

FY 2018



– photograph by Brittany Labr, one of the winners in the 2015 Rural Economic Development Photography Contest –

THE COMPREHENSIVE ANNUAL FINANCIAL REPORT



JAMES CITY SERVICE AUTHORITY

(A COMPONENT UNIT OF THE COUNTY OF JAMES CITY, VIRGINIA)

FOR THE FISCAL YEARS ENDED JUNE 30, 2018 AND 2017

PREPARED BY THE DEPARTMENT OF

FINANCIAL AND MANAGEMENT SERVICES

JAMES CITY COUNTY, VIRGINIA

JAMESCITYCOUNTYVA.GOV/JCSA

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

Comprehensive Annual Financial Report
(With Independent Auditors' Report Thereon)

For the Fiscal Years Ended
June 30, 2018 and 2017

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, 2018

Board of Directors

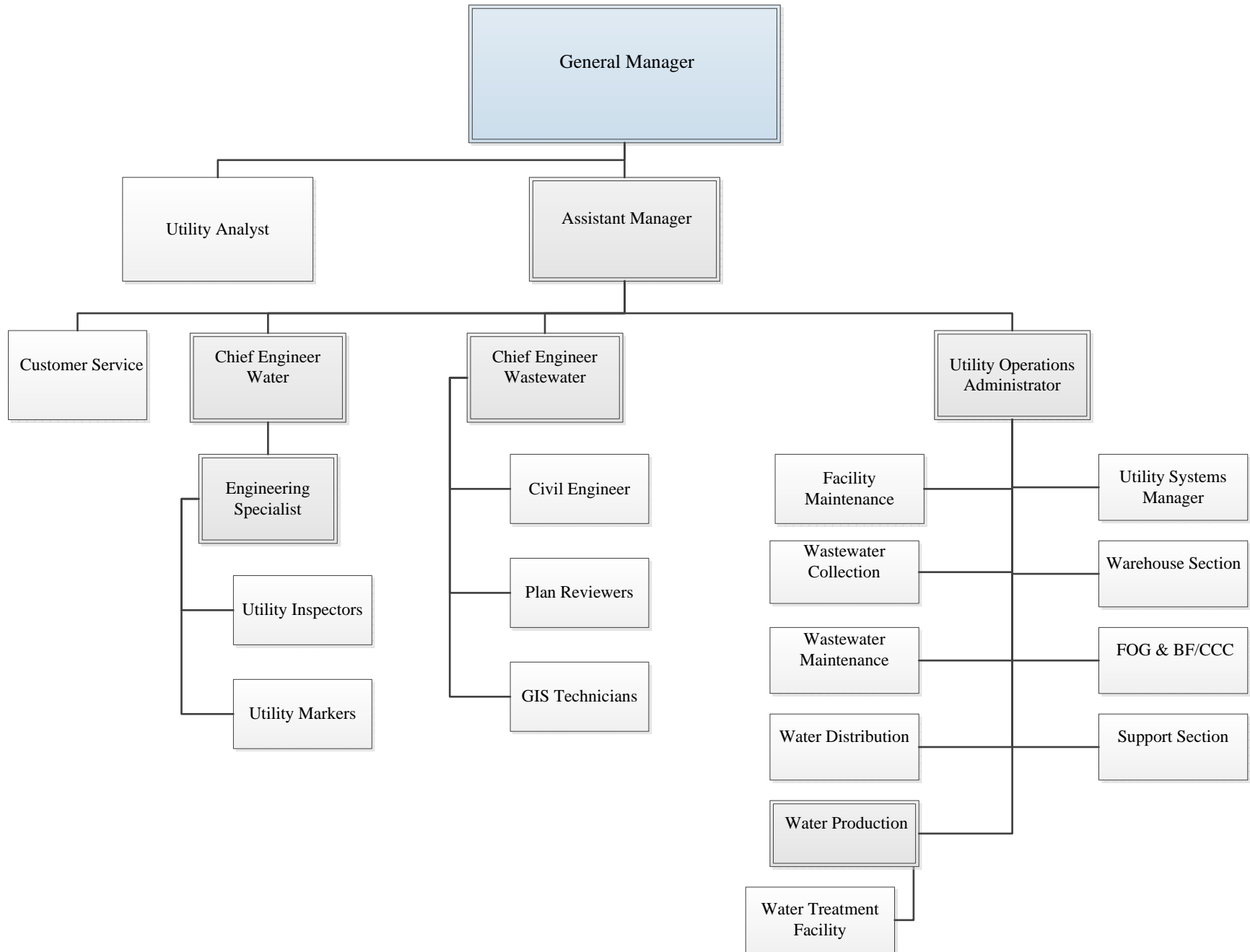
Sue Sadler, Chair
Michael J. Hipple, Vice-Chair
Ruth Larson
Jim Icenhour
John J. McGlennon

Officials

M. Douglas Powell
General Manager

Stephanie A. Luton
Assistant Manager/Treasurer

James City Service Authority Organization Chart





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

October 31, 2018

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, 2018 and 2017, 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 Dixon Hughes Goodman 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 auditors' 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 410 miles of water transmission and distribution lines throughout the entire system. The water system facilities supply approximately 5.1 million gallons of water per day to 22,540 water customers.

The JCSA's sewer system includes 76 pump stations with approximately 440 miles of sewer collection lines. The sewer system facilities collect and move approximately 5.4 million gallons of sewage per day for 24,286 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, 2018, the JCSA had 91 full-time and 2 part-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 11.5 percent from 2010 to 2017 while the Commonwealth of Virginia's population increased 5.9 percent 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 2018 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 2018, the quarterly water fixed charge was \$9.30 and the quarterly sewer fixed charge was \$5.89.

The first tier (0-15,000 gallons per quarter) water service rate for a typical single family residential customer increased from \$2.80 per 1,000 gallons to \$3.18. The second tier (15,001-30,000 gallons per quarter) rate increased from \$5.60 per 1,000 gallons to \$6.36, and the third tier (30,000+ gallons per quarter) rate increased from \$13.15 to \$14.93. The water service rate for non-residential and multi-family residential customers increased from \$4.14 per 1,000 gallons to \$4.70. The sewer service rate increased from \$2.99 to \$3.05 per 1,000 gallons of water consumed. The rate changes increased a typical 5,000 gallons per month residential customer's bill by \$2.61 per month from \$33.60 to \$36.21.

Capital Projects - Major multi-year projects continuing into 2018 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. Replacement of a deep production well at the Five Forks Water Treatment Facility was completed in fiscal year 2018. Wastewater projects completed in fiscal year 2018 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 design work was also completed in fiscal year 2018 for upgrading and flood proofing Lift

Station 5-4 on Merrimac Trail and replacing 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.

Under the Consolidation Plan, HRSD is responsible for preparing the Regional Wet Weather Management Plan (RWWMP) which details the major rehabilitation and capacity enhancement projects to be performed throughout the Hampton Roads region and reviewing the proposed improvements with JCSA and the 13 other localities.

HRSD has introduced a new initiative known as SWIFT (Sustainable Water Initiative for Tomorrow) which may significantly delay the RWWMP rehabilitation and capacity enhancement work if it receives regulatory approval. HRSD is proposing to treat already highly treated wastewater effluent to drinking water standards and return it to the aquifer. SWIFT is expected to benefit the region by replenishing groundwater, reducing or eliminating land subsidence, mitigating salt water intrusion into the aquifer, and providing a cost effective way of addressing regional stormwater obligations. EPA and DEQ are currently considering this proposal. If approved, HRSD proposes to fund SWIFT before the RWWMP to gain the greatest environmental benefit (reduction of nutrients to the Chesapeake Bay) before addressing SSOs. HRSD will have some funding available to address priority SSOs while SWIFT is under construction. The balance of the RWWMP will be constructed upon completion of SWIFT beyond 2030. In fiscal year 2018 HRSD proposed an amendment to the Consolidation Plan to better accommodate SWIFT's implementation. The amendment would extend the schedule for RWWMP work and assign HRSD the responsibility and liability for all regional wet weather overflows earlier than originally proposed.

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, 2017. This was the thirty-third 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.

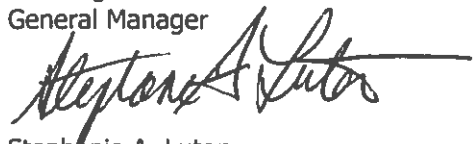
Acknowledgments

We 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. Also, 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.

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, 2017

Christopher P. Morill

Executive Director/CEO

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FINANCIAL SECTION

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Independent Auditors' Report

Board of Directors
James City Service Authority
Williamsburg, Virginia

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 years ended June 30, 2018 and 2017, 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.

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; 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 audits 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 auditors' 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 opinions.

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, 2018 and 2017, 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.

Emphasis of Matter

Changes in Accounting Principle

As discussed in Notes 1 and 9 to the financial statements, during 2018 the James City Service Authority implemented GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, which resulted in a cumulative effect adjustment to net position as of the beginning of the year. Our opinion is not modified with respect to these changes.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and schedules of changes in net pension asset and related ratios and employer contributions and related notes on pages 4 - 8 and 52 - 60 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information of 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 and actual - by activity on pages 61 - 63 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 October 31, 2018, 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 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.

Dixon Hughes Goodman LLP

**Newport News, VA
October 31, 2018**

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Management's Discussion and Analysis
June 30, 2018 and 2017

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, 2018 and 2017. 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 \$179,848,223 and \$178,818,258 at June 30, 2018 and 2017, respectively.
- ◆ Capital assets decreased by 3.0% in 2018 from 2017, primarily attributable to current year depreciation expense. For fiscal year 2018, there was formal acceptance of 3 new water system dedications and 4 new sewer system dedications.

Capital assets decreased by 2.1% in 2017 from 2016, primarily attributable to the decrease in water and sewer dedications as well as current year depreciation expense. For fiscal year 2017, there was formal acceptance of 5 new water system dedications and 4 new sewer system dedications.

- ◆ The Authority's total operating expenses before depreciation and amortization decreased by 2.7% in 2018 from 2017. The change was primarily attributable to a decrease in fringe benefits (mainly due to the OPEB adjustment) and maintenance expenses.

Total operating expenses before depreciation and amortization increased by 1.9% in 2017 from 2016. The increase was primarily attributable to higher fringe benefits expenses.

- ◆ The Authority's total operating revenues increased by 8.8% from 2017 and by 12.7% from 2016. The increases were primarily attributable to an increase in water and sewer rates.
- ◆ The Authority had a restatement of beginning net position in fiscal year 2018, due to the implementation of GASB 75. Additional information can be found in Notes 1 and 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, 2018 and 2017, 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.

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Management's Discussion and Analysis
June 30, 2018 and 2017

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 12.

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 57.

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

	6/30/2018	6/30/2017	6/30/2016
Current and other assets	\$ 51,034,603	\$ 45,806,328	\$ 40,940,536
Capital assets	153,554,105	158,226,696	161,615,472
Total assets	<u>204,588,708</u>	<u>204,033,024</u>	<u>202,556,008</u>
Deferred charge on refunding, net	1,663,079	1,739,250	1,815,422
Deferred pension/OPEB outflows	410,997	770,340	341,874
Total assets and deferred outflows	<u>\$ 206,662,784</u>	<u>\$ 206,542,614</u>	<u>\$ 204,713,304</u>
Current liabilities	\$ 2,604,572	\$ 2,723,593	\$ 2,443,765
Noncurrent liabilities	23,455,494	24,918,332	24,750,261
Total liabilities	<u>26,060,066</u>	<u>27,641,925</u>	<u>27,194,026</u>
Deferred pension/OPEB inflows	754,495	82,431	462,686
Net position:			
Net investment in capital assets	132,616,889	136,696,744	139,312,785
Restricted for debt service	567,011	677,614	729,605
Unrestricted	46,664,323	41,443,900	37,014,202
Total net position	<u>179,848,223</u>	<u>178,818,258</u>	<u>177,056,592</u>
Total liabilities, deferred inflows and net position	<u>\$ 206,662,784</u>	<u>\$ 206,542,614</u>	<u>\$ 204,713,304</u>

The largest portion of the Authority's net position at June 30, 2018 (73.7%), 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, 2018 (25.9%) 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.

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Management's Discussion and Analysis
June 30, 2018 and 2017

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

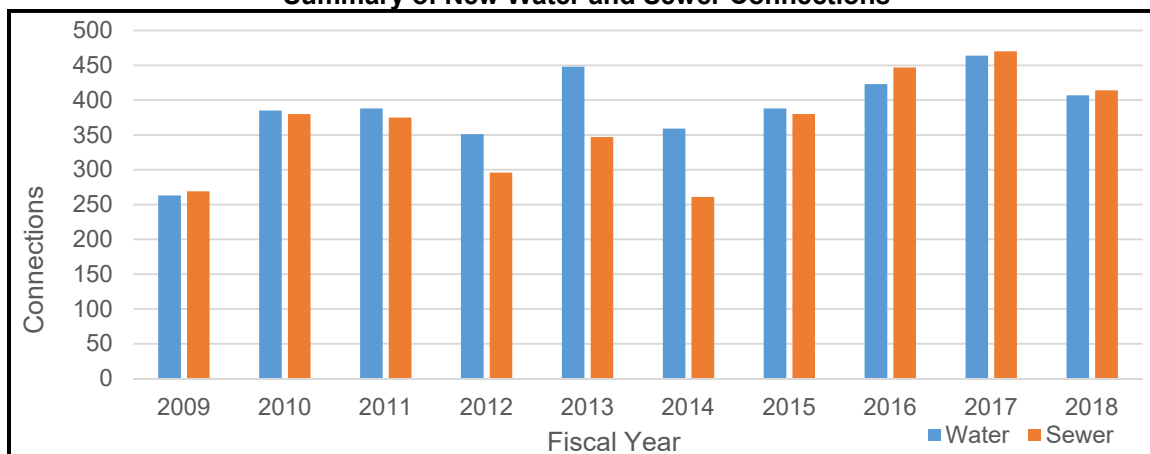
	6/30/2018	6/30/2017	6/30/2016
Water and sewer services	\$ 15,942,612	\$ 14,400,361	\$ 12,774,840
Other	726,432	923,851	817,963
Total operating revenues	16,669,044	15,324,212	13,592,803
Operating expenses	10,609,709	10,904,086	10,701,704
Depreciation and amortization	7,992,438	8,194,083	7,930,632
Total expenses	18,602,147	19,098,169	18,632,336
Facility charges	3,581,360	4,664,316	3,243,535
Other non-operating revenue (expenses), net	(875,941)	(637,907)	(805,615)
Total nonoperating revenues, net	2,705,419	4,026,409	2,437,920
Income (loss) before capital contributions	772,316	252,452	(2,601,613)
Capital contributions	796,235	1,509,214	6,865,346
Change in net position	1,568,551	1,761,666	4,263,733
Net position, beginning of year (as restated)	178,279,672	177,056,592	172,792,859
Net position, end of year	\$ 179,848,223	\$ 178,818,258	\$ 177,056,592

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 a decrease in facility charges (23.2%) during 2018 as 2017 included a large master metered multi-use project and three assisted living facilities.

In fiscal year 2017, water and sewer service revenue increased by 12.7% over 2016, primarily a result of the water and sewer rate increase. The Authority received \$298,054 in proffers from developers to fund capital improvements, which was \$79,067 more than the amount received in 2016. There was also an increase in the facility charges collected during 2017, primarily due to a large master metered multi-use project and three assisted living facilities.

The Authority's net position increased by \$1,568,551 in 2018 from 2017, which was primarily a result of increases in service revenue. The Authority's net position increased by \$1,761,666 in 2017 from 2016. This was primarily a result of increases in service revenue and facility charges.

Summary of New Water and Sewer Connections



JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Management's Discussion and Analysis
June 30, 2018 and 2017

Capital Assets

The following table summarizes the Authority's capital assets at June 30, 2018, 2017 and 2016:

Summary of Capital Assets, Net

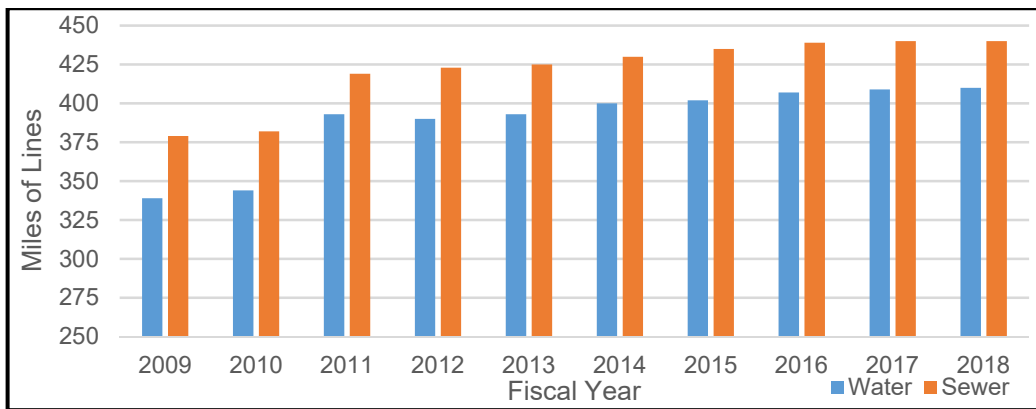
	6/30/2018	6/30/2017	6/30/2016
Utility plant	\$ 256,238,922	\$ 254,746,923	\$ 252,024,248
Nonutility plant	11,272,960	11,926,666	11,115,091
Intangible assets	25,004,570	25,004,570	25,004,570
Construction in progress	3,993,821	2,398,338	1,334,553
Less accum. depreciation and amortization	142,956,168	135,849,801	127,862,990
Net capital assets	<u>\$ 153,554,105</u>	<u>\$ 158,226,696</u>	<u>\$ 161,615,472</u>

At the end of fiscal year 2018, the Authority had invested \$153,554,105 (net of accumulated depreciation) in a broad range of capital assets. This was a decrease of \$4,672,591 from 2017, which was primarily the result of current year depreciation expense.

At the end of fiscal year 2017, the Authority had invested \$158,226,696 (net of accumulated depreciation) in a broad range of capital assets. This was a decrease of \$3,388,776 from 2016, which was primarily the result of decreased water and sewer system dedications during fiscal year 2017 as well as current year 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 2018 and 2017, the Authority's total outstanding bonded debt was \$21,205,000 (before premiums) and \$21,810,000 respectively.

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

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Management's Discussion and Analysis
June 30, 2018 and 2017

Economic Factors and Next Year Budgets and Rates

During the current fiscal year, the unrestricted net position increased by \$5,220,423 from 2017, to approximately \$46.7 million. The Authority appropriated \$974,208 of the unrestricted net position as part of the fiscal year 2019 capital budget to allow for an accelerated timeline for the meter replacement project.

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 2019 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.

Forty percent of the annual debt service payment will be made from Water Fund operating revenue, up from twenty percent in fiscal year 2018, and a larger proportion of the fiscal year 2019 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 adopted in fiscal year 2017.

The fiscal year 2019 Capital Improvements Program budget decreases slightly from \$7,584,449 in fiscal year 2018 to \$7,548,528.

The fiscal year 2019 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 \$2.74 per month from \$36.21 to \$38.95.

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 \$10.56 from \$9.30 and for sewer increases to \$5.95 from \$5.89.

The fiscal year 2019 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 \$3.18 per 1,000 gallons to \$3.61. The second tier (15,001-30,000 gallons per quarter) rate increases from \$6.36 per 1,000 gallons to \$7.22, and the third tier (30,000+ gallons per quarter) rate increases from \$14.93 to \$16.95. The water service rate for non-residential and multi-family residential customers increases from \$4.70 per 1,000 gallons to \$5.33. The sewer service rate increases from \$3.05 per 1,000 gallons to \$3.08.

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

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JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Statements of Net Position
June 30, 2018 and 2017

	2018	2017
Assets		
Current assets:		
Cash and cash equivalents (Note 2)	\$ 811,932	\$ 540,016
Investments (Note 2)	45,389,644	40,131,327
Restricted investments (Note 2)	567,011	677,614
Accounts receivable, customers	3,189,777	2,931,810
Accounts receivable, other	36,298	49,450
Note receivable (Note 3)	1,090	497,890
Interest receivable	165,999	134,824
Inventories	872,852	843,397
Total current assets	51,034,603	45,806,328
Noncurrent assets:		
Capital assets (Note 4):		
Non-depreciable	6,707,060	5,111,577
Depreciable	146,847,045	153,115,119
Net capital assets	153,554,105	158,226,696
Total assets	204,588,708	204,033,024
Deferred Outflows of Resources		
Deferred charge on refunding, net (Note 6)	1,663,079	1,739,250
Deferred pension (Note 7)	380,362	770,340
Deferred OPEB group life insurance (GLI) (Note 8)	22,168	-
Deferred OPEB health insurance credit (HIC) (Note 8)	8,467	-
Total deferred outflows of resources	2,074,076	2,509,590
Total assets and deferred outflows of resources	\$ 206,662,784	\$ 206,542,614
Liabilities		
Current liabilities:		
Accounts payable, trade	\$ 361,215	\$ 316,668
Accrued salaries	7,834	14,320
Compensated absences, current portion (Note 6)	301,496	308,913
Due to James City County (Note 11)	619,752	383,583
Deposits	287,962	190,732
Unearned revenue	-	496,800
Interest payable	332,406	343,670
Bonds payable, current portion (Note 6)	693,907	668,907
Total current liabilities	2,604,572	2,723,593
Noncurrent liabilities:		
Advances for construction (Note 5)	32,902	32,902
Compensated absences, net of current portion (Note 6)	100,499	102,971
Bonds payable, net of current portion (Note 6)	21,906,388	22,600,295
Net pension liability (Note 7)	613,640	1,868,655
Net OPEB liabilities (Note 8)	802,065	313,509
Total noncurrent liabilities	23,455,494	24,918,332
Total liabilities	26,060,066	27,641,925
Deferred Inflows of Resources		
Deferred pension (Note 7)	683,372	82,431
Deferred OPEB retiree healthcare (Note 8)	24,543	-
Deferred OPEB GLI (Note 8)	40,000	-
Deferred OPEB HIC (Note 8)	6,580	-
Total deferred inflows of resources	754,495	82,431
Net Position		
Net position:		
Net investment in capital assets	132,616,889	136,696,744
Restricted for debt service	567,011	677,614
Unrestricted	46,664,323	41,443,900
Total net position	179,848,223	178,818,258
Total liabilities, deferred inflows of resources and net position	\$ 206,662,784	\$ 206,542,614

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, 2018 and 2017

	<u>2018</u>	<u>2017</u>
Operating revenues:		
Water and sewer services	\$ 15,942,612	\$ 14,400,361
Water supply proffers	293,900	298,054
Rental income (Note 11)	354,987	377,880
Other	<u>77,545</u>	<u>247,917</u>
Total operating revenues	<u>16,669,044</u>	<u>15,324,212</u>
 Operating expenses:		
Salaries	4,552,923	4,384,445
Fringe benefits	1,511,372	1,799,798
Operating supplies	1,150,760	1,045,132
Maintenance	1,381,649	1,639,070
Utilities	913,104	899,294
Contractual fees (Note 11)	877,652	920,714
Other	<u>222,249</u>	<u>215,633</u>
Total operating expenses	<u>10,609,709</u>	<u>10,904,086</u>
Operating income before depreciation and amortization	6,059,335	4,420,126
Depreciation and amortization (Note 4)	<u>7,992,438</u>	<u>8,194,083</u>
Operating loss	<u>(1,933,103)</u>	<u>(3,773,957)</u>
 Nonoperating revenues (expenses):		
Facility charges	3,581,360	4,664,316
Investment income	43,940	90,148
Gain (loss) on disposal of capital assets	(165,655)	49,018
Insurance recovery	-	1,000
Interest expense	<u>(754,226)</u>	<u>(778,073)</u>
Net nonoperating revenues	<u>2,705,419</u>	<u>4,026,409</u>
Income before capital contributions	772,316	252,452
Capital asset contributions	<u>796,235</u>	<u>1,509,214</u>
Changes in net position	1,568,551	1,761,666
Net position, beginning of year (as restated) (Note 9)	<u>178,279,672</u>	<u>177,056,592</u>
Net position, end of year	<u>\$ 179,848,223</u>	<u>\$ 178,818,258</u>

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, 2018 and 2017

	2018	2017
Cash flows from operating activities:		
Cash received from customers	\$ 15,781,875	\$ 13,935,170
Other cash receipts	739,584	910,163
Cash payments to suppliers for goods and services	(4,294,153)	(5,014,233)
Cash payments for personnel services	(6,354,308)	(6,133,940)
Facility charges	3,581,360	4,663,226
Net cash provided by operating activities	9,454,358	8,360,386
Cash flows from capital and related financing activities:		
Repayments of debt	(605,000)	(785,000)
Interest paid	(753,226)	(574,961)
Insurance recovery	-	1,000
Acquisition and construction of capital assets	(2,698,112)	(3,303,093)
Proceeds from sale of capital assets	8,845	56,018
Net cash used in capital and related financing activities	(4,047,493)	(4,606,036)
Cash flows from investing activities:		
Purchases of investments	(26,927,603)	(33,976,952)
Proceeds from sale of investments	21,779,889	30,026,488
Interest received	12,765	80,562
Net cash used in investing activities	(5,134,949)	(3,869,902)
Increase (decrease) in cash and cash equivalents	271,916	(115,552)
Cash and cash equivalents, beginning of year	540,016	655,568
Cash and cash equivalents, end of year	\$ 811,932	\$ 540,016
Reconciliation of operating loss to net cash provided by operating activities:		
Operating loss	\$ (1,933,103)	\$ (3,773,957)
Adjustments to reconcile operating loss to cash provided by operating activities:		
Depreciation and amortization	7,992,438	8,194,083
Facility charges	3,581,360	4,664,316
Change in operating assets and liabilities:		
Accounts receivable, customers and others	(244,815)	(491,665)
Notes receivable	496,800	(495,346)
Inventories	(29,455)	(34,284)
Accounts payable, trade	44,547	(10,146)
Accrued salaries	(6,486)	237
Compensated absences	(9,889)	29,079
Due to James City County	236,169	(249,960)
Deposits	97,230	10,242
Unearned revenue	(496,800)	496,800
Net OPEB liability and deferred inflow of resources	(9,542)	36,000
Net pension liability and related deferred inflow/outflows of resources	(264,096)	(15,013)
Total adjustments	11,387,461	12,134,343
Net cash provided by operating activities	\$ 9,454,358	\$ 8,360,386
Supplemental schedules:		
Noncash capital activities:		
Capital asset contributions	\$ 796,235	\$ 1,509,214
Noncash investing activity:		
Unrealized loss from change in fair value of investments	\$ (330,376)	\$ (309,410)

See accompanying notes to basic financial statements.

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Notes to Financial Statements
June 30, 2018 and 2017

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.

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Notes to Financial Statements
June 30, 2018 and 2017

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. 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 \$1,636,000 and \$1,652,000 at June 30, 2018 and 2017, respectively, and are included in Accounts receivable, customers on the statement of net position.

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Notes to Financial Statements
June 30, 2018 and 2017

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 years ended June 30, 2018 and 2017, there were \$0 and \$4,500, respectively, in supplemental appropriations for various grants.

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, 2018 were as follows:

	Deductibles	Liability Coverage Limits
Property insurance:		
Building and contents	\$ 10,000	\$ 58,713,429
Business interruption/extra expense		\$ 3,000,000
Inland marine	\$ 1,000	\$ 906,782
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
Flood/earthquake (outside 100 year flood plain)	\$ 25,000	\$ 50,250,000
Equipment breakdown	\$ 1,000	\$ 50,000,000
General liability		\$ 2,000,000
Public officials liability		\$ 9,000,000
Automobile liability		\$ 2,000,000
Automobile comprehensive/collision	\$ 1,000	\$ 872,988
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.

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Notes to Financial Statements
June 30, 2018 and 2017

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.

The Authority could not practically determine the period-specific details of the change on all prior periods presented; therefore, the cumulative effect of the change was applied to the beginning balances of the OPEB liability and net position of the current year (see Note 9).

2) Cash and Investments

The Authority's cash and investments at June 30, 2018 and 2017, consisted of the following:

	<u>6/30/2018</u>	<u>6/30/2017</u>
Bank deposits	\$ 811,327	\$ 539,411
Petty cash	605	605
Investments	45,956,655	40,808,941
Total	<u>\$ 46,768,587</u>	<u>\$ 41,348,957</u>

Reconciliation to Statement of Net Position:

Cash and cash equivalents	\$ 811,932	\$ 540,016
Investments	45,389,644	40,131,327
Restricted investments	567,011	677,614
Total	<u>\$ 46,768,587</u>	<u>\$ 41,348,957</u>

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 reflects 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, 2018 and 2017

2) Cash and Investments, Continued

The Authority's investments at June 30, 2018 and 2017 were as follows:

Investment Type	Cost	Fair Value	Level 1	Level 2	Level 3
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	<u>\$ 45,930,242</u>	<u>\$ 45,389,644</u>	<u>\$ -</u>	<u>\$ 45,373,751</u>	<u>\$ -</u>
Restricted Investments:					
Money market	<u>\$ 567,011</u>	<u>\$ 567,011</u>	N/A	N/A	N/A
6/30/2017:					
Investments:					
Money market	\$ 68,053	\$ 68,053	N/A	N/A	N/A
U.S. Treasury securities	16,983,898	16,925,723	-	16,925,723	-
Federal agency notes and bonds	12,287,088	12,214,418	-	12,214,418	-
Corporate notes and bonds	5,837,933	5,775,711	-	5,775,711	-
Commercial paper	766,263	766,827	-	766,827	-
Certificates of deposit	2,724,034	2,725,111	-	2,725,111	-
Fed. agency coll. mortgage ob.	1,674,281	1,655,484	-	1,655,484	-
Total	<u>\$ 40,341,550</u>	<u>\$ 40,131,327</u>	<u>\$ -</u>	<u>\$ 40,063,274</u>	<u>\$ -</u>
Restricted Investments:					
Money market	<u>\$ 677,614</u>	<u>\$ 677,614</u>	N/A	N/A	N/A

Investment Type	Amount	Weighted average maturity (in years)		
		Less than 1	1-2	2-7
6/30/2018:				
Money market funds	\$ 582,904	\$ 582,904	\$ -	\$ -
U.S. Treasury securities	20,939,566	421,857	12,012,554	8,505,155
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	<u>\$ 45,956,655</u>	<u>\$ 7,598,827</u>	<u>\$ 22,900,191</u>	<u>\$ 15,457,637</u>
6/30/2017:				
Money market funds	\$ 745,667	\$ 745,667	\$ -	\$ -
U.S. Treasury securities	16,925,723	-	7,479,526	9,446,197
Federal agency notes and bonds	12,214,418	-	5,881,742	6,332,676
Corporate notes and bonds	5,775,711	882,983	2,545,081	2,347,647
Commercial paper	766,827	766,827	-	-
Certificate of deposit	2,725,111	1,952,216	772,895	-
Fed. agency coll. mortgage ob.	1,655,484	493,388	730,029	432,067
Total	<u>\$ 40,808,941</u>	<u>\$ 4,841,081</u>	<u>\$ 17,409,273</u>	<u>\$ 18,558,587</u>

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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 mutual 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.

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2) Cash and Investments, Continued

As of June 30, 2018 and 2017, the Authority's investments rated by Standard & Poor's were as follows:

	Unrated	AAA	AA+	AA	AA-	A-1+	A-1
6/30/2018:							
Money market funds	\$ 567,011	\$ 15,893	\$ -	\$ -	\$ -	\$ -	\$ -
U.S. Treasury securities	-	-	20,939,566	-	-	-	-
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	<u>\$ 567,011</u>	<u>\$ 523,939</u>	<u>\$ 35,448,612</u>	<u>\$ 1,160,992</u>	<u>\$ 5,744,821</u>	<u>\$ 771,634</u>	<u>\$ 1,739,646</u>
6/30/2017:							
Money market funds	\$ 677,614	\$ 68,053	\$ -	\$ -	\$ -	\$ -	\$ -
U.S. Treasury securities	-	-	16,925,723	-	-	-	-
Federal agency notes and bonds	-	-	12,214,418	-	-	-	-
Corporate notes and bonds	-	831,554	1,347,587	254,112	3,342,458	-	-
Commercial paper	-	-	-	-	-	-	766,827
Certificate of deposit	-	-	-	-	2,074,634	650,477	-
Fed. agency coll. mortgage ob.	-	-	1,655,484	-	-	-	-
Total	<u>\$ 677,614</u>	<u>\$ 899,607</u>	<u>\$ 32,143,212</u>	<u>\$ 254,112</u>	<u>\$ 5,417,092</u>	<u>\$ 650,477</u>	<u>\$ 766,827</u>

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, 2018 and 2017, the portions of the Authority's portfolio (excluding restricted investments) that exceeded 5% of the total were:

<u>Issuer</u>	<u>% of Portfolio</u>	
	<u>6/30/2018</u>	<u>6/30/2017</u>
U.S. Treasury	46.1%	42.2%
Federal Home Loan Banks	12.0%	16.1%
Fannie Mae	11.5%	10.3%
Freddie Mac	4.7%	8.2%

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.

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Notes to Financial Statements
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2) Cash and Investments, Continued

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.

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, 2018 and 2017, 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 September 2009, the Authority executed a promissory note for \$170,000 at 6% interest with Anderson-Hughes, LLC pursuant to the Sewer Modification Contract dated September 20, 2007 for the installation of grinder pumps. The monthly payments were \$2,508 through August 2016. At June 30, 2018 and 2017, the note receivable balance was \$0.

In June 2017, the Authority entered into a deferred payment agreement with Franciscus at Promenade, LLC. During 2017, Franciscus made an initial payment of \$478,315 towards estimated system charges and fees and the second payment of \$496,800 was paid in 2018. At June 30, 2018, the note receivable balance was \$1,090.

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4) Capital Assets

The following is a summary of changes in capital assets for the fiscal years ended June 30, 2018 and 2017:

	<u>Balance July 1, 2017</u>	<u>Increases</u>	<u>Decreases</u>	<u>Balance June 30, 2018</u>
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	2,398,338	5,972,159	4,376,676	3,993,821
Intangibles - easements	4,570	-	-	4,570
Total capital assets not being depreciated	<u>5,111,577</u>	<u>5,972,159</u>	<u>4,376,676</u>	<u>6,707,060</u>
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	<u>288,964,920</u>	<u>1,898,864</u>	<u>1,060,571</u>	<u>289,803,213</u>
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	<u>135,849,801</u>	<u>7,992,438</u>	<u>886,071</u>	<u>142,956,168</u>
Total capital assets being depr./amort, net	<u>153,115,119</u>	<u>(6,093,574)</u>	<u>174,500</u>	<u>146,847,045</u>
Total capital assets, net	<u>\$ 158,226,696</u>	<u>\$ (121,415)</u>	<u>\$ 4,551,176</u>	<u>\$ 153,554,105</u>

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4) Capital Assets, Continued

	<u>Balance July 1, 2016</u>	<u>Increases</u>	<u>Decreases</u>	<u>Balance June 30, 2017</u>
Capital assets not being depreciated:				
Utility plant:				
Land	\$ 962,995	\$ -	\$ 7,000	\$ 955,995
Nonutility plant:				
Land	1,739,491	-	-	1,739,491
Land improvements	13,183	-	-	13,183
Construction in progress	1,334,553	3,388,911	2,325,126	2,398,338
Intangibles - easements	4,570	-	-	4,570
Total capital assets not being depreciated	<u>4,054,792</u>	<u>3,388,911</u>	<u>2,332,126</u>	<u>5,111,577</u>
Capital assets being depreciated:				
Utility plant:				
Water and sewer systems	251,061,253	2,729,675	-	253,790,928
Nonutility plant:				
Central shop	4,892,209	392,700	-	5,284,909
Office fixtures and equipment	1,840,746	230,090	21,467	2,049,369
Automotive equipment	2,629,462	396,057	185,805	2,839,714
Intangible - water rights	25,000,000	-	-	25,000,000
Total capital assets being depreciated	<u>285,423,670</u>	<u>3,748,522</u>	<u>207,272</u>	<u>288,964,920</u>
Less accumulated depreciation/amortization:				
Water and sewer systems	118,583,791	6,958,996	-	125,542,787
Central shop	1,632,310	151,614	-	1,783,924
Office fixtures and equipment	1,177,444	148,948	21,467	1,304,925
Automotive equipment	2,021,592	321,028	185,805	2,156,815
Intangibles - water rights	4,447,853	613,497	-	5,061,350
Total accumulated depreciation/amortization	<u>127,862,990</u>	<u>8,194,083</u>	<u>207,272</u>	<u>135,849,801</u>
Total capital assets being depr./amort, net	<u>157,560,680</u>	<u>(4,445,561)</u>	<u>-</u>	<u>153,115,119</u>
Total capital assets, net	<u>\$ 161,615,472</u>	<u>\$ (1,056,650)</u>	<u>\$ 2,332,126</u>	<u>\$ 158,226,696</u>

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, 2018 and 2017, advances for construction consisted of:

Funds advanced	\$ 27,020
Facilities constructed	5,882
Total	<u>\$ 32,902</u>

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6) Long-Term Debt

The Authority's long-term debt activity for the fiscal years ended June 30, 2018 and 2017 was as follows:

	<u>Balance 7/1/2017</u>	<u>Increases</u>	<u>Decreases</u>	<u>Balance 6/30/2018</u>	<u>Due within one year</u>
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	<u>\$ 23,681,086</u>	<u>\$ 450,885</u>	<u>\$ 1,129,681</u>	<u>\$ 23,002,290</u>	<u>\$ 995,403</u>

	<u>Balance 7/1/2016</u>	<u>Increases</u>	<u>Decreases</u>	<u>Balance 6/30/2017</u>	<u>Due within one year</u>
Refunding revenue bonds	\$ 22,595,000	\$ -	\$ 785,000	\$ 21,810,000	\$ 605,000
Premium, refunding revenue bonds	1,523,109	-	63,907	1,459,202	63,907
Compensated absences	382,805	490,646	461,567	411,884	308,913
Total	<u>\$ 24,500,914</u>	<u>\$ 490,646</u>	<u>\$ 1,310,474</u>	<u>\$ 23,681,086</u>	<u>\$ 977,820</u>

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 range 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 2008 revenue bonds are considered defeased and the liability for those bonds has been removed from the statement of net position. The reacquisition price 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 \$1,663,079 and \$1,739,250 at June 30, 2018 and 2017, 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.

Future maturities of principal and interest payments are as follows:

<u>Year Ended June 30</u>	<u>Principal</u>	<u>Interest</u>
2019	\$ 630,000	\$ 725,250
2020	655,000	700,050
2021	690,000	667,300
2022	720,000	632,800
2023	745,000	611,200
2024-2028	4,280,000	2,502,000
2029-2033	5,040,000	1,729,500
2034-2038	5,855,000	926,250
2039-2040	2,590,000	117,150
Total	<u>\$ 21,205,000</u>	<u>\$ 8,611,500</u>

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6) Long-Term Debt, 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, 2018 and 2017, compensated absences consisted of the following:

	6/30/2018	6/30/2017
Vacation	\$ 301,066	\$ 311,861
Sick	76,290	81,128
Paid-time off	24,639	18,895
Total	\$ 401,995	\$ 411,884

7) Pensions

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.

PLAN 1

About VRS 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.

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7) Pensions, Continued

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 VRS 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. 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.

Retirement Contributions: Employees contribute up to 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.

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.

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.

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.

Average Final Compensation: A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.

Service Retirement Multiplier: 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%.

Normal Retirement Age: Age 65.

Earliest Unreduced Retirement Eligibility (non-hazardous duty): Age 65 with at least five years (60 months) of creditable service or at age 50 with at least 30 years of creditable service.

Earliest Reduced Retirement Eligibility (non-hazardous duty): Age 55 with at least five years (60 months) of creditable service or at age 50 with at least 10 years of creditable service.

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7) Pensions, Continued

Cost-of-Living Adjustment (COLA) in Retirement: The 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%.

Eligibility: 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.

Exceptions to COLA Effective Dates: The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances:

- ◆ 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.

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.

PLAN 2

About VRS Plan 2: VRS 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.

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. 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.

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7) Pensions, Continued

Retirement Contributions: Employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction.

Creditable Service: Same as Plan 1.

Vesting: Same as Plan 1.

Calculating the Benefit: See definition under Plan 1.

Average Final Compensation: A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.

Service Retirement Multiplier: 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.

Normal Retirement Age: Normal Social Security retirement age.

Earliest Unreduced Retirement Eligibility (non-hazardous duty): Normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90.

Earliest Reduced Retirement Eligibility non-hazardous duty): Age 60 with at least five years (60 months) of creditable service.

Cost-of-Living Adjustment (COLA) in Retirement: The 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%.

Eligibility: Same as Plan 1.

Exceptions to COLA Effective Dates: Same as Plan 1.

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.

Purchase of Prior Service: Same as Plan 1.

Hybrid Retirement Plan

About the Hybrid Retirement Plan: The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. 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.

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7) Pensions, Continued

Eligible Members: Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes 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. 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.

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: 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:

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 may also count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.

Defined Contributions Component: Under the defined contribution component, creditable service is used to determine vesting for the employer contribution portion of the plan.

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. 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:

Defined Benefit Component: See definition under Plan 1.

Defined Contribution Component: 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.

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7) Pensions, Continued

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: The retirement multiplier for the defined benefit component is 1.0%. For members that 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.

Normal Retirement Age:

Defined Benefit Component: Same as Plan 2.

Defined Contribution Component: Members are eligible to receive distributions upon leaving employment, subject to restrictions.

Earliest Unreduced Retirement Eligibility:

Defined Benefit Component: Normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90.

Defined Contribution Component: Members are eligible to receive distributions upon leaving employment, subject to restrictions.

Earliest Reduced Retirement Eligibility:

Defined Benefit Component:

Members may retire with a reduced benefit as early as age 60 with at least five years (60 months) of creditable service.

Defined Contribution Component:

Members are eligible to receive distributions upon leaving employment, subject to restrictions.

Cost-of-Living Adjustment (COLA) in Retirement:

Defined Benefit Component: Same as Plan 2.

Defined Contribution Component: Not applicable.

Eligibility: Same as Plan 1 and Plan 2.

Exceptions to COLA Effective Dates: Same as Plan 1 and Plan 2.

Disability Coverage: Eligible political subdivisions (including Plan 1 and Plan 2 opt-ins) participate in the Virginia Local Disability Program (VLDP) unless their local governing body provides an 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.

Purchase of Prior Service:

Defined Benefit Component: Same as Plan 1 with the following exceptions: Hybrid Retirement Plan members are ineligible for ported service.

Defined Contribution Component: Not applicable.

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7) Pensions, Continued

Employees Covered by Benefit Terms

As of the June 30, 2016 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	44
Inactive members:	
Vested	12
Non-vested	17
Active elsewhere in VRS	28
Total inactive members	57
Active members	85
Total	186

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 year ended June 30, 2018 and 2017 was 7.29% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015. 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.1 Contributions to the pension plan from the Authority were \$308,672 and \$297,668 for the years ended June 30, 2018 and June 30, 2017, respectively.

Net Pension Liability

The Authority's 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, 2017.

Actuarial Assumptions

The total pension liability for general employees in the Authority's retirement plan was based on an actuarial valuation as of June 30, 2016, 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, 2017.

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.

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7) Pensions, Continued

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 rates 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.

The actuarial assumptions used in the June 30, 2016 valuation 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%

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7) Pensions, Continued

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:

<u>Asset Class (Strategy)</u>	<u>Target Allocation</u>	<u>Arithmetic Long-Term Expected Rate of Return</u>	<u>Weighted Average Long-Term Expected Rate of Return</u>
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	<u>100.00%</u>		<u>4.80%</u>
		Inflation	<u>2.50%</u>
		*Expected arithmetic nominal return	<u>7.30%</u>

*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 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. Through the fiscal year ending June 30, 2019, the rate contributed by the employer for the Authority's retirement plan will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2019 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.

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7) Pensions, Continued

Changes in Net Pension Liability

	Total pension liability (a)	Plan fiduciary net pension (b)	Net pension liability (a) - (b)
<u>6/30/2018:</u>			
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	1,104,652	-	1,104,652
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	<u>471,660</u>	<u>1,726,674</u>	<u>(1,255,014)</u>
Balances at June 30, 2017	<u>\$ 16,499,994</u>	<u>\$ 15,886,353</u>	<u>\$ 613,641</u>
<u>6/30/2017:</u>			
Balances at June 30, 2015	\$ 15,026,681	\$ 13,951,734	\$ 1,074,947
Changes for the year:			
Service cost	404,294	-	404,294
Interest	1,032,165	-	1,032,165
Difference between expected and actual experience	128,139	-	128,139
Contributions - employer	-	336,720	(336,720)
Contributions - employee	-	197,261	(197,261)
Net investment income	-	245,617	(245,617)
Benefit payments, including refunds of employee contributions	(562,945)	(562,945)	-
Administrative expense	-	(8,604)	8,604
Other changes	-	(104)	104
Net changes	<u>1,001,653</u>	<u>207,945</u>	<u>793,708</u>
Balances at June 30, 2016	<u>\$ 16,028,334</u>	<u>\$ 14,159,679</u>	<u>\$ 1,868,655</u>

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)	\$ 2,785,275	\$ 613,640	\$ (1,194,376)

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7) Pensions, Continued

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

For the years ending June 30, 2018 and 2017, the Authority recognized pension expense of \$35,495 and \$277,501, respectively. The Authority reported deferred outflows and deferred inflow of resources related to pensions as follows:

	6/30/2018		6/30/2017	
	Deferred outflows of resources	Deferred inflows of resources	Deferred outflows of resources	Deferred inflows of resources
Difference between expected and actual experience	\$ 71,691	\$ 207,063	\$ 99,914	\$ 82,431
Changes of assumptions	-	245,980	-	-
Net difference between projected and actual earnings on plan investments	-	230,328	372,758	-
Employer contributions subsequent to the measurement date	308,672	-	297,668	-
Total	<u>\$ 380,363</u>	<u>\$ 683,371</u>	<u>\$ 770,340</u>	<u>\$ 82,431</u>

At June 30, 2018, the \$308,672 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, 2019. Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense in future reporting periods as follows:

Year Ended June 30:	
2019	\$ (290,103)
2020	(75,737)
2021	(97,226)
2022	(148,614)
Total	<u>\$ (611,680)</u>

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/2017-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)

<i>Agent Multiple Employer Plan – Retiree Healthcare</i>

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.

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

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 five plans offered by Optima, Healthkeepers and KeyCare. The majority of the participants are in Healthkeepers. 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 net 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 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, 2017), 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.

The actuarial assumptions included calculations based on a discount rate of 3.58% 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.

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

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	1.63%
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.

Changes in Net OPEB Liability

	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

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

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

The following presents the net OPEB liability using the discount rate of 3.58%, as well as what the net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (2.58%) or one percentage point higher (4.58%) than the current rate:

	1% Decrease (2.58%)	Current Discount Rate (3.58%)	1% Increase (4.58%)
Total and Net OPEB Liability	\$ 446,406	\$ 406,742	\$ 370,413

Sensitivity of the Net OPEB Liability to Changes in the Health Care Cost Trend Rate

The following presents the net OPEB liability using the health care cost trend rate of 4.00%, as well as what the net 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 OPEB Liability	\$ 357,394	\$ 406,742	\$ 465,350

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

For the year ended June 30, 2018, the Authority recognized OPEB expense of \$27,725. At June 30, 2018, deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources were reported:

	Deferred outflows of resources	Deferred inflows of resources
Differences between expected and actual experience	\$ -	\$ -
Changes of assumptions	-	24,543
Net difference between projected and actual earnings on OPEB investments	-	-
Employer contributions subsequent to the measurement date	-	-
Total	<u>\$ -</u>	<u>\$ 24,543</u>

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows:

Year Ended June 30		
2019	\$	(4,091)
2020		(4,091)
2021		(4,091)
2022		(4,091)
2023		(4,091)
Thereafter		(4,088)
Total	\$	<u>(24,543)</u>

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

<i>Multiple Employer Cost-Sharing Plan – Group Life Insurance</i>
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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 end 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:
 - o Accidental dismemberment benefit
 - o Safety belt benefit
 - o Repatriation benefit

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

- Felonious assault benefit
- Accelerated death benefit option

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 \$8,111.

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 year ended June 30, 2018 was 0.52% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015. 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 \$22,168 and \$21,263 for the years ended June 30, 2018 and June 30, 2017, 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, 2018, the Authority reported a liability of \$333,000 for its proportionate share of the Net GLI OPEB liability. The Net GLI OPEB liability was measured as of June 30, 2017 and the total GLI OPEB liability used to calculate the Net GLI OPEB liability was determined by an actuarial valuation as of that date. 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, 2017 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2017 the participating employer's proportion was 0.02217% as compared to 0.02241% at June 30, 2016.

For the year ended June 30, 2018 the Authority recognized GLI OPEB expense of \$3,000. Since 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.

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

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

	Deferred outflows of resources	Deferred inflows of resources
Differences between expected and actual experience	\$ -	\$ 7,000
Net difference between projected and actual investment earnings on OPEB Plan investments	-	13,000
Changes of assumptions	-	17,000
Changes in proportionate share	-	3,000
Employer contributions subsequent to the measurement date	22,168	-
Total	\$ 22,168	\$ 40,000

The \$22,168 reported as deferred outflows of resources related to the GLI OPEB resulting from the employer'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, 2019. 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	
2019	\$ (9,000)
2020	(9,000)
2021	(9,000)
2022	(8,000)
2023	(5,000)
Thereafter	-
Total	\$ (40,000)

Actuarial Assumptions

The total GLI OPEB liability was based on an actuarial valuation as of June 30, 2016, 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, 2017.

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.

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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, 2016 valuation 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, 2016 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016.

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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, 2017, NOL amounts for the Group Life Insurance Program is as follows (amounts expressed in thousands):

	Group Life Insurance OPEB Program
Total GLI OPEB Liability	\$ 2,942,426
Plan Fiduciary Net Position	1,437,586
Employers' Net GLI OPEB Liability (Asset)	<u>\$ 1,504,840</u>
Plan Fiduciary Net Position as a % of the Total GLI OPEB Liability	48.86%

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:

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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, 2019, 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. From July 1, 2019 on, employers are assumed 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 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	\$ 431,000	\$ 333,000	\$ 254,000

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

Group Life Insurance Program Fiduciary Net Position

Detailed information about the Group Life Insurance Program's Fiduciary Net Position is available in the separately issued VRS 2017 Comprehensive Annual Financial Report (CAFR). A copy of the 2017 VRS CAFR may be downloaded from the VRS website at <http://www.varetire.org/Pdf/Publications/2017-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.

Plan Description

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 of participating 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

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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, 2016 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	14
Inactive members:	
Vested	-
Non-vested	-
Active elsewhere in VRS	-
Total inactive members	14
Active members	85
Total	99

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 political subdivision's contractually required employer contribution rate for the year ended June 30, 2018 was 0.20% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015. 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 political subdivision to the Political Subdivision Health Insurance Credit Program were \$8,467 and \$8,166 for the years ended June 30, 2018 and June 30, 2017, respectively.

Net HIC OPEB liability

The political subdivision's net Health Insurance Credit OPEB liability was measured as of June 30, 2017. The total Health Insurance Credit OPEB 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, 2017.

Actuarial Assumptions

The total HIC OPEB liability was based on an actuarial valuation as of June 30, 2016, 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, 2017.

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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, 2016 valuation 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.

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

The actuarial assumptions used in the June 30, 2016 valuation 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%

Long-Term Expected Rate of Return

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:

<u>Asset Class (Strategy)</u>	<u>Target Allocation</u>	<u>Arithmetic Long-Term Expected Rate of Return</u>	<u>Weighted Average Long-Term Expected Rate of Return</u>
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	<u>100.00%</u>		<u>4.80%</u>
	Inflation		2.50%
	* Expected arithmetic nominal return		<u>7.30%</u>

* 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%.

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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, 2019, 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. From July 1, 2019 on, employers are assumed 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, 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 using the discount rate of 7.00%, as well as what the Political subdivision'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:

	Decrease (6.00%)	Discount Rate (7.00%)	Increase (8.00%)
Net HIC OPEB liability	\$ 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 year ended June 30, 2018, the Authority recognized an OPEB expense for HIC of \$6,632.

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

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

	<u>Deferred outflows of resources</u>	<u>Deferred inflows of resources</u>
Governmental activities		
Differences between expected and actual experience	\$ -	\$ -
Change of assumptions	-	3,391
Net difference between projected and actual earnings on OPEB plan investments	-	3,189
Employer contributions subsequent to the measurement date	8,467	-
Total	<u>\$ 8,467</u>	<u>\$ 6,580</u>

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, 2019. 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:

<u>Year ended</u>	
2019	\$ (1,359)
2020	(1,359)
2021	(1,359)
2022	(1,360)
2023	(562)
Thereafter	(581)
Total	<u>\$ (6,580)</u>

Health Insurance Credit Program Plan Data

Information about the VRS Political Subdivision Health Insurance Credit Program is available in the separately issued VRS 2017 Comprehensive Annual Financial Report (CAFR). A copy of the 2017 VRS CAFR may be downloaded from the VRS website at <http://www.varetire.org/Pdf/Publications/2017-annual-report.pdf>, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

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9) Restatement

As stated in Note 1, the Authority adopted GASB Statement 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, in the current year. The Authority could not practically determine the period-specific details of the change on all prior periods presented; therefore, the cumulative effect of the change was applied to the beginning balances of the current year as follows:

	6/30/2017		6/30/2017
	Previously		As
	Reported	Restatement	Restated
Deferred outflow - OPEB GLI contribution	\$ -	\$ 21,263	\$ 21,263
Deferred outflow - OPEB HIC contribution	\$ -	\$ 8,166	\$ 8,166
OPEB retiree healthcare liability	\$ (313,509)	\$ (105,578)	\$ (419,087)
OPEB GLI liability	\$ -	\$ (392,000)	\$ (392,000)
OPEB HIC liability	\$ -	\$ (70,437)	\$ (70,437)
Net position	\$ (178,818,258)	\$ 538,586	\$ (178,279,672)

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 \$18,500 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 \$786,149 and \$768,211 for the years ended June 30, 2018 and 2017, respectively, and are included in the expenses under contractual fees. The Authority also owed the County \$619,752 and \$383,584 at June 30, 2018 and 2017, respectively, which primarily represents payroll expenses and purchase card expenses incurred by the Authority.

In addition, the County leases space in Authority buildings under long-term leases. Rent revenue was \$313,913 and \$309,920 for years ended June 30, 2018 and 2017, respectively; and is included in rental income.

12) Commitments and Contingencies

Construction in Progress

At June 30, 2018, the Authority had several major projects under construction which are presented in the accompanying financial statements as construction in progress.

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12) Commitments and Contingencies, Continued

Below are the details for each project:

Project	Budget	Expenditures to date	Balance of contract	Budget balance
Sewer improvements	\$ 5,598,911	\$ 656,184	\$ 157,134	\$ 4,785,593
Water supply	20,777,764	2,856,592	442,932	17,478,240
Water distribution	691,761	114,226	44,774	532,761
Water transmission	500,000	40,567	4,508	454,925
Water storage	185,620	-	-	185,620
Other	2,423,602	326,252	44,142	2,053,208
	<u>\$ 30,177,658</u>	<u>\$ 3,993,821</u>	<u>\$ 693,490</u>	<u>\$ 25,490,347</u>

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 2nd installment of \$25 million will be paid in December 2019 if it is determined that the additional water is needed. If the 2nd installment is not made available, water will be reduced to 2 million gallons per day. The first installment is considered to be for the purchase of an intangible asset (rights to water supply) and, as such, has been 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, 2018 and 2017. Therefore, the Authority did not make a payment to the City of Newport News for the years ended June 30, 2018 and 2017, 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 \$1.26 per 1,000 gallons for fiscal years ended June 30, 2018 and 2017. For the years ended June 30, 2018 and 2017, 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.

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 was renewed on October 26, 2018 through October 25, 2019. The contract allows for an increase based on the Consumer Price Index. For the years ended June 30, 2018 and 2017, the Authority paid \$215,781 and \$220,228, 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 July 13, 2018 through July 12, 2019. For the years ended June 30, 2018 and 2017, the Authority paid \$165,050 and \$133,573, respectively, towards this contract.

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Notes to Financial Statements
June 30, 2018 and 2017

12) Commitments and Contingencies, Continued

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.

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**REQUIRED SUPPLEMENTARY INFORMATION
OTHER THAN MD&A (Unaudited)**

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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
Total pension liability				
Service cost	\$ 417,066	\$ 430,269	\$ 404,294	\$ 411,137
Interest	913,818	978,647	1,032,165	1,104,652
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	-	(146,331)	128,139	(213,521)
Changes in assumptions	-	-	-	(335,427)
Benefit payments, including refunds of employee contributions	(376,365)	(433,146)	(562,945)	(495,181)
Net change in total pension liability	954,519	829,439	1,001,653	471,660
Total pension liability, beginning	13,242,723	14,197,242	15,026,681	16,028,334
Total pension liability, ending	<u>\$ 14,197,242</u>	<u>\$ 15,026,681</u>	<u>\$ 16,028,334</u>	<u>\$ 16,499,994</u>
Plan fiduciary net position				
Contributions - employer	\$ 308,820	\$ 329,381	\$ 336,720	\$ 288,588
Contributions - employee	197,188	193,349	197,261	210,624
Net investment income	1,802,418	612,704	245,617	1,734,000
Benefit payments, including refunds of employee contributions	(376,365)	(433,146)	(562,945)	(495,181)
Administrative expense	(9,511)	(8,173)	(8,604)	(9,804)
Other	95	(130)	(104)	(1,553)
Net change in plan fiduciary net position	1,922,645	693,985	207,945	1,726,674
Plan fiduciary net position, beginning	11,335,104	13,257,749	13,951,734	14,159,679
Plan fiduciary net position, ending	<u>\$ 13,257,749</u>	<u>\$ 13,951,734</u>	<u>\$ 14,159,679</u>	<u>\$ 15,886,353</u>
Net pension liability	<u>\$ 939,493</u>	<u>\$ 1,074,947</u>	<u>\$ 1,868,655</u>	<u>\$ 613,641</u>
Plan fiduciary net position as a percentage of the total pension liability	93.38%	92.85%	88.34%	96.28%
Covered payroll	<u>\$ 3,943,666</u>	<u>\$ 3,897,762</u>	<u>\$ 4,026,779</u>	<u>\$ 4,083,082</u>
Net pension liability as a percentage of the total covered payroll	23.82%	27.58%	46.41%	15.03%

(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 auditors' report.

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%

(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 auditors' report.

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Schedule of Changes in the Net OPEB - Retiree Healthcare Liability and Related Ratios (1) (2)
Required Supplementary Information (Unaudited)
Last Ten Fiscal Years*

	2018
Total OPEB liability	
Service cost	\$ 20,093
Interest cost	11,723
Changes of benefit terms	-
Differences between expected and actual experience	-
Changes of assumptions	(28,634)
Benefit payments	(15,527)
Net change in total OPEB liability	(12,345)
Total OPEB liability, beginning	419,087
Total OPEB liability, ending (a)	\$ 406,742
 Plan fiduciary net position	
Contributions - employer	\$ 15,527
Net investment income	-
Benefit payments	(15,527)
Administrative expense	-
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
 Fiduciary net position as a % of total OPEB liability	0.00%
 Expected average remaining service years of all participants	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 auditors' report.

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

(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 auditors' report.

Exhibit 8

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

	2018
Total OPEB - HIC liability	
Service cost	\$ 3,682
Interest cost	10,769
Changes of benefit terms	-
Differences between expected and actual experience	-
Changes in assumptions	(3,953)
Benefit payments, including refunds of employee contributions	(3,508)
Net change in total OPEB - HIC liability	6,990
Total OPEB - HIC liability, beginning	155,602
Total OPEB - HIC liability, ending (a)	\$ 162,592
Plan fiduciary net position - HIC	
Contributions - employer	8,166
Contributions - employee	-
Net investment income	10,122
Benefit payments, including refunds of employee contributions	(3,508)
Administrative expense	(170)
Other	494
Net change in plan fiduciary net position - HIC	15,104
Plan fiduciary net position - HIC, beginning	85,165
Plan fiduciary net position - HIC, ending (b)	100,269
Net OPEB - HIC liability (a) - (b)	\$ 62,323
Plan fiduciary net position - HIC as a percentage of the total OPEB - HIC liability	61.67%
Covered payroll	\$ 4,230,543
Net OPEB - HIC liability as a percentage of the total covered payroll	1.47%

(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 auditors' report.

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%

(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 auditors' report.

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*

	<u>2018</u>
Employer's proportion of the net GLI OPEB liability	0.02217%
Employer's proportionate share of the net GLI OPEB liability	\$ 333,000
Employer's covered payroll	\$ 4,230,543
Employer's proportionate share of the net GLI OPEB liability as a percentage of its covered payroll	7.87%
Plan fiduciary net position as a % of total GLI OPEB liability	48.86%

(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.

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%

(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.

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

See accompanying notes and independent auditors' report.

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Notes to Required Supplementary Information (Unaudited)
June 30, 2018 and 2017

1) Pension - Changes of Benefit Terms

There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation. The 2014 valuation includes the Hybrid Retirement Plan members for the first time. The hybrid plan applies to most new employees hired on or after January 1, 2014 and not covered by enhanced hazardous duty benefits. Because this is a fairly new benefit and the number of participants was relatively small, the impact on the liabilities as of the measurement date of June 30, 2017 is not material.

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, 2017	2.85%
June 30, 2018	3.58%

6) OPEB Health Insurance Credit - Changes of Benefit Terms

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

7) OPEB Group Life Insurance - Changes of Benefit Terms

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

See independent auditors' report.

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SUPPLEMENTARY INFORMATION

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JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Schedules of Net Position – by Activity
June 30, 2018
(with comparative totals for 2017)

	Water operations	Sewer operations	Totals	
			2018	2017
Assets				
Current assets:				
Cash and cash equivalents	\$ 406,268	\$ 405,664	\$ 811,932	\$ 540,016
Investments	18,648,098	26,741,546	45,389,644	40,131,327
Restricted investments	567,011	-	567,011	677,614
Accounts receivable, customers	1,827,133	1,362,644	3,189,777	2,931,810
Accounts receivable, other	36,298	-	36,298	49,450
Note receivable	1,090	-	1,090	497,890
Interest receivable	82,999	83,000	165,999	134,824
Inventories	872,852	-	872,852	843,397
Total current assets	<u>22,441,749</u>	<u>28,592,854</u>	<u>51,034,603</u>	<u>45,806,328</u>
Noncurrent assets:				
Capital assets:				
Non-depreciable	5,054,260	1,652,800	6,707,060	5,111,577
Depreciable	85,845,205	61,001,840	146,847,045	153,115,119
Net capital assets	<u>90,899,465</u>	<u>62,654,640</u>	<u>153,554,105</u>	<u>158,226,696</u>
Total assets	<u>113,341,214</u>	<u>91,247,494</u>	<u>204,588,708</u>	<u>204,033,024</u>
Deferred Outflows of Resources				
Deferred charge on refunding, net	1,663,079	-	1,663,079	1,739,250
Deferred pension	190,181	190,181	380,362	770,340
Deferred OPEB GLI	11,084	11,084	22,168	-
Deferred OPEB HIC	4,234	4,233	8,467	-
Total deferred outflows of resources	<u>1,868,578</u>	<u>205,498</u>	<u>2,074,076</u>	<u>2,509,590</u>
Total assets and deferred outflows of resources	<u>\$ 115,209,792</u>	<u>\$ 91,452,992</u>	<u>\$ 206,662,784</u>	<u>\$ 206,542,614</u>
Liabilities				
Current liabilities:				
Accounts payable, trade	\$ 216,750	\$ 144,465	\$ 361,215	\$ 316,668
Accrued salaries	5,999	1,835	7,834	14,320
Compensated absences, current portion	301,496	-	301,496	308,913
Due to James City County	567,472	52,280	619,752	383,583
Deposits	287,962	-	287,962	190,732
Unearned revenue	-	-	-	496,800
Interest payable	332,406	-	332,406	343,670
Bond payable, current portion	693,907	-	693,907	668,907
Total current liabilities	<u>2,405,992</u>	<u>198,580</u>	<u>2,604,572</u>	<u>2,723,593</u>
Noncurrent liabilities:				
Advances for construction	5,882	27,020	32,902	32,902
Compensated absences, net of current portion	100,499	-	100,499	102,971
Bonds payable, net of current portion	21,906,388	-	21,906,388	22,600,295
Net pension liability	306,820	306,820	613,640	1,868,655
Net OPEB liabilities	401,033	401,032	802,065	313,509
Total noncurrent liabilities	<u>22,720,622</u>	<u>734,872</u>	<u>23,455,494</u>	<u>24,918,332</u>
Total liabilities	<u>25,126,614</u>	<u>933,452</u>	<u>26,060,066</u>	<u>27,641,925</u>
Deferred Inflows of Resources				
Deferred pension	341,686	341,686	683,372	82,431
Deferred OPEB retiree healthcare	12,271	12,272	24,543	-
Deferred OPEB GLI	20,000	20,000	40,000	-
Deferred OPEB HIC	3,290	3,290	6,580	-
Total deferred inflows of resources	<u>377,247</u>	<u>377,248</u>	<u>754,495</u>	<u>82,431</u>
Net Position				
Net position:				
Net investment in capital assets	69,962,249	62,654,640	132,616,889	136,696,744
Restricted for debt service	567,011	-	567,011	677,614
Unrestricted	19,176,671	27,487,652	46,664,323	41,443,900
Total net position	<u>89,705,931</u>	<u>90,142,292</u>	<u>179,848,223</u>	<u>178,818,258</u>
Total liabilities, deferred inflows of resources and net position	<u>\$ 115,209,792</u>	<u>\$ 91,452,992</u>	<u>\$ 206,662,784</u>	<u>\$ 206,542,614</u>

See accompanying independent auditors' report.

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Schedules of Revenues, Expenses, and Changes in Net Position – by Activity
Year ended June 30, 2018
(with comparative totals for year ended June 30, 2017)

	<u>Water operations</u>	<u>Sewer operations</u>	<u>Totals</u>	
			<u>2018</u>	<u>2017</u>
Operating revenues:				
Water and sewer services	\$ 9,636,578	\$ 6,306,034	\$ 15,942,612	\$ 14,400,361
Other	574,987	151,445	726,432	923,851
Total operating revenues	<u>10,211,565</u>	<u>6,457,479</u>	<u>16,669,044</u>	<u>15,324,212</u>
Operating expenses:				
Salaries	2,428,689	2,124,234	4,552,923	4,384,445
Fringe benefits	818,144	693,228	1,511,372	1,799,798
Operating supplies	751,468	399,292	1,150,760	1,045,132
Maintenance	511,660	869,989	1,381,649	1,639,070
Utilities	658,949	254,155	913,104	899,294
Contractual fees	474,835	402,817	877,652	920,714
Other	125,949	96,300	222,249	215,633
Total operating expenses	<u>5,769,694</u>	<u>4,840,015</u>	<u>10,609,709</u>	<u>10,904,086</u>
Operating income before depreciation and amortization	4,441,871	1,617,464	6,059,335	4,420,126
Depreciation and amortization	<u>5,043,640</u>	<u>2,948,798</u>	<u>7,992,438</u>	<u>8,194,083</u>
Operating loss	<u>(601,769)</u>	<u>(1,331,334)</u>	<u>(1,933,103)</u>	<u>(3,773,957)</u>
Nonoperating revenues (expenses):				
Facility charges	2,052,186	1,529,174	3,581,360	4,664,316
Investment income	23,862	20,078	43,940	90,148
Gain (loss) on disposal of capital assets	(161,394)	(4,261)	(165,655)	49,018
Insurance recovery	-	-	-	1,000
Transfers	52,160	(52,160)	-	-
Interest expense	<u>(754,226)</u>	<u>-</u>	<u>(754,226)</u>	<u>(778,073)</u>
Net nonoperating revenues	<u>1,212,588</u>	<u>1,492,831</u>	<u>2,705,419</u>	<u>4,026,409</u>
Income before capital contributions	610,819	161,497	772,316	252,452
Capital asset contributions	<u>287,500</u>	<u>508,735</u>	<u>796,235</u>	<u>1,509,214</u>
Changes in net position	898,319	670,232	1,568,551	1,761,666
Net position, beginning of year (as restated)	88,807,612	89,472,060	178,279,672	177,056,592
Net position, end of year	<u>\$ 89,705,931</u>	<u>\$ 90,142,292</u>	<u>\$ 179,848,223</u>	<u>\$ 178,818,258</u>

See accompanying independent auditors' report.

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, 2018

	<u>Water operations</u>		Variance favorable (unfavorable)	<u>Sewer operations</u>		Variance favorable (unfavorable)
	<u>Actual</u>	<u>Budget</u>		<u>Actual</u>	<u>Budget</u>	
Operating revenues:						
Water and sewer services	\$ 9,636,578	\$ 8,743,146	\$ 893,432	\$ 6,306,034	\$ 5,870,210	\$ 435,824
Other	574,987	360,463	214,524	151,445	147,963	3,482
Total operating revenues	<u>\$ 10,211,565</u>	<u>\$ 9,103,609</u>	<u>\$ 1,107,956</u>	<u>\$ 6,457,479</u>	<u>\$ 6,018,173</u>	<u>\$ 439,306</u>
Operating expenses:						
Salaries	\$ 2,428,689	\$ 2,583,630	\$ 154,941	\$ 2,124,234	\$ 2,293,743	\$ 169,509
Fringe benefits	818,144	1,089,653	271,509	693,228	893,064	199,836
Operating supplies	751,468	1,101,834	350,366	399,292	584,615	185,323
Maintenance *	511,660	719,051	207,391	869,989	1,241,440	371,451
Utilities	658,949	760,303	101,354	254,155	300,287	46,132
Contractual fees	474,835	615,958	141,123	402,817	490,375	87,558
Other	125,949	172,674	46,725	96,300	131,315	35,015
Total operating expenses	<u>\$ 5,769,694</u>	<u>\$ 7,043,103</u>	<u>\$ 1,273,409</u>	<u>\$ 4,840,015</u>	<u>\$ 5,934,839</u>	<u>\$ 1,094,824</u>

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

See accompanying independent auditors' report.

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STATISTICAL SECTION

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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

Financial Trends **Tables 1-2**

These tables contain trend information to help the reader understand how the Authority's financial performance and well-being has changed over time.

Revenue Capacity **Tables 3-4**

These tables contain information to help the reader assess the factors affecting the Authority's ability to generate its operating revenues.

Debt Capacity **Tables 5-7**

These tables present information to help the reader assess the affordability of the Authority's current level of outstanding debt and its ability to issue additional debt in the future.

Demographic & Economic Information **Tables 8-9**

These tables offer demographic and economic indicators to help the reader understand the environment within which the Authority's financial activities take place.

Operation Information **Tables 10-16**

These tables contain service and infrastructure data to help the reader understand how the information in the Authority's financial report relates to the services the Authority provides and the activities it performs.

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

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Net Position										
Net investment in capital assets	\$ 134,314,330	\$ 135,071,435	\$ 135,641,623	\$ 134,872,139	\$ 139,966,206	\$ 137,922,955	\$ 137,173,064	\$ 139,312,785	\$ 136,696,744	\$ 132,616,889
Restricted for debt service	-	-	-	-	-	-	-	729,605	677,614	567,011
Restricted for capital projects	4,674,837	4,610,218	4,740,769	4,876,760	2,620,384	2,601,160	2,716,277	-	-	-
Unrestricted	<u>36,591,088</u>	<u>36,430,621</u>	<u>34,057,874</u>	<u>34,106,903</u>	<u>29,699,494</u>	<u>29,159,119</u>	<u>32,903,518</u>	<u>37,014,202</u>	<u>41,443,900</u>	<u>46,664,323</u>
Total net position	<u>\$ 175,580,255</u>	<u>\$ 176,112,274</u>	<u>\$ 174,440,266</u>	<u>\$ 173,855,802</u>	<u>\$ 172,286,084</u>	<u>\$ 169,683,234</u>	<u>\$ 172,792,859</u>	<u>\$ 177,056,592</u>	<u>\$ 178,818,258</u>	<u>\$ 179,848,223</u>

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

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Operating revenues:										
Water and sewer services	\$ 12,279,796	\$ 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
Water supply proffers	138,170	52,908	125,192	26,967	13,362	57,446	450,262	218,987	298,054	293,900
Rental income	135,234	144,441	171,401	144,381	164,875	160,914	325,991	326,377	377,880	354,987
Other	241,569	450,027	190,467	198,025	242,028	285,892	214,104	272,599	247,917	77,545
Storm cost reimbursement	-	-	-	349,541	-	900	-	-	-	-
Total operating revenues	<u>12,794,769</u>	<u>12,961,644</u>	<u>13,090,878</u>	<u>12,437,211</u>	<u>12,422,798</u>	<u>12,330,854</u>	<u>13,578,827</u>	<u>13,592,803</u>	<u>15,324,212</u>	<u>16,669,044</u>
Operating expenses:										
Salaries	4,360,920	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
Fringe benefits	1,612,176	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
Operating supplies	1,014,351	866,624	888,559	899,095	822,882	882,253	836,288	1,094,002	1,045,132	1,150,760
Maintenance	1,687,340	1,969,116	3,193,116	3,065,512	3,364,910	3,501,598	2,067,464	1,670,023	1,639,070	1,381,649
Utilities	1,008,602	771,544	813,478	917,498	862,665	875,020	861,074	870,220	899,294	913,104
Contractual fees	735,132	889,869	873,110	882,505	910,491	836,634	915,365	903,463	920,714	877,652
Other	535,001	784,305	697,629	560,671	504,573	496,851	497,803	233,233	215,633	222,249
Storm costs	-	-	-	359,921	-	-	-	-	-	-
Total operating expenses	<u>10,953,522</u>	<u>10,985,233</u>	<u>12,091,472</u>	<u>12,414,605</u>	<u>12,407,714</u>	<u>12,218,405</u>	<u>10,982,443</u>	<u>10,701,704</u>	<u>10,904,086</u>	<u>10,609,709</u>
Operating income before depreciation and amortization	1,841,247	1,976,411	999,406	22,606	15,084	112,449	2,596,384	2,891,099	4,420,126	6,059,335
Depreciation and amortization	6,410,118	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
Operating loss	<u>(4,568,871)</u>	<u>(5,110,813)</u>	<u>(6,274,067)</u>	<u>(7,446,410)</u>	<u>(7,604,347)</u>	<u>(7,557,942)</u>	<u>(5,214,424)</u>	<u>(5,039,533)</u>	<u>(3,773,957)</u>	<u>(1,933,103)</u>
Nonoperating revenues (expenses):										
Facility charges	2,507,300	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
Investment income (loss)	3,658,420	956,056	509,675	351,929	(1,249,111)	267,061	248,207	519,767	90,148	43,940
Gain (loss) on disposal of capital assets	74,226	(251,710)	34,324	21,285	(44,507)	15,352	23,497	(193,113)	49,018	(165,655)
Insurance recovery	-	-	-	-	-	-	-	14,219	1,000	-
Bond issuance costs	-	-	-	-	-	-	-	(402,364)	-	-
Interest expense	(1,379,059)	(1,749,899)	(1,531,715)	(1,478,060)	(1,141,052)	(1,114,130)	(1,095,684)	(744,124)	(778,073)	(754,226)
Net nonoperating revenues	<u>4,860,887</u>	<u>2,215,322</u>	<u>2,851,986</u>	<u>2,060,484</u>	<u>1,433,984</u>	<u>3,474,011</u>	<u>3,039,670</u>	<u>2,437,920</u>	<u>4,026,409</u>	<u>2,705,419</u>
Income (loss) before contributions	292,016	(2,895,491)	(3,422,081)	(5,385,926)	(6,170,363)	(4,083,931)	(2,174,754)	(2,601,613)	252,452	772,316
Capital asset contributions	4,563,025	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
Changes in net position	<u>\$ 4,855,041</u>	<u>\$ 532,019</u>	<u>\$ (1,672,008)</u>	<u>\$ 9,436</u>	<u>\$ (1,569,718)</u>	<u>\$ (695,231)</u>	<u>\$ 3,109,625</u>	<u>\$ 4,263,733</u>	<u>\$ 1,761,666</u>	<u>\$ 1,568,551</u>

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
2009	\$ -	\$2.85 - \$3.45 - \$9.80	\$ 63.45	14.3%
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%

Quarterly Continuing Service Charges for Residential Sewer Service

Fiscal Year	Basic Charge	Rate per 1,000 gallons	Quarterly Total (2)	% Change
2009	\$ -	\$ 2.80	\$ 58.80	0.0%
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%

(1) Inverted Block Rate Structure:

1st Block based on 0 to 15,000 gallons used per quarter.

2nd Block based on 15,000 to 25,000 gallons used per quarter, which changed to 15,000 to 30,000 gallons used per quarter.

3rd Block based on over 25,000 gallons used per quarter, which changed to 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
 Current Year and Nine Years Ago

	2018			2009		
	Gallons Billed	Service Charges	Rank	Gallons Billed	Service Charges	Rank
Owens-Illinois *	19,765,397	\$ 113,971	1	18,792,500	\$ 91,015	2
Country Village Mobile Home Park (sewer only)	17,037,196	51,921	2	12,241,768	34,277	6
Greystone *	16,048,750	107,662	3	N/A	N/A	N/A
Williamsburg-James City County Public Schools *	14,950,780	105,500	4	16,523,990	98,509	4
Williamsburg Landing	14,769,312	113,387	5	N/A	N/A	N/A
Patriots Colony	14,098,862	108,922	6	18,475,980	114,301	3
Windy Hill Trailer (sewer only)	12,832,688	39,108	7	13,423,608	37,586	5
Eastern State Hospital *	11,965,415	88,973	8	29,477,400	175,938	1
WindsorMeade	10,384,616	80,018	9	N/A	N/A	N/A
Virginia Peninsula Regional Jail*	9,968,460	27,050	10	N/A	N/A	N/A
Platinum Management	-	-		12,035,000	67,463	7
Oxford-James	-	-		10,283,200	63,902	8
Rolling Meadows	-	-		8,952,200	53,362	9
Williamsburg-Oxford	-	-		8,656,150	50,115	10
Total	<u>141,821,476</u>	<u>\$ 836,512</u>		<u>148,861,796</u>	<u>\$ 786,468</u>	

* Subject to wastewater sub-meter adjustments

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
2009	\$ 37,386,546	19,085	\$ 1,958.9
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

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

<u>Fiscal year</u>	<u>Gross revenue</u>	<u>Direct operating expenses</u>	<u>Net revenue available for debt service</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>	<u>Coverage</u>
2009	\$ 19,034,715	\$ 10,953,522	\$ 8,081,193	\$ 1,395,000	\$ 1,637,050	\$ 3,032,050	2.67
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	20,128,689	10,609,709	9,518,980	630,000	725,250	1,355,250	7.02

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
2009	\$ 109,974,105	\$ 11,170,533	\$ 101,595,000	\$ 222,739,638
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

<u>Calendar year</u>	<u>Population (1)</u>	<u>Personal income (2)</u>	<u>Per capita personal income (2)</u>	<u>Unemployment percentage (1)</u>
2009	63,135	\$ 4,078,729,000	\$ 51,109	5.4%
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	**	**	3.8%
2018	**	**	**	**

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

	2018			2009		
	Employees	Rank	Percentage of total County employment	Employees	Rank	Percentage of total County employment
Busch Gardens	1000+	1	**	1000+	1	19.13%
Williamsburg-James City County Public Schools	1000+	2	4.94%	1000+	2	5.74%
Wal-Mart Distribution Center	500-999	3	2.22%	500-999	7	1.76%
James City County	500-999	4	2.04%	500-999	5	2.83%
Kingsmill Resort	500-999	5	1.87%			
Eastern State Hospital	500-999	6	1.86%	1000+	3	3.39%
Anheuser-Busch, Inc.	500-999	7	1.65%	500-999	6	2.36%
Riverside Regional Medical Center	500-999	8	1.51%			
Jamestown-Yorktown Foundation	250-499	9	1.20%	250-499	9	1.63%
Owens & Minor	250-499	10	0.99%			
Williamsburg Landing				250-499	10	1.09%
Busch Properties, Inc.				500-999	4	2.97%
Avid Medical				250-499	8	1.64%
Total			<u>18.28%</u>			<u>42.54%</u>

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

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

Table 10

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Schedule of Insurance in Force
June 30, 2018

<u>Insurer</u>	<u>Type of coverage</u>	<u>Policy number</u>	<u>Policy period</u>	<u>Annual Premium</u>
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-18	7/1/2017 - 7/1/2018	\$ 97,864
Virginia Association of Counties Group Self-Insurance Risk Pool (VACoRP)	Workers' compensation	VA-JA-131D-18	7/1/2017 - 7/1/2018	\$ 54,608

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

<u>Function</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Administration	65	65	60	63	63	63	63	63	63	63
Water	15	15	15	15	15	15	15	15	15	17
Sewer	11	11	11	11	11	11	11	11	11	11
Total	<u>91</u>	<u>91</u>	<u>86</u>	<u>89</u>	<u>89</u>	<u>89</u>	<u>89</u>	<u>89</u>	<u>89</u>	<u>91</u>

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	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Water:										
New connections	263	385	388	351	448	359	388	423	464	407
Water main breaks	37	40	44	31	25	21	26	21	34	25
Sewer:										
New connections	269	380	375	296	347	261	380	447	470	414

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	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Water:										
Water lines (miles)	339	344	393	390	393	400	402	407	409	410
Water customers	19,085	19,368	19,719	20,070	20,549	20,858	21,246	21,669	22,133	22,540
Storage tanks (greater than 250,000 gallons)	7	7	7	7	7	7	7	7	7	7
Average ERCs (1)	25,753	20,200	20,866	19,200	18,597	18,937	19,415	18,921	20,025	20,220
Sewer:										
Sewer lines (miles)	379	382	419	423	425	430	435	439	440	440
Gallons collected (millions)	1,765	1,833	1,598	1,771	1,739	1,862	1,897	1,863	1,971	1,987
Sewer customers	18,702	18,860	21,127	21,488	21,962	22,575	22,955	23,402	23,872	24,286

(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	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Water:										
Average Day	4.8	5.0	5.1	4.8	4.7	4.7	4.7	4.7	5.0	5.1
Average Day in Month of Maximum Flow	7.1	6.8	7.4	6.4	6.1	5.9	6.1	5.9	6.4	7.2
Month of Maximum Flow	August	June	July	July	July	June	July	August	August	July
Sewer:										
Average Day	5.4	4.5	4.4	5.0	5.0	5.1	5.1	5.1	5.4	5.4

Source: James City Service Authority, Administration Department

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 2018

<u>Virginia Jurisdiction</u>	<u>Water Service</u>
City of Williamsburg	\$ 318.00
City of Norfolk	463.68
City of Newport News	456.60
City of Virginia Beach	353.52
James City Service Authority	228.00

Source: James City Service Authority

Comparison of Area Sewer Bills
Annual Consumption 60,000 Gallons as of June 2018

<u>Virginia Jurisdiction</u>	<u>Sewer Service *</u>
City of Hampton	\$ 171.60
City of Newport News	324.36
City of Virginia Beach	369.72
City of Norfolk	331.32
York County	312.00
James City Service Authority	206.52

* Rates charged by the municipality. Residents of these municipalities pay a separate wastewater treatment fee to Hampton Roads Sanitation District of \$6.58 per 1,000 gallons.

Source: James City Service Authority

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

<u>Fiscal Year</u>	<u>Water</u>	<u>Sewer</u>	<u>Total</u>
2009	\$ 4,200	\$ 3,360	\$ 7,560
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

(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

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 \$260 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:

<u>Service Installed by</u>	<u>Charge</u>
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.

<u>Meter Size</u>	<u>Quarterly Fixed Charge</u>
5/8"	\$ 5.89
3/4"	8.83
1"	14.72
1 1/2"	29.43
2"	47.08
3"	94.17
4"	147.14
6"	294.27
8"	470.83
10"	676.82

Charge for all collection and treatment of wastewater:

<u>Volume</u>	<u>Collection</u>
Per 1,000 gallons of water consumed	\$ 3.05
Per 100 cubic feet of water consumed	2.29

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.

<u>Activity, Use</u>	<u>Unit</u>	<u>Charge</u>
Single-family residences	Each	\$ 42.00
Single-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"	\$ 9.30
3/4"	13.95
1"	23.24
1 1/2"	46.48
2"	74.37
3"	148.73
4"	232.39
6"	464.78
8"	743.65
10"	1,069.00

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

Single Family Residential	Quarterly Use		
	Tier 1	Tier 2	Tier 3
Meter Size			
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	\$ 3.18	\$ 6.36	\$ 14.93

Multi-Family Residential and Non-Residential

All Meter Sizes	All Use
Rate per 1,000 Gallons	\$ 4.70

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.

JAMES CITY SERVICE AUTHORITY
 (A Component Unit of the County of James City, Virginia)
 Rates and Fees

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 30 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:

<u>Meter Size</u>	<u>Deposit</u>
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
Rezoning:	
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 plus \$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 plus \$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.

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COMPLIANCE SECTION

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Independent Auditors' 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*

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 and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of James City Service Authority as of and for the year ended June 30, 2018, 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 October 31, 2018.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered James City Service 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 James City Service Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of James City Service 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.

Dixon Hughes Goodman LLP

**Newport News, VA
October 31, 2018**

Independent Auditors' Report on Compliance with Commonwealth of Virginia Laws, Regulations, Contracts and Grants

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, 2018, and have issued our report thereon October 31, 2018.

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
- Conflicts of Interest
- Retirement Systems
- Procurement
- Unclaimed Property

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.

Dixon Hughes Goodman LLP

**Newport News, VA
October 31, 2018**

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

Schedule of Findings and Responses
June 30, 2018

1. Summary of Auditors' Results

- a. An unmodified opinion was issued on the financial statements.
- b. There were no deficiencies noted in internal control to disclose.
- c. The audit disclosed no items of noncompliance material to the financial statements.

2. Findings Relating to the Financial Statements which are Required to be Reported in Accordance with *Government Auditing Standards*

None

3. State Compliance Findings

None

4. Status of Prior Year State Compliance Findings

None