and cash equivalents (Note 2)	$ 538,690	$ 811,932
Investments (Note 2)	48,980,948	45,389,644
Restricted investments (Note 2)	569,708	567,011
Accounts receivable, customers	3,637,029	3,189,777
Accounts receivable, other	66,809	36,298
Note receivable (Note 3)	1,090	1,090
Interest receivable	296,438	165,999
Inventories	915,755	872,852
Total current assets	55,006,467	51,034,603
Noncurrent assets:		
Capital assets (Note 4):		
Non-depreciable	6,180,709	5,265,718
Depreciable	148,498,709	146,847,045
Net capital assets	154,679,418	152,112,763
Total assets	209,685,885	203,147,366
Deferred Outflows of Resources		
Deferred charge on refunding, net (Note 6)	1,586,907	1,663,079
Deferred pension (Note 7)	338,772	380,362
Deferred OPEB group life insurance (GLI) (Note 8)	38,000	22,168
Deferred OPEB health insurance credit (HIC) (Note 8)	8,467	8,467
Deferred OPEB retiree healthcare (Note 8)	15,777	-
Total deferred outflows of resources	1,987,923	2,074,076
Total assets and deferred outflows of resources	$ 211,673,808	$ 205,221,442

See accompanying notes to basic financial statements.

Exhibit 1, Continued

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Statements of Net Position

June 30, 2019 and 2018

	2019	2018 (as restated)
Liabilities		
Current liabilities:		
Accounts payable, trade	$ 1,071,918	$ 361,215
Accrued salaries	12,250	7,834
Compensated absences, current portion (Note 6)	312,373	301,496
Due to James City County (Note 11)	996,066	619,752
Deposits	614,431	694,462
Interest payable	320,856	332,406
Bonds payable, current portion (Note 6)	718,907	693,907
Total current liabilities	4,046,801	3,011,072
Noncurrent liabilities:		
Advances for construction (Note 5)	32,902	32,902
Compensated absences, net of current portion (Note 6)	104,124	100,499
Bonds payable, net of current portion (Note 6)	21,187,481	21,906,388
Net pension liability (Note 7)	523,170	613,640
Net retiree healthcare OPEB liability (Note 8)	432,969	406,742
Net GLI OPEB liability (Note 8)	340,000	333,000
Net HIC OPEB liability (Note 8)	54,373	62,323
Total noncurrent liabilities	22,675,019	23,455,494
Total liabilities	26,721,820	26,466,566
Deferred Inflows of Resources		
Deferred pension (Note 7)	418,971	683,372
Deferred OPEB retiree healthcare (Note 8)	21,899	24,543
Deferred OPEB GLI (Note 8)	33,000	40,000
Deferred OPEB HIC (Note 8)	11,909	6,580
Total deferred inflows of resources	485,779	754,495
Net Position		
Net position:		
Net investment in capital assets	134,359,937	131,175,547
Restricted for debt service	569,708	567,011
Unrestricted	49,536,564	46,257,823
Total net position	184,466,209	178,000,381
Total liabilities, deferred inflows of resources and net position	$ 211,673,808	$ 205,221,442

See accompanying notes to basic financial statements.

Exhibit 2

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Statements of Revenues, Expenses, and Changes in Net Position

Years ended June 30, 2019 and 2018

	2019	2018 (as restated)
Operating revenues:		
Water and sewer services	$ 16,299,006	$ 15,942,612
Water supply proffers	213,825	293,900
Rental income (Note 11)	124,964	354,987
Other	141,896	44,045
Total operating revenues	16,779,691	16,635,544
Operating expenses:		
Salaries	4,721,993	4,552,923
Fringe benefits	1,436,239	1,511,372
Operating supplies	1,200,220	1,150,760
Maintenance	2,193,410	2,013,679
Utilities	974,168	913,104
Contractual fees (Note 11)	872,374	877,652
Other	270,685	222,249
Total operating expenses	11,669,089	11,241,739
Operating income before depreciation and amortization	5,110,602	5,393,805
Depreciation and amortization (Note 4)	7,922,613	7,992,438
Operating loss	(2,812,011)	(2,598,633)
Nonoperating revenues (expenses):		
Facility charges	2,949,130	3,581,360
Investment income	1,904,327	43,940
Gain (loss) on disposal of capital assets	14,522	(165,655)
Interest expense	(727,965)	(754,226)
Net nonoperating revenues	4,140,014	2,705,419
Income before capital contributions	1,328,003	106,786
Capital asset contributions	5,137,825	796,235
Changes in net position	6,465,828	903,021
Net position, beginning of year	178,000,381	177,097,360
Net position, end of year	$ 184,466,209	$ 178,000,381

See accompanying notes to basic financial statements.

Exhibit 3

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Statements of Cash Flows

Years ended June 30, 2019 and 2018

	2019	2018 (as restated)
Cash flows from operating activities:		
Cash received from customers	$ 15,771,723	$ 15,815,375
Other cash receipts	450,174	706,084
Cash payments to suppliers for goods and services	(4,466,743)	(4,926,183)
Cash payments for personnel services	(6,463,242)	(6,354,308)
Facility charges	2,949,130	3,581,360
Net cash provided by operating activities	8,241,042	8,822,328
Cash flows from capital and related financing activities:		
Repayments of debt	(630,000)	(605,000)
Interest paid	(727,250)	(753,226)
Acquisition and construction of capital assets	(5,352,696)	(2,066,082)
Proceeds from sale of capital assets	15,775	8,845
Net cash used in capital and related financing activities	(6,694,171)	(3,415,463)
Cash flows from investing activities:		
Purchases of investments	(37,058,812)	(26,927,603)
Proceeds from sale of investments	33,473,030	21,779,889
Interest received	1,765,669	12,765
Net cash used in investing activities	(1,820,113)	(5,134,949)
Increase (decrease) in cash and cash equivalents	(273,242)	271,916
Cash and cash equivalents, beginning of year	811,932	540,016
Cash and cash equivalents, end of year	$ 538,690	$ 811,932
Reconciliation of operating loss to net cash provided by operating activities:		
Operating loss	$ (2,812,011)	$ (2,598,633)
Adjustments to reconcile operating loss to cash provided by operating activities:		
Depreciation and amortization	7,922,613	7,992,438
Facility charges	2,949,130	3,581,360
Change in operating assets and liabilities:		
Accounts receivable, customers	(447,252)	(257,967)
Accounts receivable, others	(30,511)	13,152
Notes receivable	-	496,800
Inventories	(42,903)	(29,455)
Accounts payable, trade	710,703	44,547
Accrued salaries	4,416	(6,486)
Compensated absences	14,502	(9,889)
Due to James City County	376,314	236,169
Deposits	(80,031)	130,730
Unearned revenue	-	(496,800)
Net OPEB liability and deferred inflow of resources	(10,647)	(9,542)
Net pension liability and related deferred inflow/outflows of resources	(313,281)	(264,096)
Total adjustments	11,053,053	11,420,961
Net cash provided by operating activities	$ 8,241,042	$ 8,822,328
Supplemental schedules:		
Noncash capital activities:		
Capital asset contributions	$ 5,137,825	$ 796,235
Noncash investing activity:		
Unrealized gain (loss) from change in fair value of investments	$ 1,149,452	$ (330,376)

See accompanying notes to basic financial statements.

1) Organization and Summary of Significant Accounting Policies

The James City Service Authority (the Authority) was established on June 30, 1969, by resolution of the Board of Supervisors of James City County, Virginia (the County, or Primary Government), and was chartered by the Commonwealth of Virginia, State Corporation Commission in July 1969 to provide water and sewer service to County residents as permitted under the Code of Virginia (1950), as amended (the Enabling Act).

The Enabling Act authorizes the Authority, among other things, to: a) acquire, construct, improve, extend, operate, and maintain any water, sewer, sewage disposal, or garbage/refuse collection and disposal system; b) issue revenue bonds of the Authority, payable solely from revenues, to pay all or any part of the cost of such systems; c) fix, revise, charge, and collect rates, fees, and charges for the use of and for the services furnished or to be furnished by any system operated by the Authority; and d) enter into contracts with the Commonwealth of Virginia, or with any municipality, county, corporation, individual, or any public authority or unit thereof, relating to the services and facilities of any such system of the Authority. Further, the Enabling Act provides that the Authority is subject in all respects to the jurisdiction of the Department of Environmental Quality – Water Division (DEQ), formerly the State Water Control Board of the Commonwealth of Virginia, under the provision of the State Water Control Law.

The Authority's governing body is appointed by the County's Board of Supervisors, although the Authority is legally separate. The County's Board of Supervisors is the appointed Board of Directors of the Authority.

The County can impose its will over the Authority, significantly influencing the programs, projects, activities, or levels of service. Although a financial benefit or burden relationship may not exist, the County is financially accountable. The Authority is accounted for as a proprietary fund and its financial statements have been blended with the County's financial statements for reporting purposes.

Basis of Accounting and Presentation

The Authority prepares its financial statements in conformity with U.S. generally accepted accounting principles (GAAP) as applied to governmental units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The Authority uses the economic resources management focus and the accrual basis of accounting. Under this method, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred. Current assets include cash and amounts convertible to cash during the next normal operating cycle, or one year. Current liabilities include those obligations to be liquidated with current assets. The Authority generally first uses restricted assets for expenses incurred for which both restricted and unrestricted assets are available. The Authority may defer the use of restricted assets based on a review of the specific transaction.

Since the Authority is only engaged in business-type activities, it is required to present only the financial statements required for enterprise funds. The basic financial statements consist of Statements of Net Position, Statements of Revenues, Expenses and Changes in Net Position, Statements of Cash Flows and Notes to the Financial Statements.

Cash Equivalents

For purposes of the statements of cash flows, cash equivalents are defined as short-term, highly liquid investments that are both (a) readily convertible to known amounts of cash, and (b) so near the maturity that they present insignificant risk of changes in value because of changes in interest rates. Generally, the Authority considers investments with original maturities of three months or less to be cash equivalents.

1) Organization and Summary of Significant Accounting Policies, Continued

Investments

Investments are reported at fair value except for the position in Virginia's Local Government Investment Pool (LGIP) which in accordance with state law, is reported at amortized cost. The Authority determines fair value in accordance with GASB Statement No. 72, *Fair Value Measurement and Application*. This statement requires the use of valuation techniques which are appropriate under the circumstances and are either a market approach, a cost approach, or an income approach. The statement establishes a hierarchy of inputs used to measure fair value consisting of three levels. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are inputs, other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. The Authority uses a market approach as the valuation technique for Level 2 inputs. Level 3 inputs are unobservable inputs, such as management's assumption of the default rate among underlying mortgages of a mortgage-backed security. Statement No. 72 also contains note disclosure requirements regarding the hierarchy of valuation inputs and valuation techniques that was used for the fair value measurements.

Allowance for Uncollectible Accounts

The Authority has few uncollectible receivables and does not use an allowance account. State law permits filing of liens against real property for unpaid utility charges. The write-off of bad debts only occurs when the property is sold prior to the lien process being instituted.

Inventories

Inventories are valued at cost and are charged against operations on an average cost basis. They consist of water meters, pipes, and parts required to repair the utility systems.

Capital Assets

All direct costs of water and sewer transmission facilities constructed are capitalized. In addition, interest expense where applicable, are capitalized during the period of construction. Interest expense is reduced to the extent of any interest income earned on investment of bond proceeds. Nonutility property is capitalized at cost.

The Authority's policy is to capitalize capital assets with a cost or acquisition value at the date of donation of $5,000 or greater. The cost of major improvements is capitalized, while the cost of maintenance and repairs, which does not improve or extend the life of an asset, is expensed. The Authority provides for depreciation of capital assets using the straight-line method over their estimated useful lives, as follows:

Sewer systems	40 years
Water systems	30 years
Equipment and other	3-40 years

The Authority has easements and water rights that are considered intangible assets. The water rights are related to an agreement the Authority has with the City of Newport News to purchase and treat water to meet long-term water supply needs. These water rights are amortized using the straight-line method over the life of the agreement.

When capital assets are sold or retired, the related cost and accumulated depreciation are removed from the accounts and any gain or loss is included in the accompanying statements of revenues, expenses, and changes in net position.

Unbilled Revenue

The Authority records the amount of accrued but unbilled revenue by prorating actual subsequent billings. Amounts accrued but unbilled were approximately $2,011,000 and $1,636,000 at June 30, 2019 and 2018, respectively, and are included in Accounts receivable, customers on the statements of net position.

1) Organization and Summary of Significant Accounting Policies, Continued

Budgetary Policy

Although a budget is not legally required to be adopted, a fiscal year budget is prepared on a modified accrual basis for management and fiscal planning purposes. Any changes to the adopted budget require Board approval. Appropriations lapse at the end of the fiscal year with the exception of capital projects which continue until completed. For the year ended June 30, 2018, there were no supplemental appropriations for various grants. For the year ended June 30, 2019, there was one supplemental appropriation in the amount of $75,361 for storm costs.

Risk Management

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees, and natural disasters. Property, liability and worker's compensation coverages are provided through a self-insurance pool. The Authority's retention is through deductibles. Deductibles and coverage limits at June 30, 2019 were as follows:

	Deductibles	Liability Coverage Limits
Property insurance:		
Building and contents	$ 10,000	$ 46,248,450
Business interruption/extra expense		$ 3,000,000
Inland marine	$ 1,000	$ 1,006,021
Back-up of sewers and drains		$ 10,000,000
Debris removal		$ 25,000,000
Pollutant clean-up and removal		$ 500,000
Newly acquired locations for up to 120 days		$ 25,000,000
Property in transit		$ 5,000,000
Utility services time element		$ 5,000,000
Increased cost of construction/ordinance/demolition		$ 20,000,000
Earthquake/Flood (outside 100 year flood plain) - Pool Aggregate	$ 25,000	$ 50,250,000
Equipment breakdown	$ 1,000	$ 125,000,000
General liability		$ 2,000,000
Public officials liability		$ 9,000,000
Automobile liability		$ 2,000,000
Automobile comprehensive/collision	$ 1,000	$ 753,527
Crime	$ 250	$ 500,000
Excess liability		$ 7,000,000
Environmental liability	$ 25,000	$ 1,000,000
Cyber risk		$ 2,000,000
Worker's compensation		Statutory limits

Settled claims have not exceeded the amount of insurance coverage in any of the past three fiscal years.

Bond Premiums and Discounts

Bond premiums and discounts are deferred and amortized over the terms of the related issues on a straight-line basis, which approximates the effective interest method.

1) Organization and Summary of Significant Accounting Policies, Continued

Operating and Nonoperating Revenue and Expenses Recognition

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses result from providing water and sewer services. Revenues and expenses not meeting the operating definition are reported as nonoperating. These consist mainly of water and sewer facility charges, investment income, interest expense, and gain or loss on disposal of capital assets.

Estimates

The preparation of financial statements requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates and assumptions.

Adoption of New Accounting Statement

Effective for the fiscal year ended June 30, 2018, the Authority adopted GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions.* Statement No. 75 replaces the requirements of Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions,* as amended, and Statement No. 57, *OPEB Measurement by Agent Employers and Agent Multiple-Employer Plans*.

Statement No. 75 addresses accounting and financial reporting for OPEB that is provided to the employees of state and local governmental employers. This Statement establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures. For defined benefit OPEB, this Statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosure and required supplementary information requirements about defined benefit OPEB also are addressed.

2) Cash and Investments

The Authority's cash and investments at June 30, 2019 and 2018, consisted of the following:

	6/30/2019	6/30/2018
Bank deposits	$ 538,085	$ 811,327
Petty cash	605	605
Investments	49,550,656	45,956,655
Total	$ 50,089,346	$ 46,768,587
Reconcilation to Statements of Net Position:		
Cash and cash equivalents	$ 538,690	$ 811,932
Investments	48,980,948	45,389,644
Restricted investments	569,708	567,011
Total	$ 50,089,346	$ 46,768,587

Deposits with banks are fully covered by the Federal Deposit Insurance Corporation (FDIC) or collateralized in accordance with the Virginia Security for Public Deposits Act, Section 2.2-4400 et. seq. of the Code of Virginia.

Restricted investments reflect funds held by a trustee in escrow for future debt service payments.

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Notes to Financial Statements
June 30, 2019 and 2018

2) Cash and Investments, Continued

The Authority's investments at June 30, 2019 and 2018 were as follows:

Investment Type	Cost	Fair Value	Level 1	Level 2	Level 3
6/30/2019:					
Investments:					
Money market	$ 46,477	$ 46,477	N/A	N/A	N/A
LGIP	1,003,940	1,003,940	N/A	N/A	N/A
U.S. Treasury securities	25,767,853	26,147,199	-	26,147,199	-
Federal agency notes and bonds	6,804,207	6,879,843	-	6,879,843	-
Corporate notes and bonds	7,293,211	7,398,423	-	7,398,423	-
Certificates of deposit	4,600,000	4,610,396	-	4,610,396	-
Fed. agency coll. mortgage ob.	2,856,407	2,894,670	-	2,894,670	-
Total	$ 48,372,095	$ 48,980,948	$ -	$ 47,930,531	$ -
Restricted Investments:					
Money market	$ 569,708	$ 569,708	N/A	N/A	N/A
6/30/2018:					
Investments:					
Money market	$ 15,893	$ 15,893	N/A	N/A	N/A
U.S. Treasury securities	21,220,426	20,939,566	-	20,939,566	-
Federal agency notes and bonds	12,389,859	12,227,829	-	12,227,829	-
Corporate notes and bonds	7,489,074	7,410,015	-	7,410,015	-
Commercial paper	1,726,394	1,739,646	-	1,739,646	-
Certificates of deposit	2,500,000	2,474,269	-	2,474,269	-
Fed. agency coll. mortgage ob.	588,596	582,426	-	582,426	-
Total	$ 45,930,242	$ 45,389,644	$ -	$ 45,373,751	$ -
Restricted Investments:					
Money market	$ 567,011	$ 567,011	N/A	N/A	N/A

		Investment maturity (in years)		
Investment Type	**Amount**	**Less than 1**	**1-2**	**2-7**
6/30/2019:				
Money market funds	$ 616,185	$ 616,185	$ -	$ -
LGIP	1,003,940	1,003,940	-	-
U.S. Treasury securities	26,147,199	-	13,140,512	13,006,687
Federal agency notes and bonds	6,879,843	-	3,280,839	3,599,004
Corporate notes and bonds	7,398,423	377,708	3,543,909	3,476,806
Certificate of deposit	4,610,396	2,785,210	1,825,186	-
Fed. agency coll. mortgage ob.	2,894,670	693	-	2,893,977
Total	$ 49,550,656	$ 4,783,736	$ 21,790,446	$ 22,976,474
6/30/2018:				
Money market funds	$ 582,904	$ 582,904	$ -	$ -
U.S. Treasury securities	20,939,566	163,756	10,306,201	10,469,609
Federal agency notes and bonds	12,227,829	2,184,651	6,804,852	3,238,326
Corporate notes and bonds	7,410,015	1,735,126	3,092,155	2,582,734
Commercial paper	1,739,646	1,739,646	-	-
Certificate of deposit	2,474,269	771,634	870,385	832,250
Fed. agency coll. mortgage ob.	582,426	163,009	120,245	299,172
Total	$ 45,956,655	$ 7,340,726	$ 21,193,838	$ 17,422,091

2) Cash and Investments, Continued

Investment Policy

The JCSA Board of Directors adopted an updated Investment Policy on August 9, 2016. In accordance with the Code of Virginia and other applicable laws, including regulations, the Authority's Investment Policy (the Policy) permits investments in U.S. government obligations, federal agency obligations, municipal obligations, prime quality commercial paper, bankers' acceptances, corporate notes, negotiable certificates of deposits and bank deposit notes, money market mutual funds, repurchase agreements and the LGIP, which measures its investments at amortized cost). The Treasury Board of the Commonwealth of Virginia has regulatory oversight of the LGIP.

The Policy establishes limitations on the holdings of non-U.S. government obligations. The combined amount of bankers' acceptances, commercial paper, and corporate notes shall not exceed fifty percent (50%) of the total book value of the portfolio at the date of acquisition. The maximum percentage of the portfolio (book value at the date of acquisition) permitted in each security is as follows:

U.S. Treasury obligations	100% maximum
Federal agency obligations	100% maximum
Money market mutal funds	50% maximum
LGIP	50% maximum
Repurchase agreements	50% maximum
Bankers' acceptances	35% maximum
Commercial paper	35% maximum
Collateralized bank deposits	35% maximum
Negotiable certificates of deposit/bank deposit notes	25% maximum
Corporate notes	25% maximum
Municipal obligations	20% maximum
Federal agency mortgage-backed securities	10% maximum

Credit Risk

As required by state statute, the Policy requires that commercial paper have a short-term debt rating of no less than A-1 (or its equivalent) from at least two of the Nationally Recognized Statistical Rating Organizations (NRSROs). Corporate notes must have a minimum rating of Aa by Moody's Investors Service and AA by Standard & Poor's. Negotiable certificates of deposit and bank deposit notes maturing in less than one year must have a minimum rating of A-1 by Standard & Poor's and P-1 by Moody's Investors Service, and if maturing in over one year, the minimum rating must be AA by Standard & Poor's and Aa by Moody's Investors Service. Although state statute does not impose credit standards on repurchase agreement counterparties, bankers' acceptances, or money market mutual funds, the Authority has established stringent credit standards for these investments to minimize portfolio risk.

2) Cash and Investments, Continued

As of June 30, 2019 and 2018, the Authority's investments rated by Standard & Poor's were as follows:

	Unrated	AAA	AA+	AA	AA-	A-1+	A-1
6/30/2019:							
Money market funds	$ 569,708	$ 46,477	$ -	$ -	$ -	$ -	$ -
LGIP	-	1,003,940	-	-	-	-	-
Federal agency notes and bonds	-	-	6,879,843	-	-	-	-
Corporate notes and bonds	-	180,156	1,160,289	1,751,578	4,306,400	-	-
Certificate of deposit	-	-	-	-	1,825,186	878,144	1,907,066
Fed. agency coll. mortgage ob.	-	-	2,894,670	-	-	-	-
Total	$ 569,708	$ 1,230,573	$ 10,934,802	$ 1,751,578	$ 6,131,586	$ 878,144	$ 1,907,066
6/30/2018:							
Money market funds	$ 567,011	$ 15,893	$ -	$ -	$ -	$ -	$ -
Federal agency notes and bonds	-	-	12,227,829	-	-	-	-
Corporate notes and bonds	-	508,046	1,698,791	1,160,992	4,042,186	-	-
Commercial paper	-	-	-	-	-	-	1,739,646
Certificate of deposit	-	-	-	-	1,702,635	771,634	-
Fed. agency coll. mortgage ob.	-	-	582,426	-	-	-	-
Total	$ 567,011	$ 523,939	$ 14,509,046	$ 1,160,992	$ 5,744,821	$ 771,634	$ 1,739,646

Concentration of Credit Risk

The Policy establishes guidelines on portfolio composition by issuer in order to control concentration of credit risk. No more than 5% of the Authority's portfolio will be invested in the securities of any single issuer with the following exceptions:

U.S. Treasury obligations	100% maximum
Money market mutual funds	50% maximum
LGIP	50% maximum
Federal agency obligations	35% maximum
Collateralized bank deposits	35% maximum
Repurchase agreements	25% maximum
Federal agency mortgage-backed securities	10% maximum

At June 30, 2019 and 2018, the portions of the Authority's portfolio (excluding restricted investments) that exceeded 5% of the total were:

	% of Portfolio	
Issuer	**6/30/2019**	**6/30/2018**
U.S. Treasury	53.4%	46.1%
Federal Home Loan Banks	6.2%	12.0%
Fannie Mae	7.7%	11.5%
Freddie Mac	6.1%	4.7%

Interest Rate Risk

As a means of limiting exposure to fair value losses arising from rising interest rates, the Policy limits the investment of short-term operating funds to an average weighted maturity of no more than 180 days, with a portion of the portfolio continuously invested in readily available funds.

The operating fund core portfolio will be invested in permitted investments with a stated maturity of no more than five years from the date of purchase. To control the volatility of the core portfolio, the Authority will determine a duration target, not to exceed three years.

2) Cash and Investments, Continued

Proceeds from the sale of bonds must be invested in compliance with the specific requirements of the bond covenants and may be invested in securities with longer maturities, so long as the maturity does not exceed the expected disbursement date of those funds.

Custodial Credit Risk

The Policy requires that all investment securities purchased by the Authority or held as collateral on deposits or investments shall be held by the Authority or by a third-party custodial agent who may not otherwise be a counter party to the investment transaction. As of June 30, 2019 and 2018, all of the Authority's investments were held in a bank's trust department in the name of James City Service Authority.

3) Note Receivable

In June 2017, the Authority entered into a deferred payment agreement with Franciscus at Promenade, LLC. As part of this agreement, Franciscus made payments towards estimated system charges and fees of $496,800 and $0 for fiscal years 2018 and 2019, respectively. At June 30, 2018 and 2019, the note receivable balance was $1,090.

4) Capital Assets

The following is a summary of changes in capital assets for the fiscal years ended June 30, 2019 and 2018:

	Balance July 1, 2018 As Restated	Increases	Decreases	Balance June 30, 2019
Capital assets not being depreciated:				
Utility plant:				
Land	$ 955,995	$ -	$ -	$ 955,995
Nonutility plant:				
Land	1,739,491	2,500	-	1,741,991
Land improvements	13,183	-	-	13,183
Construction in progress	2,552,479	5,183,949	4,271,458	3,464,970
Intangibles - easements	4,570	-	-	4,570
Total capital assets not being depreciated	5,265,718	5,186,449	4,271,458	6,180,709
Capital assets being depreciated:				
Utility plant:				
Water and sewer systems	255,282,927	9,026,989	-	264,309,916
Nonutility plant:				
Land improvements (depreciable)	-	8,930	-	8,930
Central shop	4,394,478	41,417	-	4,435,895
Office fixtures and equipment	2,128,725	272,451	21,271	2,379,905
Automotive equipment	2,905,285	225,743	112,560	3,018,468
Intangible - water rights	25,000,000	-	-	25,000,000
Infrastructure	91,798	-	-	91,798
Total capital assets being depreciated	289,803,213	9,575,530	133,831	299,244,912
Less accumulated depreciation/amortization:				
Water and sewer systems	132,330,600	6,752,818	-	139,083,418
Land improvements	-	223		223
Central shop	1,160,571	125,849	-	1,286,420
Office fixtures and equipment	1,398,029	157,279	20,356	1,534,952
Automotive equipment	2,391,591	269,887	112,222	2,549,256
Intangibles - water rights	5,674,847	613,497	-	6,288,344
Infrastructure	530	3,060	-	3,590
Total accumulated depreciation/amortization	142,956,168	7,922,613	132,578	150,746,203
Total capital assets being depr./amort, net	146,847,045	1,652,917	1,253	148,498,709
Total capital assets, net	$ 152,112,763	$ 6,839,366	$ 4,272,711	$ 154,679,418

4) Capital Assets, Continued

	Balance July 1, 2017 As Restated	Increases	Decreases	Balance June 30, 2018 As Restated
Capital assets not being depreciated:				
Utility plant:				
Land	$ 955,995	$ -	$ -	$ 955,995
Nonutility plant:				
Land	1,739,491	-	-	1,739,491
Land improvements	13,183	-	-	13,183
Construction in progress	1,589,026	5,972,159	5,008,706	2,552,479
Intangibles - easements	4,570	-	-	4,570
Total capital assets not being depreciated	4,302,265	5,972,159	5,008,706	5,265,718
Capital assets being depreciated:				
Utility plant:				
Water and sewer systems	253,790,928	1,491,999	-	255,282,927
Nonutility plant:				
Central shop	5,284,909	59,716	950,147	4,394,478
Office fixtures and equipment	2,049,369	141,000	61,644	2,128,725
Automotive equipment	2,839,714	114,351	48,780	2,905,285
Intangible - water rights	25,000,000	-	-	25,000,000
Infrastructure	-	91,798	-	91,798
Total capital assets being depreciated	288,964,920	1,898,864	1,060,571	289,803,213
Less accumulated depreciation/amortization:				
Water and sewer systems	125,542,785	6,787,815	-	132,330,600
Central shop	1,783,923	156,556	779,908	1,160,571
Office fixtures and equipment	1,304,926	150,486	57,383	1,398,029
Automotive equipment	2,156,817	283,554	48,780	2,391,591
Intangibles - water rights	5,061,350	613,497	-	5,674,847
Infrastructure	-	530	-	530
Total accumulated depreciation/amortization	135,849,801	7,992,438	886,071	142,956,168
Total capital assets being depr./amort, net	153,115,119	(6,093,574)	174,500	146,847,045
Total capital assets, net	$ 157,417,384	$ (121,415)	$ 5,183,206	$ 152,112,763

5) Advances for Construction

Advances for construction consist of two separate agreement types. Funds can be advanced by developers for the construction of specific facilities. These agreements call for rebates, up to the amount advanced, and have no expiration date. Developers can also construct a facility, dedicate it to the Authority, and receive rebates up to the cost of the facility for up to 10 years. The Authority no longer enters into these types of agreements. As of June 30, 2019 and 2018, advances for construction consisted of:

Funds advanced	$ 27,020
Facilities constructed	5,882
Total	$ 32,902

6) Long-Term Liabilities

The Authority's long-term debt activity for the fiscal years ended June 30, 2019 and 2018 was as follows:

	Balance 7/1/2018	Increases	Decreases	Balance 6/30/2019	Due within one year
Refunding revenue bonds	$ 21,205,000	$ -	$ 630,000	$ 20,575,000	$ 655,000
Premium, refunding revenue bonds	1,395,295	-	63,907	1,331,388	63,907
Compensated absences	401,995	494,841	480,339	416,497	312,373
Total	$ 23,002,290	$ 494,841	$ 1,174,246	$ 22,322,885	$ 1,031,280

	Balance 7/1/2017	Increases	Decreases	Balance 6/30/2018	Due within one year
Refunding revenue bonds	$ 21,810,000	$ -	$ 605,000	$ 21,205,000	$ 630,000
Premium, refunding revenue bonds	1,459,202	-	63,907	1,395,295	63,907
Compensated absences	411,884	450,885	460,774	401,995	301,496
Total	$ 23,681,086	$ 450,885	$ 1,129,681	$ 23,002,290	$ 995,403

Revenue Bonds and Refunding Revenue Bonds (including Premium)

In August 2008, the Authority issued revenue bonds totaling $27,120,000 to finance the purchase from the City of Newport News, Virginia of a "safe yield share" of treated water capacity from the King William Reservoir Project or an alternate water supply source. In April 2016, the Authority issued revenue refunding bonds totaling $22,595,000 to advance refund the outstanding 2008 revenue bonds. There was a $1,533,760 premium issued on the new bonds. The interest rate on the bonds ranges from 3% - 5% and the net proceeds were deposited in an irrevocable trust with an escrow agent to provide funds for the future debt service payments on the refunded bonds. Consequently, the outstanding balance for the 2008 revenue bonds in the amount of $21,730,000 and $22,360,000 at June 30, 2019 and 2018, respectively, is considered defeased, and the liability for those bonds has been removed from the statements of net position.

The reacquisition price for the 2016 issuance exceeded the carrying value of the old debt by $1,828,117 ("deferred charge on refunding"), and this amount is being amortized over the life of the new debt. The deferred charge on refunding net of accumulated amortization, was $1,586,907 and $1,663,079 at June 30, 2019 and 2018, respectively. The advance refunding reduced its total debt service payments over 24 years by $6,956,051 and to obtain an economic gain of $3,548,748. The refunding revenue bonds mature in various installments through 2040 with interest payable semiannually.

Revenue Bonds and Refunding Revenue Bonds (including Premium)

Future maturities of principal and interest payments are as follows:

Year Ended June 30	Principal	Interest
2020	$ 655,000	$ 700,050
2021	690,000	667,300
2022	720,000	632,800
2023	745,000	611,200
2024	785,000	573,950
2025-2029	4,445,000	2,332,600
2030-2034	5,190,000	1,578,300
2035-2039	6,030,000	750,600
2040	1,315,000	39,450
Total	$ 20,575,000	$ 7,886,250

6) Long-Term Liabilities, Continued

Compensated Absences

Compensated absences consists of earned but unused vacation, sick leave and paid time off. The costs attributable to Authority personnel are paid by the County and reimbursed by the Authority. Upon termination and only after a minimum of 2 years of employment with the Authority, employees are entitled to receive cash payments for sick leave at 25% of accumulated values up to a maximum of $5,000. At June 30, 2019 and 2018, compensated absences consisted of the following:

	6/30/2019	6/30/2018
Vacation	$ 308,096	$ 301,066
Sick	77,720	76,290
Paid-time off	30,681	24,639
Total	$ 416,497	$ 401,995

7) Pension Plans

The Virginia Retirement System (VRS) Political Subdivision Retirement Plan is a multi-employer, agent plan. For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Authority's retirement plan and the additions to/deductions from the Authority's retirement plan's net fiduciary position have been determined on the same basis as they were reported by the VRS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Plan Description

All full-time, salaried permanent employees of the Authority are automatically covered by a VRS retirement plan upon employment. This plan is administered by the VRS along with plans for other employer groups in the Commonwealth of Virginia. Members earn one month of service credit for each month they are employed and for which they and their employer pay contributions to VRS. Members are eligible to purchase prior service, based on specific criteria as defined in the *Code of Virginia*, as amended. Eligible prior service that may be purchased includes prior public service, active duty military service, certain periods of leave and previously refunded service.

VRS administers three different benefit structures for covered employees - Plan 1, Plan 2 and Hybrid. Each of these benefit structures has a different eligibility criteria. The specific information for each plan and the eligibility for covered groups within each plan are set out below.

RETIREMENT PLAN PROVISIONS		
PLAN 1	**PLAN 2**	**HYBRID RETIREMENT PLAN**
About Plan 1 Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula.	**About Plan 2** Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula.	**About the Hybrid Retirement Plan** The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan.

7) Pension Plans, Continued

		• The defined benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. • The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions. • In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.
Eligible Members Employees are in Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013, and they have not taken a refund. **Hybrid Opt-In Election** VRS non-hazardous duty covered Plan 1 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014. The Hybrid Retirement Plan's effective date for eligible Plan 1 members who opted in was July 1, 2014. If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.	**Eligible Members** Employees are in Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013. **Hybrid Opt-In Election** Eligible Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014. The Hybrid Retirement Plan's effective date for eligible Plan 2 members who opted in was July 1, 2014. If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.	**Eligible Members** Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes: • Political subdivision employees* • Members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1-April 30, 2014; the plan's effective date for opt-in members was July 1, 2014 ***Non-Eligible Members** Some employees are not eligible to participate in the Hybrid Retirement Plan. They include: • Political subdivision employees who are covered by enhanced benefits for hazardous duty employees

7) Pension Plans, Continued

Members who were eligible for an optional retirement plan (ORP) and had prior service under Plan 1 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 1 or ORP.	Members who were eligible for an optional retirement plan (ORP) and have prior service under Plan 2 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 2 or ORP.	Those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable) or ORP.
Retirement Contributions Employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.	**Retirement Contributions** Same as Plan 1.	**Retirement Contributions** A member's retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to both the defined benefit and the defined contribution components of the plan. Mandatory contributions are based on a percentage of the employee's creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.
Creditable Service Creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.	**Creditable Service** Same as Plan 1.	**Creditable Service** **Defined Benefit Component:** Under the defined benefit component of the plan, creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.

7) Pension Plans, Continued

		Defined Contributions Component: Under the defined contribution component, creditable service is used to determine vesting for the employer contribution portion of the plan.
Vesting Vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members become vested when they have at least five years (60 months) of creditable service. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund. Members are always 100% vested in the contributions that they make.	**Vesting** Same as Plan 1.	**Vesting** **Defined Benefit Component:** Defined benefit vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members are vested under the defined benefit component of the Hybrid Retirement Plan when they reach five years (60 months) of creditable service. Plan 1 or Plan 2 members with at least five years (60 months) of creditable service who opted into the Hybrid Retirement Plan remain vested in the defined benefit component. **Defined Contributions Component:** Defined contribution vesting refers to the minimum length of service a member needs to be eligible to withdraw the employer contributions from the defined contribution component of the plan. Members are always 100% vested in the contributions that they make. Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service. • After two years, a member is 50% vested and may withdraw 50% of employer contributions.

7) Pension Plans, Continued

		• After three years, a member is 75% vested and may withdraw 75% of employer contributions. • After four or more years, a member is 100% vested and may withdraw 100% of employer contributions. Distribution is not required by law until age 70½.
Calculating the Benefit The Basic Benefit is calculated based on a formula using the member's average final compensation, a retirement multiplier and total service credit at retirement. It is one of the benefit payout options available to a member at retirement. An early retirement reduction factor is applied to the Basic Benefit if the member retires with a reduced retirement benefit or selects a benefit payout option other than the Basic Benefit.	**Calculating the Benefit** See definition under Plan 1.	**Calculating the Benefit** **<u>Defined Benefit Component:</u>** See definition under Plan 1. **<u>Defined Contributions Component:</u>** The benefit is based on contributions made by the member and any matching contributions made by the employer, plus net investment earnings on those contributions.
Average Final Compensation A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.	**Average Final Compensation** A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.	**Average Final Compensation** Same as Plan 2. It is used in the retirement formula for the defined benefit component of the plan.
Service Retirement Multiplier **VRS:** The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.70%.	**Service Retirement Multiplier** **VRS:** Same as Plan 1 for service earned, purchased or granted prior to January 1, 2013. For non-hazardous duty members the retirement multiplier is 1.65% for creditable service earned, purchased or granted on or after January 1, 2013.	**Service Retirement Multiplier** **<u>Defined Benefit Component:</u>** **VRS:** The retirement multiplier for the defined benefit component is 1.00%.

7) Pension Plans, Continued

Sheriffs and regional jail superintendents: The retirement multiplier for sheriffs and regional jail superintendents is 1.85%. **Political subdivision hazardous duty employees:** The retirement multiplier of eligible political subdivision hazardous duty employees other than sheriffs and regional jail superintendents is 1.70% or 1.85% as elected by the employer.	**Sheriffs and regional jail superintendents:** Same as Plan 1. **Political subdivision hazardous duty employees:** Same as Plan 1.	For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans. **Sheriffs and regional jail superintendents:** Not applicable. **Political subdivision hazardous duty employees:** Not applicable. **<u>Defined Contributions Component:</u>** Not applicable.
Normal Retirement Age VRS: Age 65. **Political subdivisions hazardous duty employees:** Age 60.	**Normal Retirement Age VRS:** Normal Social Security retirement age. **Political subdivisions hazardous duty employees:** Same as Plan 1.	**Normal Retirement Age** **<u>Defined Benefit Component:</u>** **VRS:** Same as Plan 2. **Political subdivisions hazardous duty employees:** Not applicable. **<u>Defined Contributions Component:</u>** Members are eligible to receive distributions upon leaving employment, subject to restrictions.
Earliest Unreduced Retirement Eligibility **VRS:** Age 65 with at least five years (60 months) of creditable service or at age 50 with at least 30 years of creditable service. **Political subdivisions hazardous duty employees:** Age 60 with at least five years of creditable service or age 50 with at least 25 years of creditable service.	**Earliest Unreduced Retirement Eligibility** **VRS:** Normal Social Security retirement age with at least five years (60 months) of creditable service or when their age and service equal 90. **Political subdivisions hazardous duty employees:** Same as Plan 1.	**Earliest Unreduced Retirement Eligibility** **<u>Defined Benefit Component:</u>** **VRS:** Normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90. **Political subdivisions hazardous duty employees:** Not applicable. **<u>Defined Contributions Component:</u>** Members are eligible to receive distributions upon leaving employment, subject to restrictions.

7) Pension Plans, Continued

Earliest Reduced Retirement Eligibility **VRS:** Age 55 with at least five years (60 months) of creditable service or age 50 with at least 10 years of creditable service. **Political subdivisions hazardous duty employees:** 50 with at least five years of creditable service.	**Earliest Reduced Retirement Eligibility** **VRS:** Age 60 with at least five years (60 months) of creditable service. **Political subdivisions hazardous duty employees:** Same as Plan 1.	**Earliest Reduced Retirement Eligibility** **<u>Defined Benefit Component:</u>** **VRS:** Age 60 with at least five years (60 months) of creditable service. **Political subdivisions hazardous duty employees:** Not applicable. **<u>Defined Contributions Component:</u>** Members are eligible to receive distributions upon leaving employment, subject to restrictions.
Cost-of-Living Adjustment (COLA) in Retirement The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) up to a maximum COLA of 5%. **<u>Eligibility:</u>** For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of creditable service, the COLA will go into effect on July 1 after one full calendar year from the retirement date. For members who retire with a reduced benefit and who have less than 20 years of creditable service, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date. **<u>Exceptions to COLA Effective Dates:</u>** The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances:	**Cost-of-Living Adjustment (COLA) in Retirement** The Cost-of-Living Adjustment (COLA) matches the first 2% increase in the CPI-U and half of any additional increase (up to 2%), for a maximum COLA of 3%. **<u>Eligibility:</u>** Same as Plan 1. **<u>Exceptions to COLA Effective Dates:</u>** Same as Plan 1.	**Cost-of-Living Adjustment (COLA) in Retirement** **<u>Defined Benefit Component:</u>** Same as Plan 2. **<u>Defined Contributions Component:</u>** Not applicable. **<u>Eligibility:</u>** Same as Plan 1 and Plan 2. **<u>Exceptions to COLA Effective Dates:</u>** Same as Plan 1 and Plan 2.

7) Pension Plans, Continued

• The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013. • The member retires on disability. • The member retires directly from short-term or long-term disability under the Virginia Sickness and Disability Program (VSDP). • The member Is involuntarily separated from employment for causes other than job performance or misconduct and is eligible to retire under the Workforce Transition Act or the Transitional Benefits Program. • The member dies in service and the member's survivor or beneficiary is eligible for a monthly death-in-service benefit. The COLA will go into effect on July 1 following one full calendar year (January 1 to December 31) from the date the monthly benefit begins.		
Disability Coverage Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.7% on all service, regardless of when it was earned, purchased or granted.	**Disability Coverage** Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.65% on all service, regardless of when it was earned, purchased or granted.	**Disability Coverage** Employees of political subdivisions (including Plan 1 and Plan 2 opt-ins) participate in the Virginia Local Disability Program (VLDP) unless their local governing body provides and employer-paid comparable program for its members. Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VLDP are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.

7) Pension Plans, Continued

Purchase of Prior Service	**Purchase of Prior Service**	**Purchase of Prior Service**
Members may be eligible to purchase service from previous public employment, active duty military service, an eligible period of leave or VRS refunded service as creditable service in their plan. Prior creditable service counts toward vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. Members also may be eligible to purchase periods of leave without pay.	Same as Plan 1.	**Defined Benefit Component:** Same as Plan 1, with the following exceptions: • Hybrid Retirement Plan members are ineligible for ported service. **Defined Contributions Component:** Not applicable.

Employees Covered by Benefit Terms

As of the June 30, 2017 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	48
Inactive members:	
Vested	15
Non-vested	18
Active elsewhere in VRS	27
Total inactive members	60
Active members	85
Total	193

Contributions

The contributions requirement for active employees is governed by §51.1-145 of the *Code of Virginia*, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. Employees are required to contribute 5% of their compensation toward their retirement. Beginning July 1, 2012, new employees were required to pay the 5% member contribution. In addition, for existing employees, employers were required to begin making the employee pay the 5% member contribution. This could be phased in over a period of up to 5 years and the employer is required to provide a salary increase equal to the amount of the increase in the employee-paid member contribution.

The Authority's contractually required contribution rate for the years ended June 30, 2019 and 2018 was 5.64% and 7.29%, respectively, of covered employee compensation. This rate was based on an actuarially determined rate from actuarial valuations as of June 30, 2017 and June 30, 2015, respectively. This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employee during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Authority were $250,534 and $308,672 for the years ended June 30, 2019 and June 30, 2018, respectively.

7) Pension Plans, Continued

Net Pension Liability

The net pension liability (NPL) is calculated separately for each employer and represents that particular employer's total pension liability determined in accordance with GASB Statement No. 68, less that employer's fiduciary net position. For political subdivisions, the net pension liability for fiscal year 2019 was measured as of June 30, 2018. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2017 rolled forward to the measurement date of June 30, 2018.

For fiscal year 2018, the net pension liability was measured as of June 30, 2017. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2016, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018.

Actuarial Assumptions

The total pension liability for fiscal years 2019 and 2018 for general employees in the Authority's retirement plan was based on actuarial valuations as of June 30, 2017 and June 30, 2016, respectively, using the entry age normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018 and June 30, 2017, respectively.

Inflation	2.5%
Salary increases, including inflation	3.5% - 5.35%
Investment rate of return	7%, net of pension plan investment expense, including inflation*

*Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 7.0%. However, since the difference was minimal, and a more conservative 7.0% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7.0% to simplify preparation of pension liabilities.

Mortality rates:

Largest 10 - Non-Hazardous duty: 20% of deaths are assumed to be service related.

Pre-retirement:

RP-2014 employee rates to age 80, healthy annuitant rates at ages 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates.

Post-retirement:

RP-2014 employee rates to age 49, healthy annuitant rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

Post-Disablement:

RP-2014 disability mortality rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

All Others (Non 10 Largest) - Non-Hazardous duty: 15% of deaths are assumed to be service related.

Pre-retirement:

RP-2014 employee fates to age 80, healthy annuitant rates at age 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates.

Post-retirement:

RP-2014 employee rates to age 49, healthy annuitant rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

Post-Disablement:

RP-2014 disability mortality rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

7) Pension Plans, Continued

The actuarial assumptions used in the June 30, 2016 and June 30, 2017 valuations were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Largest 10 - Non-Hazardous duty:
- Update mortality table (RP-2014 projected to 2020)
- Decrease in rates of service retirement and changed final retirement from 70 to 75
- Adjust withdrawal rates to better fit experience at each year age and service through 9 years of service
- Decrease in rates of disability retirement
- Increase rates of line of duty disability from 14% to 20%

All Others (Non 10 Largest) - Non-Hazardous duty:
- Update mortality rates to a more current mortality table – RP-2014 projected to 2020
- Lowered retirement rates at older ages and changed final retirement from 70 to 75
- Adjust withdrawal rates to better fit experience at each year age and service through 9 years of service
- Lowered disability rates
- No change in salary scale
- Increase rate of line of duty disability from 14% to 15%

Long-Term Expected Rate of Return

The long-term expected rate of return on pension system investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension system investment expense and inflation) 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 real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return
Public Equity	40.00%	4.54%	1.82%
Fixed Income	15.00%	0.69%	0.10%
Credit Strategies	15.00%	3.96%	0.59%
Real Assets	15.00%	5.76%	0.86%
Private Equity	15.00%	9.53%	1.43%
Total	100.00%		4.80%
		Inflation	2.50%
	*Expected arithmetic nominal return		7.30%

*The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.

7) Pension Plans, Continued

Discount Rate

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Consistent with the phased-in funding provided by the General Assembly for state and teacher employer contributions; political subdivisions were also provided with an opportunity to use an alternate employer contribution rate. For the year ended June 30, 2018, the alternate rate was the employer contribution rate used in FY 2012 or 90% of the actuarially determined employer contribution rate from the June 30, 2015, actuarial valuations, whichever was greater. From July 1, 2018 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

Changes in Net Pension Liability

	Total pension liability (a)	Plan fiduciary net pension (b)	Net pension liability (a) - (b)
6/30/2019:			
Balances at June 30, 2017	$ 16,499,993	$ 15,886,353	$ 613,640
Changes for the year:			
Service cost	379,365	-	379,365
Interest	1,132,686	-	1,132,686
Change in benefit terms	-		-
Change in assumptions	-		-
Difference between expected and actual experience	62,537	-	62,537
Contributions - employer	-	297,525	(297,525)
Contributions - employee	-	204,311	(204,311)
Net investment income	-	1,174,317	(1,174,317)
Benefit payments, including refunds of employee contributions	(637,522)	(637,522)	-
Administrative expense	-	(10,045)	10,045
Other changes	-	(1,050)	1,050
Net changes	937,066	1,027,536	(90,470)
Balances at June 30, 2018	$ 17,437,059	$ 16,913,889	$ 523,170
6/30/2018:			
Balances at June 30, 2016	$ 16,028,334	$ 14,159,679	$ 1,868,655
Changes for the year:			
Service cost	411,137	-	411,137
Interest	1,104,651	-	1,104,651
Change in benefit terms	-		-
Change in assumptions	(335,427)		(335,427)
Difference between expected and actual experience	(213,521)	-	(213,521)
Contributions - employer	-	288,588	(288,588)
Contributions - employee	-	210,624	(210,624)
Net investment income	-	1,734,000	(1,734,000)
Benefit payments, including refunds of employee contributions	(495,181)	(495,181)	-
Administrative expense	-	(9,804)	9,804
Other changes	-	(1,553)	1,553
Net changes	471,659	1,726,674	(1,255,015)
Balances at June 30, 2017	$ 16,499,993	$ 15,886,353	$ 613,640

7) Pension Plans, Continued

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following represents the net pension liability using the stated discount rate of 7.00%, as well as what the net position liability would be if it were calculated using a discount rate that is one-percentage point lower or one-percentage point higher than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net pension liability (asset), as of June 30, 2019	$ 2,790,320	$ 523,170	$ (1,367,365)

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net pension liability (asset), as of June 30, 2018	$ 2,785,275	$ 613,640	$ (1,194,376)

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the years ending June 30, 2019 and 2018, the Authority recognized pension expense (recovery) of $(73,893) and $35,495, respectively. The Authority reported deferred outflows and deferred inflow of resources related to pensions as follows:

	6/30/2019		6/30/2018	
	Deferred outflows of resources	Deferred inflows of resources	Deferred outflows of resources	Deferred inflows of resources
Difference between expected and actual experience	$ 88,238	$ 118,174	$ 71,691	$ 207,063
Changes of assumptions	-	156,533	-	245,980
Net difference between projected and actual earnings on plan investments	-	144,264	-	230,328
Employer contributions subsequent to the measurement date	250,534	-	308,672	-
Total	$ 338,772	$ 418,971	$ 380,363	$ 683,371

The $250,534 reported as deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the fiscal year ending June 30, 2020. Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense (recovery) in future reporting periods as follows:

Year Ended June 30:	
2020	$ (71,453)
2021	(92,942)
2022	(152,857)
2023	(13,481)
2024	-
Total	$ (330,733)

7) Pension Plans, Continued

Pension Plan Data

Information about the VRS Political Subdivision Retirement Plan is available in the separately issued comprehensive annual financial report (CAFR). A copy of the CAFR may be downloaded from the VRS website at http://www.varetire.org/pdf/publications/2018-annual-report.pdf or by writing to VRS' Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

8) Other Post-Employment Benefits (OPEB)

Agent Multiple Employer Plan – Retiree Healthcare

The Authority provides other post-employment health-care benefits for qualifying retired employees who are not yet eligible for Medicare through an agent, multiple-employer defined benefit plan administered by James City County. The benefits, benefit levels, employee contributions and employer contributions are governed by the Authority and can be amended by the Authority through its personnel manual.

Plan Description

Participants must be eligible to retire under VRS and must be full-time active employees who retire directly from the Authority and are at least 55 years of age with 15 years of service. Each year, retirees participating in the Authority's sponsored plans will be given the opportunity to change plans or drop coverage during an open enrollment period. The pre-Medicare retirees have a choice of two plans offered by Cigna. Dental plans are available at the retiree's cost and therefore, there is no employer obligation. There is no coverage for post-Medicare retirees.

Funding Policy

The Authority does not intend to establish a trust to pre-fund the obligation. The anticipated growth in the retiree healthcare OPEB liability is based on contributions to the benefit plan on a pay-as-you-go cost basis. The data has been projected into the future based on the assumption that the current active population remains constant. Retirees contribute towards their health insurance premiums based on a blended rate and therefore, the Authority has an implicit rate obligation. The estimated contributions are based on the implicit rate subsidy payments made during the year by the retirees. Retirees pay 100% of the published rates for individual and dependent coverage until age 65.

Employees Covered by Benefit Terms

As of the June 30, 2017 actuarial valuation, the following employees were covered by the benefit terms of the retiree healthcare OPEB plan:

	Number of Participants
Active employees	74
Retirees	1
Total	75

Actuarial Methods and Assumptions

For the actuarial valuation at July 1, 2017 (measurement date of June 30, 2018), the entry age normal funding method was used. The goal of this method is that the annual accrual (or normal cost) be a level percent of pay throughout an employee's career. This method requires a salary increase assumption. The normal cost percentage is equal to the present value of benefits divided by the present value of future salary determined when the employee was hired. The actuarial accrued liability is equal to the present value of benefits minus the normal cost percentage times the present value of future salaries at the valuation date.

8) Other Post-Employment Benefits (OPEB), Continued

The actuarial assumptions included calculations based on a discount rate of 3.62% and 3.58% for 2019 and 2018, respectively, for the unfunded liability. Benefits are discounted based on an index rate for 20-year tax exempt general obligation (GO) municipal bonds with an average rating of AA/Aa or higher. For this valuation, the Bond Buyer GO 20-year Bond Municipal Bond Index was used.

The medical trend assumption was changed from the previous valuation to an assumption developed using the Society of Actuaries (SOA) Long-Run Medical Cost Trend Model baseline assumptions. The SOA Model was released in December 2007 and revised in 2014. The following assumptions were used as input variables into this model:

Inflation	2.20%
Rate of growth in real income/ GDP per capita	1.60%
Income multiplier for health spending	1.30
Extra trend due to technology and other factors	1.40%
Health share of GDP resistance point	25.00%
Year for limiting cost growth to GDP growth	2075

The SOA Long-Run Medical Cost Trend Model and its baseline projection are based on an econometric analysis of historical U.S. medical expenditures and the judgments of experts in the field. The long-run baseline projection and input variables have been developed under the guidance of an SOA Project Oversight Group.

The actuarial assumptions included calculations based on salary increases of 3.15%-1.30% (general) and 2.55%-1.30% (public safety) based on years of service. The valuation assumed that 40% of participants currently with coverage will elect coverage upon retirement, and that 30% of participants electing coverage at retirement will elect coverage for their spouse.

Mortality decrements:

- Pre-Retirement (General): RP 2000 Employee Mortality Table Projected with Scale AA to 2020, males set forward 2 years and females set back 3 years
- Pre-Retirement (LEOS): RP 2000 Employee Mortality Table Projected with Scale AA to 2020, males and females set back 2 years
- Post-Retirement (General): RP 2000 Combined Mortality Table Projected with Scale AA to 2020, females back 1 year
- Post-Retirement (LEOS): RP 2000 Combined Mortality Table Projected with Scale AA to 2020, males set forward 1 year
- Disabled: RP 2000 Disabled Mortality Table, males set back 3 years not fully generational

Changes in Assumptions Since Prior Valuation

- Discount rate was updated as required under GASB 75.
- Decrement and mortality assumptions were updated to the most recent VRS assumptions.
- Election rate was decreased from 50% to 40% for participants currently with coverage and 50% to 30% for participants who elect coverage at retirement taking spousal coverage.
- Claims assumption was updated to include the most recent plan experience.

8) Other Post-Employment Benefits (OPEB), Continued

Changes in Total Retiree Healthcare OPEB Liability

	Increase (decrease)		
	Total OPEB liability (a)	Plan fiduciary net pension (b)	Net OPEB liability (a) - (b)
Balances at June 30, 2017	$ 406,742	$ -	$ 406,742
Changes for the year:			
Service cost	24,948	-	24,948
Interest	14,359	-	14,359
ER Contribution	-	29,798	(29,798)
Difference between expected & actual	18,322	-	18,322
Changes in assumptions	(1,688)	-	(1,688)
Changes in proportions	84	-	84
Benefit payments	(29,798)	(29,798)	-
Net changes	26,227	-	26,227
Balances at June 30, 2018	$ 432,969	$ -	$ 432,969

	Increase (decrease)		
	Total OPEB liability (a)	Plan fiduciary net pension (b)	Net OPEB liability (a) - (b)
Balances at June 30, 2016 (as restated)	$ 419,087	$ -	$ 419,087
Changes for the year:			
Service cost	20,093	-	20,093
Interest	11,723	-	11,723
ER Trust contribution	-	15,527	(15,527)
Changes in assumptions	(28,634)	-	(28,634)
Benefit payments	(15,527)	(15,527)	-
Net changes	(12,345)	-	(12,345)
Balances at June 30, 2017	$ 406,742	$ -	$ 406,742

Sensitivity of the Total Retiree Healthcare OPEB Liability to Changes in the Discount Rate

The following presents the total retiree healthcare OPEB liability for 2019 and 2018 using the discount rates of 3.62% and 3.58%, respectively, as well as what the total OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (2.62% and 2.58%, respectively) or one percentage point higher (4.62% and 4.58%, respectively) than the current rates:

	1% Decrease (2.62%)	Current Discount Rate (3.62%)	1% Increase (4.62%)
Total and Net Retiree Healthcare OPEB Liability as of June 30, 2019	$ 477,162	$ 432,969	$ 392,888

	1% Decrease (2.58%)	Current Discount Rate (3.58%)	1% Increase (4.58%)
Total and Net Retiree Healthcare OPEB Liability as of June 30, 2018	$ 446,406	$ 406,742	$ 370,413

8) Other Post-Employment Benefits (OPEB), Continued

Sensitivity of the Total Retiree Healthcare OPEB Liability to Changes in the Health Care Cost Trend Rate

The following presents the total retiree healthcare OPEB liability for 2019 and 2018 using the health care cost trend rate of 4.00%, as well as what the total retiree healthcare OPEB liability would be if it were calculated using a health care cost trend rate that is one percentage point lower (3.00%) or one percentage point higher (5.00%) than the current rate:

	1% Decrease (3.00%)	Current Discount Rate (4.00%)	1% Increase (5.00%)
Total and Net Retiree Healthcare OPEB Liability as of June 30, 2019	$ 376,756	$ 432,969	$ 499,940

	1% Decrease (3.00%)	Current Discount Rate (4.00%)	1% Increase (5.00%)
Total and Net Retiree Healthcare OPEB Liability as of June 30, 2018	$ 357,394	$ 406,742	$ 465,350

Retiree Healthcare OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources

For the years ended June 30, 2019 and 2018, the Authority recognized retiree healthcare OPEB expense of $37,604 and $27,725, respectively. At June 30, 2019, deferred outflows of resources and deferred inflows of resources related to retiree healthcare OPEB from the following sources were reported:

	6/30/2019		6/30/2018	
	Deferred outflows of resources	Deferred inflows of resources	Deferred outflows of resources	Deferred inflows of resources
Difference between expected and actual experience	$ 15,705	$ -	$ -	$ -
Changes of assumptions	-	21,899	-	24,543
Change in proportion	72	-	-	-
Total	$ 15,777	$ 21,899	$ -	$ 24,543

Amounts reported as deferred outflows of resources and deferred inflows of resources related to retiree healthcare OPEB will be recognized in retiree healthcare OPEB Expense as follows:

Year Ended June 30	
2020	$ (1,703)
2021	(1,703)
2022	(1,703)
2023	(1,703)
2024	(1,700)
Thereafter	2,390
Total	$ (6,122)

8) Other Post-Employment Benefits (OPEB), Continued

Multiple Employer Cost-Sharing Plan – Group Life Insurance

VRS Group Life Insurance Program is a multiple employer, cost-sharing plan. It provides coverage to state employees, teachers, and employees of participating political subdivisions. The Group Life Insurance Program was established pursuant to Section 51.1-500 et seq. of the *Code of Virginia*, as amended, and which provides the authority under which benefit terms are established or may be amended. The Group Life Insurance Program is a defined benefit plan that provides a basic group life insurance benefit for employees of participating employers. For purposes of measuring the net Group Life Insurance Program OPEB liability, deferred outflows of resources and deferred inflows of resources related to the Group Life Insurance Program OPEB, and Group Life Insurance Program OPEB expense, information about the fiduciary net position of the VRS Group Life Insurance Program OPEB and the additions to/deductions from the VRS Group Life Insurance Programs OPEB's net fiduciary position have been determined on the same basis as they were reported by VRS. In addition, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Plan Description

All full-time, salaried permanent employees of the Authority are automatically covered by the VRS Group Life Insurance Program upon employment. This plan is administered by the VRS, along with pensions and other OPEB plans, for public employer groups in the Commonwealth of Virginia.

In addition to the Basic Group Life Insurance Program benefit, members are also eligible to elect additional coverage for themselves as well as a spouse or dependent children through the Optional Group Life Insurance Program. For members who elect the optional group life insurance coverage, the insurer bills employers directly for the premiums. Employers deduct these premiums from members' paychecks and pay the premiums to the insurer. Since this is a separate and fully insured program, it is not included as part of the Group Life Insurance Program OPEB.

The specific information for Group Life Insurance Program OPEB, including eligibility, coverage and benefits is set out below:

Eligible Employees: The Group Life Insurance Program was established July 1, 1960, for state employees, teachers, and employees of political subdivisions that elect the program, including the following employers that do not participate in VRS for retirement: City of Richmond, City of Portsmouth, City of Roanoke, City of Norfolk, and Roanoke City Schools Board. Basic group life insurance coverage is automatic upon employment. Coverage ends for employees who leave their position before retirement eligibility or who take a refund of their member contributions and accrued interest.

Benefit Amounts: The benefits payable under the Group Life Insurance Program have several components.

- Natural death benefit - equal to the employee's covered compensation rounded to the next highest thousand and then doubled.
- Accidental death benefit - double the natural death benefit.
- Other benefit provisions - the program provides additional benefits provided under specific circumstances. These include:
  - Accidental dismemberment benefit
  - Safety belt benefit
  - Repatriation benefit
  - Felonious assault benefit
  - Accelerated death benefit option

8) Other Post-Employment Benefits (OPEB), Continued

Reduction in benefit amounts: Benefit amounts provided to members covered under the Group Life Insurance Program are subject to a reduction factor. The benefit amount reduces by 25% on January 1 following one calendar year of separation. The benefit amount reduces by an additional 25% on each subsequent January 1 until it reaches 25% of its original value.

Minimum benefit amount and Cost-of-living adjustment (COLA): For covered members with at least 30 years of creditable service, the minimum benefit payable under the Group Life Insurance Program. The minimum benefit was set at $8,000 by statute. This amount is increased annually based on the VRS Plan 2 cost-of-living adjustment and is currently $8,279 effective July 1, 2018.

Contributions

The contribution requirement for the Group Life Insurance Program are governed by Section 51.1-506 and Section 51.1-508 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies and school division by the Virginia General Assembly. The total rate for the Group Life Insurance Program was 1.31% of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.79% (1.31% X 60%) and the employer component was 0.52% (1.31% X 40%). Employers may elect to pay all or part of the employee contribution, however the employer must pay all of the employer contribution. Each employer's contractually required employer contribution rate for the years ended June 30, 2019 and 2018 was 0.52% of covered employee compensation. This rate was based on an actuarially determined rate from actuarial valuations as of June 30, 2017 and June 30, 2015, respectively. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits payable during the year, with an additional amount to finance any unfunded accrued liability. Contribution to the Group Life Insurance Program from the Authority were $21,000 and $22,168 for the years ended June 30, 2019 and June 30, 2018, respectively.

Group Life Insurance (GLI) OPEB Liabilities, GLI OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the GLI Program OPEB

At June 30, 2019 and 2018, the Authority reported a liability of $340,000 and $333,000, respectively, for its proportionate share of the Net GLI OPEB liability. The Net GLI OPEB liability as of June 30, 2019 and 2018 was measured as of June 30, 2018 and 2017 respectively, and the total GLI OPEB liability used to calculate the Net GLI OPEB liability was determined by an actuarial valuation as of those dates. The covered employer's proportion of the Net GLI OPEB liability was based on the covered employer's actuarially determined employer contributions to the Group Life Insurance Program for the year ended June 30, 2018 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2018 the participating employer's proportion was 0.02234% as compared to 0.02217% at June 30, 2017.

For the years ended June 30, 2019 and 2018, the Authority recognized GLI OPEB expense of $4,000 and $3,000, respectively. Given that there was a change in proportionate share between measurement dates, a portion of the GLI OPEB expense was related to deferred amounts from changes in proportion.

8) Other Post-Employment Benefits (OPEB), Continued

At June 30, 2019 and 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to the GLI OPEB from the following sources:

	6/30/2019		6/30/2018	
	Deferred outflows of resources	Deferred inflows of resources	Deferred outflows of resources	Deferred inflows of resources
Difference between expected and actual experience	$ 17,000	$ 6,000	$ -	$ 7,000
Net difference between projected and actual investment earnings on OPEB Plan investments	-	11,000	-	13,000
Changes of assumptions	-	14,000	-	17,000
Changes in proportionate share	-	2,000	-	3,000
Employer contributions subsequent to the measurement date	21,000	-	22,168	-
Total	$ 38,000	$ 33,000	$ 22,168	$ 40,000

The $21,000 reported as deferred outflows of resources related to the GLI OPEB resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the Net GLI OPEB liability in the fiscal year ending June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the GLI OPEB will be recognized in the GLI OPEB expense in future reporting periods as follows:

Year Ended	
2020	$ (6,000)
2021	(6,000)
2022	(5,000)
2023	(2,000)
2024	1,000
Thereafter	2,000
Total	$ (16,000)

Actuarial Assumptions

The total GLI OPEB liability as of June 30, 2019 and 2018 was based on an actuarial valuation as of June 30, 2017 and 2016, respectively, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018 and 2017, respectively.

Inflation	2.50%
Salary increases, including inflation:	
Locality - general employees	3.5% - 5.35%
Investment rate of return	7.0%, net of investment expenses, including inflation*

*Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 7.0%. However, since the difference was minimal, and a more conservative 7.0% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7.0% to simplify preparation of the OPEB liabilities.

8) Other Post-Employment Benefits (OPEB), Continued

Mortality rates: Largest Ten Locality Employers - General Employees

- Pre-Retirement: RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 95% of rates; females 105% of rates.

- Post-Retirement: RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

- Post-Disablement: RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates

The actuarial assumptions used in the June 30, 2017 and 2016 valuations were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages and extended final retirement age from 70 to 75
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 20%

Mortality rates: Non-Largest Ten Locality Employers - General Employees

- Pre-Retirement: RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 95% of rates; females 105% of rates.

- Post-Retirement: RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

- Post-Disablement: RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

The actuarial assumptions used in the June 30, 2017 and 2016 valuations were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016.

8) Other Post-Employment Benefits (OPEB), Continued

Changes to the actuarial assumptions as a result of the experience study are as follows:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages and extended final retirement age from 70 to 75
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 15%

Net GLI OPEB Liability

The net OPEB liability (NOL) for the Group Life Insurance Program represents the program's total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of June 30, 2018, NOL amounts for the Group Life Insurance Program is as follows (amounts expressed in thousands):

	Group Life Insurance OPEB Program
Total GLI OPEB Liability	$ 3,113,508
Plan Fiduciary Net Position	1,594,773
Employers' Net GLI OPEB Liability (Asset)	$ 1,518,735
Plan Fiduciary Net Position as a % of the Total GLI OPEB Liability	51.22%

The total GLI OPEB liability is calculated by VRS's actuary, and each plan's fiduciary net position is reported in the VRS's financial statements. The net GLI OPEB liability is disclosed in accordance with the requirements of GASB Statement No. 74 in the VRS's notes to the financial statements and required supplementary information.

Long-Term Expected Rate of Return

The long-term expected rate of return on the VRS's investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of VRS's investment expense and inflation) 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 real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

8) Other Post-Employment Benefits (OPEB), Continued

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return
Public Equity	40.00%	4.54%	1.82%
Fixed Income	15.00%	0.69%	0.10%
Credit Strategies	15.00%	3.96%	0.59%
Real Assets	15.00%	5.76%	0.86%
Private Equity	15.00%	9.53%	1.43%
Total	100.00%		4.80%
	Inflation		2.50%
	* Expected arithmetic nominal return		7.30%

* The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.

Discount Rate

The discount rate used to measure the total GLI OPEB liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that member contributions will be made per the VRS guidance and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2018, the rate contributed by the entity for the GLI OPEB will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly, which was 100% of the actuarially determined contribution rate. From July 1, 2018 on, employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the GLI OPEB's fiduciary net position was projected to be available to make all projected future benefit payments of eligible employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total GLI OPEB liability.

Sensitivity of the Employer's Proportionate Share of the Net GLI OPEB Liability to Changes in the Discount Rate

The following presents the employer's proportionate share of the net GLI OPEB liability as of June 30, 2019 and June 30, 2018 using the discount rate of 7.00%, as well as what the employer's proportionate share of the net GLI OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (6.00%) or one percentage point higher (8.00%) than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Employer's proportionate share of the Group Life Insurance Program Net OPEB Liability as of June 30, 2019	$ 444,000	$ 340,000	$ 255,000

8) Other Post-Employment Benefits (OPEB), Continued

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Employer's proportionate share of the Group Life Insurance Program Net OPEB Liability as of June 30, 2018	$ 431,000	$ 333,000	$ 254,000

<u>Group Life Insurance Program Fiduciary Net Position</u>

Detailed information about the Group Life Insurance Program's Fiduciary Net Position is available in the separately issued VRS 2018 Comprehensive Annual Financial Report (CAFR). A copy of the 2018 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2018-annual-report.pdf, or by writing to the VRS' Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

Agent Multiple Employer Plan – Health Insurance Credit Program

The Political Subdivision Health Insurance Credit Program is a multiple-employer, agent defined benefit plan that provides a credit toward the cost of health insurance coverage for retired political subdivision employees of participating employers. The Political Subdivision Health Insurance Credit Program was established pursuant to §51.1-1400 et seq. of the *Code of Virginia*, as amended, and which provides the authority under which benefit terms are established or may be amended. For purposes of measuring the net Political Subdivision Health Insurance Credit Program OPEB liability, deferred outflows of resources and deferred inflows of resources related to the Political Subdivision Health Insurance Credit Program OPEB, and the Political Subdivision Health Insurance Credit Program OPEB expense, information about the fiduciary net position of the VRS Political Subdivision Health Insurance Credit Program; and the additions to/deductions from the VRS Political Subdivision Health Insurance Credit Program's net fiduciary position have been determined on the same basis as they were reported by VRS. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

<u>Plan Description</u>

All full-time, salaried permanent employees of participating political subdivisions are automatically covered by the VRS Political Subdivision Health Insurance Credit Program upon employment. This plan is administered by the Virginia Retirement System (the System), along with pension and other OPEB plans, for public employer groups in the Commonwealth of Virginia. Members earn one month of service credit toward the benefit for each month they are employed and for which their employer pays contributions to VRS. The health insurance credit is a tax-free reimbursement in an amount set by the General Assembly for each year of service credit against qualified health insurance premiums retirees pay for single coverage, excluding any portion covering the spouse or dependents. The credit cannot exceed the amount of the premiums and ends upon the retiree's death.

The specific information about the Political Subdivision Health Insurance Credit Program OPEB, including eligibility, coverage and benefits is set out below:

Eligible employees: The political subdivision retiree health insurance credit program was established July 1, 1993 for retired political subdivision employees or employers who elect the benefit and who retire with at least 15 years of service credit. Eligible employees are enrolled automatically upon employment. They include full-time permanent salaried employees of the participating political subdivision who are covered under the VRS pension plan.

Benefit amounts: The political subdivision's retiree health insurance credit program provides the following benefits for eligible employees:

- At retirement: for employees who retire, the monthly benefit is $1.50 per year of service per month with a maximum benefit of $45 per month
- Disability retirement: for employees who retire on disability or go on long-term disability under the Virginia Local Disability Program (VLDP), the monthly benefit is $45 per month

8) Other Post-Employment Benefits (OPEB), Continued

Health Insurance Credit Program notes: The monthly health insurance credit benefit cannot exceed the individual premium amount; no health insurance credit for premiums paid and qualified under LODA, however, the employee may receive the credit for premiums paid for other qualified health plans; and employees who retire after being on long-term disability under VLDP must have at least 15 years of service credit to qualify for the health insurance credit as a retiree.

Employees Covered by Benefit Terms

As of the June 30, 2017 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	13
Inactive members:	
Vested	-
Non-vested	-
Active elsewhere in VRS	-
Total inactive members	13
Active members	85
Total	98

Contributions

The contribution requirement for active employees is governed by §51.1-1402(E) of the *Code of Virginia*, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. The Authority's contractually required employer contribution rate for the years ended June 30, 2019 and 2018 was 0.19% and 0.20%, respectively, of covered employee compensation. These rates were based on an actuarially determined rate from actuarial valuations as of June 30, 2017 and 2015, respectively. The actuarially determined rate was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions from the Authority to the Political Subdivision Health Insurance Credit Program were $8,467 for the years ended June 30, 2019 and June 30, 2018.

Net HIC OPEB liability

The Authority's net Health Insurance Credit OPEB liability was measured as of June 30, 2018 and 2017 for fiscal year 2019 and 2018, respectively. The total Health Insurance Credit OPEB liability as of June 30, 2019 and 2018 was determined by an actuarial valuation performed as of June 30, 2017 and 2016, respectively, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018 and 2017, respectively.

Actuarial Assumptions

The total HIC OPEB liability as of June 30, 2019 and 2018 was based on an actuarial valuation as of June 30, 2017 and 2016, respectively, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018 and 2017, respectively.

8) Other Post-Employment Benefits (OPEB), Continued

Inflation	2.50%
Salary increases, including inflation:	
Locality - general employees	3.5% - 5.35%
Investment rate of return	7.0%, net of investment expenses, including inflation*

* Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 7.0%. However, since the difference was minimal, and a more conservative 7.0% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7.0% to simplify preparation of the OPEB liabilities.

Mortality rates – Largest Ten Locality Employers - General Employees

- Pre-Retirement: RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 95% of rates; females 105% of rates.

- Post-Retirement: RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

- Post-Disablement: RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates

The actuarial assumptions used in the June 30, 2017 and 2016 valuations were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages and extended final retirement age from 70 to 75
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 20%

Mortality rates – Non-Largest Ten Locality Employers - General Employees

- Pre-Retirement: RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 95% of rates; females 105% of rates.

- Post-Retirement: RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

- Post-Disablement: RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

8) Other Post-Employment Benefits (OPEB), Continued

The actuarial assumptions used in the June 30, 2017 and 2016 valuations were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages and extended final retirement age from 70 to 75
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 15%

<u>Long-Term Expected Rate of Return</u>

The long-term expected rate of return on the System's investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of System's investment expense and inflation) 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 real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return
Public Equity	40.00%	4.54%	1.82%
Fixed Income	15.00%	0.69%	0.10%
Credit Strategies	15.00%	3.96%	0.59%
Real Assets	15.00%	5.76%	0.86%
Private Equity	15.00%	9.53%	1.43%
Total	100.00%		4.80%
	Inflation		2.50%
	* Expected arithmetic nominal return		7.30%

* The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.

8) Other Post-Employment Benefits (OPEB), Continued

Discount Rate

The discount rate used to measure the total HIC OPEB liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2018, the rate contributed by the entity for the HIC OPEB will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly, which was 100% of the actuarially determined contribution rate. From July 1, 2018 on, employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the HIC OPEB's fiduciary net position was projected to be available to make all projected future benefit payments of eligible employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total HIC OPEB liability.

Changes in Net HIC OPEB Liability:

	Increase (decrease)		
	Total OPEB liability (a)	Plan fiduciary net pension (b)	Net OPEB liability (a) - (b)
Balances at June 30, 2017	$ 162,592	$ 100,269	$ 62,323
Changes for the year:			
Service cost	3,588	-	3,588
Interest	11,121	-	11,121
Difference between expected and actual experience	(7,706)	-	(7,706)
Contributions - employer	-	8,467	(8,467)
Net investment income	-	7,150	(7,150)
Benefit payments	(7,440)	(7,440)	-
Administrative expense	-	(170)	170
Other changes	-	(494)	494
Net changes	(437)	7,513	(7,950)
Balances at June 30, 2018	$ 162,155	$ 107,782	$ 54,373

	Increase (decrease)		
	Total OPEB liability (a)	Plan fiduciary net pension (b)	Net OPEB liability (a) - (b)
Balances at June 30, 2016 (as restated)	$ 155,602	$ 85,165	$ 70,437
Changes for the year:			
Service cost	3,682	-	3,682
Interest	10,769	-	10,769
Changes in assumptions	(3,953)	-	(3,953)
Contributions - employer	-	8,166	(8,166)
Net investment income	-	10,122	(10,122)
Benefit payments	(3,508)	(3,508)	-
Administrative expense	-	(170)	170
Other changes	-	494	(494)
Net changes	6,990	15,104	(8,114)
Balances at June 30, 2017	$ 162,592	$ 100,269	$ 62,323

Sensitivity of the Political Subdivision Health Insurance Credit Net OPEB Liability to Changes in the Discount Rate

The following presents the Political Subdivision Health Insurance Credit Program net HIC OPEB liability as of June 30, 2019 and June 30, 2018 using the discount rate of 7.00%, as well as what the Authority's net HIC OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (6.00%) or one percentage point higher (8.00%) than the current rate:

8) Other Post-Employment Benefits (OPEB), Continued

	Decrease (6.00%)		Discount Rate (7.00%)		Increase (8.00%)	
Net HIC OPEB liability as of June 30, 2019	$	71,742	$	54,373	$	39,537

	Decrease (6.00%)		Discount Rate (7.00%)		Increase (8.00%)	
Net HIC OPEB liability as of June 30, 2018	$	79,377	$	62,323	$	47,770

Health Insurance Credit Program OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Health Insurance Credit Program OPEB

For the years ended June 30, 2019 and 2018, the Authority recognized an OPEB expense for HIC of $5,846 and $6,632, respectively.

At June 30, 2019 and 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to the Political Subdivision Health Insurance Credit Program from the following sources:

	6/30/2019				6/30/2018			
	Deferred outflows of resources		Deferred inflows of resources		Deferred outflows of resources		Deferred inflows of resources	
Difference between expected and actual experience	$	-	$	6,594	$	-	$	-
Changes of assumptions		-		2,829		-		3,391
Net difference between projected and actual investment earnings on OPEB Plan investments		-		2,486		-		3,189
Employer contributions subsequent to the measurement date		8,467		-		8,467		-
Total	$	8,467	$	11,909	$	8,467	$	6,580

The $8,467 reported as deferred outflows of resources related to the HIC OPEB resulting from the political subdivision's contributions subsequent to the measurement date will be recognized as a reduction of the Net HIC OPEB Liability in the fiscal year ending June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the HIC OPEB will be recognized in the HIC OPEB expense in future reporting periods as follows:

Year ended		
2020	$	(2,495)
2021		(2,495)
2022		(2,496)
2023		(1,696)
2024		(1,674)
Thereafter		(1,053)
Total	$	(11,909)

Health Insurance Credit Program Plan Data

Information about the VRS Political Subdivision Health Insurance Credit Program is available in the separately issued VRS 2018 Comprehensive Annual Financial Report (CAFR). A copy of the 2018 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2018-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

9) Restatement

The net position as of the beginning of fiscal years 2018 and 2019 was restated to reflect an adjustment to the Authority's capital assets for construction in progress as well as an adjustment to the water meter agreement deposit liability as follows:

	6/30/2017 Previously Reported	**Restatement**	**6/30/2017 As Restated**
Statement of Net Position			
Capital assets - Construction in progress	$ 2,398,338	$ (809,312)	$ 1,589,026
Current liabilities - Deposits	$ (190,732)	$ (373,000)	$ (563,732)
Net position - Net investment in capital assets	$ (136,696,744)	$ 809,312	$ (135,887,432)
Net position - Unrestricted	$ (40,905,314)	$ 373,000	$ (40,532,314)

	6/30/2018 Previously Reported	**Restatement**	**6/30/2018 As Restated**
Statement of Net Position			
Capital assets - Construction in progress	$ 3,993,821	$ (1,441,342)	$ 2,552,479
Current liabilities - Deposits	$ (287,962)	$ (406,500)	$ (694,462)
Net position - Net investment in capital assets	$ (132,616,889)	$ 1,441,342	$ (131,175,547)
Net position - Unrestricted	$ (46,664,323)	$ 406,500	$ (46,257,823)
Statement of Revenues, Expenses and Changes in Net Position			
Operating revenues - Other	$ 77,545	$ (33,500)	$ 44,045
Operating expenses - Maintenance	$ 1,381,649	$ 632,030	$ 2,013,679
Operating loss	$ (1,933,103)	$ (665,530)	$ (2,598,633)
Change in net position	$ 1,568,551	$ (665,530)	$ 903,021
Statement of Cash Flows			
Cash Flows from operating activities			
Cash received from customers	$ 15,781,875	$ 33,500	$ 15,815,375
Other cash received	$ 739,584	$ (33,500)	$ 706,084
Cash payments to suppliers for goods and services	$ (4,292,153)	$ (632,030)	$ (4,924,183)
Cash flows from capital and related financing activities			
Acquisition and construction of capital assets	$ (2,698,112)	$ 632,030	$ (2,066,082)

10) Deferred Compensation Plan

The Authority offers its employees a deferred-compensation plan created in accordance with Internal Revenue Code Section 457. The plan, available to regular part-time and full-time Authority employees, permits them to defer 25% of their gross income up to a maximum of $19,000 per year. The deferred compensation is not available to employees until termination, retirement, death, or an unforeseeable emergency.

As required by Internal Revenue Code Section 457, all amounts of compensation deferred under the plan, all property and rights purchased with those amounts, and all income attributable to those amounts, property, or rights, are held in trust for the participants. The County acts as trustee for the plan with the choice of investment options being made by the participants.

11) Transactions with Related Parties

Certain financial management, accounting, and other services are provided to the Authority by the County. The charges for these services amounted to $831,810 and $786,149 for the years ended June 30, 2019 and 2018, respectively, and are included in the expenses under contractual fees. The Authority also owed the County $996,066 and $619,752 at June 30, 2019 and 2018, respectively, which primarily represents payroll expenses and purchase card expenses incurred by the Authority.

11) Transactions with Related Parties, Continued

In addition, the County has leased space in Authority buildings under long-term leases. Rent revenue from the County was $88,463 and $313,913 for years ended June 30, 2019 and 2018, respectively; and is included in rental income. As of June 30, 2019, the County has one lease agreement in effect with the Authority for building space. The term of this lease began in July 2014 and ends in June 2024, and the amount of rent due increases every five years. Future minimum payments under this lease are as follows:

Year ended		
2020	$	85,680
2021		85,680
2022		85,680
2023		85,680
2024		85,680
Total	$	428,400

12) Commitments and Contingencies

Construction in Progress

At June 30, 2019, the Authority had several major projects under construction which are presented in the accompanying financial statements as construction in progress.

Below are the details for each project:

Project	Budget	Expenditures to date	Balance of contract	Budget balance
Sewer improvements	$ 5,657,345	$ 1,810,586	$ 1,559,189	$ 2,287,570
Water supply	9,146,731	615,802	997,039	7,533,890
Water distribution	1,582,374	353,176	115,919	1,113,279
Water transmission	889,593	509,656	18,069	361,869
Water storage	185,620	-	-	185,620
Other	2,398,023	175,750	87,381	2,134,893
	$ 19,859,686	$ 3,464,970	$ 2,777,597	$ 13,617,119

Project Development Agreement - Long Term Water Supply

The Authority entered into a project development agreement with the City of Newport News on March 25, 2008 for long-term water supply. Under the agreement, JCSA has the right to a minimum of 4 million gallons of potable water capacity per day per calendar year for future water demands. The initial term of this agreement ends on January 1, 2050, at which time this agreement shall be automatically renewed for additional terms of 25 years. The Authority paid the City of Newport News $25 million on December 31, 2008. The optional 2nd installment of $25 million was not paid in 2019, and water will be reduced to 2 million gallons per day. The first installment was considered to be for the purchase of an intangible asset (rights to water supply) and, as such, was capitalized and is being amortized over the remaining life of the agreement (initial term). See note 4 for more information on the intangible asset.

In addition to the installment payments, the Authority agreed to pay variable and fixed operating and maintenance costs to the City of Newport News payable by September 1 each year, based on its safe yield share of 20%. The Authority did not receive any water from the City of Newport News for the years ended June 30, 2019 and 2018. Therefore, the Authority did not make a payment to the City of Newport News for the years ended June 30, 2019 and 2018, for these costs. Further, the Authority agreed that if it receives water from the City of Newport News through this agreement, to pay for the treatment of such water at a cost of $1.30 per 1,000 gallons for fiscal year ended June 30, 2019 and $1.26 per 1,000 gallons for fiscal year 2018. For the years ended June 30, 2019 and 2018, the Authority did not receive water from the City of Newport News under this agreement, and, as such, did not incur or pay for water treatment these fiscal years.

12) Commitments and Contingencies, Continued

Grinder Pump Maintenance

The Authority entered into a contract with Final Phase Installations, Inc. where they will provide grinder pump maintenance. The initial term of the contract was from October 26, 2016 through October 25, 2017, with the option to renew for up to 4 additional years. The contract has been renewed on an annual basis with the current renewal period ending October 25, 2019. Subsequent to year end, the contract was renewed for another annual period. The contract allows for an increase based on the Consumer Price Index. For the years ended June 30, 2019 and 2018, the Authority paid $208,979 and $215,781, respectively, for grinder pump maintenance.

Water Storage Tank Maintenance

The Authority entered into a contract with Superior Industrial Maintenance Company where they will provide water storage tank maintenance. The term of the contract is July 13, 2017 through July 12, 2018, with the option to renew for up to 5 additional years. The contract was renewed on August 6, 2019, for the period July 1, 2019 through June 30, 2020. For the years ended June 30, 2019 and 2018, the Authority paid $325,764 and $165,050, respectively, towards this contract.

Regional Hybrid Consolidation Plan

In February 2014, the Authority, HRSD and fourteen Hampton Roads localities entered into a Regional Hybrid Consolidation Plan for meeting Consent Agreement requirements to reduce sewer overflows. Under this plan, HRSD is responsible for major rehabilitation projects to repair deteriorated infrastructure and projects to increase the capacity of HRSD and locality pump stations and pipelines. HRSD will fund the work through a regional HRSD rate. The Authority keeps ownership and control of its local sewer infrastructure and is still responsible for monitoring and maintaining the local sewer system to Consent Agreement standards and fixing significant defects on an ongoing basis. In fiscal year 2018, HRSD proposed an amendment to the Plan to extend the schedule for rehabilitation work and assign HRSD the responsibility and liability for all regional overflows earlier than originally proposed. The purpose of the amendment is to accommodate HRSD's implementation of the SWIFT (Sustainable Water Initiative for Tomorrow) project to treat already highly treated wastewater effluent to drinking water standards and return it to the aquifer.

Other

The Authority is not currently involved in any litigation in which management deems would have a material impact to the financial statements.

* * * * *

REQUIRED SUPPLEMENTARY INFORMATION
OTHER THAN MD&A (Unaudited)

Exhibit 4

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Schedule of Changes in the Net Pension Liability and Related Ratios

Required Supplementary Information (Unaudited)

Last Ten Fiscal Years (1) *

	2014	2015	2016	2017	2018
Total pension liability					
Service cost	$ 417,066	$ 430,269	$ 404,294	$ 411,137	$ 379,365
Interest	913,818	978,647	1,032,165	1,104,651	1,132,686
Differences between expected and actual experience	-	(146,331)	128,139	(213,521)	62,537
Changes in assumptions	-	-	-	(335,427)	-
Benefit payments, including refunds of employee contributions	(376,365)	(433,146)	(562,945)	(495,181)	(637,522)
Net change in total pension liability	954,519	829,439	1,001,653	471,659	937,066
Total pension liability, beginning	13,242,723	14,197,242	15,026,681	16,028,334	16,499,993
Total pension liability, ending	$ 14,197,242	$ 15,026,681	$ 16,028,334	$ 16,499,993	$ 17,437,059
Plan fiduciary net position					
Contributions - employer	$ 308,820	$ 329,381	$ 336,720	$ 288,588	$ 297,525
Contributions - employee	197,188	193,349	197,261	210,624	204,311
Net investment income	1,802,418	612,704	245,617	1,734,000	1,174,317
Benefit payments, including refunds of employee contributions	(376,365)	(433,146)	(562,945)	(495,181)	(637,522)
Administrative expense	(9,511)	(8,173)	(8,604)	(9,804)	(10,045)
Other	95	(130)	(104)	(1,553)	(1,050)
Net change in plan fiduciary net position	1,922,645	693,985	207,945	1,726,674	1,027,536
Plan fiduciary net position, beginning	11,335,104	13,257,749	13,951,734	14,159,679	15,886,353
Plan fiduciary net position, ending	$ 13,257,749	$ 13,951,734	$ 14,159,679	$ 15,886,353	$ 16,913,889
Net pension liability	$ 939,493	$ 1,074,947	$ 1,868,655	$ 613,640	$ 523,170
Plan fiduciary net position as a percentage of the total pension liability	93.38%	92.85%	88.34%	96.28%	97.00%
Covered payroll	$ 3,943,666	$ 3,897,762	$ 4,026,779	$ 4,083,082	$ 4,230,543
Net pension liability as a percentage of the total covered payroll	23.82%	27.58%	46.41%	15.03%	12.37%

(1) This schedule is intended to present 10 years of information. GASB 68 and 71 were implemented in fiscal year 2015, and additional years will be presented as the information becomes available.

* The amounts presented have a measurement date of the previous fiscal year end.

See accompanying notes and independent auditor's report.

Exhibit 5

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)
Schedule of Employer Pension Contributions
Required Supplementary Information (Unaudited)
Last Ten Fiscal Years (1)

Fiscal year	**Contractually required contribution**	**Contributions in relation to contractually required contribution**	**Contribution deficiency (excess)**	**Employer's covered payroll**	**Contributions as a % of covered payroll**
2015	$ 330,920	$ 330,920	$ -	$ 3,897,762	8.49%
2016	341,874	341,874	-	4,026,779	8.49%
2017	297,668	297,668	-	4,083,082	7.29%
2018	308,672	308,672	-	4,230,543	7.29%
2019	250,534	250,534	-	4,445,820	5.63%

(1) This schedule is intended to present 10 years of information. GASB 68 and 71 were implemented in fiscal year 2015, and additional years will be presented as the information becomes available.

See accompanying notes and independent auditor's report.

Exhibit 6

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Schedule of Changes in OPEB - Retiree Healthcare Liability and Related Ratios (1) (2)

Required Supplementary Information (Unaudited)

Last Ten Fiscal Years*

	2017	2018
Total OPEB liability		
Service cost	$ 20,093	$ 24,948
Interest cost	11,723	14,359
Changes of benefit terms	-	-
Differences between expected and actual experience	-	18,322
Changes of assumptions	(28,634)	(1,688)
Changes in proportion	-	84
Benefit payments	(15,527)	(29,798)
Net change in total OPEB liability	(12,345)	26,227
Total OPEB liability, beginning	419,087	406,742
Total OPEB liability, ending (a)	$ 406,742	$ 432,969
Plan fiduciary net position		
Contributions - employer	$ 15,527	$ 29,798
Net investment income	-	-
Benefit payments	(15,527)	(29,798)
Administrative expense	-	-
Other	-	-
Net change in plan fiduciary net position	-	-
Plan fiduciary net position, beginning	-	-
Plan fiduciary net position, ending (b)	$ -	$ -
Net OPEB liability (a) - (b)	$ 406,742	$ 432,969
Fiduciary net position as a % of total OPEB liability	0.00%	0.00%
Expected average remaining service years of all participants	7	7

(1) This schedule is intended to present 10 years of information. GASB 75 was implemented in fiscal year 2018; additional years will be presented as the information becomes available.

(2) This OPEB plan does not depend on salary information.

* The amounts presented have a measurement date of the previous fiscal year end.

See accompanying notes and independent auditor's report.

Exhibit 7

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)
Schedule of Employer OPEB - Retiree Healthcare Contributions
Required Supplementary Information (Unaudited)
Last Ten Fiscal Years (1) (2)

Fiscal year	Actuarially determined contribution	Contributions in relation to actuarially determined contribution	Contribution deficiency (excess)
2018	$ 27,725	$ 15,527	$ 12,198
2019	37,604	29,798	$ 7,806

(1) This schedule is intended to present 10 years of information. GASB 75 was implemented in fiscal year 2018; additional years will be presented as the information becomes available.

(2) This OPEB plan does not depend on salary information.

See accompanying notes and independent auditor's report.

Exhibit 8

James City Service Authority

Schedule of Changes in the Net OPEB - Health Insurance Credit (HIC) Liability
Required Supplementary Information (Unaudited)
Last Ten Fiscal Years (1) *

	2017	2018
Total OPEB - HIC liability		
Service cost	$ 3,682	$ 3,588
Interest cost	10,769	11,121
Changes of benefit terms	-	-
Differences between expected and actual experience	-	(7,706)
Changes in assumptions	(3,953)	-
Benefit payments, including refunds of employee contributions	(3,508)	(7,440)
Net change in total OPEB - HIC liability	6,990	(437)
Total OPEB - HIC liability, beginning	155,602	162,592
Total OPEB - HIC liability, ending (a)	$ 162,592	$ 162,155
Plan fiduciary net position - HIC		
Contributions - employer	8,166	8,467
Contributions - employee	-	-
Net investment income	10,122	7,150
Benefit payments, including refunds of employee contributions	(3,508)	(7,440)
Administrative expense	(170)	(170)
Other	494	(494)
Net change in plan fiduciary net position - HIC	15,104	7,513
Plan fiduciary net position - HIC, beginning	85,165	100,269
Plan fiduciary net position - HIC, ending (b)	100,269	107,782
Net OPEB - HIC liability (a) - (b)	$ 62,323	$ 54,373
Plan fiduciary net position - HIC as a percentage of the total OPEB - HIC liability	61.67%	66.47%
Covered payroll	$ 4,083,082	$ 4,230,543
Net OPEB - HIC liability as a percentage of the total covered payroll	1.53%	1.29%

(1) This schedule is intended to present 10 years of information. GASB 75 were implemented in fiscal year 2018, and additional years will be presented as the information becomes available.

* The amounts presented have a measurement date of the previous fiscal year end.

See accompanying notes and independent auditor's report.

Exhibit 9

James City Service Authority

Schedule of Employer OPEB - Health Insurance Credit Contributions

Required Supplementary Information (Unaudited)

Last Ten Fiscal Years (1)

Fiscal Year	Contractually required contribution	Contributions in relation to contractually required contribution	Contribution deficiency (excess)	Employer's covered payroll	Contributions as a % of covered payroll
2018	$ 8,461	$ 8,467	$ (6)	$ 4,230,543	0.20%
2019	$ 8,002	$ 8,467	$ (465)	$ 4,445,820	0.19%

(1) This schedule is intended to present 10 years of information. GASB 75 was implemented in fiscal year 2018, and additional years will be presented as the information becomes available.

See accompanying notes and independent auditor's report.

Exhibit 10

James City Service Authority

Schedule of Employer's Share of Net Group Life Insurance (GLI) OPEB Liability (1)
Required Supplementary Information (Unaudited)
Last Ten Fiscal Years*

	2017	2018
Employer's proportion of the net GLI OPEB liability	0.02217%	0.02234%
Employer's proportionate share of the net GLI OPEB liability	$ 333,000	$ 340,000
Employer's covered payroll	$ 4,083,082	$ 4,230,543
Employer's proportionate share of the net GLI OPEB liability as a percentage of its covered payroll	8.16%	8.04%
Plan fiduciary net position as a % of total GLI OPEB liability	48.86%	51.22%

(1) This schedule is intended to present 10 years of information. GASB 75 was implemented in fiscal year 2018; additional years will be presented as the information becomes available.

* The amounts presented have a measurement date of the previous fiscal year end.

See accompanying notes and independent auditor's report.

Exhibit 11

James City Service Authority

Schedule of Employer OPEB - Group Life Insurance Contributions

Required Supplementary Information (Unaudited)

Last Ten Fiscal Years (1)

Fiscal Year	Contractually required contribution	Contributions in relation to contractually required contribution	Contribution deficiency (excess)	Employer's covered payroll	Contributions as a % of covered payroll
2018	$ 21,999	$ 22,168	$ (169)	$ 4,230,543	0.52%
2019	$ 23,118	$ 21,000	$ 2,118	$ 4,445,820	0.47%

(1) This schedule is intended to present 10 years of information. GASB 75 was implemented in fiscal year 2018, and additional years will be presented as the information becomes available.

See accompanying notes and independent auditor's report.

1) Pension - Changes of Benefit Terms

There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation.

2) Pension, OPEB Group Life Insurance and Health Insurance Credit - Changes of Assumptions

The following changes in actuarial assumptions were made effective June 30, 2016 based on the most recent experience study of the system for the four-year period ending June 30, 2016:

Largest 10 - Non-Hazardous Duty:

- Update mortality rates to a more current mortality table – RP-2014 projected to 2020
- Lowered retirement rates at older ages and changed final retirement from 70 to 75
- Adjust withdrawal rates to better fit experience at each year age and service through 9 years of service
- Lowered disability rates
- No change in salary scale
- Increase rate of line of duty disability from 14% to 20%

All Others (Non 10 Largest) - Non-Hazardous Duty:

- Update mortality rates to a more current mortality table – RP-2014 projected to 2020
- Lowered retirement rates at older ages and changed final retirement from 70 to 75
- Adjust withdrawal rates to better fit experience at each year age and service through 9 years of service
- Lowered disability rates
- No change in salary scale
- Increase rate of line of duty disability from 14% to 15%

3) OPEB Retiree Healthcare - Trust Arrangement and Funding Policy

The Authority does not intend to establish a trust to pre-fund the obligation. The anticipated growth in the net OPEB liability is based on contributions to the benefit plan on a pay-as-you-go cost basis.

4) OPEB Retiree Healthcare - Changes of Benefit Terms

There have been no actuarially material changes to the benefit provisions since the prior actuarial valuation.

5) OPEB Retiree Healthcare - Changes of Assumptions

The following change in actuarial assumptions were made based on the most recent actuarial valuation:

Discount Rate	
June 30, 2018	3.58%
June 30, 2019	3.62%

6) OPEB Health Insurance Credit and Group Life Insurance - Changes of Benefit Terms

There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation.

See independent auditor’s report.

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SUPPLEMENTARY INFORMATION

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Exhibit A

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Schedule of Net Position – by Activity

June 30, 2019

(with comparative totals for 2018)

	Water operations	Sewer operations	Totals 2019	Totals 2018 (as restated)
Assets				
Current assets:				
Cash and cash equivalents	$ 269,648	$ 269,042	$ 538,690	$ 811,932
Investments	20,699,965	28,280,983	48,980,948	45,389,644
Restricted investments	569,708	-	569,708	567,011
Accounts receivable, customers	2,235,594	1,401,435	3,637,029	3,189,777
Accounts receivable, other	44,012	22,797	66,809	36,298
Note receivable	1,090	-	1,090	1,090
Interest receivable	148,219	148,219	296,438	165,999
Inventories	915,755	-	915,755	872,852
Total current assets	24,883,991	30,122,476	55,006,467	51,034,603
Noncurrent assets:				
Capital assets:				
Non-depreciable	3,411,933	2,768,776	6,180,709	5,265,718
Depreciable	87,268,721	61,229,988	148,498,709	146,847,045
Net capital assets	90,680,654	63,998,764	154,679,418	152,112,763
Total assets	115,564,645	94,121,240	209,685,885	203,147,366
Deferred Outflows of Resources				
Deferred charge on refunding, net	1,586,907	-	1,586,907	1,663,079
Deferred pension	169,386	169,386	338,772	380,362
Deferred OPEB group life insurance (GLI)	19,000	19,000	38,000	22,168
Deferred OPEB health insurance credit (HIC)	4,234	4,233	8,467	8,467
Deferred OPEB retiree healthcare	7,889	7,888	15,777	-
Total deferred outflows of resources	1,787,416	200,507	1,987,923	2,074,076
Total assets and deferred outflows of resources	$ 117,352,061	$ 94,321,747	$ 211,673,808	$ 205,221,442
Liabilities				
Current liabilities:				
Accounts payable, trade	$ 562,469	$ 509,449	$ 1,071,918	$ 361,215
Accrued salaries	9,588	2,662	12,250	7,834
Compensated absences, current portion	312,373	-	312,373	301,496
Due to James City County	908,775	87,291	996,066	619,752
Deposits	614,431	-	614,431	694,462
Interest payable	320,856	-	320,856	332,406
Bond payable, current portion	718,907	-	718,907	693,907
Total current liabilities	3,447,399	599,402	4,046,801	3,011,072
Noncurrent liabilities:				
Advances for construction	5,882	27,020	32,902	32,902
Compensated absences, net of current portion	104,124	-	104,124	100,499
Bonds payable, net of current portion	21,187,481	-	21,187,481	21,906,388
Net pension liability	261,585	261,585	523,170	613,640
Net retiree healthcare OPEB liability	216,485	216,484	432,969	406,742
Net GLI OPEB liability	170,000	170,000	340,000	333,000
Net HIC OPEB liability	27,186	27,187	54,373	62,323
Total noncurrent liabilities	21,972,743	702,276	22,675,019	23,455,494
Total liabilities	25,420,142	1,301,678	26,721,820	26,466,566
Deferred Inflows of Resources				
Deferred pension	209,486	209,485	418,971	683,372
Deferred OPEB retiree healthcare	10,950	10,949	21,899	24,543
Deferred OPEB GLI	16,500	16,500	33,000	40,000
Deferred OPEB HIC	5,955	5,954	11,909	6,580
Total deferred inflows of resources	242,891	242,888	485,779	754,495
Net Position				
Net position:				
Net investment in capital assets	70,361,173	63,998,764	134,359,937	131,175,547
Restricted for debt service	569,708	-	569,708	567,011
Unrestricted	20,758,147	28,778,417	49,536,564	46,257,823
Total net position	91,689,028	92,777,181	184,466,209	178,000,381
Total liabilities, deferred inflows of resources and net position	$ 117,352,061	$ 94,321,747	$ 211,673,808	$ 205,221,442

See accompanying independent auditor's report.

Exhibit B

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Schedule of Revenues, Expenses, and Changes in Net Position – by Activity

Year ended June 30, 2019

(with comparative totals for year ended June 30, 2018)

			Totals	
	Water operations	**Sewer operations**	**2019**	**2018 (as restated)**
Operating revenues:				
Water and sewer services	$ 9,883,852	$ 6,415,154	$ 16,299,006	$ 15,942,612
Other	356,856	123,829	480,685	692,932
Total operating revenues	10,240,708	6,538,983	16,779,691	16,635,544
Operating expenses:				
Salaries	2,508,565	2,213,428	4,721,993	4,552,923
Fringe benefits	791,067	645,172	1,436,239	1,511,372
Operating supplies	770,232	429,988	1,200,220	1,150,760
Maintenance	805,180	1,388,230	2,193,410	2,013,679
Utilities	707,458	266,710	974,168	913,104
Contractual fees	480,541	391,833	872,374	877,652
Other	138,664	132,021	270,685	222,249
Total operating expenses	6,201,707	5,467,382	11,669,089	11,241,739
Operating income before depreciation and amortization	4,039,001	1,071,601	5,110,602	5,393,805
Depreciation and amortization	5,014,701	2,907,912	7,922,613	7,992,438
Operating loss	(975,700)	(1,836,311)	(2,812,011)	(2,598,633)
Nonoperating revenues (expenses):				
Facility charges	1,685,840	1,263,290	2,949,130	3,581,360
Investment income	956,502	947,825	1,904,327	43,940
Gain (loss) on disposal of capital assets	14,522	-	14,522	(165,655)
Interest expense	(727,965)	-	(727,965)	(754,226)
Net nonoperating revenues	1,928,899	2,211,115	4,140,014	2,705,419
Income before capital contributions	953,199	374,804	1,328,003	106,786
Capital asset contributions	2,259,775	2,878,050	5,137,825	796,235
Changes in net position	3,212,974	3,252,854	6,465,828	903,021
Net position, beginning of year (as restated)	88,476,054	89,524,327	178,000,381	177,097,360
Net position, end of year	$ 91,689,028	$ 92,777,181	$ 184,466,209	$ 178,000,381

See accompanying independent auditor's report.

Exhibit C

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Schedule of Operating Revenues and Expenses – Budget and Actual – by Activity

Year ended June 30, 2019

	Water operations		Variance favorable	Sewer operations		Variance favorable
	Actual	**Budget**	**(unfavorable)**	**Actual**	**Budget**	**(unfavorable)**
Operating revenues:						
Water and sewer services	$ 9,883,852	$ 9,863,758	$ 20,094	$ 6,415,154	$ 6,094,338	$ 320,816
Other	356,856	210,489	146,367	123,829	135,041	(11,212)
Total operating revenues	$ 10,240,708	$ 10,074,247	$ 166,461	$ 6,538,983	$ 6,229,379	$ 309,604
Operating expenses:						
Salaries	$ 2,508,565	$ 2,744,920	$ 236,355	$ 2,213,428	$ 2,422,823	$ 209,395
Fringe benefits	791,067	1,076,553	285,486	645,172	920,155	274,983
Operating supplies	770,232	1,078,735	308,503	429,988	502,330	72,342
Maintenance *	805,180	1,130,697	325,517	1,388,230	1,632,755	244,525
Utilities	707,458	762,556	55,098	266,710	305,040	38,330
Contractual fees	480,541	599,704	119,163	391,833	491,689	99,856
Other	138,664	212,766	74,102	132,021	161,682	29,661
Total operating expenses	$ 6,201,707	$ 7,605,930	$ 1,404,223	$ 5,467,382	$ 6,436,472	$ 969,090

*Includes budget from Capital Improvements Program for expenses related to the Department of Environmental Quality consent order.

See accompanying independent auditor's report.

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STATISTICAL SECTION

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Statistical Section Overview

This part of the James City Service Authority's comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures and required supplementary information says about the Authority's overall financial health.

Contents

Sources: Unless otherwise noted, the information in these tables is derived from the comprehensive annual financial reports for the relevant year.

Table 1

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Net Position
Last Ten Fiscal Years

	2010	2011	2012	2013	2014	2015	2016	2017	2018 (as restated)	2019
Net Position										
Net investment in capital assets	$ 135,071,435	$ 135,641,623	$ 134,872,139	$ 139,966,206	$ 137,922,955	$ 137,173,064	$ 139,312,785	$ 135,887,432	$ 131,175,547	$ 134,359,937
Restricted for debt service	-	-	-	-	-	-	729,605	677,614	567,011	569,708
Restricted for capital projects	4,610,218	4,740,769	4,876,760	2,620,384	2,601,160	2,716,277	-	-	-	-
Unrestricted	36,430,621	34,057,874	34,106,903	29,699,494	29,159,119	32,903,518	37,014,202	40,532,314	46,257,823	49,536,564
Total net position	$ 176,112,274	$ 174,440,266	$ 173,855,802	$ 172,286,084	$ 169,683,234	$ 172,792,859	$ 177,056,592	$ 177,097,360	$ 178,000,381	$ 184,466,209

Table 2

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Changes in Revenues, Expenses and Net Position
Last Ten Fiscal Years

	2010	2011	2012	2013	2014	2015	2016	2017	2018 (as restated)	2019
Operating revenues:										
Water and sewer services	$ 12,314,268	$ 12,603,818	$ 11,718,297	$ 12,002,533	$ 11,825,702	$ 12,588,470	$ 12,774,840	$ 14,400,361	$ 15,942,612	$ 16,299,006
Water supply proffers	52,908	125,192	26,967	13,362	57,446	450,262	218,987	298,054	293,900	213,825
Rental income	144,441	171,401	144,381	164,875	160,914	325,991	326,377	377,880	354,987	124,964
Other	450,027	190,467	198,025	242,028	285,892	214,104	272,599	158,917	44,045	141,896
Storm cost reimbursement	-	-	349,541	-	900	-	-	-	-	-
Total operating revenues	12,961,644	13,090,878	12,437,211	12,422,798	12,330,854	13,578,827	13,592,803	15,235,212	16,635,544	16,779,691
Operating expenses:										
Salaries	4,133,261	4,040,543	4,144,696	4,306,155	4,288,721	4,257,924	4,347,283	4,384,445	4,552,923	4,721,993
Fringe benefits	1,570,514	1,585,037	1,584,707	1,636,038	1,337,328	1,546,525	1,583,480	1,799,798	1,511,372	1,436,239
Operating supplies	866,624	888,559	899,095	822,882	882,253	836,288	1,094,002	1,045,132	1,150,760	1,200,220
Maintenance	1,969,116	3,193,116	3,065,512	3,364,910	3,501,598	2,067,464	1,670,023	1,913,322	2,013,679	2,193,410
Utilities	771,544	813,478	917,498	862,665	875,020	861,074	870,220	899,294	913,104	974,168
Contractual fees	889,869	873,110	882,505	910,491	836,634	915,365	903,463	920,714	877,652	872,374
Other	784,305	697,629	560,671	504,573	496,851	497,803	233,233	215,633	222,249	270,685
Storm costs	-	-	359,921	-	-	-	-	-	-	-
Total operating expenses	10,985,233	12,091,472	12,414,605	12,407,714	12,218,405	10,982,443	10,701,704	11,178,338	11,241,739	11,669,089
Operating income before depreciation and amortization	1,976,411	999,406	22,606	15,084	112,449	2,596,384	2,891,099	4,056,874	5,393,805	5,110,602
Depreciation and amortization	7,087,224	7,273,473	7,469,016	7,619,431	7,670,391	7,810,808	7,930,632	8,194,083	7,992,438	7,922,613
Operating loss	(5,110,813)	(6,274,067)	(7,446,410)	(7,604,347)	(7,557,942)	(5,214,424)	(5,039,533)	(4,137,209)	(2,598,633)	(2,812,011)
Nonoperating revenues (expenses):										
Facility charges	3,260,875	3,839,702	3,165,330	3,868,654	4,305,728	3,863,650	3,243,535	4,664,316	3,581,360	2,949,130
Investment income (loss)	956,056	509,675	351,929	(1,249,111)	267,061	248,207	519,767	90,148	43,940	1,904,327
Gain (loss) on disposal of capital assets	(251,710)	34,324	21,285	(44,507)	15,352	23,497	(193,113)	49,018	(165,655)	14,522
Insurance recovery	-	-	-	-	-	-	14,219	1,000	-	-
Bond issuance costs	-	-	-	-	-	-	(402,364)	-	-	-
Interest expense	(1,749,899)	(1,531,715)	(1,478,060)	(1,141,052)	(1,114,130)	(1,095,684)	(744,124)	(778,073)	(754,226)	(727,965)
Net nonoperating revenues	2,215,322	2,851,986	2,060,484	1,433,984	3,474,011	3,039,670	2,437,920	4,026,409	2,705,419	4,140,014
Income (loss) before contributions	(2,895,491)	(3,422,081)	(5,385,926)	(6,170,363)	(4,083,931)	(2,174,754)	(2,601,613)	(110,800)	106,786	1,328,003
Capital asset contributions	3,427,510	1,750,073	5,395,362	4,600,645	3,388,700	5,284,379	6,865,346	1,509,214	796,235	5,137,825
Changes in net position	$ 532,019	$ (1,672,008)	$ 9,436	$ (1,569,718)	$ (695,231)	$ 3,109,625	$ 4,263,733	$ 1,398,414	$ 903,021	$ 6,465,828

Table 3

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Water and Sewer Rates

Last Ten Fiscal Years

Quarterly Continuing Service Charges for Residential Water Service

Fiscal Year	Basic Charge	Rate per 1,000 gallons (1)	Quarterly Total (2)	% Change
2010	$ -	$2.85 - $3.45 - $9.80	$ 63.45	0.0%
2011	-	2.85 - 3.45 - 9.80	63.45	0.0%
2012	-	2.85 - 3.45 - 9.80	63.45	0.0%
2013	-	2.85 - 3.45 - 9.80	63.45	0.0%
2014	-	2.85 - 3.45 - 9.80	63.45	0.0%
2015	-	2.85 - 3.45 - 9.80	63.45	0.0%
2016	7.22	2.47 - 4.93 - 11.59	73.85	16.4%
2017	8.19	2.80 - 5.60 - 13.15	83.79	13.5%
2018	9.30	3.18 - 6.36 - 14.93	95.16	13.6%
2019	10.56	3.61 - 7.22 - 16.95	108.03	13.5%

Quarterly Continuing Service Charges for Residential Sewer Service

Fiscal Year	Basic Charge	Rate per 1,000 gallons	Quarterly Total (2)	% Change
2010	$ -	$ 2.80	$ 58.80	0.0%
2011	-	2.80	58.80	0.0%
2012	-	2.80	58.80	0.0%
2013	-	3.22	67.62	15.0%
2014	-	3.22	67.62	0.0%
2015	-	3.22	67.62	0.0%
2016	5.66	2.93	67.19	-0.6%
2017	5.77	2.99	68.56	2.0%
2018	5.89	3.05	69.94	2.0%
2019	5.95	3.08	70.63	1.0%

(1) Inverted Block Rate Structure:
1st Block based on 0 to 15,000 gallons used per quarter.

2nd Block based on 15,000 to 30,000 gallons used per quarter.

3rd Block based on over 30,000 gallons used per quarter.

(2) Assumes 21,000 gallons average quarterly use.

Source: James City Service Authority Schedule of Rates and Fees

Table 4

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Largest Utility Customers (1)

Current Year and Nine Years Ago

	2019			2010		
	Gallons Billed	**Service Charges**	**Rank**	**Gallons Billed**	**Service Charges**	**Rank**
Historic Powhatan Resort	34,512,265	$ 296,625	1	N/A	N/A	N/A
Owens-Illinois *	19,529,527	131,312	2	16,921,150	105,757	3
Williamsburg Plantation	18,745,501	155,044	3	N/A	N/A	N/A
Marriott Ownership Resorts	18,487,609	153,949	4	N/A	N/A	N/A
Country Village Mobile Home Park (sewer only)	15,684,812	48,285	5	15,366,164	43,025	6
Williamsburg Landing	15,047,444	125,333	6	N/A	N/A	N/A
Greystone *	14,654,170	112,022	7	10,977,000	68,606	8
Patriots Colony	13,655,706	114,041	8	19,414,950	121,343	2
Williamsburg-James City County Public Schools *	13,594,916	104,492	9	16,531,550	100,738	4
Windy Hill Trailer (sewer only)	13,107,952	40,354	10	12,146,772	34,010	5
Eastern State Hospital *	-	-		25,915,300	161,970	1
Platinum Management	-	-		15,380,996	96,131	7
Oxford-James	-	-		9,146,150	57,163	9
Rolling Meadows	-	-		8,732,800	54,580	10
Total	177,019,902	$ 1,281,457		150,532,832	$ 843,323	

* Subject to wastewater sub-meter adjustments

(1) Reports implemented in fiscal year 2019 improved identification of customers with numerous individual accounts such as timeshare resorts.

Source: James City Service Authority, Administration Department

Table 5

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Ratio of Outstanding Debt

Last Ten Fiscal Years

Fiscal year	Revenue bonds	Number of water connections	Debt per water connection
2010	35,950,423	19,368	1,856.2
2011	34,469,298	19,719	1,748.0
2012	32,938,175	20,070	1,641.2
2013	25,185,000	20,549	1,225.6
2014	24,660,000	20,858	1,182.3
2015	24,115,000	21,246	1,135.0
2016	24,118,109	21,669	1,113.0
2017	23,269,202	22,133	1,051.3
2018	22,600,295	22,540	1,002.7
2019	21,906,388	22,832	959.5

Note: The James City Service Authority has no legal debt margin nor overlapping debt.

Source: James City Service Authority, Administration Department

Table 6

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Revenue Bond Coverage

Last Ten Fiscal Years

Fiscal year	Gross revenue	Direct operating expenses	Net revenue available for debt service	Principal	Interest	Total	Coverage
2010	17,178,575	10,985,233	6,193,342	1,440,000	1,590,562	3,030,562	2.04
2011	17,474,579	12,091,472	5,383,107	1,490,000	1,537,750	3,027,750	1.78
2012	15,975,755	12,414,605	3,561,150	1,545,000	1,483,100	3,028,100	1.18
2013	14,997,834	12,407,714	2,590,120	525,000	1,119,306	1,644,306	1.58
2014	16,918,995	12,218,405	4,700,590	545,000	1,100,931	1,645,931	2.86
2015	17,714,181	10,982,443	6,731,738	565,000	1,081,856	1,646,856	4.09
2016	17,370,324	10,701,704	6,668,620	785,000	571,161	1,356,161	4.92
2017	20,128,694	10,904,086	9,224,608	605,000	749,450	1,354,450	6.81
2018	20,260,844	11,241,739	9,019,105	630,000	725,250	1,355,250	6.65
2019	21,647,670	11,669,089	9,978,581	655,000	700,050	1,355,050	7.36

Note: The James City Service Authority has no legal debt margin nor overlapping debt.

Table 7

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Outstanding Debt for James City County

Last Ten Fiscal Years

Fiscal year	General obligation bonds	Capital leases	Lease revenue bonds	Total
2010	101,414,765	10,169,895	110,275,000	221,859,660
2011	93,283,624	10,285,522	104,055,000	207,624,146
2012	86,134,103	9,235,074	104,472,000	199,841,177
2013	80,004,294	1,098,854	123,034,000	204,137,148
2014	72,164,244	984,528	114,416,000	187,564,772
2015	65,458,589	858,833	103,604,000	169,921,422
2016	49,844,842	728,456	130,451,552	181,024,850
2017	44,155,482	4,195,266	119,855,768	168,206,516
2018	38,348,323	3,183,141	109,069,984	150,601,448

Table 8

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)
County Demographic and Economic Statistics
Last Ten Calendar Years

Calendar year	Population (1)	Personal income (2)	Per capita personal income (2)	Unemployment percentage (1)
2010	67,745	4,196,931,000	51,538	6.3%
2011	68,500	4,474,583,000	54,224	6.1%
2012	69,451	4,703,429,000	55,990	5.7%
2013	70,376	4,745,679,000	55,550	5.3%
2014	71,254	4,954,338,000	56,960	4.9%
2015	72,682	5,160,028,000	58,504	4.3%
2016	73,767	5,344,090,000	59,632	4.1%
2017	74,795	5,646,096,000	62,350	3.8%
2018	75,776	**	**	2.9%
2019	**	**	**	**

Source:

(1) Planning Division, supplemented by data from Virginia Employment Commission (http://www.vec.virginia.gov/)

(2) Data from the Bureau of Economic Analysis (http://www.bea.gov/), and has combined data for James City County and the City of Williamsburg

** Statistics not yet available

Table 9

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Principal Employers in James City County

Current Year and Nine Years Ago

	2019			2010		
	Employees	**Rank**	**Percent of total County employment**	**Employees**	**Rank**	**Percent of total County employment**
Busch Gardens	1000+	1	**	1000+	1	17.94%
Williamsburg-James City County Public Schools	1000+	2	5.36%	1000+	2	5.93%
Wal-Mart Distribution Center	500-999	3	2.41%	500-999	8	2.26%
James City County	500-999	4	2.18%	500-999	6	2.35%
Riverside Regional Medical Center	500-999	5	1.92%			
Eastern State Hospital	500-999	6	1.86%	1000+	3	3.26%
Anheuser-Busch Inbev	500-999	7	1.79%	500-999	7	2.28%
Kingsmill Resort and Spa	500-999	8	1.79%			
Williamsburg Landing	250-499	9	1.15%			
Owens & Minor/AVID	250-499	10	1.04%			
Lumber Liquidaters				500-999	4	3.05%
Busch Properties, Inc.				500-999	5	2.69%
Avid Medical				250-499	9	1.60%
Jamestown-Yorktown Foundation				250-499	10	1.27%
			19.48%			42.63%

Source: Economic Development, James City County and Virginia Employment Commission

** Busch Gardens became publicly traded during fiscal year 2013, and information is not available.

Table 10

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Schedule of Insurance in Force

June 30, 2019

Insurer	Type of coverage	Policy number	Policy period	Annual Premium
Virginia Association of Counties Group Self-Insurance Risk Pool (VACoRP)	General liability, property, automobile, public officials' liability, crime, cyber risk, excess risk	VA-JA-131D-19	7/1/2018 - 7/1/2019	$ 95,929
Virginia Association of Counties Group Self-Insurance Risk Pool (VACoRP)	Workers' compensation	VA-JA-131D-19	7/1/2018 - 7/1/2019	$ 67,874

Table 11

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Full-time Employees by Function

Last Ten Fiscal Years

Function	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Administration	65	60	63	63	63	63	63	63	63	68
Water	15	15	15	15	15	15	15	15	17	17
Sewer	11	11	11	11	11	11	11	11	11	11
Total	**91**	**86**	**89**	**89**	**89**	**89**	**89**	**89**	**91**	**96**

Source: James City County, Fiscal Year Adopted Budgets

Table 12

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Operating Indicators by Function

Last Ten Fiscal Years

Function	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Water:										
New connections	385	388	351	448	359	388	423	464	407	292
Water main breaks	40	44	31	25	21	26	21	34	25	30
Sewer:										
New connections	380	375	296	347	261	380	447	470	414	287

Source: James City Service Authority, Administration Department

Table 13

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Capital Asset Statistics by Function

Last Ten Fiscal Years

Function	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Water:										
Water lines (miles)	344	393	390	393	400	402	407	409	410	414
Water customers	19,368	19,719	20,070	20,549	20,858	21,246	21,669	22,133	22,540	22,832
Storage tanks (greater than 250,000 gallons)	7	7	7	7	7	7	7	7	7	7
Average ERCs (1)	20,200	20,866	19,200	18,597	18,937	19,415	18,921	20,025	20,220	19,247
Sewer:										
Sewer lines (miles)	382	419	423	425	430	435	439	440	440	446
Gallons collected (millions)	1,833	1,598	1,771	1,739	1,862	1,897	1,863	1,971	1,987	1,898
Sewer customers	18,860	21,127	21,488	21,962	22,575	22,955	23,402	23,872	24,286	24,573

(1) Equivalent Residential Connections (ERCs) are determined based upon the rated capacity of a water meter (e.g., the average amount of water which can flow through such meter on a continuous basis) as compared to the rated capacity for a typical 5/8" residential water meter.

Source: James City Service Authority, Administration Department

Table 14

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Summary of Historical Flows (MGD)

Last Ten Fiscal Years

Function	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Water:										
Average Day	5.0	5.1	4.8	4.7	4.7	4.7	4.7	5.0	5.1	4.8
Average Day in Month of Maximum Flow	6.8	7.4	6.4	6.1	5.9	6.1	5.9	6.4	7.2	6.3
Month of Maximum Flow	June	July	July	July	June	July	August	August	July	July
Sewer:										
Average Day	4.5	4.4	5.0	5.0	5.1	5.1	5.1	5.4	5.4	5.2

Source: James City Service Authority, Administration Department

Table 15

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Miscellaneous Statistics

Comparison of Area Water Bills
Annual Consumption 60,000 Gallons as of June 2019

Virginia Jurisdiction	Water Service
City of Williamsburg	$ 318.00
City of Norfolk	477.36
City of Newport News	456.60
City of Virginia Beach	353.52
James City Service Authority	258.84

Source: James City Service Authority

Comparison of Area Sewer Bills
Annual Consumption 60,000 Gallons as of June 2019

Virginia Jurisdiction	Sewer Service *
City of Hampton	$ 171.60
City of Newport News	330.36
City of Virginia Beach	369.72
City of Norfolk	344.88
York County	312.00
James City Service Authority	208.56

* Rates charged by the municipality. Residents of these municipalities pay a separate wastewater treatment fee to Hampton Roads Sanitation District of $7.18 per 1,000 gallons.

Source: James City Service Authority

Availability Charges for a Typical Residential Connection (1)
Last Ten Fiscal Years

Fiscal Year	Water	Sewer	Total
2010	4,200	3,360	7,560
2011	4,200	3,360	7,560
2012	4,200	3,360	7,560
2013	4,200	3,360	7,560
2014	4,200	3,360	7,560
2015	4,200	3,360	7,560
2016	4,200	3,360	7,560
2017	4,200	3,360	7,560
2018	4,200	3,360	7,560
2019	4,200	3,360	7,560

(1) A system facilities charge for water service is assessed for each new separate service connection. The purpose of the charge is to defray in part the cost of providing major supply, transmission main, booster pumping and distribution facilities. A similar system facilities charge for sewer service is assessed for each new separate service connection. The current charge for a residential 5/8 inch meter is $500 per bathroom fixture and has been in effect since 2008. The sewer service connection is also based on the size of the water meter and is $400 per bathroom fixture and has been in effect since 2009.

Source: James City Service Authority

Table 16

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Rates and Fees

Wastewater Charges

(a) System Facilities Charge

A system facilities charge for wastewater collection service to be furnished through each new separate service connection which is to be made to a public sewer, regardless of who may have paid for the installation of the public sewer to which the connection is to be made, shall be paid by each applicant for service prior to the installation of service, as follows:

Metered Water Service

Commercial, industrial, institutional, multi-family residential and single-family residential:

Meter Size (inches)	Charge
5/8” Residential	$400 per bathroom fixture
5/8” Nonresidential	2,500
3/4”	3,500
1”	4,000
1 1/2”	7,500
2”	12,000
3”	24,000
4”	37,500
5”	75,000

Nonmetered Water Service

Where water is provided by an unmetered source, the following estimated charges shall be assessed:

Activity, use	Unit	Charge
Single-family residences	Each	$300 per bathroom fixture
Singe-family mobile homes	Each	1,000
Mobile homes in parks	Each lot	1,000
Two family, apartments and townhouses	Each	300 per bathroom fixture
Schools (with showers)	Student	80
Schools (without showers)	Student	50
Motels and hotels	Room	650 or minimum 2,500
Manufacturing	Msf	300 or minimum 1,200
Warehouses	Msf	100 or minimum 1,200
Service stations	Each	1,200
Camping facilities	Each space	500 or minimum 1,200
Restaurants	Seat	20 or minimum 1,200
Commercial	Msf	minimum 1,500

Activity, use	Unit	Charge
First	30,000 sq. ft.	$ 500
Next	10,000 sq. ft.	450
Next	10,000 sq. ft.	400
Over	50,000 sq. ft.	350

The purpose of this charge is to defray, in part, the cost of providing force mains, pump stations, transmission mains, booster pumps, and other system facilities.

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Rates and Fees

Wastewater Charges

(b) Local Facilities Charge

A local facilities charge of $1,050 for each separate connection to public sewer shall be paid by each applicant who desires to secure wastewater service therefrom, which charge shall be paid prior to the approval of the application for service; provided, however, in any instance where satisfactory evidence shows that an applicant has paid the cost of installation of the local facility to which the connection is to be made, either by installing the local facility at his expense and then conveying the same to the Authority (or its predecessors) or by reimbursing the Authority (or its predecessors) for the cost of such local facilities, the local facilities charge shall be waived. Additionally, when the Authority does not install or have a rebate agreement, the local facilities charge shall also be waived. In situations where a new wastewater system has been installed by the Authority and whereas any applicant adjacent to this new system that has an existing septic system desires to receive wastewater service therefrom, the local facilities charge shall be waived for a period of 12 months from the completion date of the new wastewater system installation.

The purpose of this charge is to defray in part the cost of installing collection mains which are necessary to provide wastewater collection service to abutting properties and which have been provided at the expense of the Authority or persons, firms, or corporations other than the applicant. The charge shall be paid prior to issuance of a plumbing permit from Building Safety and Permits.

(c) Grinder Pump Installation and Maintenance Charge

Any applicant for a sewer connection requiring a residential grinder pump may purchase the grinder pump (that meets Authority standards and specifications) plus ancillary parts from the Authority at cost if the grinder pump is necessary to replace an existing septic system. In addition, if the connection to the public sewer system is replacing a septic system, the applicant is eligible for the deferred-payment plan discussed in Paragraph G, Section 2 of the James City Service Authority Regulations Governing Utility Service.

An annual grinder pump maintenance charge of $300 shall be paid for each separate connection to a grinder pump when the operation and maintenance of said residential grinder pump is the responsibility of the Authority. The payment for this charge will be prorated in equal amounts in the customers' utility service charge billing. The Authority shall not maintain nonresidential grinder pumps or other commercial pump stations unless such utility maintenance is deemed by the Authority to be in the interest of the public health or is necessary to protect the integrity of the system, or such facility is located within a designated Reservoir Protection Zone.

(d) Services Connection Charge

A service connection charge shall be paid by each applicant for each new service connection prior to the approval of the application as follows:

Service Installed by	Charge
Developer, applicant	$10 per connection inspection fee
Utility	Actual cost x 1.25, including overhead

The purpose of this charge is to defray the cost of installation or inspection of a service connection from the public sewer main in the street to the curb or property line. The service connection charge shall be waived provided the applicant has paid a local facilities charge and the sewer service line is not greater than six inches in diameter for a gravity main or two inches in diameter for a force main. In the event that the service connection charge is not waived, the local facilities charge will be applied against the service connection charge. waived provided the applicant has paid a local facilities charge and the sewer service line is not greater than six inches in diameter for a gravity main or two inches in diameter for a force main. In the event that the service connection charge is not waived, the local facilities charge will be applied against the service connection charge.

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Rates and Fees

(e) Retail Service Rates

The wastewater service charge shall be based on usage from a metered water source where available. For wastewater service on an unmetered water source, a meter sized equivalent shall be used, based upon an estimated charge.

Metered Water Source

Metered water usage shall be reduced by a metered reading from a landscaping meter or similar device if the landscaping meter or device is approved and utilized under operating regulations adopted by Hampton Roads Sanitation District (HRSD).

A copy of the deduction meter reading provided to HRSD must be received by the Authority within 20 days prior to the end of each billing period. In the event a meter reading is not received within this time, the Authority shall bill based on total water consumption and no refund or billing adjustment shall be made.

Each customer bill shall include a Fixed Charge based upon the size of the meter serving the customer. The Fixed Charge for each billing cycle shall be calculated based on the quarterly fixed charge chart below. This Fixed Charge is for expenses associated with operating and maintaining the wastewater collection system.

Meter Size	Quarterly Fixed Charge
5/8”	$ 5.95
3/4”	$ 8.92
1”	$ 14.87
1 1/2”	$ 29.72
2”	$ 47.55
3”	$ 95.11
4”	$ 148.61
6”	$ 297.21
8”	$ 475.54
10”	$ 683.59

Charge for all collection and treatment of wastewater:

Volume	Collection
Per 1,000 gallons of water consumed	$ 3.08
Per 100 cubic feet of water consumed	2.31

Nonmetered Water Source

Where no meter exists or where meter readings are not made available by the water supplier to the Authority, the estimated charges below shall be assessed.

Activity, Use	Unit	Charge
Single-family residences	Each	$ 42.00
Singe-family mobile homes	Each	42.00
Mobile homes in parks	Each lot	37.25
Duplex, apartments and townhouses	Each	37.25
Schools (with showers)	Student	4.25
Schools (without showers)	Student	2.65
Motels and hotels	Room	18.55 or minimum 186.70
Manufacturing	Msf	11.00 or minimum 35.85
Warehouses	Msf	7.45 or minimum 46.50
Service stations	Each	49.95
Camping facilities	Each space	16.22 or minimum 64.25
Restaurants	Seat	4.95 or minimum 55.85
Commercial	Msf	18.55 or minimum 55.85
Churches	Each	40.65
Swimming pools	Sfe	40.65
Laundromats	Sfe	40.65

Commercial condensate discharge shall be billed annually at the current wastewater collection metered retail service rate. The bill shall be based on a condensate volume estimate prepared by the customer or customer's designated representative and approved by JCSA Engineering.

Others to be established when needed

The purpose of the retail service charge is to defray all other costs of providing wastewater collection, and in certain cases, treatment for domestic, commercial, and industrial uses including replacement, renewals, extensions, and repayment of moneys borrowed to acquire or construct the wastewater collection transmission system.

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Rates and Fees

Water Charges

(a) System Facilities Charge

A system facilities charge for water service to be furnished through each new separate service connection which is to be made to a public water main, regardless of who may have paid for the installation of the public water main to which the connection is to be made, shall be paid by each applicant for service prior to the installation of the water service connection, as follows.

Commercial, industrial, institutional, multi-family residential and single-family residential:

Meter Size	Charge
5/8" Residential	$500 per bathroom fixture
5/8" Nonresidential	2,500
3/4"	3,500
1"	4,000
1 1/2"	7,500
2"	12,000
3"	24,000
4"	37,000
6"	75,000

The purpose of this charge is to defray in part the cost of providing major supply, transmission main, booster pumping, and distribution storage facilities. The charge shall be paid prior to the issuance of a plumbing permit from Building Safety and Permits.

(b) Local Facilities Charge

A local facilities charge of $1,300 for each separate connection to an existing water main shall be paid by each applicant who desires to secure water service therefrom, which charge shall be paid prior to the approval of the application for service; provided, however, in any instance where satisfactory evidence shows that an applicant for a connection has paid the cost of installation of the local facility to which the connection is to be made, whether by installing the local facility at his expense and then conveying the same to the Authority (or its predecessors) or by reimbursing the Authority (or its predecessors) for the cost of such local facility, the local facilities charge shall be waived.

The purpose of this charge is to defray, in part, the cost of installing mains, valves, and fire hydrants which are necessary to provide water service to abutting properties and which have been provided at the expense of the Authority or persons, firms, or corporations other than the applicant. The charge shall be paid prior to the issuance of a plumbing permit from Building Safety and Permits.

(c) Service Connection Charge

A service connection charge shall be paid by each applicant for each new service connection and meter installation prior to the approval of the application, as follows:

Installation of Connection by	Collection
Developer	$10 per meter inspection fee
Utility	Actual cost x 1.25, including overhead

The purpose of this charge is to defray the cost of installation or inspection of a service connection from the water main in the street to the curb or property line and the installation of a meter either at the curb or property line or within the premise.

(d) Retail Service Charge

Each customer bill shall include a Fixed Charge based upon the size of the meter serving the customer. The Fixed Charge for each billing cycle shall be calculated based on the quarterly fixed charge chart below. This Fixed Charge is for expenses associated with operating and maintaining the water distribution system.

Meter Size	Quarterly Fixed Charge
5/8"	$ 10.56
3/4"	$ 15.83
1"	$ 26.38
1 1/2"	$ 52.75
2"	$ 84.41
3"	$ 168.81
4"	$ 263.76
6"	$ 527.53
8"	$ 844.04
10"	$ 1,213.32

Water service shall be based upon a commodity charge for all consumption, as follows:

Single Family Residential	Quarterly Use		
Meter Size	Tier 1	Tier 2	Tier 3
5/8"	0-15,000	15,001-30,000	30,000+
3/4"	0-22,500	22,501-45,000	45,000+
1"	0-37,500	37,501-75,000	75,000+
1 1/2"	0-75,000	75,001-150,000	150,000+
2"	0-120,000	120,001-240,000	240,000+
3"	0-240,000	240,001-480,000	480,000+
4"	0-375,000	375,001-750,000	750,000+
6"	0-750,000	750,001-1,500,000	1,500,000+
8"	0-1,200,000	1,200,001-2,400,000	2,400,000+
10"	0-1,725,000	1,725,001-3,450,000	3,450,000+
Rate Per 1,000 Gallons	$ 3.61	$ 7.22	$ 16.95

Multi-Family Residential and Non-Residential

All Meter Sizes	All Use
Rate per 1,000 Gallons	$ 5.33

The purpose of the retail service charge is to defray all costs of providing water service for domestic, commercial, and industrial uses and for firefighting purposes, including repayment of moneys borrowed to acquire or construct the water system; operation and maintenance; and renewals, replacements and extensions.

Exceptions to Local System Facilities Charges

The provisions of Regulations Governing Utility Service, Section 29 above, shall be observed when there is a conflict between Section 29 and the provisions of Sections 32(b) and 32(c) above.

Billing and Account Charges

The below charges shall be assessed for any customer billed by the Authority.

(a) Account Charges

An account charge of $10 ($20 if the meter is read) shall be paid for each applicant for continuing service, whether for a new account or for a transfer of account, for water and/or wastewater service. The purpose of this charge is to defray the cost incurred in clerical and bookkeeping activities, the turning on of services, and/or meter reading required for each new account or transfer of account.

(b) Transaction Charge for Late Payment

A transaction charge for late payment of 1.5% will be assessed on the balance due once the bill is delinquent and then every 30 days thereafter. The late charge will be added to a bill in the event the bill is not paid within 21 days following the date thereof.

(c) Interest Charge for Late Payment with a Lien

An interest charge for late payment of 8% simple interest on the principal (delinquent amount) due, shall be added to any account when a lien has been placed upon real estate. Such lien on any real estate may be discharged by the payment to the Authority of the total lien amount, penalty, and the interest which has accrued to the date of the payment.

(d) Restoration of Service Charge

Where service has been terminated on account of the nonpayment of any bill, a restoration of service charge of $30 ($100 for a single service wastewater customer not on metered water service) shall be paid before service is restored, except as defined in Section 17(A)(2).

The purpose of this charge is to defray the expenses of terminating and restoring services, including clerical and bookkeeping activities.

(e) Meter Test Deposit

A test of a water meter shall be done at the request of a water customer upon payment of a meter test deposit as defined in Regulations Governing Utility Service Section I (1). If the meter is found to be 3% or more fast, then the deposit shall be refunded. If inoperable or 25% or more slow, the deposit shall be credited against a revised billing. The deposit shall be determined by meter size, as set out in the following:

Meter Size	Deposit
5/8" to 1"	$ 75.00
Greater than 1"	100.00

(f) Fire Hydrant Charge

For customer-requested hydrants installed under the provisions of Regulations Governing Utility Service Section 21, there shall be an installation cost of actual cost plus an allowance of 25% for overhead. The applicant shall deposit with the Authority an estimated fee prepared by the Authority, subsequently adjusted at the completion of the installation with costs exceeding the estimate billed or, in case the estimate exceeds the cost, refunded to the applicant.

The purpose of this charge is to assess to the user the cost of installing fire hydrants for the benefit of the applicant.

(g) Temporary Water Service Charge

Under the provisions of Section 22, an applicant for temporary service shall pay, upon application, for the estimated costs of installing, replacing, and removing the facilities which are required to furnish such services plus an allowance of 25% for overhead. The applicant shall receive a refund if the estimate exceeds the actual. The applicant shall also pay service charges and all charges caused by a late payment or nonpayment. The applicant may also be required to post a deposit as described in Regulations Governing Utility Service Section 6.

(h) Fire Connection Detector Check Meter Charge

Fire connection detector check meters shall be read and billed at least annually or on a more frequent basis, as determined by the Authority. Rates governing normal water usage shall be assessed. Fire connection detector check meters monitor nonfire flow usage from a fire connection and there should be little or no water activity.

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Rates and Fees

Multiple Charges Bills

All charges and fees above are in addition to charges and fees assessed and owed to Newport News Waterworks, HRSD, or any other private or municipal utility.

No Free Service

There shall be no utility service provided to any customer without the assessment of service charges.

Plan Review Fee

The following are the charges that shall be assessed for the appropriate plan. The purpose of this charge is to defray cost incurred for time used to provide engineer technical review.

Document	Collection
Rezonings:	
5 acres or less	$ 100
Greater than 5; but less than 10 acres	150
Greater than 10 acres	200
Special use permits:	
General	200
Family subdivision	50
Wireless communication facilities	50
Other	50
Site plans:	
Administrative review:	
Residential structure (multi-family)	300 plus $5 per unit
Nonresidential structure	300
Mixed use structure	200 plue $5 per residential unit
Utility easement plat service	300
Planning commission review:	
Residential structure (multi-family)	300 plus $5 per unit
Nonresidential structure	300
Mixed use structure	300 plue $5 per residential unit
Utility easement plat service	300
Amendment to an approved plan:	
Residential structure (multi-family)	150 plus $2 per unit
Nonresidential structure	150
Mixed use structure	150 plus $2 per residential unit
Utility easement plat service	150
Each additional review after second resubmission	150
Master plan review:	
Initial review	600
Revision of plan	600
Conceptual plan for water and sewer:	
General	100
Master utility plans and modeling	300
Each additional review after second resubmission	150
Subdivision plan review:	
No public improvements required	75
Public improvements required	300 per plan plus $5 per lot
Wastewater pumping station	2,000
Well facility	3,000
Each additional review after second resubmission	150

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)

Rates and Fees

Inspection

There shall be an inspection fee of $25 for the third and subsequent inspections for water and sewer service connections. These will include, but are not limited to, water meter box installations, water and sewer service line connections, and grinder pump installations. This charge will be paid prior to the third/or subsequent inspections. The purpose of this fee is to defray the expense of making multiple on-site inspections to correct previously identified deficiencies.

Inspection Fee for Water and Sewer Lines

There shall be a fee for the inspection of public water and sewer installations. Such fee shall be $2.87 per foot for every foot of water main and sewer main constructed and shall be submitted at the time of filing an application for a land disturbance permit.

Sub-Meter Account Charge

An account charge of $18 shall be paid annually by each customer who has established a sub-meter account. The payment for this charge will be prorated in equal amounts in the customer utility service charge billing.

COMPLIANCE SECTION

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
James City Service Authority
Williamsburg, Virginia

We have audited, in accordance with the auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; and the *Specifications for Audits of Authorities, Boards, and Commissions*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia, the financial statements of the business-type activities of the James City Service Authority (the "Authority") as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise James City Service Authority's basic financial statements, and have issued our report thereon dated November 25, 2019.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority'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 opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority'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 a 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 a 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 over financial reporting 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 James City Service Authority's financial statements are free of material misstatement, we performed tests of its 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 purposes.

Brown, Edwards & Company, L.L.P.

CERTIFIED PUBLIC ACCOUNTANTS

Newport News, Virginia
November 25, 2019

INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE WITH COMMONWEALTH OF VIRGINIA LAWS, REGULATIONS, CONTRACTS AND GRANTS

To the Board of Directors
James City Service Authority
Williamsburg, Virginia

We have audited the financial statements of the James City Service Authority, as of and for the year ended June 30, 2019, and have issued our report thereon November 25, 2019.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and *Specifications for Audits of Boards, Commissions and Authorities*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia. Those standards and specifications require that we plan and perform the audit to obtain reasonable assurance about whether the general-purpose financial statements are free of material misstatement.

Compliance with Commonwealth of Virginia laws, regulations, contracts and grants applicable to the James City Service Authority, is the responsibility of the James City Service Authority's management. As part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we performed tests of the James City Service Authority's compliance with certain provisions of the Commonwealth of Virginia's laws, regulations, contracts, and grants. However, the objective of our audit of the financial statements was not to provide an opinion on overall compliance with such provisions. Accordingly, we do not express such an opinion.

Following is a summary of the Commonwealth of Virginia's laws, regulations, contracts and grants for which we performed tests of compliance:

Code of Virginia

- Cash and Investments Laws
- Conflicts of Interest Act
- Local Retirement Systems
- Procurement Laws
- Uniform Disposition of Unclaimed Property Act

The results of our tests disclosed no instances of noncompliance with the provisions referred to in the preceding paragraph. With respect to items not tested, nothing came to our attention that caused us to believe that the James City Service Authority had not complied, in all material respects, with those provisions.

This report is intended solely for the information and use of the Board of Directors and management of James City Service Authority, and the Auditor of Public Accounts and all applicable state agencies and is not intended to be, and should not be, used by anyone other than these specified parties.

Brown, Edwards & Company, L.L.P.

CERTIFIED PUBLIC ACCOUNTANTS

Newport News, Virginia
November 25, 2019

Report to the
Board of Directors

JAMES CITY SERVICE AUTHORITY

June 30, 2019

BROWNEDWARDS
certified public accountants

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BROWNEDWARDS
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REQUIRED COMMUNICATIONS WITH THOSE CHARGED WITH GOVERNANCE

November 25, 2019

To the Board of Directors
James City Service Authority

We have audited the financial statements of James City Service Authority (the "Authority") for the year ended June 30, 2019, and have issued our report thereon dated November 25, 2019. Professional standards require that we provide you with information about our responsibilities in accordance with auditing standards generally accepted in the United States of America, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated April 10, 2019. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by James City Service Authority are described in Note 1 to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during 2019. We noted no transactions entered into by James City Service Authority during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management, and are based on management's knowledge and experience about past and current events, and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the financial statements were:

> Management's estimate of the Other Postemployment Benefits (OPEB) liability is based on the valuation received from the independent actuary. We evaluated the key factors and assumptions used to develop the OPEB liability in determining that it is reasonable in relation to the financial statements taken as a whole.
>
> Management's estimate of the pension liability is based on the valuation received from the independent actuary. We evaluated the key factors and assumptions used to develop the pension liability in determining that it is reasonable in relation to the financial statements taken as a whole.
>
> Management's estimate of the depreciable lives is based on the James City County policy. We evaluated the key factors and assumptions in determining asset lives in determining that it is reasonable in relation to the financial statement taken as a whole.

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Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the financial statements include those related to capital assets, long-term debt, commitments and contingencies, pension, and other post-employment liabilities.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all misstatements identified during the audit, other than those that are trivial, and communicate them to the appropriate level of management. We are pleased to report that there were no uncorrected misstatements or audit adjustments posted.

Disagreements with Management

For purposes of this letter, professional standards define a disagreement with management as a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter included in Appendix A.

Management Consultations with Other Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the Authority's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Significant Matters, Findings, or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the Authority's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

<u>Other Matters</u>

We applied certain limited procedures to Management's Discussion and Analysis and the Required Supplementary Information as listed in the Table of Contents, which are required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding 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 did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were engaged to report on schedules by activity which accompany the financial statements but are not RSI. With respect to this supplementary information accompanying the financial statements, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

We were not engaged to report on the introductory and statistical sections, which accompanies the financial statements but are not RSI. Such information has 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 it.

Restriction on Use

This information is intended solely for the use of the Board of Directors and management of James City Service Authority and is not intended to be, and should not be, used by anyone other than these specified parties.

Sincerely,

Brown, Edwards & Company, L.L.P.

CERTIFIED PUBLIC ACCOUNTANTS

Newport News, Virginia

NEW GASB PRONOUNCEMENTS

In this section, we would like to make you aware of certain confirmed and potential changes that are on the horizon that may affect your financial reporting and audit.

The GASB issued **Statement No. 84**, ***Fiduciary Activities*** in January 2017. The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported.

This Statement establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and postemployment benefit arrangements that are fiduciary activities.

An activity meeting the criteria should be reported in a fiduciary fund in the basic financial statements. Governments with activities meeting the criteria should present a statement of fiduciary net position and a statement of changes in fiduciary net position. An exception to that requirement is provided for a business-type activity that normally expects to hold custodial assets for three months or less.

This Statement describes four fiduciary funds that should be reported, if applicable: (1) pension (and other employee benefit) trust funds, (2) investment trust funds, (3) private-purpose trust funds, and (4) custodial funds. Custodial funds generally should report fiduciary activities that are not held in a trust or equivalent arrangement that meets specific criteria.

A fiduciary component unit, when reported in the fiduciary fund financial statements of a primary government, should combine its information with its component units that are fiduciary component units and aggregate that combined information with the primary government's fiduciary funds.

This Statement also provides for recognition of a liability to the beneficiaries in a fiduciary fund when an event has occurred that compels the government to disburse fiduciary resources. Events that compel a government to disburse fiduciary resources occur when a demand for the resources has been made or when no further action, approval, or condition is required to be taken or met by the beneficiary to release the assets.

The requirements of this Statement are effective for periods beginning after December 15, 2018.

The GASB issued **Statement No. 87**, ***Leases*** in June 2017. The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities.

Definition of a Lease

A lease is defined as a contract that conveys control of the right to use another entity's nonfinancial asset (the underlying asset) as specified in the contract for a period of time in an exchange or exchange-like transaction. Examples of nonfinancial assets include buildings, land, vehicles, and equipment. Any contract that meets this definition should be accounted for under the leases guidance, unless specifically excluded in this Statement.

Lease Term

The lease term is defined as the period during which a lessee has a noncancelable right to use an underlying asset, plus the following periods, if applicable:

a. Periods covered by a lessee's option to extend the lease if it is reasonably certain, based on all relevant factors, that the lessee will exercise that option.
b. Periods covered by a lessee's option to terminate the lease if it is reasonably certain, based on all relevant factors, that the lessee will not exercise that option.
c. Periods covered by a lessor's option to extend the lease if it is reasonably certain, based on all relevant factors, that the lessor will exercise that option.
d. Periods covered by a lessor's option to terminate the lease if it is reasonably certain, based on all relevant factors, that the lessor will not exercise that option.

A fiscal funding or cancellation clause should affect the lease term only when it is reasonably certain that the clause will be exercised.

Lessees and lessors should reassess the lease term only if one or more of the following occur:

a. The lessee or lessor elects to exercise an option even though it was previously determined that it was reasonably certain that the lessee or lessor would not exercise that option.
b. The lessee or lessor elects not to exercise an option even though it was previously determined that it was reasonably certain that the lessee or lessor would exercise that option.
c. An event specified in the lease contract that requires an extension or termination of the lease takes place.

Short-Term Leases

A short-term lease is defined as a lease that, at the commencement of the lease term, has a maximum possible term under the lease contract of 12 months (or less), including any options to extend, regardless of their probability of being exercised. Lessees and lessors should recognize short-term lease payments as outflows of resources or inflows of resources, respectively, based on the payment provisions of the lease contract.

Lessee Accounting

A lessee should recognize a lease liability and a lease asset at the commencement of the lease term, unless the lease is a short-term lease or it transfers ownership of the underlying asset. The lease liability should be measured at the present value of payments expected to be made during the lease term (less any lease incentives). The lease asset should be measured at the amount of the initial measurement of the lease liability, plus any payments made to the lessor at or before the commencement of the lease term and certain direct costs.

A lessee should reduce the lease liability as payments are made and recognize an outflow of resources (for example, expense) for interest on the liability. The lessee should amortize the lease asset in a systematic and rational manner over the shorter of the lease term or the useful life of the underlying asset. The notes to financial statements should include a description of leasing arrangements, the amount of lease assets recognized, and a schedule of future lease payments to be made.

Lessor Accounting

A lessor should recognize a lease receivable and a deferred inflow of resources at the commencement of the lease term, with certain exceptions for leases of assets held as investments, certain regulated leases, short-term leases, and leases that transfer ownership of the underlying asset. A lessor should not derecognize the asset underlying the lease. The lease receivable should be measured at the present value of lease payments expected to be received during the lease term. The deferred inflow of resources should be measured at the value of the lease receivable plus any payments received at or before the commencement of the lease term that relate to future periods.

A lessor should recognize interest revenue on the lease receivable and an inflow of resources (for example, revenue) from the deferred inflows of resources in a systematic and rational manner over the term of the lease. The notes to financial statements should include a description of leasing arrangements and the total amount of inflows of resources recognized from leases.

Contracts with Multiple Components and Contract Combinations

Generally, a government should account for the lease and nonlease components of a lease as separate contracts. If a lease involves multiple underlying assets, lessees and lessors in certain cases should account for each underlying asset as a separate lease contract. To allocate the contract price to different components, lessees and lessors should use contract prices for individual components as long as they do not appear to be unreasonable based on professional judgment, or use professional judgment to determine their best estimate if there are no stated prices or if stated prices appear to be unreasonable. If determining a best estimate is not practicable, multiple components in a lease contract should be accounted for as a single lease unit. Contracts that are entered into at or near the same time with the same counterparty and that meet certain criteria should be considered part of the same lease contract and should be evaluated in accordance with the guidance for contracts with multiple components.

Lease Modifications and Terminations

An amendment to a lease contract should be considered a lease modification, unless the lessee’s right to use the underlying asset decreases, in which case it would be a partial or full lease termination. A lease termination should be accounted for by reducing the carrying values of the lease liability and lease asset by a lessee, or the lease receivable and deferred inflows of resources by the lessor, with any difference being recognized as a gain or loss. A lease modification that does not qualify as a separate lease should be accounted for by remeasuring the lease liability and adjusting the related lease asset by a lessee and remeasuring the lease receivable and adjusting the related deferred inflows of resources by a lessor.

Subleases and Leaseback Transactions

Subleases should be treated as transactions separate from the original lease. The original lessee that becomes the lessor in a sublease should account for the original lease and the sublease as separate transactions, as a lessee and lessor, respectively.

A transaction qualifies for sale-leaseback accounting only if it includes a sale. Otherwise, it is a borrowing. The sale and lease portions of a transaction should be accounted for as separate sale and lease transactions, except that any difference between the carrying value of the capital asset that was sold and the net proceeds from the sale should be reported as a deferred inflow of resources or a deferred outflow of resources and recognized over the term of the lease.

A lease-leaseback transaction should be accounted for as a net transaction. The gross amounts of each portion of the transaction should be disclosed.

The requirements of this Statement are effective for periods beginning after December 15, 2019.

The GASB issued **Statement No. 89**, ***Accounting for Interest Cost Incurred before the End of a Construction Period*** in June 2018. The objectives of this Statement are (1) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) to simplify accounting for interest cost incurred before the end of a construction period.

This Statement establishes accounting requirements for interest cost incurred before the end of a construction period. Such interest cost includes all interest that previously was accounted for in accordance with the requirements of paragraphs 5–22 of Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, which are superseded by this Statement. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund.

This Statement also reiterates that in financial statements prepared using the current financial resources measurement focus, interest cost incurred before the end of a construction period should be recognized as an expenditure on a basis consistent with governmental fund accounting principles.

The requirements of this Statement are effective for periods beginning after December 15, 2019. The requirements of this Statement should be applied prospectively.

The GASB issued **Statement No. 90**, ***Major Equity Interests, an amendment of GASB Statements No. 14 and No. 61*** in August 2018. This Statement improves the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and improves the relevance of financial statement information for certain component units. It defines a majority equity interest and specifies that a majority equity interest in a legally separate organization should be reported as an investment if a government's holding of the equity interest meets the definition of an investment. A majority equity interest that meets the definition of an investment should be measured using the equity method, unless it is held by a special-purpose government engaged only in fiduciary activities, a fiduciary fund, or an endowment (including permanent and term endowments) or permanent fund. Those governments and funds should measure the majority equity interest at fair value.

For all other holdings of a majority equity interest in a legally separate organization, a government should report the legally separate organization as a component unit, and the government or fund that holds the equity interest should report an asset related to the majority equity interest using the equity method. This Statement establishes that ownership of a majority equity interest in a legally separate organization results in the government being financially accountable for the legally separate organization and, therefore, the government should report that organization as a component unit.

This Statement also requires that a component unit in which a government has a 100 percent equity interest account for its assets, deferred outflows of resources, liabilities, and deferred inflows of resources at acquisition value at the date the government acquired a 100 percent equity interest in the component unit. Transactions presented in flows statements of the component unit in that circumstance should include only transactions that occurred subsequent to the acquisition.

The requirements of this Statement are effective for periods beginning after December 15, 2018. The requirements should be applied retroactively, except for the provisions related to (1) reporting a majority equity interest in a component unit and (2) reporting a component unit if the government acquires a 100 percent equity interest. Those provisions should be applied on a prospective basis.

The GASB issued **Statement No. 91**, ***Conduit Debt Obligations*** in May 2019. The primary objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. This Statement achieves those objectives by clarifying the existing definition of a conduit debt obligation; establishing that a conduit debt obligation is not a liability of the issuer; establishing standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improving required note disclosures.

A conduit debt obligation is defined as a debt instrument having all of the following characteristics:

- There are at least three parties involved: (1) an issuer, (2) a third-party obligor, and (3) a debt holder or a debt trustee.
- The issuer and the third-party obligor are not within the same financial reporting entity.
- The debt obligation is not a parity bond of the issuer, nor is it cross-collateralized with other debt of the issuer.
- The third-party obligor or its agent, not the issuer, ultimately receives the proceeds from the debt issuance.
- The third-party obligor, not the issuer, is primarily obligated for the payment of all amounts associated with the debt obligation (debt service payments).

All conduit debt obligations involve the issuer making a limited commitment. Some issuers extend additional commitments or voluntary commitments to support debt service in the event the third party is, or will be, unable to do so.

An issuer should not recognize a conduit debt obligation as a liability. However, an issuer should recognize a liability associated with an additional commitment or a voluntary commitment to support debt service if certain recognition criteria are met. As long as a conduit debt obligation is outstanding, an issuer that has made an additional commitment should evaluate at least annually whether those criteria are met. An issuer that has made only a limited commitment should evaluate whether those criteria are met when an event occurs that causes the issuer to reevaluate its willingness or ability to support the obligor's debt service through a voluntary commitment.

This Statement also addresses arrangements—often characterized as leases—that are associated with conduit debt obligations. In those arrangements, capital assets are constructed or acquired with the proceeds of a conduit debt obligation and used by third-party obligors in the course of their activities. Payments from third-party obligors are intended to cover and coincide with debt service payments. During those arrangements, issuers retain the titles to the capital assets. Those titles may or may not pass to the obligors at the end of the arrangements.

Issuers should not report those arrangements as leases, nor should they recognize a liability for the related conduit debt obligations or a receivable for the payments related to those arrangements. In addition, the following provisions apply:

- If the title passes to the third-party obligor at the end of the arrangement, an issuer should not recognize a capital asset.
- If the title does not pass to the third-party obligor and the third party has exclusive use of the entire capital asset during the arrangement, the issuer should not recognize a capital asset until the arrangement ends.
- If the title does not pass to the third-party obligor and the third party has exclusive use of only portions of the capital asset during the arrangement, the issuer, at the inception of the arrangement, should recognize the entire capital asset and a deferred inflow of resources. The deferred inflow of resources should be reduced, and an inflow recognized, in a systematic and rational manner over the term of the arrangement.

This Statement requires issuers to disclose general information about their conduit debt obligations, organized by type of commitment, including the aggregate outstanding principal amount of the issuers' conduit debt obligations and a description of each type of commitment. Issuers that recognize liabilities related to supporting the debt service of conduit debt obligations also should disclose information about the amount recognized and how the liabilities changed during the reporting period.

The requirements of this Statement are effective for periods beginning after December 15, 2020.

CURRENT GASB PROJECTS

GASB currently has a variety of projects in process. Some of these projects discussed below.

Conceptual Framework – Recognition. The project's objective is to develop recognition criteria for *whether* information should be reported in state and local governmental financial statements and *when* that information should be reported. This project ultimately will lead to a Concepts Statement on recognition of elements of financial statements. The project is currently in deliberations with an exposure draft expected in February 2020, and concepts Statement draft in November 2021.

Conceptual Framework – Disclosure. The project's objective is to develop concepts related to a framework for the development and evaluation of notes to financial statements for the purpose of improving the effectiveness of note disclosures in government financial reports. The framework will establish criteria for the Board to use in evaluating potential note disclosure requirements during future standards-setting activities and in reexamining existing note disclosure requirements. Those concepts also will provide governments a basis for considering the essentiality of information items for which the GASB does not specifically provide authoritative disclosure guidance. This project is currently in deliberations with an exposure draft expected in March 2021, and a Concepts Statement draft in April 2022.

Financial Reporting Model. The objective of this project is to make improvements to the financial reporting model, including Statement No. 34, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments*, and other reporting model-related pronouncements (Statements No. 35, *Basic Financial Statements – and Management's Discussion and Analysis – for Public Colleges and Universities*, No. 37, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments: Omnibus*, No. 41, *Budgetary Comparison Schedules – Perspective Differences*, and No. 46, *Net Assets Restricted by Enabling Legislation, and Interpretation No. 6*, *Recognition and Measurement of Certain Liabilities and Expenditures in Governmental Fund Financial Statements*). The objective of these improvements would be to enhance the effectiveness of the model in providing information that is essential for decision-making and enhance the ability to assess a government's accounting and address certain application issues, based upon the results of the pre-agenda research on the financial reporting model. The project is currently in deliberations with an exposure draft expected in February 2020, and a final Statement draft in November 2021.

Public-Private Partnerships and Availability Payment Arrangements. The project's objective is to address accounting and financial reporting for public-private partnerships (PPPs) and availability payment arrangements (APAs). The project will consider: (1) potential amendments to Statement No. 60, *Accounting and Financial Reporting for Service Concession Arrangements*, and potential amended or new implementation guidance to better address accounting and financial reporting for service concession arrangements (SCAs) within its scope, (2) potential additional accounting and financial reporting guidance for other types of public-private partnerships not with the scope of Statement 60, or subject to the provisions of Statement No. 87, *Leases,* and (3) APAs. The project is currently in the exposure draft comment period with a final Statement draft expected in February 2020.

Revenue and Expense Recognition. The objective of this project is to develop a comprehensive application model for the classification, recognition, and measurement of revenues and expenses. The purpose for developing a comprehensive model is (1) to improve the information regarding revenues and expenses that users need to make decisions and assess accountability, (2) to provide guidance regarding exchange and exchange-like transactions that have not been specifically addressed, (3) to evaluate revenue and expense recognition in the context of the conceptual framework, and (4) to address application issues identified in practice, based upon the results of the pre-agenda research on revenue for exchange and exchange-like transactions. The project is currently in deliberations with an exposure draft expected in September 2021, and a final Statement draft in December 2022.

Appendix A
Management Representation Letter

JCSA
JAMES CITY SERVICE AUTHORITY

Operations Center
119 Tewning Road
Williamsburg, VA 23188-2639
P: 757-229-7421
F: 757-229-2463
jcsa@jamescitycountyva.gov

November 25, 2019

Brown, Edwards & Company L.L.P.
Fountain Plaza One
701 Town Center Drive, Suite 700
Newport News, VA 23606

This representation letter is provided in connection with your audit of the financial statements of James City Service Authority (the "Authority"), which comprise the *statement of net position* as of June 30, 2019 and the related statements of revenues, expenses, and changes in net position and cash flows for the year then ended, and the related notes to the financial statements, for the purpose of expressing an opinion on whether the financial statements are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP).

Certain representations in this letter are described as being limited to matters that are material. Items are considered material, regardless of size, if they involve an omission or misstatement of accounting information that, in the light of surrounding circumstances, makes it probable that the judgment of a reasonable person relying on the information would be changed or influenced by the omission or misstatement. An omission or misstatement that is monetarily small in amount could be considered material as a result of qualitative factors.

We confirm that, to the best of our knowledge and belief, having made such inquiries as we considered necessary for the purpose of appropriately informing ourselves as of the date of this letter:

Financial Statements

1. We have fulfilled our responsibilities, as set out in the terms of the audit engagement letter dated April 10, 2019, including our responsibility for the preparation and fair presentation of the financial statements in accordance with U.S. GAAP and for the preparation of the supplementary information in accordance with the applicable criteria.

2. The financial statements referred to above are fairly presented in conformity with U.S. GAAP and include all properly classified funds and other financial information required by generally accepted accounting principles to be included in the financial reporting entity.

3. We acknowledge our responsibility for 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.

4. We acknowledge our responsibility for the design, implementation, and maintenance of internal control to prevent and detect fraud.

5. Significant assumptions we used in making accounting estimates, including estimates of fair value, are reasonable.

6. The following have been properly accounted for and disclosed in the financial statements in accordance with U.S. GAAP:
   a) Related-party relationships and transactions, including revenues, expenses, loans, transfers, leasing arrangements, and guarantees, and amounts receivable from or payable to related parties;
   b) Guarantees, whether written or oral, under which the Authority is contingently liable;
   c) Other liabilities or gain or loss contingencies.

7. Significant estimates that may be subject to a material change in the near term have been properly disclosed in the financial statements. We understand that "near term" means the period within one year of the date of the financial statements. In addition, we have no knowledge of concentrations existing at the date of the financial statements that make the Authority vulnerable to the risk of severe impact that have not been properly disclosed in the financial statements.

8. There are no uncorrected misstatements or omitted disclosures. Also, there were no adjusting journal entries proposed by you.

9. We represent to you the following for the Authority's fair value measurements and disclosures:
   a) The underlying assumptions are reasonable and they appropriately reflect management's intent and ability to carry out its stated courses of action.
   b) The measurement methods and related assumptions used in determining fair value are appropriate in the circumstances and have been consistently applied.
   c) The disclosures related to fair values are complete, adequate, and in conformity with U.S. GAAP.
   d) There are no subsequent events that require adjustments to the fair value measurements and disclosures included in the financial statements.

10. The effects of all known actual or possible litigation and claims, if any, have been accounted for and disclosed in accordance with U.S. GAAP.

11. There are no component units or joint ventures that should be included or disclosed in the financial statements.

12. The financial statements properly classify all funds and activities.

13. Receivables recorded in the financial statements represent valid claims against debtors for transactions arising on or before the balance sheet date and have been properly reduced to their estimated net realizable value. No provision for uncollectible receivables is considered necessary.

14. Operating expenses have been appropriately classified in the statement of revenues, expenses, and changes in net position.

15. Operating revenues are appropriately classified in the statement of revenues, expenses, and changes in net position.

16. Inter-fund, internal, and intra-entity activity balances have been appropriately classified and reported.

17. Arrangements, if any, with financial institutions involving compensating balances or other arrangements involving restrictions on cash balances, lines of credit, or similar arrangements have been properly disclosed in the financial statements.

18. We review long-lived assets to be held and used for impairment whenever events or changes in circumstances indicate the carrying amount of such might not be recoverable and record an appropriate adjustment.

19. Net position components (net investment in capital assets; restricted; and unrestricted) are properly classified and, if applicable, approved.

20. All material transactions have been recorded in the accounting records and are reflected in the financial statements.

21. We have provided you with:
    a) Access to all information, of which we are aware, that is relevant to the preparation and fair presentation of the financial statements, such as records, documentation, and other matters.
    b) Additional information that you have requested from us for the purpose of the audit.
    c) Unrestricted access to persons within the entity from whom you determined it necessary to obtain audit evidence.
    d) Minutes of the meetings or summaries of actions of recent meetings for which minutes have not yet been prepared.

22. We have no knowledge of any fraud or suspected fraud affecting the Authority involving:
    a) Management,
    b) Employees who have significant roles in internal control,
    c) Service organizations used by the Authority, or
    d) Others where the fraud could have a material effect on the financial statements.

23. We have no knowledge of any allegations of fraud or suspected fraud affecting the Authority's financial statements received in communications from employees, former employees, analysts, regulators, short sellers, or others.

24. We have no knowledge of any instances of noncompliance or suspected noncompliance with laws, regulations, contracts, or grant agreements, or abuse, whose effects should be considered when preparing the financial statements.

25. We have disclosed to you the identity of the entity's related parties and all the related party relationships and transactions of which we are aware. Further, Bolton Partners, Inc. and Cavanaugh Macdonald Consulting, LLC, who performed our OPEB valuation, are not related to the Authority.

26. The Authority has no plans or intentions that may materially affect the carrying value or classification of assets, deferred outflows of resources, liabilities, deferred inflows of resources, or net position.

27. We have complied with all aspects of contractual agreements that would have a material effect on the financial statements in the event of noncompliance.

28. We are not aware of any pending or threatened litigation and claims whose effects should be considered when preparing the financial statements, and we have not contacted an attorney concerning such matters.

29. The Authority has satisfactory title to all owned assets and there are no liens or encumbrances on such assets nor has any asset been pledged as collateral.

30. Deposits and investment securities and derivative instruments are properly classified as to risk and are properly disclosed.

31. Capital assets, including infrastructure and intangible assets, are properly capitalized, reported, and, if applicable, depreciated.

Government—specific

32. We have made available to you all financial records and related data.

33. There have been no communications from regulatory agencies concerning noncompliance with, or deficiencies in, financial reporting practices.

34. We have identified to you any previous audits, attestation engagements, and other studies related to the audit objectives and whether related recommendations have been implemented.

35. We are responsible for compliance with the laws, regulations, and provisions of contracts and grant agreements applicable to us, including tax or debt limits and debt contracts; and we have identified and disclosed to you all laws, regulations, and provisions of contracts and grant agreements that we believe have a direct and material effect on the financial statement amounts or other financial data significant to the audit objectives, including legal and contractual provisions.

36. We have identified and disclosed to you all instances, which have occurred or are likely to have occurred, of fraud and noncompliance with provisions of laws and regulations that we believe have a material effect on the financial statements or other financial data significant to the audit objectives, and any other instances that warrant the attention of those charged with governance.

37. We have identified and disclosed to you all instances, which have occurred or are likely to have occurred, of noncompliance with provisions of contracts and grant agreements that we believe have a material effect on the determination of financial statement amounts or other financial data significant to the audit objectives.

38. We have identified and disclosed to you all instances that have occurred or are likely to have occurred, of abuse that could be quantitatively or qualitatively material to the financial statements or other financial data significant to the audit objectives.

39. There are no violations or possible violations of budget ordinances, laws and regulations (including those pertaining to adopting, approving, and amending budgets), provisions of contracts and grant agreements, tax or debt limits, and any related debt covenants whose effects should be considered for disclosure in the financial statements, or as a basis for recording a loss contingency, or for reporting on noncompliance.

40. We have followed all applicable laws and regulations in adopting, approving, and amending budgets.

41. We have appropriately disclosed the Authority's policy regarding whether to first apply restricted or unrestricted resources when an expense is incurred for purposes for which both restricted and unrestricted net position is available and have determined that net position is properly recognized under the policy.

42. We acknowledge our responsibility for the required supplementary information (RSI). The RSI is measured and presented within prescribed guidelines and the methods of measurement and presentation have not changed from those used in the prior period. We have disclosed to you any significant assumptions and interpretations underlying the measurement and presentation of the RSI.

43. With respect to the Schedules of Net Position – by Activity, Schedules of Revenues, Expenses, Changes in Net Position – by Activity, and Schedule of Operating Revenues and Expenses – Budget to Actual – by Activity (Supplementary Information).

a) We acknowledge our responsibility for presenting the supplementary information in accordance with accounting principles generally accepted in the United States of America, and we believe the supplementary information, including its form and content, is fairly presented in accordance with accounting principles generally accepted in the United States of America. The methods of measurement and presentation of the supplementary information have not changed from those used in the prior period, and we have disclosed to you any significant assumptions or interpretations underlying the measurement and presentation of the supplementary information.

b) If the supplementary information is not presented with the audited financial statements, we will make the audited financial statements readily available to the intended users of the supplementary information no later than the date we issue the supplementary information and the auditor's report thereon.

44. We reaffirm the representations made to other auditors in our letter dated October 31, 2018, regarding the audit for the fiscal year ended June 30, 2018.

We have evaluated subsequent events through the date of this letter, which is the date the financial statements were available to be issued. No events have occurred subsequent to the balance sheet date and through the date of this letter that would require adjustment to or disclosure in the aforementioned financial statements.

M. D. Powell

M. Douglas Powell, General Manager

Sharon Day

Sharon Day, Director of FMS, James City County

AGENDA ITEM NO. E.1.

ITEM SUMMARY

DATE:	12/10/2019
TO:	The Board of Directors
FROM:	M. Douglas Powell, General Manager, James City Service Authority
SUBJECT:	Changes to the Regulations Governing Utility Service - Meter for Private Water Supply

---

The attached resolution approves changes to the "Regulations Governing Utility Service" as outlined in the attachment. The proposed revision removes obsolete language permitting the installation of an Authority water meter on a private water supply.

ATTACHMENTS:

	Description	Type
🗋	Memo	Cover Memo
🗋	Resolution	Resolution
🗋	Attachment	Backup Material

REVIEWERS:

Department	Reviewer	Action	Date
James City Service Authority	Luton, Stephanie	Approved	11/25/2019 - 12:36 PM
Publication Management	Daniel, Martha	Approved	11/25/2019 - 1:23 PM
Legal Review	Kinsman, Adam	Approved	11/25/2019 - 1:28 PM
Board Secretary	Fellows, Teresa	Approved	11/27/2019 - 2:03 PM
Board Secretary	Purse, Jason	Approved	12/3/2019 - 9:51 AM
Board Secretary	Fellows, Teresa	Approved	12/3/2019 - 1:06 PM

M E M O R A N D U M

DATE: December 10, 2019

TO: The Board of Directors

FROM: M. Douglas Powell, General Manager, James City Service Authority

SUBJECT: Changes to the Regulations Governing Utility Service - Meter for Private Water Supply

---

The attached resolution approves changes to the "Regulations Governing Utility Service" as outlined in the attachment. The proposed revision removes obsolete language permitting the installation of an Authority water meter on a private water supply.

This revision is needed because the practice is inefficient to administer and exposes the Authority to operational risk. The Regulations already contain provisions for billing private well customers using a flat wastewater fee based on normal usage of comparable customers with metered connections to the public water system.

This practice is inefficient to administer because it requires a number of non-standard, manual activities and practices including a separate written agreement between the Authority and the customer in addition to the standard application for service, manual billing for the installation, and manual monitoring and non-cyclical billing for any subsequent maintenance activities including access to the meter. The Authority is exposed to operational risk because it has no maintenance or operational history for the private well and assumes responsibility for the continued safe and accurate operation of the meter.

The small number of customers with an Authority-owned meter on a private water supply would be grandfathered.

MDP/md
UtilServ-PrivWtr-mem

Attachment

R E S O L U T I O N

CHANGES TO THE REGULATIONS GOVERNING UTILITY SERVICE -

METER FOR PRIVATE WATER SUPPLY

WHEREAS, a change to the Regulations Governing Utility Service is required to remove obsolete language permitting the installation of an Authority water meter on a private water supply.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the James City Service Authority, James City County, Virginia, hereby adopts the change to Section 10, Meters and Meter Installation, Regulations Governing Utility Service as summarized in the attachment, which will become effective December 10, 2019.

BE IT FURTHER RESOLVED that the attachment showing the proposed changes be made part of this resolution.

____
P. Sue Sadler
Chairman, Board of Directors

ATTEST:

____
Teresa J. Fellows
Deputy Secretary to the Board

VOTES	AYE	NAY	ABSTAIN
HIPPLE	____	____	____
LARSON	____	____	____
MCGLENNON	____	____	____
ICENHOUR	____	____	____
SADLER	____	____	____

Adopted by the Board of Directors of the James City Service Authority, James City County, Virginia, this 10th day of November, 2019.

UtilServ-PrivWtr-res

G. Access to meters required. The Authority requires unobstructed access to its meters at all reasonable times. The Authority will inform the customer that unobstructed meter access is required. If access to the meter is regularly blocked by bushes or foliage, the meter reader may trim or remove the obstruction, as much as necessary to properly inspect the meter. When such access is regularly unavailable, the Authority may, after written notification, terminate service until the access problem is resolved to the satisfaction of the Authority.

H. Change in location, size. Upon request of the applicant the Authority shall change either the location or size or both of a meter when the applicant observes the following conditions:

1. Observance of applicable provisions of Section 8 (G) above.

2. For the installation of a larger meter, remittance of the difference between the meter sizes shall be based upon current system facility charges as prescribed in Section 32. A refund shall be made for a reduction in meter size.

3. If the applicant requests the Authority to relocate or replace the meter, then the applicant shall pay the cost of the upgrade in addition to the system facility charge.

~~I. Meter for private water supply. Upon written application to the Authority on a form furnished by the Authority, the Authority shall furnish, install and maintain at the applicant's expense, a water meter and required appurtenances on the private water supply which discharges into a public sewer. The meter shall be readily accessible to the Authority at reasonable times for periodic reading, inspection and maintenance. The Authority may authorize the applicant in writing to furnish and install the meter, subject to the approval of and inspection by the Authority. Such meter and appurtenances shall remain the property of the Authority. The Authority reserves the right to meter the private water supply of a single service wastewater customer.~~

J. Unauthorized Meter Removal. Upon installation, only Authority employees or designated representatives shall turn on, turn off, move, remove or replace a meter or any connections to it. Should the Authority determine that a customer has tampered with the meter or its connections, then the customer shall be subject to a $100 penalty. Each day such violation is committed or permitted to continue, shall constitute a separate offense and therefore shall be punishable with a $100 penalty. Payment will be made immediately and prior to reinstallment of service. Failure to pay the penalty promptly may result in the suspension of service to all other accounts in the customer's name. Payment of the penalty does not preclude the Authority from seeking additional legal remedies when deemed necessary.

AGENDA ITEM NO. I.1.

ITEM SUMMARY

DATE:	12/10/2019
TO:	The Board of Supervisors
FROM:	M. Douglas Powell, General Manager
SUBJECT:	Report

ATTACHMENTS:

	Description	Type
🗋	Memorandum	Cover Memo

REVIEWERS:

Department	Reviewer	Action	Date
Board Secretary	Fellows, Teresa	Approved	12/3/2019 - 2:37 PM

James City Service Authority

Operations Center
119 Tewning Road
Williamsburg, VA 23188-2639
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F: 757-229-2463
jcsa@jamescitycountyva.gov

GENERAL MANAGER'S UPDATE
DECEMBER, 2019

We have issued a purchase order for the next phase of easement clearing, which has just begun. Below is a list of the areas to be cleared. Work in these areas will occur for the next 3-6 months.

Area	Hours	Linear feet
Bowling Alley/Bruces	15	271
Chisel Run	22	760
First Colony	3	230
Forest Glen	60	1654
Giuseppe's/Ewell Shopping Center	8	344
Grove	114	3467
Kingsmill	260	6427
Longhill Station	8	176
Mooretown Rd	26	870
Pocahontas Trail Williamsburg	4	269
Rt 199 - Eastbound Easement Fords Colony	16	1091
Rt 199 - Westbound Easement (199 to Richmond RD)	21	1331
Rt 199 - Westbound Easement (199 to the Mews)	26	986
Seasons Trace	4	141
Williamsburg Plantation	8	149
Windsor Forest	4	356

All 6 of the lift station construction projects are nearing completion.

We have hired two Instrumentation and Control Specialists. One begins December 16 and the other begins

January 1. With their arrival, we will be fully staffed in the Support Section for the first time in over a year.

The SCADA Improvement Project continues to progress. A total of 32 facilities have now been fully converted.

We have issued a Purchase Order for the Five Forks Water Treatment Plant HVAC Improvements:

VDOT has approved the site plan for the College Creek Water Main Directional Drill Project.

Survey work and preliminary design are continuing for the White Oaks, Indigo Park, Jamestown Farm, and Canterbury Hills water main replacement project.

The Racefield groundwater permit application has been submitted to DEQ. The draft groundwater permit for Wexford Hills is in the public comment period.

AGENDA ITEM NO. J.1.

ITEM SUMMARY

DATE:	12/10/2019
TO:	The Board of Directors
FROM:	Teresa J. Fellows, Deputy Secretary
SUBJECT:	Adjourn until 4 p.m. on January 2, 2020 for the Organizational Meeting

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REVIEWERS:

Department	Reviewer	Action	Date
Board Secretary	Fellows, Teresa	Approved	12/3/2019 - 2:36 PM