A G E N D A
JAMES CITY SERVICE AUTHORITY BOARD OF DIRECTORS
REGULAR MEETING
County Government Center Board Room
101 Mounts Bay Road, Williamsburg, VA 23185
December 8, 2020
5:00 PM

A. CALL TO ORDER

B. ROLL CALL

C. PRESENTATIONS

1. James City Service Authority Audit Report

D. PUBLIC COMMENT

E. CONSENT CALENDAR

1. Authorization of a 2% General Wage Increase

F. PUBLIC HEARING(S)

1. Acceptance of Responsibility for a Memorandum of Agreement for Grease Control Devices; Public Hearing on Endorsement of the Fats, Oils, and Grease Program, Enforcement Response Plan; and Adoption of Civil Penalties

G. BOARD CONSIDERATION(S)

1. Participation in the Coronavirus Aid, Relief, and Economic Security Act Delinquent Utility Bill Grant Program

H. BOARD REQUESTS AND DIRECTIVES

I. GENERAL MANAGER'S UPDATE

J. ADJOURNMENT

1. Adjourn until 4 p.m. on January 4, 2021 for the Organizational Meeting

AGENDA ITEM NO. C.1.

ITEM SUMMARY

DATE: 12/8/2020

TO: The Board of Directors

FROM: Leslie Roberts, Partner with Brown Edwards and Company, LLP

SUBJECT: James City Service Authority Audit Report

ATTACHMENTS:

	Description	Type
🗋	Report	Exhibit
🗋	Financial Statements	Exhibit

REVIEWERS:

Department	Reviewer	Action	Date
Board Secretary	Fellows, Teresa	Approved	12/1/2020 - 3:03 PM

Report to the
Board of Directors

JAMES CITY SERVICE AUTHORITY

June 30, 2020

BROWN EDWARDS
certified public accountants

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REQUIRED COMMUNICATION WITH THOSE CHARGED WITH GOVERNANCE

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

We have audited the financial statements of the business-type activities of James City Service Authority (the "Authority") for the years ended June 30, 2020 and 2019. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated August 5, 2020. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Matters

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by James City Service Authority are described in Note 1 to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during 2020. We noted no transactions entered into by James City Service Authority during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

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

- Management's estimates of the Pension and Other Post-Employment Benefits (OPEB) liabilities and related inflows and outflows is based upon valuations received from independent actuaries.
- Management's estimate of the depreciable lives of capital assets is based on James City County's policy.

We have evaluated the key factors and assumptions used to develop these estimates in determining that they are reasonable in relation to the financial statements as a whole.

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

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

Difficulties Encountered in Performing the Audit

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

Corrected and Uncorrected Misstatements

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

Disagreements with Management

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

Management Representations

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

Management Consultations with Other Accountants

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

Other Significant Matters, Findings, or Issues

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

<u>Other Matters</u>

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

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

We were not engaged to report on the introductory and statistical sections which accompany the financial statements but are not RSI. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Restriction on Use

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

Sincerely,

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

CERTIFIED PUBLIC ACCOUNTANTS

Newport News, Virginia
December 7, 2020

ACCOUNTING AND OTHER MATTERS

June 30, 2020

NEW GASB PRONOUNCEMENTS

In this section, we would like to make you aware of certain confirmed and potential changes that are on the horizon that may affect your financial reporting and audit. The effective dates below are updated based on **Statement No. 95**, ***Postponement of the Effective Dates of Certain Authoritative Guidance*** due to the COVID-19 pandemic.

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

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

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

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

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

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

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

NEW GASB PRONOUNCEMENTS

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

Definition of a Lease

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

Lease Term

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

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

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

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

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

NEW GASB PRONOUNCEMENTS

Short-Term Leases

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

Lessee Accounting

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

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

Lessor Accounting

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

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

Contracts with Multiple Components and Contract Combinations

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

NEW GASB PRONOUNCEMENTS

Lease Modifications and Terminations

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

Subleases and Leaseback Transactions

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

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

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

The requirements of this Statement are effective for fiscal years beginning after June 15, 2021.

The GASB issued **Statement No. 88**, ***Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*** in March 2018. The primary objective of this Statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt.

This Statement defines debt for purposes of disclosure in notes to financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established.

This Statement requires that additional essential information related to debt be disclosed in notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses.

For notes to financial statements related to debt, this Statement also requires that existing and additional information be provided for direct borrowings and direct placements of debt separately from other debt.

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

ACCOUNTING AND OTHER MATTERS

June 30, 2020

NEW GASB PRONOUNCEMENTS

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

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

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

The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. The requirements should be applied retroactively, except for the provisions related to (1) reporting a majority equity interest in a component unit and (2) reporting a component unit if the government acquires a 100 percent equity interest. Those provisions should be applied on a prospective basis.

NEW GASB PRONOUNCEMENTS

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

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

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

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

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

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

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

- If the title passes to the third-party obligor at the end of the arrangement, an issuer should not recognize a capital asset.
- If the title does not pass to the third-party obligor and the third party has exclusive use of the entire capital asset during the arrangement, the issuer should not recognize a capital asset until the arrangement ends.

NEW GASB PRONOUNCEMENTS

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

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

The requirements of this Statement are effective for reporting periods beginning after December 15, 2021.

The GASB issued **Statement No. 92**, ***Omnibus 2020*** in January 2020. The primary objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics and includes specific provisions about the following:

- The effective date of Statement No. 87, Leases, and Implementation Guide No. 2019-3, Leases, for interim financial reports.
- Reporting of intra-entity transfers of assets between a primary government employer and a component unit defined benefit pension plan or defined benefit other postemployment benefit (OPEB) plan.
- The applicability of Statements No. 73, Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68, as amended, and No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended, to reporting assets accumulated for postemployment benefits.
- The applicability of certain requirements of Statement No. 84, Fiduciary Activities, to postemployment benefit arrangements.
- Measurement of liabilities (and assets, if any) related to asset retirement obligations (AROs) in a government acquisition.
- Reporting by public entity risk pools for amounts that are recoverable from reinsurers or excess insurers
- Reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature.
- Terminology used to refer to derivative instruments.

The requirements related to the effective date of Statement 87 and Implementation Guide 2019-3, reinsurance recoveries, and terminology used to refer to derivative instruments are effective upon issuance. The requirements related to intra-entity transfers of assets and those related to the applicability of Statements 73 and 74 and application of Statement 84 to postemployment benefit arrangements and those related to nonrecurring fair value measurements of assets or liabilities are effective for fiscal years beginning after June 15, 2021. The requirements related to the measurement of liabilities (and assets, if any) associated with AROs in a government acquisition are effective for government acquisitions occurring in reporting periods beginning after June 15, 2021.

NEW GASB PRONOUNCEMENTS

The GASB issued **Statement No. 93, *Replacement of Interbank Offered Rates*** in March 2020. Some governments have entered into agreements in which variable payments made or received depend on an interbank offered rate (IBOR)—most notably, the London Interbank Offered Rate (LIBOR). As a result of global reference rate reform, LIBOR is expected to cease to exist in its current form at the end of 2021, prompting governments to amend or replace financial instruments for the purpose of replacing LIBOR with other reference rates, by either changing the reference rate or adding or changing fallback provisions related to the reference rate.

Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments,* as amended, requires a government to terminate hedge accounting when it renegotiates or amends a critical term of a hedging derivative instrument, such as the reference rate of a hedging derivative instrument's variable payment. In addition, in accordance with Statement No. 87, *Leases,* as amended, replacement of the rate on which variable payments depend in a lease contract would require a government to apply the provisions for lease modifications, including remeasurement of the lease liability or lease receivable.

The objective of this Statement is to address those and other accounting and financial reporting implications that result from the replacement of an IBOR. This Statement achieves that objective by:

- Providing exceptions for certain hedging derivative instruments to the hedge accounting termination provisions when an IBOR is replaced as the reference rate of the hedging derivative instrument's variable payment.
- Clarifying the hedge accounting termination provisions when a hedged item is amended to replace the reference rate.
- Clarifying that the uncertainty related to the continued availability of IBORs does not, by itself, affect the assessment of whether the occurrence of a hedged expected transaction is probable.
- Removing LIBOR as an appropriate benchmark interest rate for the qualitative evaluation of the effectiveness of an interest rate swap.
- Identifying a Secured Overnight Financing Rate and the Effective Federal Funds Rate as appropriate benchmark interest rates for the qualitative evaluation of the effectiveness of an interest rate swap.
- Clarifying the definition of reference rate, as it is used in Statement 53, as amended.

Providing an exception to the lease modifications guidance in Statement 87, as amended, for certain lease contracts that are amended solely to replace an IBOR as the rate upon which variable payments depend.

The removal of LIBOR as an appropriate benchmark interest rate is effective for reporting periods ending after December 31, 2022. All other requirements of this Statement are effective for reporting periods beginning after June 15, 2021.

NEW GASB PRONOUNCEMENTS

The GASB issued **Statement No. 94,** ***Public-Private and Public-Public Partnerships and Availability Payment Arrangements*** in March 2020**.** The primary objective of this Statement is to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements (PPPs). As used in this Statement, a PPP is an arrangement in which a government (the transferor) contracts with an operator (a governmental or nongovernmental entity) to provide public services by conveying control of the right to operate or use a nonfinancial asset, such as infrastructure or other capital asset (the underlying PPP asset), for a period of time in an exchange or exchange-like transaction. Some PPPs meet the definition of a service concession arrangement (SCA), which the Board defines in this Statement as a PPP in which (1) the operator collects and is compensated by fees from third parties; (2) the transferor determines or has the ability to modify or approve which services the operator is required to provide, to whom the operator is required to provide the services, and the prices or rates that can be charged for the services; and (3) the transferor is entitled to significant residual interest in the service utility of the underlying PPP asset at the end of the arrangement.

This Statement also provides guidance for accounting and financial reporting for availability payment arrangements (APAs). As defined in this Statement, an APA is an arrangement in which a government compensates an operator for services that may include designing, constructing, financing, maintaining, or operating an underlying nonfinancial asset for a period of time in an exchange or exchange-like transaction.

This Statement requires that PPPs that meet the definition of a lease apply the guidance in Statement No. 87, *Leases*, as amended, if existing assets of the transferor that are not required to be improved by the operator as part of the PPP arrangement are the only underlying PPP assets and the PPP does not meet the definition of an SCA. This Statement provides accounting and financial reporting requirements for all other PPPs: those that either (1) meet the definition of an SCA or (2) are not within the scope of Statement 87, as amended (as clarified by this Statement). The PPP term is defined as the period during which an operator has a noncancellable right to use an underlying PPP asset, plus, if applicable, certain periods if it is reasonably certain, based on all relevant factors, that the transferor or the operator either will exercise an option to extend the PPP or will not exercise an option to terminate the PPP.

A transferor generally should recognize an underlying PPP asset as an asset in financial statements prepared using the economic resources measurement focus. However, in the case of an underlying PPP asset that is not owned by the transferor or is not the underlying asset of an SCA, a transferor should recognize a receivable measured based on the operator's estimated carrying value of the underlying PPP asset as of the expected date of the transfer in ownership. In addition, a transferor should recognize a receivable for installment payments, if any, to be received from the operator in relation to the PPP. Measurement of a receivable for installment payments should be at the present value of the payments expected to be received during the PPP term. A transferor also should recognize a deferred inflow of resources for the consideration received or to be received by the transferor as part of the PPP. Revenue should be recognized by a transferor in a systematic and rational manner over the PPP term.

This Statement requires a transferor to recognize a receivable for installment payments and a deferred inflow of resources to account for a PPP in financial statements prepared using the current financial resources measurement focus. Governmental fund revenue would be recognized in a systematic and rational manner over the PPP term.

NEW GASB PRONOUNCEMENTS

This Statement also provides specific guidance in financial statements prepared using the economic resources measurement focus for a government that is an operator in a PPP that either (1) meets the definition of an SCA or (2) is not within the scope of Statement 87, as amended (as clarified in this Statement). An operator should report an intangible right-to-use asset related to an underlying PPP asset that either is owned by the transferor or is the underlying asset of an SCA. Measurement of the right-to-use asset should be the amount of consideration to be provided to the transferor, plus any payments made to the transferor at or before the commencement of the PPP term, and certain direct costs. For an underlying PPP asset that is not owned by the transferor and is not the underlying asset of an SCA, an operator should recognize a liability measured based on the estimated carrying value of the underlying PPP asset as of the expected date of the transfer in ownership. In addition, an operator should recognize a liability for installment payments, if any, to be made to the transferor in relation to the PPP. Measurement of a liability for installment payments should be at the present value of the payments expected to be made during the PPP term. An operator also should recognize a deferred outflow of resources for the consideration provided or to be provided to the transferor as part of the PPP. Expense should be recognized by an operator in a systematic and rational manner over the PPP term.

This Statement also requires a government to account for PPP and non-PPP components of a PPP as separate contracts. If a PPP involves multiple underlying assets, a transferor and an operator in certain cases should account for each underlying PPP asset as a separate PPP. To allocate the contract price to different components, a transferor and an operator should use contract prices for individual components as long as they do not appear to be unreasonable based on professional judgment or use professional judgment to determine their best estimate if there are no stated prices or if stated prices appear to be unreasonable. If determining the best estimate is not practicable, multiple components in a PPP should be accounted for as a single PPP.

This Statement also requires an amendment to a PPP to be considered a PPP modification, unless the operator's right to use the underlying PPP asset decreases, in which case it should be considered a partial or full PPP termination. A PPP termination should be accounted for by a transferor by reducing, as applicable, any receivable for installment payments or any receivable related to the transfer of ownership of the underlying PPP asset and by reducing the related deferred inflow of resources. An operator should account for a termination by reducing the carrying value of the right-to-use asset and, as applicable, any liability for installment payments or liability to transfer ownership of the underlying PPP asset. A PPP modification that does not qualify as a separate PPP should be accounted for by remeasuring PPP assets and liabilities.

An APA that is related to designing, constructing, and financing a nonfinancial asset in which ownership of the asset transfers by the end of the contract should be accounted for by a government as a financed purchase of the underlying nonfinancial asset. This Statement requires a government that engaged in an APA that contains multiple components to recognize each component as a separate arrangement. An APA that is related to operating or maintaining a nonfinancial asset should be reported by a government as an outflow of resources in the period to which payments relate.

The requirements of this Statement are effective for reporting periods beginning after June 15, 2022.

ACCOUNTING AND OTHER MATTERS

June 30, 2020

NEW GASB PRONOUNCEMENTS

The GASB issued **Statement No. 96, *Subscription-Based Information Technology Arrangements*** in May 2020**.** This Statement provides guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs) for government end users (governments). This Statement (1) defines a SBITA; (2) establishes that a SBITA results in a right-to-use subscription asset—an intangible asset—and a corresponding subscription liability; (3) provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA; and (4) requires note disclosures regarding a SBITA. To the extent relevant, the standards for SBITAs are based on the standards established in Statement No. 87, Leases, as amended.

A SBITA is defined as a contract that conveys control of the right to use another party's (a SBITA vendor's) information technology (IT) software, alone or in combination with tangible capital assets (the underlying IT assets), as specified in the contract for a period of time in an exchange or exchange-like transaction.

The subscription term includes the period during which a government has a noncancellable right to use the underlying IT assets. The subscription term also includes periods covered by an option to extend (if it is reasonably certain that the government or SBITA vendor will exercise that option) or to terminate (if it is reasonably certain that the government or SBITA vendor will *not* exercise that option).

Under this Statement, a government generally should recognize a right-to-use subscription asset—an intangible asset—and a corresponding subscription liability. A government should recognize the subscription liability at the commencement of the subscription term, —which is when the subscription asset is placed into service. The subscription liability should be initially measured at the present value of subscription payments expected to be made during the subscription term. Future subscription payments should be discounted using the interest rate the SBITA vendor charges the government, which may be implicit, or the government's incremental borrowing rate if the interest rate is not readily determinable. A government should recognize amortization of the discount on the subscription liability as an outflow of resources (for example, interest expense) in subsequent financial reporting periods.

The subscription asset should be initially measured as the sum of (1) the initial subscription liability amount, (2) payments made to the SBITA vendor before commencement of the subscription term, and (3) capitalizable implementation costs, less any incentives received from the SBITA vendor at or before the commencement of the subscription term. A government should recognize amortization of the subscription asset as an outflow of resources over the subscription term.

Activities associated with a SBITA, other than making subscription payments, should be grouped into the following three stages, and their costs should be accounted for accordingly:

- Preliminary Project Stage, including activities such as evaluating alternatives, determining needed technology, and selecting a SBITA vendor. Outlays in this stage should be expensed as incurred.
- Initial Implementation Stage, including all ancillary charges necessary to place the subscription asset into service. Outlays in this stage generally should be capitalized as an addition to the subscription asset.
- Operation and Additional Implementation Stage, including activities such as subsequent implementation activities, maintenance, and other activities for a government's ongoing operations related to a SBITA. Outlays in this stage should be expensed as incurred unless they meet specific capitalization criteria.

In classifying certain outlays into the appropriate stage, the nature of the activity should be the determining factor. Training costs should be expensed as incurred, regardless of the stage in which they are incurred.

If a SBITA contract contains multiple components, a government should account for each component as a separate SBITA or nonsubscription component and allocate the contract price to the different components. If it is not practicable to determine a best estimate for price allocation for some or all components in the contract, a government should account for those components as a single SBITA.

This Statement provides an exception for short-term SBITAs. Short-term SBITAs have a maximum possible term under the SBITA contract of 12 months (or less), including any options to extend, regardless of their probability of being exercised. Subscription payments for short-term SBITAs should be recognized as outflows of resources.

This Statement requires a government to disclose descriptive information about its SBITAs other than short-term SBITAs, such as the amount of the subscription asset, accumulated amortization, other payments not included in the measurement of a subscription liability, principal and interest requirements for the subscription liability, and other essential information.

The requirements of this Statement are effective for reporting periods beginning after June 15, 2022.

NEW GASB PRONOUNCEMENTS

The GASB issued **Statement No. 97**, ***Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans - an Amendment of GASB Statements No. 14 and No. 84, and a Supersession of GASB Statement No. 32*** in June 2020. The primary objectives of this Statement are to (1) increase consistency and comparability related to the reporting of fiduciary component units in circumstances in which a potential component unit does not have a governing board and the primary government performs the duties that a governing board typically would perform; (2) mitigate costs associated with the reporting of certain defined contribution pension plans, defined contribution other postemployment benefit (OPEB) plans, and employee benefit plans other than pension plans or OPEB plans (other employee benefit plans) as fiduciary component units in fiduciary fund financial statements; and (3) enhance the relevance, consistency, and comparability of the accounting and financial reporting for Internal Revenue Code (IRC) Section 457 deferred compensation plans (Section 457 plans) that meet the definition of a pension plan and for benefits provided through those plans.

This Statement requires that for purposes of determining whether a primary government is financially accountable for a potential component unit, except for a potential component unit that is a defined contribution pension plan, a defined contribution OPEB plan, or another employee benefit plan (for example, certain Section 457 plans), the absence of a governing board should be treated the same as the appointment of a voting majority of a governing board if the primary government performs the duties that a governing board typically would perform.

This Statement also requires that the financial burden criterion in paragraph 7 of Statement No. 84, *Fiduciary Activities*, be applicable to only defined benefit pension plans and defined benefit OPEB plans that are administered through trusts that meet the criteria in paragraph 3 of Statement No. 67, *Financial Reporting for Pension Plans*, or paragraph 3 of Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, respectively.

This Statement (1) requires that a Section 457 plan be classified as either a pension plan or another employee benefit plan depending on whether the plan meets the definition of a pension plan and (2) clarifies that Statement 84, as amended, should be applied to all arrangements organized under IRC Section 457 to determine whether those arrangements should be reported as fiduciary activities.

This Statement supersedes the remaining provisions of Statement No. 32, *Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*, as amended, regarding investment valuation requirements for Section 457 plans. As a result, investments of *all* Section 457 plans should be measured as of the end of the plan's reporting period in all circumstances.

The requirements of this Statement that (1) exempt primary governments that perform the duties that a governing board typically performs from treating the absence of a governing board the same as the appointment of a voting majority of a governing board in determining whether they are financially accountable for defined contribution pension plans, defined contribution OPEB plans, or other employee benefit plans and (2) limit the applicability of the financial burden criterion in paragraph 7 of Statement 84 to defined benefit pension plans and defined benefit OPEB plans that are administered through trusts that meet the criteria in paragraph 3 of Statement 67 or paragraph 3 of Statement 74, respectively, are effective immediately.

The requirements of this Statement that are related to the accounting and financial reporting for Section 457 plans are effective for fiscal years beginning after June 15, 2021. For purposes of determining whether a primary government is financially accountable for a potential component unit, the requirements of this Statement that provide that for all other arrangements, the absence of a governing board be treated the same as the appointment of a voting majority of a governing board if the primary government performs the duties that a governing board typically would perform, are effective for reporting periods beginning after June 15, 2021.

CURRENT GASB PROJECTS

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

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

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

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

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

Appendix A
Management Representation Letter

James City Service Authority

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

December 7, 2020

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

This representation letter is provided in connection with your audits of the financial statements of James City Service Authority (the "Authority"), which comprise the *respective financial positions* of the business-type activities as of June 30, 2020 and 2019, and the respective changes in financial position and cash flows for the years then ended, and the related notes to the financial statements, for the purpose of expressing opinions as to whether the financial statements are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP).

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

We confirm, to the best of our knowledge and belief, as of the date of this letter, the following representations made to you during your audit.

Financial Statements

1. We have fulfilled our responsibilities, as set out in the terms of the audit engagement letter dated April 29, 2020, including our responsibility for the preparation and fair presentation of the financial statements in accordance with U.S. GAAP and for the preparation of the supplementary information in accordance with the applicable criteria.

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

3. We acknowledge our responsibility for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

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

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

6. Related party relationships and transactions, including revenues, expenditures/expenses, loans, transfers, leasing arrangements, and guarantees, and amounts receivable from or payable to related parties have been appropriately accounted for and disclosed in accordance with U.S. GAAP.

7. Adjustments or disclosures have been made for all events, including instances of noncompliance, subsequent to the date of the financial statements that would require adjustment to or disclosure in the financial statements or in the schedule of findings and responses. There were none.

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

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

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

11. Guarantees, whether written or oral, under which the entity is contingently liable, if any, have been properly recorded or disclosed.

Information Provided

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

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

14. We have disclosed to you the results of our assessment of the risk that the financial statements may be materially misstated as a result of fraud.

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

16. We have no knowledge of any allegations of fraud or suspected fraud affecting the Authority's financial statements communicated by employees, former employees, regulators, or others.

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

18. We have disclosed to you all known actual or possible litigation, claims, and assessments whose effects should be considered when preparing the financial statements.

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

Government—specific

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

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

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

23. We are responsible for compliance with the laws, regulations, and provisions of contracts and grant agreements applicable to us, including tax or debt limits and debt contracts; and legal and contractual provisions for reporting specific activities in separate funds.

24. We have identified and disclosed to you all instances, which have occurred or are likely to have occurred, of fraud and noncompliance with provisions of laws and regulations that we believe have a material effect on the financial statements or other financial data significant to the audit objectives, and any other instances that warrant the attention of those charged with governance. There were none.

25. We have identified and disclosed to you all instances, which have occurred or are likely to have occurred, of noncompliance with provisions of contracts and grant agreements that we believe have a material effect on the determination of financial statement amounts or other financial data significant to the audit objectives. There were none.

26. We have identified and disclosed to you all instances that have occurred or are likely to have occurred, of abuse that could be quantitatively or qualitatively material to the financial statements or other financial data significant to the audit objectives. There were none.

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

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

29. The Authority has complied with all aspects of contractual agreements that would have a material effect on the financial statements in the event of noncompliance.

30. The financial statements properly classify all funds and activities, in accordance with GASB Statement No. 34, as amended.

31. Components of net position (net investment in capital assets; restricted; and unrestricted) are properly classified and, if applicable, approved.

32. Investments, derivative instruments, and land and other real estate held by endowments are properly valued.

33. Provisions for uncollectible receivables have been properly identified and recorded.

34. Expenses have been appropriately classified in or allocated to functions and programs in the statement of revenues, expenses and changes in net position, and allocations have been made on a reasonable basis.

35. Revenues are appropriately classified in the statement of revenues, expenses and changes in net position within operating and non-operating revenues.

36. Interfund, internal, and intra-entity activity and balances have been appropriately classified and reported.

37. Special and extraordinary items are appropriately classified and reported, if applicable.

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

39. Capital assets, including infrastructure and intangible assets, are properly capitalized, reported, and, if applicable, depreciated or amortized.

40. Capital assets have been evaluated for impairment as a result of significant and unexpected decline in service utility.

41. We believe that the actuarial assumptions and methods used to measure pension and OPEB liabilities and costs for financial accounting purposes are appropriate in the circumstances.

42. We have not completed the process of evaluating the impact that will result from adopting new Governmental Accounting Standards Board Statements (GASBS) that are not yet effective, as discussed in the notes to financial statements. The entity is therefore unable to disclose the impact that adopting these Statements will have on its financial position and the results of its operations when the Statements are adopted.

43. We agree with the findings of specialists in evaluating the completeness and accuracy of the pension and OPEB related amounts and have adequately considered the qualifications of the specialist in determining the amounts and disclosures used in the financial statements and underlying accounting records. We did not give or cause any instructions to be given to specialists with respect to the values or amounts derived in an attempt to bias their work, and we are not otherwise aware of any matters that have had an impact on the independence or objectivity of the specialists.

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

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

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

47. With respect to the Schedules of Net Position – by Activity, Schedules of Revenues, Expenses, Changes in Net Position – by Activity, and Schedule of Operating Revenues and Expenses – Budget to Actual – by Activity (Supplementary Information) of which an in-relation-to opinion is issued:

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

48. Expenditures of federal awards were below the $750,000 threshold in the audit period, and we were not required to have an audit in accordance with the Uniform Guidance.

49. We reaffirm the representations made to you in our letter dated November 25, 2019, regarding your audit for the fiscal year ended June 30, 2019.

50. To the best of our knowledge and belief, no events have occurred subsequent to June 30, 2020, and through the date this letter is signed that would require adjustment to or disclosure in the aforementioned financial statements (except as follows):

- To the extent our normal procedures and controls related to our financial close process were adversely impacted by the COVID-19 outbreak, we took appropriate actions and safeguards to reasonably ensure the fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America.
- Other than as disclosed in note 13 to the financial statements, no other impacts from the COVID-19 outbreak are necessary to be reflected in those financial statements.
- Disclosures included in the financial statements regarding the relevant significant business, financial, and reporting impacts of the COVID-19 outbreak accurately reflect management's full consideration of such impacts.

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

M. Douglas Powell, General Manager

Cheryl Cochet, Assistant Director of FMS, James City County

JAMES CITY SERVICE AUTHORITY

A Component Unit of the County of James City, Virginia

THE COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED JUNE 30, 2020

James City County, Virginia · jamescitycountyva.gov/jcsa

Prepared by the Department of Financial & Management Services

JAMES CITY SERVICE AUTHORITY

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

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

For the Fiscal Years Ended
June 30, 2020 and 2019

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, 2020

Board of Directors

Sue Sadler, Chair

Ruth Larson, Vice-Chair

Michael J. Hipple

Jim Icenhour

John J. McGlennon

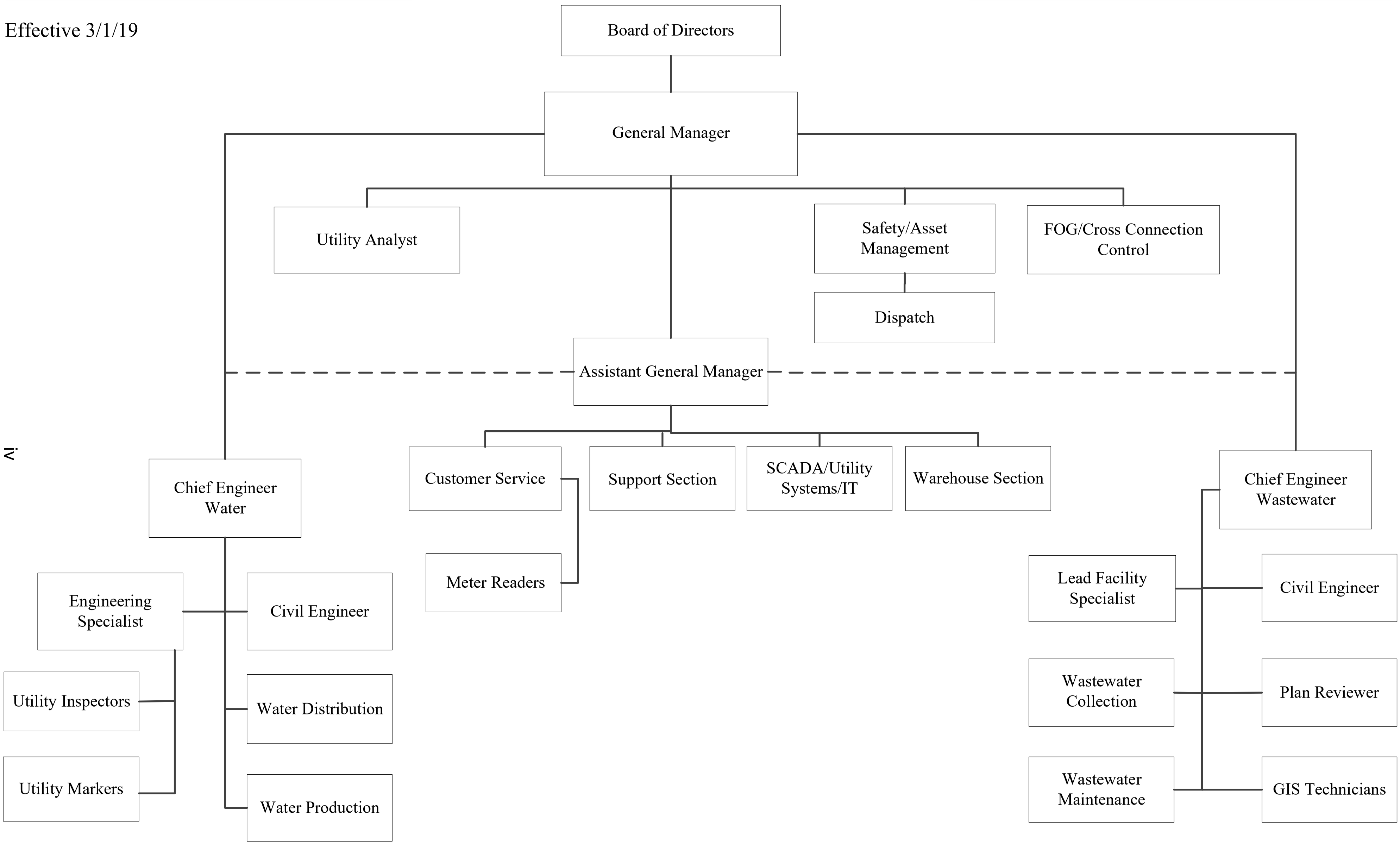
Officials

M. Douglas Powell
General Manager

Stephanie A. Luton
Assistant Manager/Treasurer

JCSA Organizational Chart

Effective 3/1/19



James City Service Authority

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jcsa@jamescitycountyva.gov

jamescitycountyva.gov/jcsa

December 7, 2020

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, 2020 and 2019, is hereby submitted. This report presents the financial position of all fund types of the James City Service Authority (JCSA) and the results of operations for the years then ended.

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

Generally accepted accounting principles require that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. JCSA's MD&A can be found on pages 4-9, 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 and, beginning in fiscal year 2019, supervises the JCSA's General Manager. 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 Plant with 10 water production facilities, and 8 independent water production facilities that are located outside the PSA. There are approximately 414 miles of water transmission and distribution lines throughout the entire system. The water system facilities supply approximately 4.7 million gallons of water per day to 23,116 water customers.

The JCSA's sewer system includes 76 pump stations with approximately 446 miles of sewer collection lines. The sewer system facilities collect and move approximately 5.1 million gallons of sewage per day for 24,863 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, 2020, the JCSA had 96 full-time employees with the responsibility to operate and maintain its utility facilities and lines. The JCSA's operating funds are self-supporting and the JCSA receives no share of any local or property tax levies. The Board of Directors has the sole power to set water and sewer utility rates and related fees. The Board of Directors adopted an inverted-block or inclining rate structure in 1996 for residential customers which incorporates a unit charge that increases with increasing consumption. The primary objective of the inverted-block rate structure is to promote water conservation, particularly from large-volume residential customers.

Economic Condition and Outlook

The County has a strong, diverse, and growing economic base. The County is located near the Cities of Hampton, Newport News and Williamsburg, and York County. Major employers within commuting distance include Busch Gardens, Anheuser-Busch, Owens-Illinois, Ball Metal, Newport News Shipbuilding, Langley Air Force Base, Fort Eustis, the Colonial Williamsburg Foundation, and the National Aeronautics and Space Administration. The County's population grew 13.3 percent from 2010 to 2019 while the Commonwealth of Virginia's population increased 6.7 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 2020 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 2020, the quarterly water fixed charge was $11.99 and the quarterly sewer fixed charge was $6.01.
The first tier (0-15,000 gallons per quarter) water service rate for a typical single family residential customer increased from $3.61 per 1,000 gallons to $4.10. The second tier (15,001-30,000 gallons per quarter) rate increased from $7.22 per 1,000 gallons to $8.19, and the third tier (30,000+ gallons per quarter) rate increased from $16.95 to $19.24. The water service rate for non-residential and multi-family residential customers increased from $5.33 per 1,000 gallons to $6.05. The sewer service rate increased from $3.08 to $3.11 per 1,000 gallons of water consumed. The rate changes increased a typical 5,000 gallons per month residential customer's bill by $3.10 per month from $38.95 to $42.05.

Monthly Billing - JCSA's multi-year meter replacement project was completed in fiscal year 2020 with over 22,800 touch-read meters converted to radio read technology. Readings are now collected with a vehicle mounted mobile data collector that has significantly reduced meter reading time. This operational efficiency allowed JCSA to move from quarterly billing to monthly billing in May 2020 to better serve customers and promote water conservation. Monthly billing benefits include more efficient household budgeting, more frequent and timely information about usage, and the ability to detect leaks sooner.

Bond Issue - The Authority issued $9,135,000 in revenue bonds in May 2020 to fund major portions of two large infrastructure improvement efforts, the White Oaks Area and Kingswood Water Main Replacement Projects. These projects are part of the Authority's repair and replacement program focusing on the replacement of aging and underperforming infrastructure to increase service reliability, minimize service disruptions, and improve operational efficiency. The White Oaks Area Water Main Replacement Project consists of replacing and upsizing approximately 22,000 feet of water main in the water distribution system installed in the early 1970s in the White Oaks, Indigo Park, Jamestown Farms, Paddock Green, Paddock Lane, and Canterbury Hills neighborhoods. Design is underway and construction will start at the end of calendar year 2020 at an estimated cost of $6.6 million and with an estimated completion date of June 2022. The Kingswood Water Main Replacement Project consists of replacing and upsizing approximately 14,500 feet of cast iron water main in the 1960-70s era neighborhood water distribution system primarily serving the Kingswood subdivision. Design started in 2020 with construction anticipated to begin in 2021 at an estimated total cost of $4.675 million and with an estimated completion date of December 2022.

Capital Projects - Major projects completed in fiscal year 2020 include replacement of 22,800 water meters, replacement of variable frequency drives controlling electric motor speed and power for production wells and the reverse osmosis treatment process at the Five Forks Water Treatment Plant, rehabilitation of the 1.25 million gallon Stonehouse elevated water storage tank, upgrading and flood proofing Lift Station 5-4 on Merrimac Trail, replacement of four air ejector lift stations along the Jamestown Road corridor and Lift Station 1-7 on Pocahontas Trail that reached the end of their service lives, and erosion control site improvements at Lift Station 6-6 in Norge.

Major multi-year projects continuing into 2020 and beyond are upgrading the existing Supervisory Control and Data Acquisition (SCADA) communication and control system for 107 remote sites, upgrading computer server hardware and software, asset management program development, future water source alternatives evaluations, design of the College Creek directional drill water main replacement project, corrosion inhibitor equipment upgrades at water production wells and associated distribution systems, design for replacement of the roof and HVAC system at the Five Forks Water Treatment Plant, and design for replacement of the water mains and service lines in the White Oaks area neighborhoods. Wastewater maintenance and rehabilitation projects associated with the Authority's Consent Agreement with the Virginia Department of Environmental Quality (DEQ) continued in fiscal year 2020 and included manhole raising and rehabilitation, extensive easement inspection and clearing, closed circuit television (CCTV) pipeline inspections, repairs to pipe defects identified during the CCTV inspections and design for replacing Lift Station 1-9 in the First Colony neighborhood.

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 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 on behalf of James City County, 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.

Pandemic Response - The Authority implemented several initiatives in mid-March 2020 in response to the COVID-19 pandemic. An Emergency Staffing Plan was adopted with split shifts and teleworking to maintain service levels and protect employee health. All employees practice social distancing and follow increased disinfection protocols in the workplace. Increased disinfection protocols for custodial services were also implemented at Authority facilities. Authority facilities were closed to the general public and deliveries and essential maintenance activities follow social distancing rules. Customer service operations continue through electronic and drop box methods.

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, 2019. This was the thirty-fifth year that the JCSA has received this prestigious award.

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

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

Acknowledgments

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

Sincerely,

M. Douglas Powell
General Manager

Stephanie A. Luton
Assistant General Manager/Treasurer

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

James City Service Authority
Virginia

For its Comprehensive Annual
Financial Report
For the Fiscal Year Ended

June 30, 2019

Christopher P. Morrill

Executive Director/CEO

FINANCIAL SECTION

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BROWN EDWARDS
certified public accountants

INDEPENDENT AUDITOR'S REPORT

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

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of the James City Service Authority (the "Authority"), a component unit of the County of James City, Virginia, as of and for the years ended June 30, 2020 and 2019, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States; and *Specifications for Audits of Authorities, Boards and Commissions* issued by the Auditor of Public Accounts of the Commonwealth of Virginia. Those standards require that we plan and perform the 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 auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

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Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities of the James City Service Authority as of June 30, 2020 and 2019, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis (MD&A) on pages 4 - 9 and the pension and OPEB schedules and related notes on pages 61 - 72 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits 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 introductory section, schedule of net position – by activity, schedule of revenues, expenses, and changes in net position - by activity, schedule of operating revenues and expenses - budget to actual - by activity, and the statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedule of net position – by activity, schedule of revenues, expenses, and changes in net position - by activity, and schedule of operating revenues and expenses - budget to actual - by activity are 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, the schedule of net position – by activity, schedule of revenues, expenses, and changes in net position - by activity, and schedule of operating revenues and expenses - budget to actual - by activity are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory 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 December 7, 2020, on our consideration of the James City Service Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the James City Service Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the James City Service Authority's internal control over financial reporting and compliance.

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

CERTIFIED PUBLIC ACCOUNTANTS

Newport News, Virginia
December 7, 2020

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, 2020 and 2019. 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 $185,764,711 and $184,466,209 at June 30, 2020 and 2019, respectively.

- Capital assets decreased by (1.4%) in 2020 from 2019, primarily attributable to current year depreciation expense and fewer utility infrastructure dedications in 2020 compared to 2019. For fiscal year 2020, there was formal acceptance of 1 new water system dedication and 1 new sewer system dedication.

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

- The Authority's total operating expenses before depreciation and amortization increased by 6.0% in 2020 from 2019 and by 3.8% in 2019 from 2018. The changes in 2020 were primarily attributable to an increase in personnel expenses including implementing compensation study recommendations and an increase in pension costs. The changes in 2019 were primarily attributable to an increase in infrastructure maintenance expenses related to the DEQ Consent Agreement and future water source studies and planning.

- The Authority's total operating revenues increased by 8.3% in 2020 from 2019 and by 0.9% in 2019 from 2018. The increases were primarily attributable to an increase in water and sewer rates.

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

Overview of the Financial Statements

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

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

The *statements of net position* present information on the Authority's (1) assets and deferred outflows of resources and (2) liabilities and deferred inflows of resources as of June 30, 2020 and 2019, 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 current year and previous two years.

Notes to the financial statements provide additional information that is essential for a full understanding of the data provided in the financial statements. The notes to the financial statements begin on page 14.

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 61.

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

	6/30/2020	6/30/2019	6/30/2018 (as restated)
Current and other assets	$ 66,137,146	$ 55,006,467	$ 51,034,603
Capital assets	152,582,412	154,679,418	152,112,763
Total assets	218,719,558	209,685,885	203,147,366
Deferred charge on refunding, net	1,510,736	1,586,907	1,663,079
Deferred pension/OPEB outflows	917,623	401,016	410,997
Total assets and deferred outflows	$ 221,147,917	$ 211,673,808	$ 205,221,442
Current liabilities	$ 3,800,152	$ 4,046,801	$ 3,011,072
Noncurrent liabilities	31,206,699	22,675,019	23,455,494
Total liabilities	35,006,851	26,721,820	26,466,566
Deferred pension/OPEB inflows	376,355	485,779	754,495
Net position:			
Net investment in capital assets	132,512,264	134,359,937	131,175,547
Restricted	9,401,879	569,708	567,011
Unrestricted	43,850,568	49,536,564	46,257,823
Total net position	185,764,711	184,466,209	178,000,381
Total liabilities, deferred inflows and net position	$ 221,147,917	$ 211,673,808	$ 205,221,442

The largest portion of the Authority's net position at June 30, 2020 (71.3%), 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 given that the capital assets themselves cannot be used to liquidate these liabilities. The unrestricted portion of net position at June 30, 2020 (23.6%) 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, 2020 and 2019

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

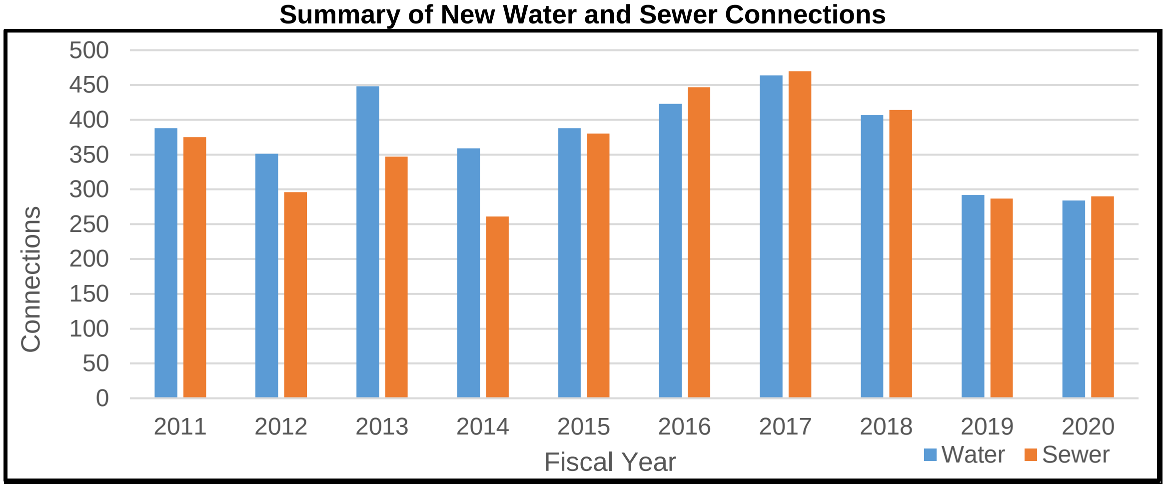
	6/30/2020	6/30/2019	6/30/2018 (as restated)
Water and sewer services	$ 17,692,654	$ 16,299,006	$ 15,942,612
Other	484,897	480,685	692,932
Total operating revenues	18,177,551	16,779,691	16,635,544
Operating expenses	12,364,418	11,669,089	11,241,739
Depreciation and amortization	8,115,624	7,922,613	7,992,438
Total expenses	20,480,042	19,591,702	19,234,177
Facility charges	2,386,850	2,949,130	3,581,360
Other non-operating revenue (expenses), net	1,196,818	1,190,884	(875,941)
Total nonoperating revenues, net	3,583,668	4,140,014	2,705,419
Income before capital contributions	1,281,177	1,328,003	106,786
Capital contributions	17,325	5,137,825	796,235
Change in net position	1,298,502	6,465,828	903,021
Net position, beginning of year	184,466,209	178,000,381	177,097,360
Net position, end of year	$ 185,764,711	$ 184,466,209	$ 178,000,381

In fiscal year 2020, water and sewer service revenue increased by 8.6% over 2019, primarily a result of the water and sewer rate increase. The Authority received $220,804 in proffers from developers to fund capital improvements, which was an increase of 3.3% from the amount received in 2019. There was a decrease in facility charges of (19.1%) during 2020, primarily attributable to pandemic-related economic uncertainty, a 3.2% decrease in the number of new construction sites paying facility fees and a 16.4% decrease in the average facility fees per site.

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

The Authority's net position increased by $1,298,502 in 2020 from 2019. This was primarily a result of increases in service revenue. The Authority's net position increased by $6,465,828 in 2019 from 2018, which was primarily a result of capital asset contributions received.

Summary of New Water and Sewer Connections



Capital Assets

The following table summarizes the Authority's capital assets at June 30, 2020, 2019, and 2018:

Summary of Capital Assets, Net

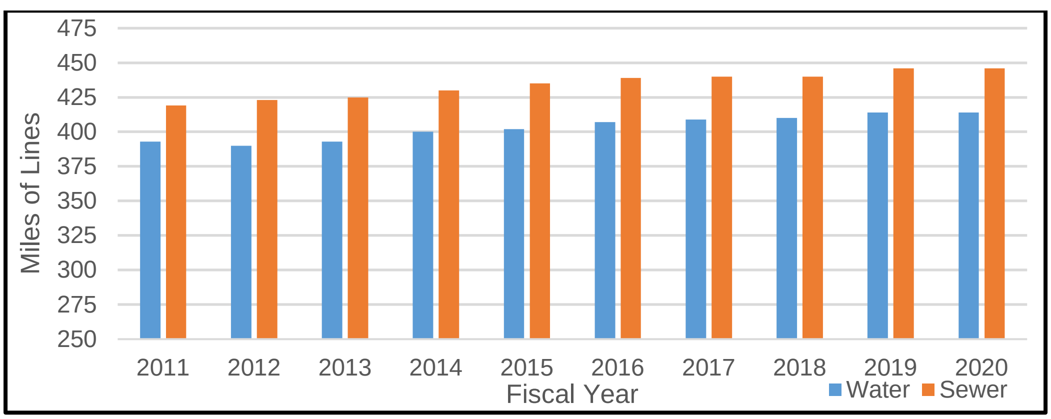
	6/30/2020	6/30/2019	6/30/2018 (as restated)
Utility plant	$ 268,631,727	$ 265,265,911	$ 256,238,922
Nonutility plant	14,236,936	11,690,170	11,272,960
Intangible assets	25,004,570	25,004,570	25,004,570
Construction in progress	3,395,592	3,464,970	2,552,479
Less accum. depreciation and amortization	158,686,413	150,746,203	142,956,168
Net capital assets	$ 152,582,412	$ 154,679,418	$ 152,112,763

At the end of fiscal year 2020, the Authority had invested $152,582,412 (net of accumulated depreciation and amortization) in a broad range of capital assets. This was a decrease of $2,097,006 from 2019, which was primarily the result of depreciation expense.

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

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.

In May 2020, the Authority issued revenue bonds totaling $9,135,000, to fund major portions of two large infrastructure improvement efforts, the White Oaks Area and Kingswood Water Main Replacement Projects. The White Oaks Area Water Main Replacement Project consists of replacing and upsizing approximately 22,000 feet of water main in the water distribution system installed in the early 1970s in the White Oaks, Indigo Park, Jamestown Farms, Paddock Green, Paddock Lane, and Canterbury Hills neighborhoods. The Kingswood Water Main Replacement Project consists of replacing and upsizing approximately 14,500 feet of cast iron water main in the 1960-70s era neighborhood water distribution system primarily serving the Kingswood subdivision. Construction on both projects is scheduled for completion in calendar year 2022.

At the close of the fiscal years 2020 and 2019, the Authority's total outstanding bonded debt was $29,055,000 (before premiums) and $20,575,000, respectively.

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

Economic Factors and Next Year Budgets and Rates

During the current fiscal year, the unrestricted net position increased by $3,055,601 from 2019, to approximately $52.6 million.

Starting in fiscal year 2021 JCSA will account for its operations and Capital Improvement Program (CIP) utilizing two separate funds: the Water Fund and the Sewer Fund, which are both supported by user fees. Support services are provided by various County departments in legal, finance, payroll, and general administrative functions on a reimbursable basis.

The fiscal year 2021 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. Current CIP projects such as the White Oaks Area and Kingswood Water Main Replacement Projects, SCADA Upgrade and the Repair and Replacement Reserve will allow JCSA to fix aging infrastructure for the foreseeable future.

The fiscal year 2021 Capital Improvements Program budget increased from $7,247,799 in fiscal year 2020 to $12,922,855, funded in part by $9,000,000 of bond proceeds.

The JCSA's Financial Policy requires a comprehensive rate study every five years. The fiscal year 2021 budget implements changes from the fiscal year 2020 rate study that are designed to maintain adequate revenue despite continued decreases in water usage and minimize the impact of rate increases on the customer. The total monthly water and sewer bill for a typical 5,000 gallons per month residential user increases by $1.79 per month from $42.05 to $43.84. The combined bill is the lowest in the region except for the City of Williamsburg.

The rate study developed a multi-year plan with changes to the water rate structure and water rates. The fiscal year 2021 water rate structure change consists of adjusting the number and size of single-family residential tiers to better reflect current usage patterns while promoting water conservation. The new structure contains four tiers sized as follows: Tier 1 (up to 4,000 gallons monthly), Tier 2 (4,001-8,000 gallons monthly), Tier 3 (8,001-12,000 gallons monthly), and Tier 4 (greater than 12,000 gallons monthly). Water service rates for both single-family residential consumption in the first three tiers and commercial/non-single-family residential consumption decrease to offset an increase in the water fixed charge that all customers pay regardless of consumption level. The water fixed charge increase promotes long-term revenue and rate stability and moves the Authority's fixed cost recovery level closer to the range favored by credit rating agencies. No changes were made to the sewer service rate or sewer fixed charge.

Water and sewer facility fees are also updated as a result of the rate study analysis. Facility fees are charged to new development in the Authority's service area to cover the cost of system expansion. System facility fees are assessed for major backbone infrastructure and local facility fees are assessed for smaller water distribution and sewer collection mains. The new system facility fee structure is based solely on meter size for all connection types and is the industry standard. It is more efficient to administer than the previous calculation method for residential connections that was based on the number of bathroom fixtures. The local facility fee structure remains a fixed charge, but the rates increase to reflect the current cost of service.

Contacting the Authority's Financial Management

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

BASIC FINANCIAL STATEMENTS

Exhibit 1

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)
Statements of Net Position
June 30, 2020 and 2019

	2020	2019
Assets		
Current assets:		
Cash and cash equivalents (Note 2)	$ 3,088,624	$ 1,589,107
Investments (Note 2)	49,828,908	47,930,531
Restricted cash and cash equivalents (Note 2)	9,401,879	569,708
Accounts receivable, customers	2,412,576	3,637,029
Accounts receivable, other	1,044	66,809
Note receivable (Note 3)	1,090	1,090
Interest receivable	293,410	296,438
Inventories	1,109,615	915,755
Total current assets	66,137,146	55,006,467
Noncurrent assets:		
Capital assets (Note 4):		
Non-depreciable	6,111,331	6,180,709
Depreciable	146,471,081	148,498,709
Net capital assets	152,582,412	154,679,418
Total assets	218,719,558	209,685,885
Deferred Outflows of Resources		
Deferred charge on refunding, net (Note 6)	1,510,736	1,586,907
Deferred pension (Note 7)	815,631	338,772
Deferred OPEB group life insurance (GLI) (Note 8)	77,029	38,000
Deferred OPEB health insurance credit (HIC) (Note 8)	11,901	8,467
Deferred OPEB retiree healthcare (Note 8)	13,062	15,777
Total deferred outflows of resources	2,428,359	1,987,923
Total assets and deferred outflows of resources	$ 221,147,917	$ 211,673,808

See accompanying notes to basic financial statements.

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)
Statements of Net Position
June 30, 2020 and 2019

	2020	2019
Liabilities		
Current liabilities:		
Accounts payable, trade	$ 428,901	$ 1,071,918
Accrued salaries	23,170	12,250
Compensated absences, current portion (Note 6)	356,429	312,373
Due to James City County (Note 11)	494,045	996,066
Deposits	830,721	614,431
Interest payable	328,979	320,856
Bonds payable, current portion (Note 6)	1,337,907	718,907
Total current liabilities	3,800,152	4,046,801
Noncurrent liabilities:		
Advances for construction (Note 5)	32,902	32,902
Compensated absences, net of current portion (Note 6)	118,811	104,124
Bonds payable, net of current portion (Note 6)	28,984,574	21,187,481
Net pension liability (Note 7)	1,265,328	523,170
Net retiree healthcare OPEB liability (Note 8)	381,436	432,970
Net GLI OPEB liability (Note 8)	369,227	340,000
Net HIC OPEB liability (Note 8)	54,421	54,372
Total noncurrent liabilities	31,206,699	22,675,019
Total liabilities	35,006,851	26,721,820
Deferred Inflows of Resources		
Deferred pension (Note 7)	262,425	418,971
Deferred OPEB retiree healthcare (Note 8)	76,605	21,899
Deferred OPEB GLI (Note 8)	25,058	33,000
Deferred OPEB HIC (Note 8)	12,267	11,909
Total deferred inflows of resources	376,355	485,779
Net Position		
Net position:		
Net investment in capital assets	132,512,264	134,359,937
Restricted for:		
Capital projects	8,741,597	-
Debt service	660,282	569,708
Unrestricted	43,850,568	49,536,564
Total net position	185,764,711	184,466,209
Total liabilities, deferred inflows of resources and net position	$ 221,147,917	$ 211,673,808

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, 2020 and 2019

	2020	2019
Operating revenues:		
Water and sewer services	$ 17,692,654	$ 16,299,006
Water supply proffers	220,804	213,825
Rental income	127,656	124,964
Other	136,437	141,896
Total operating revenues	18,177,551	16,779,691
Operating expenses:		
Salaries	5,093,032	4,721,993
Fringe benefits	2,075,905	1,436,239
Operating supplies	1,229,827	1,200,220
Maintenance	1,735,381	2,193,410
Utilities	919,745	974,168
Contractual fees	991,478	872,374
Other	319,050	270,685
Total operating expenses	12,364,418	11,669,089
Operating income before depreciation and amortization	5,813,133	5,110,602
Depreciation and amortization (Note 4)	8,115,624	7,922,613
Operating loss	(2,302,491)	(2,812,011)
Nonoperating revenues (expenses):		
Facility charges	2,386,850	2,949,130
Investment income	2,033,417	1,904,327
Gain on disposal of capital assets	17,813	14,522
Interest expense	(854,412)	(727,965)
Net nonoperating revenues	3,583,668	4,140,014
Income before capital contributions	1,281,177	1,328,003
Capital asset contributions	17,325	5,137,825
Changes in net position	1,298,502	6,465,828
Net position, beginning of year, as restated (Note 9)	184,466,209	178,000,381
Net position, end of year	$ 185,764,711	$ 184,466,209

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, 2020 and 2019

	2020	2019
Cash flows from operating activities:		
Cash received from customers	$ 19,133,397	$ 15,771,723
Other cash receipts	550,662	450,174
Cash payments to suppliers for goods and services	(6,534,379)	(4,466,743)
Cash payments for personnel services	(7,005,405)	(6,463,242)
Facility charges	2,386,850	2,949,130
Net cash provided by operating activities	8,531,125	8,241,042
Cash flows from capital and related financing activities:		
Repayments of debt	(655,000)	(630,000)
Interest paid	(702,050)	(727,250)
Proceeds from bond issuance	9,135,000	-
Bond issuance costs	(131,975)	-
Acquisition and construction of capital assets	(6,020,651)	(5,352,696)
Proceeds from sale of capital assets	37,171	15,775
Net cash provided by (used in) capital and related financing activities	1,662,495	(6,694,171)
Cash flows from investing activities:		
Purchases of investments	(29,239,804)	(34,653,287)
Proceeds from sale of investments	27,346,986	32,101,888
Interest received	2,030,886	1,768,507
Net cash used in investing activities	138,068	(782,892)
Decrease in cash and cash equivalents	10,331,688	763,979
Cash and cash equivalents, beginning of year (including $569,708 and $567,011 in restricted accounts at June 30, 2019 and 2018, respectively)	2,158,815	1,394,836
Cash and cash equivalents, end of year (including $9,401,879 and $569,708 in restricted accounts at June 30, 2020 and 2019, respectively)	$ 12,490,503	$ 2,158,815
Reconciliation of operating loss to net cash provided by operating activities:		
Operating loss	$ (2,302,491)	$ (2,812,011)
Adjustments to reconcile operating loss to cash provided by operating activities:		
Depreciation and amortization	8,115,624	7,922,613
Facility charges	2,386,850	2,949,130
Change in operating assets and liabilities:		
Accounts receivable, customers	1,224,453	(447,252)
Accounts receivable, others	65,765	(30,511)
Inventories	(193,860)	(42,903)
Accounts payable, trade	(643,017)	710,703
Accrued salaries	10,920	4,416
Compensated absences	58,743	14,502
Due to James City County	(502,021)	376,314
Deposits	216,290	(80,031)
Net OPEB liability and deferred inflow of resources	(14,884)	(10,647)
Net pension liability and related deferred inflow/outflows of resources	108,753	(313,281)
Total adjustments	10,833,616	11,053,053
Net cash provided by operating activities	$ 8,531,125	$ 8,241,042
Supplemental schedules:		
Noncash capital activities:		
Capital asset contributions	$ 17,325	$ 5,137,825
Noncash investing activity:		
Unrealized gain from change in fair value of investments	$ 580,156	$ 1,149,452

See accompanying notes to basic financial statements.

1) Organization and Summary of Significant Accounting Policies

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

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

The Authority's governing body is appointed by the County's Board of Supervisors, although the Authority is legally separate. The County's Board of Supervisors is the appointed Board of Directors of the Authority. The County cannot impose its will over the Authority, nor does a financial benefit or burden exist between the County and the Authority. The County does not have access to the resources of the Authority, nor does it have responsibility to provide financial support for the debt or other obligations of the Authority. However, the Authority is considered to be financially integrated with the County based on the nature and significance of its relationship with the County. The County's Strategic Plan includes a sustainable long-term water supply as a primary goal, which is to be achieved through the efforts of the Authority. In addition, the Authority has adopted other Strategic Plan goals in developing its initiatives. As a result, the County's Strategic Plan impacts the budgetary and operational decisions of both the County and the Authority and financially integrates these entities.

In prior years, the Authority was presented as a blended component unit of the County, given that the County Administrator had certain operational responsibility for the Authority. The Board of Directors adopted a resolution to appoint the Authority's General Manager as its chief executive officer in 2018, and procedures have been implemented subsequently to remove operational responsibilities over the Authority from the County. The Authority remains financially integrated with the County; therefore, the Authority is included as a discretely presented component unit in 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.

Given that 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.

1) Organization and Summary of Significant Accounting Policies, Continued

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.

Investments

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

Allowance for Uncollectible Accounts

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

Inventories

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

Capital Assets

All direct costs of water and sewer transmission facilities constructed are capitalized. 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.

1) Organization and Summary of Significant Accounting Policies, Continued

Unbilled Revenue

The Authority records the amount of accrued but unbilled revenue by prorating actual subsequent billings. Amounts accrued but unbilled were approximately $1,300,000 and $2,011,000 at June 30, 2020 and 2019, respectively, and are included in Accounts receivable, customers on the statements of net position. In May 2020, the Authority adjusted its billing cycles so that all billings are now on a monthly basis. This change resulted in a decrease to unbilled revenue for fiscal year 2020, given that only one month needed to be accounted for in subsequent billings under the new monthly process.

Budgetary Policy

Although a budget is not legally required to be adopted, a fiscal year budget is prepared on a modified accrual basis for management and fiscal planning purposes. Any changes to the adopted budget require Board approval. Appropriations lapse at the end of the fiscal year with the exception of capital projects which continue until completed. For the year ended June 30, 2020, there were no supplemental appropriations for various grants. For the year ended June 30, 2019, there was one supplemental appropriation in the amount of $75,361 for storm costs.

Risk Management

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees, and natural disasters. Property, liability and worker's compensation coverages are provided through a self-insurance pool. The Authority's retention is through deductibles. Deductibles and coverage limits at June 30, 2020 were as follows:

	Deductibles	Liability Coverage Limits
Property insurance:		
Building and contents	$ 10,000	$ 46,248,450
Business interruption/extra expense		$ 3,000,000
Inland marine	$ 1,000	$ 1,133,952
Back-up of sewers and drains		$ 10,000,000
Debris removal		$ 25,000,000
Pollutant clean-up and removal		$ 500,000
Newly acquired locations for up to 120 days		$ 25,000,000
Property in transit		$ 5,000,000
Utility services time element		$ 5,000,000
Increased cost of construction/ordinance/demolition		$ 20,000,000
Earthquake/Flood (outside 100 year flood plain)	$ 25,000	$ 100,000,000
Equipment breakdown	$ 1,000	$ 125,000,000
General liability		$ 2,000,000
Public officials liability		$ 1,000,000
Automobile liability		$ 2,000,000
Automobile comprehensive/collision	$ 1,000	$ 753,527
Crime	$ 250	$ 500,000
Excess liability		$ 7,000,000
Excess public officials liability		$ 8,000,000
Environmental liability	$ 25,000	$ 1,000,000
Cyber risk		$ 2,000,000

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

1) Organization and Summary of Significant Accounting Policies, Continued

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.

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.

Deferred Outflows and Inflows of Resources

In addition to assets and liabilities, the statements of net position report separate sections for deferred outflows of resources and deferred inflows of resources. Deferred outflows represent a consumption of net position that applies to future periods and so will not be recognized as an outflow of resources until then. Deferred inflows represent an acquisition of net position that is applicable to a future reporting period and, therefore, will not be recognized as an inflow of resources until that time.

The Authority has the following items that qualify for reporting in these categories:

- ***Deferred gain/loss on refunding:*** A deferred amount on refunding is a deferred outflow/inflow which results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt.
- ***Contributions subsequent to the measurement date for pensions and OPEB:*** These contributions are always a deferred outflow, which will be applied to the net pension or OPEB liability in the next fiscal year.
- ***Differences between expected and actual experience for economic/demographic factors in the measurement of the total pension or OPEB liability:*** This difference will be recognized in pension or OPEB expense over the expected average remaining service life of all employees provided with benefits in the plan and may be reported as a deferred inflow or outflow as appropriate.
- ***Differences resulting from a changes in proportion of the collective net pension and OPEB liabilities:*** This difference will be recognized in pension and OPEB expense over the expected average remaining service life of all employees provided with benefits in the plan and may be reported as a deferred inflow or outflow as appropriate.
- ***Difference between projected and actual earnings on pension and OPEB plan investments:*** This difference will be recognized in pension or OPEB expense over the closed five year period and may be reported as a deferred outflow or inflow as appropriate.
- ***Differences resulting from changes in assumptions on pension plan or OPEB investments:*** These differences will be recognized in pension or OPEB expense over the estimated remaining service life of employees subject to the plan.

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.

Reclassification

Certain amounts in the prior year financial presentations in the management's discussion and analysis and statistical sections have been reclassified for comparative purposes to conform to the current year presentation.

2) Cash, Cash Equivalents, and Investments

The Authority's cash, cash equivalents, and investments at June 30, 2020 and 2019, consisted of the following:

	6/30/2020	6/30/2019
Bank deposits	$ 1,057,657	$ 538,085
Petty cash	503	605
Money market	11,432,343	1,620,125
Investments	49,828,908	47,930,531
Total	$ 62,319,411	$ 50,089,346
Reconcilation to Statements of Net Position:		
Cash and cash equivalents	$ 3,088,624	$ 1,589,107
Investments	49,828,908	47,930,531
Restricted cash and cash equivalents	9,401,879	569,708
Total	$ 62,319,411	$ 50,089,346

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

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

The Authority's investments at June 30, 2020 and 2019 were as follows:

Investment Type	Cost	Fair Value	Level 1	Level 2	Level 3
6/30/2020:					
U.S. Treasury securities	$ 23,059,027	$ 23,754,793	$ -	$ 23,754,793	$ -
Municipal Bond/Note	1,364,047	1,374,408	-	1,374,408	-
Federal agency mortgage security	1,226,230	1,262,893	-	1,262,893	-
Federal agency notes and bonds	9,293,461	9,427,670	-	9,427,670	-
Corporate notes and bonds	6,320,981	6,503,213	-	6,503,213	-
Certificates of deposit	2,775,000	2,815,774	-	2,815,774	-
Commercial paper	494,396	498,840	-	498,840	-
Fed. agency coll. mortgage ob.	4,106,757	4,191,317	-	4,191,317	-
Total	$ 48,639,899	$ 49,828,908	$ -	$ 49,828,908	$ -
6/30/2019:					
U.S. Treasury securities	$ 25,767,853	$ 26,147,199	$ -	$ 26,147,199	$ -
Federal agency notes and bonds	6,804,207	6,879,843	-	6,879,843	-
Corporate notes and bonds	7,293,211	7,398,423	-	7,398,423	-
Certificates of deposit	4,600,000	4,610,396	-	4,610,396	-
Fed. agency coll. mortgage ob.	2,856,407	2,894,670	-	2,894,670	-
Total	$ 47,321,678	$ 47,930,531	$ -	$ 47,930,531	$ -

2) Cash, Cash Equivalents, and Investments, Continued

		Investment maturity (in years)		
Investment Type	**Amount**	**Less than 1**	**1-2**	**2-10**
6/30/2020:				
Commercial paper	$ 498,840	$ 498,840	$ -	$ -
U.S. Treasury securities	23,754,793	-	15,172,043	8,582,750
Municipal bond	1,374,408	-	502,745	871,663
Federal agency notes and bonds	9,427,670	-	2,948,382	6,479,288
Federal agency mortgage security	1,262,893	-	-	1,262,893
Corporate notes and bonds	6,503,213	1,117,186	2,336,127	3,049,900
Certificate of deposit	2,815,774	1,836,924	-	978,850
Fed. agency coll. mortgage ob.	4,191,317	-	879,479	3,311,838
Total	$ 49,828,908	$ 3,452,950	$ 21,838,776	$ 24,537,182
6/30/2019:				
U.S. Treasury securities	$ 26,147,199	$ -	$ 13,140,512	$ 13,006,687
Federal agency notes and bonds	6,879,843	-	3,280,839	3,599,004
Corporate notes and bonds	7,398,423	377,708	3,543,909	3,476,806
Certificate of deposit	4,610,396	2,785,210	1,825,186	-
Fed. agency coll. mortgage ob.	2,894,670	693	-	2,893,977
Total	$ 47,930,531	$ 3,163,611	$ 21,790,446	$ 22,976,474

Investment Policy

The JCSA Board of Directors adopted an updated Investment Policy on August 13, 2019. 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 pooled investment programs.

The Policy establishes limitations on the holdings of non-U.S. government obligations. The combined amount of bankers' acceptances, commercial paper, negotiable certificates of deposit, and corporate notes shall not exceed forty percent (40%) of the total book value of the portfolio at the date of acquisition. When investing in a pool, the Authority shall limit its investment to ten percent (10%) of the total assets of the pool. The table below summarizes sector limits, issuer limits, ratings requirements and the maximum maturity for the Authority's investments.

2) Cash, Cash Equivalents, and Investments, Continued

Permitted Investment	Sector Limit	Issuer Limit[1]	Ratings Requirement[2,3]	Max Maturity[4]
U.S. Treasury Obligations	100%	100%	N/A	5 Years
Federal Agency Obligations	100%	35%	AA or equivalent by at least two NRSROs, which of which will either be Moody's or S&P	5 Years
Federal Agency Mortgage-Backed Securities	25%	25%	AA or equivalent by at least two NRSROs, which of which will either be Moody's or S&P	5 Years WAL
Municipal Obligations	20%	5%	AA (S&P) and Aa (Moody's)	5 Years
Commercial Paper	35%	5%	A-1 or equivalent by at least two NRSROs	270 Days
Bankers' Acceptances	35%	5%	A-1 or equivalent by at least two NRSROs	180 Days
Corporate Notes	30%	5%	AA (S&P) and Aa (Moody's)	5 Years
Negotiable Certificates of Deposit and Bank Deposit Notes	30%	5%	A-1 (S&P) & P-1 (Moody's) if less than one year to maturity; AA (S&P) and Aa (Moody's) if greater than one year to maturity	5 Years
Money Market Mutual Funds	50%	50%	AAAm or equivalent by an NRSRO	N/A
Principal Stability Pools	50%	50%	AAAm or equivalent by an NRSRO	N/A
Short-term Bond Pools	50%	50%	AAf or equivalent by an NRSRO	Maximum duration of 3 years
Repurchase Agreements	50%	25%	Counterparty: AA or the equivalent from an NRSRO	30 days
Collateralized Bank Deposits	100%	100%	Collateralized in accordance with the Security for Public Deposits Act	N/A

1. *Issuer Limit refers to the allowable percentage of the entire Portfolio*
2. *Ratings by Nationally Recognized Statistical Ratings Organizations ("NRSROs") as designated by the Securities and Exchange Commission*
3. *At time of purchase*
4. *From transaction settlement date*

2) Cash, Cash Equivalents, and Investments, Continued

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.

As of June 30, 2020 and 2019, the Authority's investments rated by Standard & Poor's were as follows:

	Unrated	AAA	AA+	AA	AA-	A+	A-1+	A-1
6/30/2020:								
Money market funds	$ 9,401,879	$ 70,966	$ -	$ -	$ -	$ -	$ -	$ -
LGIP	-	1,959,498	-	-	-	-	-	-
Federal agency notes/bonds	-	-	9,427,670	-	-	-	-	-
Corporate notes/bonds	-	-	795,819	2,117,014	3,101,012	489,368	-	-
Certificate of deposit	-	-	-	-	978,850	-	-	1,836,924
Commercial paper	-	-	-	-	-	-	498,840	
Municipal bond note	-	250,000	256,480	502,745	365,183	-	-	-
Federal agency mrtge. security	-	-	1,262,893	-	-	-	-	-
Fed. agency coll. mrtge. ob.	-	-	4,191,317	-	-	-	-	-
Total	$ 9,401,879	$ 2,280,464	$ 15,934,179	$ 2,619,759	$ 4,445,045	$ 489,368	$ 498,840	$ 1,836,924
6/30/2019:								
Money market funds	$ 569,708	$ 46,477	$ -	$ -	$ -	$ -	$ -	$ -
LGIP	-	1,003,940	-	-	-	-	-	-
Federal agency notes/bonds	-	-	6,879,843	-	-	-	-	-
Corporate notes/bonds	-	180,156	1,160,289	1,751,578	4,306,400	-	-	-
Certificate of deposit	-	-	-	-	1,825,186	-	878,144	1,907,066
Fed. agency coll. mrtge ob.	-	-	2,894,670	-	-	-	-	-
Total	$ 569,708	$ 1,230,573	$ 10,934,802	$ 1,751,578	$ 6,131,586	$ -	$ 878,144	$ 1,907,066

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 exceptions noted in the table above under "Issuer Limit."

At June 30, 2020 and 2019, the portions of the Authority's portfolio (excluding restricted investments) that exceeded 5% of the total were:

	% of Portfolio	
Issuer	**6/30/2020**	**6/30/2019**
U.S. Treasury	45.8%	53.4%
Freddie Mac	12.4%	6.1%
Fannie Mae	11.3%	7.7%
Federal Home Loan Banks	5.1%	6.2%

2) Cash, Cash Equivalents, and Investments, Continued

Interest Rate Risk

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

The operating fund core portfolio will be invested in permitted investments with a stated maturity of no more than five years from transaction settlement date (with the exception of Agency Mortgage-Backed Securities ("MBS") which must have a weighted average life of no more than 5 years. 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 will 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

In accordance with the Code of Virginia Section 2.2-4515, 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, 2020 and 2019, all of the Authority's investments were held in a bank's trust department in the name of James City Service Authority.

3) Note Receivable

In June 2017, the Authority entered into a deferred payment agreement with Franciscus at Promenade, LLC ("Franciscus") under which Franciscus would make installment payments for water and sewer system facility charges related to a construction project. Upon either the completion of the project or December 31, 2021, a final reconciliation of charges and payments will occur, and any outstanding balance owed to the Authority will be due. At June 30, 2020 and 2019, the note receivable balance was $1,090.

4) Capital Assets

The following is a summary of changes in capital assets for the fiscal years ended June 30, 2020 and 2019:

	Balance July 1, 2019	Increases	Decreases	Balance June 30, 2020
Capital assets not being depreciated:				
Utility plant:				
Land	$ 955,995	$ -	$ -	$ 955,995
Nonutility plant:				
Land	1,741,991	-	-	1,741,991
Land improvements	13,183	-	-	13,183
Construction in progress	3,464,970	5,843,839	5,913,217	3,395,592
Intangibles - easements	4,570	-	-	4,570
Total capital assets not being depreciated	6,180,709	5,843,839	5,913,217	6,111,331
Capital assets being depreciated:				
Utility plant:				
Water and sewer systems	264,309,916	3,365,816	-	267,675,732
Nonutility plant:				
Land improvements (depreciable)	8,930	-	-	8,930
Central shop	4,435,895	798,941	49,425	5,185,411
Office fixtures and equipment	2,379,905	1,776,153	22,764	4,133,294
Automotive equipment	3,018,468	155,882	122,583	3,051,767
Software	-	10,562	-	10,562
Infrastructure	91,798	-	-	91,798
Intangible - water rights	25,000,000	-	-	25,000,000
Total capital assets being depreciated	299,244,912	6,107,354	194,772	305,157,494
Less accumulated depreciation/amortization:				
Water and sewer systems	139,083,418	6,888,955	-	145,972,373
Land improvements	223	446		669
Central shop	1,286,420	128,687	30,067	1,385,040
Office fixtures and equipment	1,534,952	217,247	22,764	1,729,435
Automotive equipment	2,549,256	263,732	122,583	2,690,405
Infrastructure	3,590	3,060	-	6,650
Intangibles - water rights	6,288,344	613,497	-	6,901,841
Total accumulated depreciation/amortization	150,746,203	8,115,624	175,414	158,686,413
Total capital assets being depr./amort, net	148,498,709	(2,008,270)	19,358	146,471,081
Total capital assets, net	$ 154,679,418	$ 3,835,569	$ 5,932,575	$ 152,582,412

4) Capital Assets, Continued

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

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, 2020 and 2019, advances for construction consisted of:

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

6) Long-Term Liabilities

The Authority's long-term debt activity for the fiscal years ended June 30, 2020 and 2019 was as follows:

	Balance 7/1/2019	Increases	Decreases	Balance 6/30/2020	Due within one year
Refunding revenue bonds	$ 20,575,000	$ -	$ 655,000	$ 19,920,000	$ 690,000
Revenue bonds	-	9,135,000	-	9,135,000	584,000
Premium, refunding revenue bonds	1,331,388	-	63,907	1,267,481	63,907
Compensated absences	416,497	502,416	443,673	475,240	356,429
Total	$ 22,322,885	$ 9,637,416	$ 1,162,580	$ 30,797,721	$ 1,694,336

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

Revenue Bonds and Refunding Revenue Bonds (including Premium)

In August 2008, the Authority issued revenue bonds totaling $27,120,000 to finance the purchase from the City of Newport News, Virginia of a "safe yield share" of treated water capacity from the King William Reservoir Project or an alternate water supply source. In April 2016, the Authority issued revenue refunding bonds totaling $22,595,000 to advance refund the outstanding 2008 revenue bonds. There was a $1,533,760 premium issued on the new bonds. The interest rate on the bonds ranges from 3% - 5% and the net proceeds were deposited in an irrevocable trust with an escrow agent to provide funds for the future debt service payments on the refunded bonds. Consequently, the outstanding balance for the 2008 revenue bonds in the amount of $21,075,000 and $21,730,000 at June 30, 2020 and 2019, respectively, is considered defeased, and the liability for those bonds has been removed from the statements 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 $1,510,736 and $1,586,907 at June 30, 2020 and 2019, respectively. The advance refunding reduced its total debt service payments over 24 years by $6,956,051 to obtain an economic gain of $3,548,748. The refunding revenue bonds mature in various installments through 2040 with interest payable semiannually.

In May 2020, the Authority issued revenue bonds totaling $9,135,000 to finance the upgrade, repair, and replacement of a portion of the Authority's water distribution system and pay for the costs of issuance associated with the bonds. The interest rate on the bonds is 2.264%, and the first principal payment for this issuance is due in January 2021. As a result, the full amount of the revenue bonds is outstanding as of June 30, 2020 and is reflected on the statements of net position.

6) Long-Term Liabilities, Continued

Future maturities of principal and interest payments on the Authority's bonds are as follows:

Year Ended June 30	Principal	Interest
2021	1,274,000	802,305
2022	1,246,000	826,394
2023	1,283,000	792,886
2024	1,335,000	743,456
2025	1,382,000	691,754
2026-2030	7,609,000	2,762,408
2031-2035	8,716,000	1,654,658
2036-2040	6,210,000	569,700
Total	$ 29,055,000	$ 8,843,561

Compensated Absences

Compensated absences consist 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, 2020 and 2019, compensated absences consisted of the following:

	6/30/2020	6/30/2019
Vacation	$ 339,727	$ 308,096
Sick	75,082	77,720
Paid-time off	60,431	30,681
Total	$ 475,240	$ 416,497

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.

7) Pensions, Continued

RETIREMENT PLAN PROVISIONS

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
About Plan 1 Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, service credit and average final compensation at retirement using a formula.	**About Plan 2** Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, service credit and average final compensation at retirement using a formula.	**About the Hybrid Retirement Plan** The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. • The defined benefit is based on a member's age, service credit and average final compensation at retirement using a formula. • The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions. • In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.
Eligible Members Employees are in Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013, and they have not taken a refund.	**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.	**Eligible Members** Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes:

7) Pensions, Continued

Hybrid Opt-In Election VRS non-hazardous duty covered Plan 1 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014. The Hybrid Retirement Plan's effective date for eligible Plan 1 members who opted in was July 1, 2014. If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan. 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.	*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.	• Political subdivision employees* Members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1-April 30, 2014; the plan's effective date for opt-in members was July 1, 2014 **Non-Eligible Members* Some employees are not eligible to participate in the Hybrid Retirement Plan. They include: • Political subdivision employees who are covered by enhanced benefits for hazardous duty employees Those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable) or ORP.
Retirement Contributions Employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.	**Retirement Contributions** Same as Plan 1.	**Retirement Contributions** A member's retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to both the defined benefit and the defined contribution components of the plan. Mandatory contributions are based on a percentage of the employee's creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.

7) Pensions, Continued

<table>
<tr>
<td>Service Credit
Service credit includes active service. Members earn service credit for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional service credit the member was granted. A member's total service credit 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.</td>
<td>Service Credit
Same as Plan 1.</td>
<td>Service Credit
Defined Benefit Component:
Under the defined benefit component of the plan, service credit includes active service. Members earn service credit for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional service credit the member was granted. A member's total service credit 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.

Defined Contributions Component:
Under the defined contribution component, service credit is used to determine vesting for the employer contribution portion of the plan.</td>
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<tr>
<td>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 service credit. 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.</td>
<td>Vesting
Same as Plan 1.</td>
<td>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 service credit. Plan 1 or Plan 2 members with at least five years (60 months) of service credit 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.</td>
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</table>

7) Pensions, Continued

		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 The basic benefit is determined using the average final compensation, service credit and plan multiplier. An early retirement reduction is applied to this amount if the member is retiring with a reduced benefit. In cases where the member has elected an optional form of retirement payment, an option factor specific to the option chosen is then applied.	**Calculating the Benefit** See definition under Plan 1.	**Calculating the Benefit** *Defined Benefit Component:* See definition under Plan 1. *Defined Contributions 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.
Average Final Compensation A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.	**Average Final Compensation** A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.	**Average Final Compensation** Same as Plan 2. It is used in the retirement formula for the defined benefit component of the plan.

7) Pensions, Continued

Service Retirement Multiplier ***VRS:*** The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.70%.	**Service Retirement Multiplier** ***VRS:*** Same as Plan 1 for service earned, purchased or granted prior to January 1, 2013. For non-hazardous duty members the retirement multiplier is 1.65% for service credit earned, purchased or granted on or after January 1, 2013. .	**Service Retirement Multiplier** *Defined Benefit Component:* ***VRS:*** The retirement multiplier for the defined benefit component is 1.00%. For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans. *Defined Contributions Component:* Not applicable.
Normal Retirement Age ***VRS:*** Age 65.	**Normal Retirement Age** ***VRS:*** Normal Social Security retirement age.	**Normal Retirement Age** *Defined Benefit Component:* **VRS:** Same as Plan 2. *Defined Contributions Component:* Members are eligible to receive distributions upon leaving employment, subject to restrictions.
Earliest Unreduced Retirement Eligibility ***VRS:*** Age 65 with at least five years (60 months) of service credit or at age 50 with at least 30 years of service credit.	**Earliest Unreduced Retirement Eligibility** ***VRS:*** Normal Social Security retirement age with at least five years (60 months) of service credit or when their age plus service credit equals 90.	**Earliest Unreduced Retirement Eligibility** *Defined Benefit Component:* ***VRS:*** Normal Social Security retirement age and have at least five years (60 months) of service credit or when their age plus service credit equals 90. *Defined Contributions Component:* Members are eligible to receive distributions upon leaving employment, subject to restrictions.
Earliest Reduced Retirement Eligibility ***VRS:*** Age 55 with at least five years (60 months) of service credit or age 50 with at least 10 years of service credit.	**Earliest Reduced Retirement Eligibility** ***VRS:*** Age 60 with at least five years (60 months) of service credit.	**Earliest Reduced Retirement Eligibility** *Defined Benefit Component:* ***VRS:*** Age 60 with at least five years (60 months) of service credit. *Defined Contributions Component:* Members are eligible to receive distributions upon leaving employment, subject to restrictions.

7) Pensions, Continued

Cost-of-Living Adjustment (COLA) in Retirement	**Cost-of-Living Adjustment (COLA) in Retirement**	**Cost-of-Living Adjustment (COLA) in Retirement**
The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) up to a maximum COLA of 5%. *Eligibility:* For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of service credit, 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 service credit, 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. • 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 Cost-of-Living Adjustment (COLA) matches the first 2% increase in the CPI-U and half of any additional increase (up to 2%), for a maximum COLA of 3%. *Eligibility:* Same as Plan 1. *Exceptions to COLA Effective Dates:* Same as Plan 1.	*Defined Benefit Component:* Same as Plan 2. *Defined Contributions Component:* Not applicable. *Eligibility:* Same as Plan 1 and Plan 2. *Exceptions to COLA Effective Dates:* Same as Plan 1 and Plan 2.

7) Pensions, Continued

• The member dies in service and the member's survivor or beneficiary is eligible for a monthly death-in-service benefit. The COLA will go into effect on July 1 following one full calendar year (January 1 to December 31) from the date the monthly benefit begins.		
Disability Coverage Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.7% on all service, regardless of when it was earned, purchased or granted.	**Disability Coverage** Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.65% on all service, regardless of when it was earned, purchased or granted.	**Disability Coverage** Employees of political subdivisions (including Plan 1 and Plan 2 opt-ins) participate in the Virginia Local Disability Program (VLDP) unless their local governing body provides 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 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 service credit in their plan. Prior service credit 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.	**Purchase of Prior Service** Same as Plan 1.	**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 Contributions Component:* Not applicable.

7) Pensions, Continued

Employees Covered by Benefit Terms

As of the June 30, 2018 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	53
Inactive members:	
Vested	17
Non-vested	19
Active elsewhere in VRS	26
Total inactive members	62
Active members	83
Total	198

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.

The Authority's contractually required contribution rate for the years ended June 30, 2020 and 2019 was 5.67% and 5.64%, respectively, of covered employee compensation. These rates were based on actuarially determined rates from an actuarial valuation as of June 30, 2017. These rates, when combined with employee contributions, were expected to finance the costs of benefits earned by employee during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Authority were $265,027 and $250,534 for the years ended June 30, 2020 and June 30, 2019, respectively.

Net Pension Liability

The net pension liability (NPL) is calculated separately for each employer and represents that particular employer's total pension liability determined in accordance with GASB Statement No. 68, less that employer's fiduciary net position. For the Authority, the net pension liability for fiscal year 2020 was measured as of June 30, 2019. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2018 rolled forward to the measurement date of June 30, 2019. The net pension liability for fiscal year 2019 was measured as of June 30, 2018. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2017 rolled forward to the measurement date of June 30, 2018.

Actuarial Assumptions

The total pension liability for fiscal years 2020 and 2019 for general employees in the Authority's retirement plan was based on actuarial valuations as of June 30, 2018 and June 30, 2017, respectively, using the entry age normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2019 and June 30, 2018, respectively.

Inflation	2.50%
Salary increases, including inflation	3.5% – 5.35%
Investment rate of return	
June 30, 2020	6.75%, net of pension plan investment expenses, including inflation*
June 30, 2019	7.00%, net of pension plan investment expenses, including inflation*

7) Pensions, Continued

**Administrative expenses as a percent of the market value of assets for the last experience studies 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 rates noted above. However, since the difference was minimal, and the more conservative investment return assumptions noted above 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 the rates above to simplify preparation of pension liabilities.*

Mortality 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, 2018 and June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012, through June 30, 2016, except the change in the discount rate for the June 30, 2018 valuation, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study and VRS Board action are as follows:

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

- Updated mortality rates (pre-retirement, post-retirement healthy, and disabled) 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
- Adjusted 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%
- Decreased discount rate from 7.00% to 6.75% for the June 30, 2018 valuation
- No change in discount rate for the June 30, 2017 valuation

Long-Term Expected Rate of Return

The long-term expected rate of return on pension System investments was determined using a lognormal 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:

7) Pensions, Continued

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return*
Public equity	34.00%	5.61%	1.91%
Fixed income	15.00%	0.88%	0.13%
Credit strategies	14.00%	5.13%	0.72%
Real assets	14.00%	5.27%	0.74%
Private equity	14.00%	8.77%	1.23%
MAPS - Multi-Asset Public Strategies	6.00%	3.52%	0.21%
PIP- Private Investment Partnership	3.00%	6.29%	0.19%
Total	100.00%		5.13%
		Inflation	2.50%
		*Expected arithmetic nominal return	7.63%

**The above allocation provides a one-year return of 7.63%. 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 7.11%, including expected inflation of 2.50%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation.*

Discount Rate

The discount rate used to measure the total pension liability at June 30, 2020 and 2019 was 6.75% and 7.00%, respectively. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate.

Consistent with the phased-in funding provided by the General Assembly for state and teacher employer contributions; political subdivisions were also provided with an opportunity to use an alternate employer contribution rate. For the year ended June 30, 2019, the alternate rate was the employer contribution rate used in fiscal year 2012 or 100% of the actuarially determined employer contribution rate from the June 30, 2017, actuarial valuations, whichever was greater. From July 1, 2019, on, participating employers are assumed to continue to contribute 100% of the actuarially determined contribution rates.

For the year ended June 30, 2018, the alternate rate was the employer contribution rate used in FY 2012 or 90% of the actuarially determined employer contribution rate from the June 30, 2015, actuarial valuations, whichever was greater. From July 1, 2018 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates.

Based on those assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

7) Pensions, Continued

Changes in Net Pension Liability

	Total pension liability (a)	Plan fiduciary net pension (b)	Net pension liability (a) - (b)
6/30/2020:			
Balances at June 30, 2018	$ 17,437,059	$ 16,913,889	$ 523,170
Changes for the year:			
Service cost	378,585	-	378,585
Interest	1,198,755	-	1,198,755
Change in benefit terms	-		-
Change in assumptions	546,875		546,875
Difference between expected and actual experience	182,506	-	182,506
Contributions - employer	-	235,463	(235,463)
Contributions - employee	-	212,351	(212,351)
Net investment income	-	1,128,516	(1,128,516)
Benefit payments, including refunds of employee contributions	(623,967)	(623,967)	-
Administrative expense	-	(11,054)	11,054
Other changes	-	(713)	713
Net changes	1,682,754	940,596	742,158
Balances at June 30, 2019	$ 19,119,813	$ 17,854,485	$ 1,265,328
6/30/2019:			
Balances at June 30, 2017	$ 16,499,993	$ 15,886,353	$ 613,640
Changes for the year:			
Service cost	379,365	-	379,365
Interest	1,132,686	-	1,132,686
Change in benefit terms	-		-
Change in assumptions	-		-
Difference between expected and actual experience	62,537	-	62,537
Contributions - employer	-	297,525	(297,525)
Contributions - employee	-	204,311	(204,311)
Net investment income	-	1,174,317	(1,174,317)
Benefit payments, including refunds of employee contributions	(637,522)	(637,522)	-
Administrative expense	-	(10,045)	10,045
Other changes	-	(1,050)	1,050
Net changes	937,066	1,027,536	(90,470)
Balances at June 30, 2018	$ 17,437,059	$ 16,913,889	$ 523,170

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

The following presents the net pension liability of the Authority for fiscal year 2020 using the discount rate of 6.75%, as well as what the net pension 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. In addition, the net pension liability of the Authority for fiscal year 2019 is presented using the discount rate of 7.00%, as well as what the net pension liability would have been if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than that discount rate:

7) Pensions, Continued

	1% Decrease (5.75%)	Current Discount Rate (6.75%)	1% Increase (7.75%)
Net pension liability (asset), as of June 30, 2020	$ 3,723,268	$ 1,265,328	$ (702,029)

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

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

For the years ending June 30, 2020 and 2019, the Authority recognized pension expense (recovery) of $358,709 and $(73,893), respectively. The Authority reported deferred outflows and deferred inflow of resources related to pensions as follows:

	6/30/2020		6/30/2019	
	Deferred outflows of resources	Deferred inflows of resources	Deferred outflows of resources	Deferred inflows of resources
Difference between expected and actual experience	$ 169,449	$ 42,704	$ 88,238	$ 118,174
Changes of assumptions	381,155	67,086	-	156,533
Net difference between projected and actual earnings on plan investments	-	152,635	-	144,264
Employer contributions subsequent to the measurement date	265,027	-	250,534	-
Total	$ 815,631	$ 262,425	$ 338,772	$ 418,971

The $265,027 reported as deferred outflows of resources related to pensions as of June 30, 2020, 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, 2021. Other amounts reported as deferred outflows and inflows of resources related to pensions as of June 30, 2020, will be recognized in pension expense (recovery) in future reporting periods as follows:

Year Ended June 30:	
2021	$ 137,859
2022	77,944
2023	62,601
2024	9,775
Total	$ 288,179

Pension Plan Data

Information about the VRS Political Subdivision Retirement Plan is also available in the separately issued VRS 2019 Comprehensive Annual Financial Report (CAFR). A copy of the 2019 VRS CAFR may be downloaded from the VRS website at varetire.org/pdf/publications/2019-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA 23218-2500.

8) Other Post-Employment Benefits (OPEB)

Multiple Employer Cost-Sharing Plan – Retiree Healthcare

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

Plan Description

Participants must be eligible to retire under VRS and must be full-time active employees who retire directly from the Authority and are at least 55 years of age with 15 years of service. Each year, retirees participating in the Authority's sponsored plans will be given the opportunity to change plans or drop coverage during an open enrollment period. For fiscal year 2020, the pre-Medicare retirees have a choice of two plans offered by Cigna. Dental plans are available at the retiree's cost and therefore, there is no employer obligation. There is no coverage for post-Medicare retirees.

Funding Policy

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

Actuarial Methods and Assumptions

For the actuarial valuation at January 1, 2020 and July 1, 2017 (measurement dates of June 30, 2019 and 2018, respectively), 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 3.13% and 3.62% for June 30, 2019 and 2018, respectively, for the unfunded liability. Benefits are discounted based on an index rate for 20-year tax exempt general obligation (GO) municipal bonds with an average rating of AA/Aa or higher.

For the actuarial valuation dated January 1, 2020, 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 October 2010 and updated in September 2019. The following assumptions were used as input variables into this model:

Inflation	2.50%
Rate of growth in real income/ GDP per capita	1.50%
Extra trend due to technology and other factors	1.10%
Expected health share of GDP in 2029	20.00%
Health share of GDP resistance point	25.00%
Year for limiting cost growth to GDP growth	2075

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

For the actuarial valuation dated July 1, 2017, 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, tolerance ranges 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 used in the January 1, 2020, valuation:

- Pre-Retirement
    - General: Pub-2010 General Employees Headcount-Weighted Mortality Projected with Fully Generational MP2019 Mortality Improvement Scale
    - LEOS: Pub-2010 Public Safety Employees Headcount-Weighted Mortality Projected with Fully Generational MP2019 Mortality Improvement Scale
- Post-Retirement
    - General: Pub-2010 General Retirees Headcount-Weighted Mortality Projected with Fully Generational MP2019 Mortality Improvement Scale
    - LEOS: Pub-2010 Public Safety Retirees Headcount-Weighted Mortality Projected with Fully Generational MP2019 Mortality Improvement Scale
- Disabled:
    - General: Pub-2010 General Disabled Retirees Headcount-Weighted Mortality Projected with Fully Generational MP2019 Mortality Improvement Scale
    - LEOS: Pub-2010 Public Safety Disabled Retirees Headcount-Weighted Mortality Projected with Fully Generational MP2019 Mortality Improvement Scale

Mortality decrements used in the July 1, 2017, valuation:

- 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
    - 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
    - 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

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

Changes in Assumptions Since Prior Valuation

- Discount rate was updated as required under the GASB 75 standard.
- Decrement and mortality assumptions were updated to the most recent VRS assumptions.
- Medical trend was updated based on most recent actuarial baseline assumptions.

Changes in Assumptions for the July 1, 2017 valuation:

- Discount rate was updated as required under the GASB 75 standard.
- 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.

Retiree Healthcare OPEB Liability

At June 30, 2020 and 2019, the Authority reported retiree healthcare OPEB liabilities of $381,436 and $432,969, respectively, for its proportionate share of the County's retiree healthcare OPEB liability. The County's June 30, 2020, retiree healthcare OPEB liability was measured as of June 30, 2019, and was determined by an actuarial valuation performed January 1, 2020. The County's June 30, 2019, retiree healthcare OPEB liability was measured as of June 30, 2018, and was determined by an actuarial valuation performed July 1, 2017. The Authority's proportion of the County's retiree healthcare OPEB liability was based on the Authority's projected long-term contribution effort to the OPEB plan as compared to the total projected long-term contribution effort of all contributing entities to determine the Authority's proportion. At June 30, 2020 and 2019, the Authority's proportion of the County's retiree healthcare OPEB liability was 7.30% and 7.35%, respectively.

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

The following presents the retiree healthcare OPEB liability for 2020 and 2019 using the discount rates of 3.13% and 3.62%, respectively, as well as what the retiree healthcare OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (2.13% and 2.62%, respectively) or one percentage point higher (4.13% and 4.62%, respectively) than the current rates:

	1% Decrease (2.13%)	Current Discount Rate (3.13%)	1% Increase (4.13%)
Retiree Healthcare OPEB Liability as of June 30, 2020	$ 418,056	$ 381,436	$ 347,794

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

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

The following presents the retiree healthcare OPEB liability for 2020 and 2019 using the health care cost trend rate of 4.00%, as well as what the retiree healthcare OPEB liability would be if it were calculated using a health care cost trend rate that is one percentage point lower (3.00%) or one percentage point higher (5.00%) than the current rate:

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

	1% Decrease (3.00%)	Current Discount Rate (4.00%)	1% Increase (5.00%)
Retiree Healthcare OPEB Liability as of June 30, 2020	$ 336,833	$ 381,436	$ 434,028

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

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

For the years ended June 30, 2020 and 2019, the Authority recognized retiree healthcare OPEB expense of $28,017 and $37,604, respectively. Since there was a change in proportionate share between measurement dates, a portion of the retiree healthcare OPEB expense was related to deferred amounts from changes in proportion. At June 30, 2020 and 2019, deferred outflows of resources and deferred inflows of resources related to retiree healthcare OPEB from the following sources were reported:

	6/30/2020		6/30/2019	
	Deferred outflows of resources	Deferred inflows of resources	Deferred outflows of resources	Deferred inflows of resources
Difference between expected and actual experience	$ 13,002	$ 40,728	$ 15,705	$ -
Changes of assumptions	-	34,509	-	21,899
Change in proportion	60	1,368	72	-
Total	$ 13,062	$ 76,605	$ 15,777	$ 21,899

Amounts reported as deferred outflows of resources and deferred inflows of resources related to retiree healthcare OPEB as of June 30, 2020 will be recognized in retiree healthcare OPEB expense (recovery) as follows:

Year Ended June 30	
2021	$ (13,571)
2022	(13,571)
2023	(13,571)
2024	(13,572)
2025	(9,262)
Thereafter	4
Total	$ (63,543)

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

Multiple Employer Cost-Sharing Plan – Group Life Insurance

VRS Group Life Insurance Program is a multiple employer, cost-sharing plan. It provides coverage to state employees, teachers, and employees of participating political subdivisions. The Group Life Insurance Program was established pursuant to §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 School Board. Basic group life insurance coverage is automatic upon employment. Coverage ends for employees who leave their position before retirement eligibility or who take a refund of their member contributions and accrued interest.

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

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

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

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

Minimum benefit amount and Cost-of-living adjustment (COLA): for covered members with at least 30 years of service credit, there is a minimum benefit payable under the Group Life Insurance Program. The minimum benefit was set at $8,000 by statute in 2015. This will be increased annually based on the VRS Plan 2 cost-of-living adjustment calculation. The minimum benefit adjusted for the COLA was $8,463 and $8,279 as of June 30, 2020 and 2019, respectively.

Contributions

The contribution requirements for the Group Life Insurance Program are governed by §51.1-506 and §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 divisions 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, 2020 and 2019, was 0.52% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. 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. Contributions to the Group Life Insurance Program from the Authority were $24,492 and $21,000 for the years ended June 30, 2020 and June 30, 2019, 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, 2020 and 2019, the Authority reported a liability of $369,227 and $340,000, respectively, for its proportionate share of the Net GLI OPEB liability. The Net GLI OPEB liability as of June 30, 2020 and 2019 was measured as of June 30, 2019 and 2018 respectively and the total GLI OPEB liability used to calculate the Net GLI OPEB liability was determined by an actuarial valuation performed as of June 30, 2018 and 2017, respectively, and rolled forward to the measurement date of June 30, 2019 and 2018, respectively. The Authority's proportion of the Net GLI OPEB liability was based on the Authority's actuarially determined employer contributions to the Group Life Insurance Program for the prior fiscal year relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2019, the Authority's proportion was 0.02269% as compared to 0.02234% at June 30, 2018.

For the years ended June 30, 2020 and 2019, the Authority recognized GLI OPEB expense of $8,976 and $4,000, respectively. Given that there was a change in proportionate share between measurement dates, a portion of the GLI OPEB expense was related to deferred amounts from changes in proportion.

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

At June 30, 2020 and 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to the GLI OPEB from the following sources:

	6/30/2020		6/30/2019	
	Deferred outflows of resources	Deferred inflows of resources	Deferred outflows of resources	Deferred inflows of resources
Difference between expected and actual experience	$ 24,556	$ 4,789	$ 17,000	$ 6,000
Net difference between projected and actual investment earnings on OPEB Plan investments	-	7,584	-	11,000
Changes of assumptions	23,311	11,134	-	14,000
Changes in proportionate share	4,670	1,551	-	2,000
Employer contributions subsequent to the measurement date	24,492	-	21,000	-
Total	$ 77,029	$ 25,058	$ 38,000	$ 33,000

The $24,492 reported as deferred outflows of resources at June 30, 2020, related to the GLI OPEB resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the Net GLI OPEB liability in the fiscal year ending June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources at June 30, 2020, related to the GLI OPEB will be recognized in the GLI OPEB expense in future reporting periods as follows:

Year Ended	
2021	$ 1,750
2022	1,750
2023	4,962
2024	8,139
2025	8,473
Thereafter	2,405
Total	$ 27,479

Actuarial Assumptions

The total GLI OPEB liability as of June 30, 2020 and June 30, 2019 was based on actuarial valuations as of June 30, 2018 and June 30, 2017, respectively, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement dates of June 30, 2019 and June 30, 2018, respectively.

Inflation	2.50%
Salary increases, including inflation	
General state employees	3.50% – 5.35%
Teachers	3.50% – 5.95%
SPORS employees	3.50% – 4.75%
VaLORS employees	3.50% – 4.75%
JRS employees	4.50%
Locality – General employees	3.50% – 5.35%
Locality – Hazardous Duty employees	3.50% – 4.75%
Investment rate of return	
June 30, 2020	6.75%, net of investment expenses, including inflation*
June 30, 2019	7.00%, net of investment expenses, including inflation*

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

**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 rates above. However, since the difference was minimal, and the more conservative investment return assumptions above 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 the rates above to simplify preparation of OPEB liabilities.*

Mortality rates:

	Pre-Retirement	*Post-Retirement*	*Post-Disablement*
General State Employees	RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males set back 1 year, 85% of rates; females set back 1 year.	RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year; females set back 1 year with 1.5% increase compounded from ages 70 to 85.	RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males 115% of rates; females 130% of rates.
Teachers	RP-2014 White Collar Employee Rates to age 80, White Collar Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020.	RP-2014 White Collar Employee Rates to age 49, White Collar Health Annuitant Rates at ages 50 and older projected with scale BB to 2020; males 1% increase compounded from ages 70 to 90; females set back 3 years with 1.5% increase compounded from ages 65 to 70 and 2.0% increase compounded from ages 75 to 90.	RP-2014 Disability Mortality Rates projected with Scale BB to 2020; 115% of rates for males and females
SPORS Employees	RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 90% of rates; females set forward 1 year.	RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.	RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.
VaLORS Employees	RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 90% of rates; females set forward 1 year.	RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.	RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

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

	Pre-Retirement	*Post-Retirement*	*Post-Disablement*
JRS Employees	RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males set back 1 year, 85% of rates; females set back 1 year.	RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 1 year; females set back 1 year with 1.5% compounding increase from ages 70 to 85.	RP-2014 Disability Mortality Rates projected with Scale BB to 2020; males 115% of rates; females 130% of rates.
Largest 10 Locality Employers - General Employees	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.	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.	RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.
Non-Largest 10 Locality Employers - General Employees	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.	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.	RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.
Largest 10 Locality Employers - Hazardous Duty Employees	RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 90% of rates; females set forward 1 year.	RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.	RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.
Non-Largest 10 Locality Employers - Hazardous Duty Employees	RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 90% of rates; females set forward 1 year.	RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.	RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

The actuarial assumptions used in the June 30, 2018 and 2017 valuations were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate for the June 30, 2018 valuation, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study are as follows:

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

General State Employees:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement age from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 25%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

Teachers:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement age from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

SPORS Employees:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 85%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

VaLORS Employees:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 50% to 35%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

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

JRS Employees:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Decreased rates at first retirement eligibility
Withdrawal Rates	No change
Disability Rates	Removed disability rates
Salary Scale	No change
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

Largest 10 Locality Employers – General Employees:

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%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

Non-Largest 10 Locality Employers – General Employees:

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%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

Largest 10 Locality Employers – Hazardous Duty Employees:

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
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Increased disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 70%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

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

Non-Largest 10 Locality Employers – Hazardous Duty Employees:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 60% to 45%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

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 the measurement dates of June 30, 2019 and 2018, NOL amounts for the Group Life Insurance Program are as follows (amounts expressed in thousands):

	Group Life Insurance OPEB Program	
	6/30/19 Measurement Date	6/30/18 Measurement Date
Total GLI OPEB Liability	$ 3,390,238	$ 3,113,508
Plan Fiduciary Net Position	1,762,972	1,594,773
Net GLI OPEB Liability (Asset)	$ 1,627,266	$ 1,518,735
Plan Fiduciary Net Position as a % of the Total GLI OPEB Liability	52.00%	51.22%

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

Long-Term Expected Rate of Return

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

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

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return*
Public Equity	34.00%	5.61%	1.91%
Fixed Income	15.00%	0.88%	0.13%
Credit Strategies	14.00%	5.13%	0.72%
Real Assets	14.00%	5.27%	0.74%
Private Equity	14.00%	8.77%	1.23%
MAPS - Multi-Asset Public Strategies	6.00%	3.52%	0.21%
PIP - Private Onvestment Partnership	3.00%	6.29%	0.19%
Total	100.00%		5.13%
	Inflation		2.50%
	* Expected arithmetic nominal return		7.63%

**The above allocation provides a one-year return of 7.63%. 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 7.11%, including expected inflation of 2.50%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation.*

Discount Rate

The discount rate used to measure the total GLI OPEB liability at June 30, 2019 and 2018 was 6.75% and 7.0%, respectively. 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 which was 100% of the actuarially determined contribution rate. From July 1, 2019 on, employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the GLI OPEB's fiduciary net position was projected to be available to make all projected future benefit payments of eligible employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total GLI OPEB liability.

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

The following presents the Authority's proportionate share of the net GLI OPEB liability as of June 30, 2020 and June 30, 2019 using discount rates of 6.75% and 7.00%, respectively, as well as what the Authority'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 (5.75% and 6.00%, respectively) or one percentage point higher (7.75% and 8.00%, respectively) than the current discount rate:

	1% Decrease (5.75%)	Current Discount Rate (6.75%)	1% Increase (7.75%)
Authority's proportionate share of the Group Life Insurance Plan Net OPEB Liability as of June 30, 2020	$ 485,062	$ 369,227	$ 275,288

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

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

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 2019 Comprehensive Annual Financial Report (CAFR). A copy of the 2019 VRS CAFR may be downloaded from the VRS website at varetire.org/pdf/publications/2019annual-report.pdf, or by writing to the System's 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 $45.00 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 $45.00 per month.

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

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

Employees Covered by Benefit Terms

As of the June 30, 2018 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	83
Total	97

Contributions

The contribution requirement for active employees is governed by §51.1-1402(E) of the *Code of Virginia*, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. The Authority's contractually required employer contribution rate for the years ended June 30, 2020 and 2019 was 0.18% and 0.19%, respectively, of covered employee compensation. These rates were based on actuarially determined rates from an actuarial valuation as of June 30, 2017. The actuarially determined rate was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions from the Authority to the Political Subdivision Health Insurance Credit Program were $8,413 and $8,467 for the years ended June 30, 2020 and June 30, 2019, respectively.

Net HIC OPEB liability

The Authority's net Health Insurance Credit OPEB liability was measured as of June 30, 2019 and 2018 for fiscal year 2020 and 2019, respectively. The total Health Insurance Credit OPEB liability as of June 30, 2019 and 2018 was determined by an actuarial valuation performed as of June 30, 2018 and 2017, respectively, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement dates of June 30, 2019 and 2018, respectively.

Actuarial Assumptions

The total HIC OPEB liability as of June 30, 2020 and 2019 was based on an actuarial valuation as of June 30, 2018 and 2017, respectively, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2019 and 2018, respectively.

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

Inflation	2.50%
Salary increases, including inflation	
Locality – General Employees	3.50% – 5.35%
Investment rate of return	
June 30, 2020	6.75%, net of investment expenses, including inflation*
June 30, 2019	7.00%, 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 rates above. However, since the difference was minimal, and the more conservative investment return assumptions above 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 the rates above to simplify preparation of OPEB liabilities.*

Mortality rates:

Non-Largest 10 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, 2018 and 2017 valuations were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate in the June 30, 2018 valuation, which was based on VRS Board action effective as of July 1, 2019. 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%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

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

Long-Term Expected Rate of Return

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

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return
Public Equity	34.00%	5.61%	1.91%
Fixed Income	15.00%	0.88%	0.13%
Credit Strategies	14.00%	5.13%	0.72%
Real Assets	14.00%	5.27%	0.74%
Private Equity	14.00%	8.77%	1.23%
MAPS - Multi-Asset Public Strategies	6.00%	3.52%	0.21%
PIP - Private Onvestment Partnership	3.00%	6.29%	0.19%
Total	100.00%		5.13%
	Inflation		2.50%
	* Expected arithmetic nominal return		7.63%

**The above allocation provides a one-year return of 7.63%. 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 7.11%, including expected inflation of 2.50%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation.*

Discount Rate

The discount rate used to measure the total HIC OPEB liability as of June 30, 2019 and 2018, was 6.75% and 7.00%, respectively. 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, which was 100% of the actuarially determined contribution rate. From July 1, 2019, on, employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the HIC OPEB's fiduciary net position was projected to be available to make all projected future benefit payments of eligible employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total HIC OPEB liability.

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

Changes in Net HIC OPEB Liability:

	Increase (decrease)		
	Total OPEB liability (a)	Plan fiduciary net position (b)	Net OPEB liability (a) - (b)
Balances at June 30, 2018	$ 162,155	$ 107,782	$ 54,373
Changes for the year:			
Service cost	3,579	-	3,579
Interest	11,031	-	11,031
Changes of Assumptions	4,095	-	4,095
Difference between expected and actual experience	(3,892)	-	(3,892)
Contributions - employer	-	8,002	(8,002)
Net investment income	-	6,922	(6,922)
Benefit payments	(9,131)	(9,131)	-
Administrative expense	-	(151)	151
Other changes	-	(8)	8
Net changes	5,682	5,634	48
Balances at June 30, 2019	$ 167,837	$ 113,416	$ 54,421

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

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

The following presents the Political Subdivision Health Insurance Credit Program net HIC OPEB liability as of June 30, 2020 and June 30, 2019 using the discount rates of 6.75% and 7.00%, respectively, as well as what the Authority's net HIC OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (5.75% and 6.00%, respectively) or one percentage point higher (7.75% and 8.00%, respectively) than the current rate:

	1% Decrease (5.75%)	Current Discount Rate (6.75%)	1% Increase (7.75%)
Net HIC OPEB liability as of June 30, 2020	$ 72,530	$ 54,421	$ 38,954

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net HIC OPEB liability as of June 30, 2019	$ 71,742	$ 54,373	$ 39,537

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

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

For the years ended June 30, 2020 and 2019, the Authority recognized HIC OPEB expense of $4,920 and $5,846. At June 30, 2020 and 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to the Political Subdivision Health Insurance Credit Program from the following sources:

	6/30/2020		6/30/2019	
	Deferred outflows of resources	Deferred inflows of resources	Deferred outflows of resources	Deferred inflows of resources
Difference between expected and actual experience	$ -	$ 8,797	$ -	$ 6,594
Changes of assumptions	3,488	2,267	-	2,829
Net difference between projected and actual investment earnings on OPEB Plan investments	-	1,203	-	2,486
Employer contributions subsequent to the measurement date	8,413	-	8,467	-
Total	$ 11,901	$ 12,267	$ 8,467	$ 11,909

The $8,413 reported as deferred outflows of resources related to the HIC OPEB as of June 30, 2020, resulting from the Authority'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, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the HIC OPEB as of June 30, 2020, will be recognized in the HIC OPEB expense (recovery) in future reporting periods as follows:

Year ended	
2021	$ (2,349)
2022	(2,350)
2023	(1,550)
2024	(1,530)
2025	(1,023)
Thereafter	23
Total	$ (8,779)

Health Insurance Credit Program Plan Data

Information about the VRS Political Subdivision Health Insurance Credit Program is available in the separately issued VRS 2019 Comprehensive Annual Financial Report (CAFR). A copy of the 2019 VRS CAFR may be downloaded from the VRS website at varetire.org/pdf/publications/2019annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA 23218-2500.

OPEB Expense – Aggregate Information

The total amount of expense recognized by the Authority for its OPEB plans is summarized below for the years ended June 30, 2020 and 2019:

	6/30/2020	6/30/2019
Retiree healthcare	$ 28,017	$ 37,604
Group life insurance	8,976	4,000
Health insurance credit program	4,920	5,846
Total	$ 41,913	$ 47,450

OPEB expense is included in fringe benefits in the Authority's statements of revenues, expenses, and changes in net position.

9) Restatement

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

	6/30/2018 Previously Reported	Restatement	6/30/2018 As Restated
Capital assets - Construction in progress	$ 3,993,821	$ (1,441,342)	$ 2,552,479
Current liabilities - Deposits	$ (287,962)	$ (406,500)	$ (694,462)
Net position - Investment in capital assets	$ (132,616,889)	$ 1,441,342	$ (131,175,547)
Net position - Unrestricted	$ (46,664,323)	$ 406,500	$ (46,257,823)

10) Deferred Compensation Plan

The Authority offers its employees a deferred-compensation plan created in accordance with Internal Revenue Code Section 457. The plan, available to regular part-time and full-time Authority employees, permits them to defer 25% of their gross income up to a maximum of $19,500 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 $810,170 and $831,810 for the years ended June 30, 2020 and 2019, respectively, and are included in the expenses under contractual fees. The Authority also owed the County $494,045 and $996,066 at June 30, 2020 and 2019, respectively, which primarily represents payroll expenses and purchase card expenses paid by the County on behalf of the Authority.

In addition, the County has leased space in Authority buildings under long-term leases. Rent revenue from the County was $85,680 and $88,463 for years ended June 30, 2020 and 2019, respectively; and is included in rental income. As of June 30, 2020, the County has one lease agreement in effect with the Authority for building space. The term of this lease began in July 2014 and ends in June 2024. Future minimum payments under this lease are as follows:

Year ended	
2021	$ 85,680
2022	85,680
2023	85,680
2024	85,680
Total	$ 342,720

12) Commitments and Contingencies

Construction in Progress

At June 30, 2020, the Authority had several major projects under construction which are presented in the accompanying financial statements as construction in progress.

Below are the details for each project:

12) Commitments and Contingencies, Continued

Project		Budget		Expenditures to date		Balance of contract		Budget balance
Sewer improvements	$	3,498,831	$	11,303	$	401,145	$	3,086,383
Water supply		8,872,492		1,955,072		729,325		6,188,095
Water distribution		3,348,507		563,672		248,152		2,536,683
Water transmission		1,252,725		656,559		7,806		588,360
Water storage		185,620		-		-		185,620
Other		2,993,026		208,986		152,161		2,631,879
	$	20,151,201	$	3,395,592	$	1,538,589	$	15,217,020

Project Development Agreement - Long Term Water Supply

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

In addition to the installment payments, the Authority agreed to pay variable and fixed operating and maintenance costs to the City of Newport News payable by September 1 each year, based on its safe yield share of 20%. The Authority did not receive any water from the City of Newport News for the years ended June 30, 2020 and 2019. Therefore, the Authority did not make a payment to the City of Newport News for the years ended June 30, 2020 and 2019, 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 $1.34 per 1,000 gallons for fiscal year ended June 30, 2020 and $1.30 per 1,000 gallons for fiscal year 2019. For the years ended June 30, 2020 and 2019, 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 during 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 has been renewed on an annual basis with the current renewal period ending October 25, 2020. Subsequent to year end, the contract was renewed for another annual period. The contract allows for an increase based on the Consumer Price Index. For the years ended June 30, 2020 and 2019, the Authority paid $203,174 and $208,979, respectively, for grinder pump maintenance.

Water Storage Tank Maintenance

The Authority entered into a contract with Superior Industrial Maintenance Company where they will provide water storage tank maintenance. The term of the contract is July 13, 2017 through July 12, 2018, with the option to renew for up to 5 additional years. The contract was renewed on August 24, 2020, for the period July 1, 2020 through June 30, 2021. For the years ended June 30, 2020 and 2019, the Authority paid $153,826 and $325,764, respectively, towards this contract.

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.

13) COVID-19

During fiscal year 2020, the novel coronavirus disease (COVID-19) impacted the operational and financial activities of the Authority. In March 2020, the Authority adopted an Emergency Staffing Plan with split shifts and teleworking to maintain service levels and protect employee health. The Authority also incurred $66,694 of operational expenses in response to the COVID-19 pandemic as of June 30, 2020, related to the purchase of protective, sanitary, and disinfecting supplies. These costs are included in other operating expenses on the statements of revenues, expenses and changes in net position.

In addition, COVID-19 contributed a loss of revenue for the Authority in fiscal year 2020 resulting from pandemic-related economic uncertainty. This loss is reflected as a reduction to facility charges in the statements of revenues, expenses and changes in net position.

The extent to which COVID-19 may impact the Authority's operations and financial condition in subsequent fiscal years will depend on future developments, which remain uncertain and cannot be predicted due to the evolving nature of this situation. As a result, the Authority cannot reasonably estimate the future impact of COVID-19 at this time.

* * * * *

REQUIRED SUPPLEMENTARY INFORMATION
OTHER THAN MD&A (Unaudited)

Exhibit 4

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)
Schedule of Changes in the Net Pension Liability and Related Ratios
Required Supplementary Information (Unaudited)
Last Ten Fiscal Years (1) *

	2015	2016	2017	2018	2019	2020
Total pension liability						
Service cost	$ 417,066	$ 430,269	$ 404,294	$ 411,137	$ 379,364	$ 378,585
Interest	913,818	978,647	1,032,165	1,104,651	1,132,686	1,198,755
Differences between expected and actual experience	-	(146,331)	128,139	(213,521)	62,537	182,506
Changes in assumptions	-	-	-	(335,427)	-	546,875
Benefit payments, including refunds of employee contributions	(376,365)	(433,146)	(562,945)	(495,181)	(637,522)	(623,967)
Net change in total pension liability	954,519	829,439	1,001,653	471,659	937,065	1,682,754
Total pension liability, beginning	13,242,723	14,197,242	15,026,681	16,028,334	16,499,994	17,437,059
Total pension liability, ending	$ 14,197,242	$ 15,026,681	$ 16,028,334	$ 16,499,993	$ 17,437,059	$ 19,119,813
Plan fiduciary net position						
Contributions - employer	$ 308,820	$ 329,381	$ 336,720	$ 288,588	$ 297,525	$ 235,463
Contributions - employee	197,188	193,349	197,261	210,624	204,311	212,351
Net investment income	1,802,418	612,704	245,617	1,734,000	1,174,317	1,128,516
Benefit payments, including refunds of employee contributions	(376,365)	(433,146)	(562,945)	(495,181)	(637,522)	(623,967)
Administrative expense	(9,511)	(8,173)	(8,604)	(9,804)	(10,045)	(11,054)
Other	95	(130)	(104)	(1,553)	(1,050)	(713)
Net change in plan fiduciary net position	1,922,645	693,985	207,945	1,726,674	1,027,536	940,596
Plan fiduciary net position, beginning	11,335,104	13,257,749	13,951,734	14,159,679	15,886,353	16,913,889
Plan fiduciary net position, ending	$ 13,257,749	$ 13,951,734	$ 14,159,679	$ 15,886,353	$ 16,913,889	$ 17,854,485
Net pension liability	$ 939,493	$ 1,074,947	$ 1,868,655	$ 613,640	$ 523,170	$ 1,265,328
Plan fiduciary net position as a percentage of the total pension liability	93.38%	92.85%	88.34%	96.28%	97.00%	93.38%
Covered payroll	$ 3,943,666	$ 3,897,762	$ 4,026,779	$ 4,083,082	$ 4,230,543	$ 4,445,820
Net pension liability as a percentage of the total covered payroll	23.82%	27.58%	46.41%	15.03%	12.37%	28.46%

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

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

See accompanying notes and independent auditor's report.

Exhibit 5

JAMES CITY SERVICE AUTHORITY

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

Fiscal year	Contractually required contribution	Contributions in relation to contractually required contribution	Contribution deficiency (excess)	Employer's covered payroll	Contributions as a % of covered payroll
2015	$ 330,920	$ 330,920	$ -	$ 3,897,762	8.49%
2016	341,874	341,874	-	4,026,779	8.49%
2017	297,668	297,668	-	4,083,082	7.29%
2018	308,672	308,672	-	4,230,543	7.29%
2019	250,534	250,534	-	4,445,820	5.63%
2020	265,027	265,027	-	4,673,979	5.67%

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

See accompanying notes and independent auditor's report.

Exhibit 6

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)
Schedule of Employer's Share of Retiree Healthcare OPEB Liability (1) (2)
Required Supplementary Information (Unaudited)
Last Ten Fiscal Years*

Fiscal year ending June 30,	**2020**	**2019**	**2018**
Employer's proportion of the County's Retiree Healthcare OPEB liability	7.30%	7.35%	7.35%
Employer's proportionate share of the County's Retiree Healthcare OPEB liability	$ 381,436	$ 432,969	$ 406,742
Fiduciary net position as a % of total OPEB liability	0.00%	0.00%	0.00%
Expected average remaining service years of all participants	6	7	7

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

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

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

See accompanying notes and independent auditor's report.

Exhibit 7

JAMES CITY SERVICE AUTHORITY

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

Fiscal year	Actuarially determined contribution	Contributions in relation to actuarially determined contribution	Contribution deficiency (excess)
2018	$ 27,725	$ -	$ 27,725
2019	37,604	-	37,604
2020	28,017	-	28,017

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

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

See accompanying notes and independent auditor's report.

Exhibit 8

JAMES CITY SERVICE AUTHORITY

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

	2018	2019	2020
Total OPEB - HIC liability			
Service cost	$ 3,682	$ 3,588	$ 3,579
Interest cost	10,769	11,121	11,031
Changes of benefit terms	-	-	-
Differences between expected and actual experience	-	(7,706)	(3,892)
Changes in assumptions	(3,953)	-	4,095
Benefit payments, including refunds of employee contributions	(3,508)	(7,440)	(9,131)
Net change in total OPEB - HIC liability	6,990	(437)	5,682
Total OPEB - HIC liability, beginning	155,602	162,592	162,155
Total OPEB - HIC liability, ending (a)	$ 162,592	$ 162,155	$ 167,837
Plan fiduciary net position - HIC			
Contributions - employer	8,166	8,467	8,002
Contributions - employee	-	-	-
Net investment income	10,122	7,150	6,922
Benefit payments, including refunds of employee contributions	(3,508)	(7,440)	(9,131)
Administrative expense	(170)	(170)	(151)
Other	494	(494)	(8)
Net change in plan fiduciary net position - HIC	15,104	7,513	5,634
Plan fiduciary net position - HIC, beginning	85,165	100,269	107,782
Plan fiduciary net position - HIC, ending (b)	100,269	107,782	113,416
Net OPEB - HIC liability (a) - (b)	$ 62,323	$ 54,373	$ 54,421
Plan fiduciary net position - HIC as a percentage of the total OPEB - HIC liability	61.67%	66.47%	67.58%
Covered payroll	$ 4,083,082	$ 4,230,543	$ 4,445,820
Net OPEB - HIC liability as a percentage of the total covered payroll	1.53%	1.29%	1.22%

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

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

See accompanying notes and independent auditor's report.

JAMES CITY SERVICE AUTHORITY

Schedule of Employer OPEB - Health Insurance Credit Contributions
Required Supplementary Information (Unaudited)
Last Ten Fiscal Years (1)

Fiscal Year	Contractually required contribution	Contributions in relation to contractually required contribution	Contribution deficiency (excess)	Employer's covered payroll	Contributions as a % of covered payroll
2018	$ 8,461	$ 8,467	$ (6)	$ 4,230,543	0.20%
2019	$ 8,002	$ 8,467	$ (465)	$ 4,445,820	0.19%
2020	$ 8,413	$ 8,413	$ -	$ 4,673,979	0.18%

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

See accompanying notes and independent auditor's report.

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*

	2018	2019	2020
Employer's proportion of the net GLI OPEB liability	0.02217%	0.02234%	0.02269%
Employer's proportionate share of the net GLI OPEB liability	$ 333,000	$ 340,000	$ 369,227
Employer's covered payroll	$ 4,083,082	$ 4,230,543	$ 4,445,820
Employer's proportionate share of the net GLI OPEB liability as a percentage of its covered payroll	8.16%	8.04%	8.31%
Plan fiduciary net position as a % of total GLI OPEB liability	48.86%	51.22%	52.00%

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

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

See accompanying notes and independent auditor's report.

Exhibit 11

JAMES CITY SERVICE AUTHORITY

Schedule of Employer OPEB - Group Life Insurance Contributions
Required Supplementary Information (Unaudited)
Last Ten Fiscal Years* (1)

Fiscal Year	Contractually required contribution	Contributions in relation to contractually required contribution	Contribution deficiency (excess)	Employer's covered payroll	Contributions as a % of covered payroll
2018	$ 21,999	$ 22,168	$ (169)	$ 4,230,543	0.52%
2019	$ 23,118	$ 21,000	$ 2,118	$ 4,445,820	0.47%
2020	$ 23,131	$ 24,492	$ (1,361)	$ 4,673,979	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.

See accompanying notes and independent auditor's report.

1) Pension - Changes of Benefit Terms
There have been no actuarially material changes to System benefit provisions since the prior actuarial valuation.

2) Pension - Changes of Assumptions
The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study are as follows:

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

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 rates to better fit experience at each age and service year through 9 years of service
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 15%
Discount Rate	Decrease rate from 7.00% to 6.75%

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:

Measurement Date	Discount Rate
June 30, 2017	3.58%
June 30, 2018	3.62%
June 30, 2019	3.13%

6) OPEB Health Insurance Credit and Group Life Insurance - Changes of Benefit Terms
There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation.

7) OPEB Group Life Insurance – Changes of Assumptions
The actuarial assumptions used in the June 30, 2018 and 2017 valuations were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate for the June 30, 2018 valuation, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study are as follows:

7) OPEB Group Life Insurance – Changes of Assumptions, Continued

General State Employees:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement age from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 25%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

Teachers:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement age from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

SPORS Employees:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 85%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

VaLORS Employees:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 50% to 35%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

7) OPEB Group Life Insurance – Changes of Assumptions, Continued

JRS Employees:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Decreased rates at first retirement eligibility
Withdrawal Rates	No change
Disability Rates	Removed disability rates
Salary Scale	No change
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

Largest 10 Locality Employers – General Employees:

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%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

Non-Largest 10 Locality Employers – General Employees:

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%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

Largest 10 Locality Employers – Hazardous Duty Employees:

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
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Increased disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 70%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

7) OPEB Group Life Insurance – Changes of Assumptions, Continued

Non-Largest 10 Locality Employers – Hazardous Duty Employees:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 60% to 45%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

8) OPEB Health Insurance Credit – Changes of Assumptions

The actuarial assumptions used in the June 30, 2018 and 2017 valuations were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate for the June 30, 2018 valuation, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study are as follows:

Non-Largest 10 Locality Employers – General Employees

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%
Discount Rate	Decrease rate from 7.00% to 6.75% for the June 30, 2018 valuation

SUPPLEMENTARY INFORMATION

Exhibit A

JAMES CITY SERVICE AUTHORITY
(A Component Unit of the County of James City, Virginia)
Schedule of Net Position – by Activity
June 30, 2020
(with comparative totals for 2019)

	Water operations	Sewer operations	Totals 2020	Totals 2019
Assets				
Current assets:				
Cash and cash equivalents	$ 1,544,563	$ 1,544,061	$ 3,088,624	$ 1,589,107
Investments	23,889,633	25,939,275	49,828,908	47,930,531
Restricted cash and cash equivalents	9,401,879	-	9,401,879	569,708
Accounts receivable, customers	1,509,729	902,847	2,412,576	3,637,029
Accounts receivable, other	1,044	-	1,044	66,809
Note receivable	1,090	-	1,090	1,090
Interest receivable	146,705	146,705	293,410	296,438
Inventories	1,109,615	-	1,109,615	915,755
Total current assets	37,604,258	28,532,888	66,137,146	55,006,467
Noncurrent assets:				
Capital assets:				
Non-depreciable	5,141,839	969,492	6,111,331	6,180,709
Depreciable	84,729,457	61,741,624	146,471,081	148,498,709
Net capital assets	89,871,296	62,711,116	152,582,412	154,679,418
Total assets	127,475,554	91,244,004	218,719,558	209,685,885
Deferred Outflows of Resources				
Deferred charge on refunding, net	1,510,736	-	1,510,736	1,586,907
Deferred pension	407,816	407,815	815,631	338,772
Deferred OPEB group life insurance (GLI)	38,515	38,514	77,029	38,000
Deferred OPEB health insurance credit (HIC)	5,950	5,951	11,901	8,467
Deferred OPEB retiree healthcare	6,531	6,531	13,062	15,777
Total deferred outflows of resources	1,969,548	458,811	2,428,359	1,987,923
Total assets and deferred outflows of resources	$ 129,445,102	$ 91,702,815	$ 221,147,917	$ 211,673,808
Liabilities				
Current liabilities:				
Accounts payable, trade	$ 399,204	$ 29,697	$ 428,901	$ 1,071,918
Accrued salaries	20,364	2,806	23,170	12,250
Compensated absences, current portion	356,429	-	356,429	312,373
Due to James City County	456,741	37,304	494,045	996,066
Deposits	830,721	-	830,721	614,431
Interest payable	328,979	-	328,979	320,856
Bond payable, current portion	1,337,907	-	1,337,907	718,907
Total current liabilities	3,730,345	69,807	3,800,152	4,046,801
Noncurrent liabilities:				
Advances for construction	5,882	27,020	32,902	32,902
Compensated absences, net of current portion	118,811	-	118,811	104,124
Bonds payable, net of current portion	28,984,574	-	28,984,574	21,187,481
Net pension liability	632,664	632,664	1,265,328	523,170
Net retiree healthcare OPEB liability	190,718	190,718	381,436	432,970
Net GLI OPEB liability	184,613	184,614	369,227	340,000
Net HIC OPEB liability	27,211	27,210	54,421	54,372
Total noncurrent liabilities	30,144,473	1,062,226	31,206,699	22,675,019
Total liabilities	33,874,818	1,132,033	35,006,851	26,721,820
Deferred Inflows of Resources				
Deferred pension	131,212	131,213	262,425	418,971
Deferred OPEB retiree healthcare	38,303	38,302	76,605	21,899
Deferred OPEB GLI	12,529	12,529	25,058	33,000
Deferred OPEB HIC	6,134	6,133	12,267	11,909
Total deferred inflows of resources	188,178	188,177	376,355	485,779
Net Position				
Net position:				
Net investment in capital assets	69,801,148	62,711,116	132,512,264	134,359,937
Restricted for:				
Capital projects	8,741,597	-	8,741,597	-
Debt service	660,282	-	660,282	569,708
Unrestricted	16,179,079	27,671,489	43,850,568	49,536,564
Total net position	95,382,106	90,382,605	185,764,711	184,466,209
Total liabilities, deferred inflows of resources and net position	$ 129,445,102	$ 91,702,815	$ 221,147,917	$ 211,673,808

See accompanying independent auditor's report.

Exhibit B

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)
Schedule of Revenues, Expenses, and Changes in Net Position – by Activity
Year ended June 30, 2020
(with comparative totals for year ended June 30, 2019)

	Water operations	Sewer operations	Totals 2020	Totals 2019
Operating revenues:				
Water and sewer services	$ 11,252,713	$ 6,439,941	$ 17,692,654	$ 16,299,006
Other	377,238	107,659	484,897	480,685
Total operating revenues	11,629,951	6,547,600	18,177,551	16,779,691
Operating expenses:				
Salaries	2,715,933	2,377,099	5,093,032	4,721,993
Fringe benefits	1,133,755	942,150	2,075,905	1,436,239
Operating supplies	829,688	400,139	1,229,827	1,200,220
Maintenance	530,527	1,204,854	1,735,381	2,193,410
Utilities	671,046	248,699	919,745	974,168
Contractual fees	531,626	459,852	991,478	872,374
Other	174,444	144,606	319,050	270,685
Total operating expenses	6,587,019	5,777,399	12,364,418	11,669,089
Operating income before depreciation and amortization	5,042,932	770,201	5,813,133	5,110,602
Depreciation and amortization	5,119,420	2,996,204	8,115,624	7,922,613
Operating loss	(76,488)	(2,226,003)	(2,302,491)	(2,812,011)
Nonoperating revenues (expenses):				
Facility charges	1,422,900	963,950	2,386,850	2,949,130
Investment income	1,020,718	1,012,699	2,033,417	1,904,327
Gain on disposal of capital assets	17,813	-	17,813	14,522
Interest expense	(854,412)	-	(854,412)	(727,965)
Net nonoperating revenues	1,607,019	1,976,649	3,583,668	4,140,014
Income before capital contributions	1,530,531	(249,354)	1,281,177	1,328,003
Capital asset contributions	1,000	16,325	17,325	5,137,825
Changes in net position	1,531,531	(233,029)	1,298,502	6,465,828
Net position, beginning of year	91,689,028	92,777,181	184,466,209	178,000,381
Net position, end of year	$ 93,220,559	$ 92,544,152	$ 185,764,711	$ 184,466,209

See accompanying independent auditor's report.

Exhibit C

JAMES CITY SERVICE AUTHORITY

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

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

Year ended June 30, 2020

	Water operations		Variance favorable	Sewer operations		Variance favorable
	Actual	**Budget**	**(unfavorable)**	**Actual**	**Budget**	**(unfavorable)**
Operating revenues:						
Water and sewer services	$ 11,252,713	$ 10,625,139	$ 627,574	$ 6,439,941	$ 6,207,125	$ 232,816
Other	377,238	86,500	290,738	107,659	88,000	19,659
Total operating revenues	$ 11,629,951	$ 10,711,639	$ 918,312	$ 6,547,600	$ 6,295,125	$ 252,475
Operating expenses:						
Salaries	$ 2,715,933	$ 2,798,206	$ 82,273	$ 2,377,099	$ 2,482,382	$ 105,283
Fringe benefits	1,133,755	1,103,609	(30,146)	942,150	957,444	15,294
Operating supplies	829,688	1,042,734	213,046	400,139	542,802	142,663
Maintenance *	530,527	1,269,831	739,304	1,204,854	1,504,779	299,925
Utilities	671,046	786,882	115,836	248,699	314,190	65,491
Contractual fees	531,626	643,236	111,610	459,852	541,021	81,169
Other	174,444	186,620	12,176	144,606	128,241	(16,365)
Total operating expenses	$ 6,587,019	$ 7,831,118	$ 1,244,099	$ 5,777,399	$ 6,470,859	$ 693,460

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

See accompanying independent auditor's report.

STATISTICAL SECTION

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

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

Contents

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

Table 1

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

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Net Position										
Net investment in capital assets	$ 135,641,623	$ 134,872,139	$ 139,966,206	$ 137,922,955	$ 137,173,064	$ 139,312,785	$ 135,887,432	$ 131,175,547	$ 134,359,937	$ 132,512,264
Restricted for debt service	-	-	-	-	-	729,605	677,614	567,011	569,708	-
Restricted for capital projects	4,740,769	4,876,760	2,620,384	2,601,160	2,716,277	-	-	-	-	-
Unrestricted	34,057,874	34,106,903	29,699,494	29,159,119	32,903,518	37,014,202	40,532,314	46,257,823	49,733,750	43,850,568
Total net position	$ 174,440,266	$ 173,855,802	$ 172,286,084	$ 169,683,234	$ 172,792,859	$ 177,056,592	$ 177,097,360	$ 178,000,381	$ 184,663,395	$ 176,362,832

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

	2011	2012	2013	2014	2015	2016	2017	2018 (as restated)	2019	2020
Operating revenues:										
Water and sewer services	$ 12,603,818	$ 11,718,297	$ 12,002,533	$ 11,825,702	$ 12,588,470	$ 12,774,840	$ 14,400,361	$ 15,942,612	$ 16,299,006	$ 17,692,654
Water supply proffers	125,192	26,967	13,362	57,446	450,262	218,987	298,054	293,900	213,825	220,804
Rental income	171,401	144,381	164,875	160,914	325,991	326,377	377,880	354,987	124,964	127,656
Other	190,467	198,025	242,028	285,892	214,104	272,599	158,917	44,045	141,896	136,437
Storm cost reimbursement	-	349,541	-	900	-	-	-	-	-	-
Total operating revenues	13,090,878	12,437,211	12,422,798	12,330,854	13,578,827	13,592,803	15,235,212	16,635,544	16,779,691	18,177,551
Operating expenses:										
Salaries	4,040,543	4,144,696	4,306,155	4,288,721	4,257,924	4,347,283	4,384,445	4,552,923	4,721,993	5,093,032
Fringe benefits	1,585,037	1,584,707	1,636,038	1,337,328	1,546,525	1,583,480	1,799,798	1,511,372	1,436,239	2,075,905
Operating supplies	888,559	899,095	822,882	882,253	836,288	1,094,002	1,045,132	1,150,760	1,200,220	1,229,827
Maintenance	3,193,116	3,065,512	3,364,910	3,501,598	2,067,464	1,670,023	1,913,322	2,013,679	2,193,410	1,735,381
Utilities	813,478	917,498	862,665	875,020	861,074	870,220	899,294	913,104	974,168	919,745
Contractual fees	873,110	882,505	910,491	836,634	915,365	903,463	920,714	877,652	872,374	991,478
Other	697,629	560,671	504,573	496,851	497,803	233,233	215,633	222,249	270,685	319,050
Storm costs	-	359,921	-	-	-	-	-	-	-	-
Total operating expenses	12,091,472	12,414,605	12,407,714	12,218,405	10,982,443	10,701,704	11,178,338	11,241,739	11,669,089	12,364,418
Operating income before depreciation and amortization	999,406	22,606	15,084	112,449	2,596,384	2,891,099	4,056,874	5,393,805	5,110,602	5,813,133
Depreciation and amortization	7,273,473	7,469,016	7,619,431	7,670,391	7,810,808	7,930,632	8,194,083	7,992,438	7,922,613	8,115,624
Operating loss	(6,274,067)	(7,446,410)	(7,604,347)	(7,557,942)	(5,214,424)	(5,039,533)	(4,137,209)	(2,598,633)	(2,812,011)	(2,302,491)
Nonoperating revenues (expenses):										
Facility charges	3,839,702	3,165,330	3,868,654	4,305,728	3,863,650	3,243,535	4,664,316	3,581,360	2,949,130	2,386,850
Investment income (loss)	509,675	351,929	(1,249,111)	267,061	248,207	519,767	90,148	43,940	1,904,327	2,033,417
Gain (loss) on disposal of capital assets	34,324	21,285	(44,507)	15,352	23,497	(193,113)	49,018	(165,655)	14,522	17,813
Insurance recovery	-	-	-	-	-	14,219	1,000	-	-	-
Bond issuance costs	-	-	-	-	-	(402,364)	-	-	#REF!	#REF!
Interest expense	(1,531,715)	(1,478,060)	(1,141,052)	(1,114,130)	(1,095,684)	(744,124)	(778,073)	(754,226)	(727,965)	(854,412)
Net nonoperating revenues	2,851,986	2,060,484	1,433,984	3,474,011	3,039,670	2,437,920	4,026,409	2,705,419	#REF!	#REF!
Income (loss) before contributions	(3,422,081)	(5,385,926)	(6,170,363)	(4,083,931)	(2,174,754)	(2,601,613)	(110,800)	106,786	1,328,003	1,281,177
Capital asset contributions	1,750,073	5,395,362	4,600,645	3,388,700	5,284,379	6,865,346	1,509,214	796,235	5,137,825	17,325
Changes in net position	$ (1,672,008)	$ 9,436	$ (1,569,718)	$ (695,231)	$ 3,109,625	$ 4,263,733	$ 1,398,414	$ 903,021	$ 6,465,828	$ 1,298,502

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
2011	$ -	$2.85 - $3.45 - $9.80	$ 63.45	0.0%
2012	-	2.85 - 3.45 - 9.80	63.45	0.0%
2013	-	2.85 - 3.45 - 9.80	63.45	0.0%
2014	-	2.85 - 3.45 - 9.80	63.45	0.0%
2015	-	2.85 - 3.45 - 9.80	63.45	0.0%
2016	7.22	2.47 - 4.93 - 11.59	73.85	16.4%
2017	8.19	2.80 - 5.60 - 13.15	83.79	13.5%
2018	9.30	3.18 - 6.36 - 14.93	95.16	13.6%
2019	10.56	3.61 - 7.22 - 16.95	108.03	13.5%
2020	11.99	4.10 - 8.19 - 19.24	122.63	13.5%

Quarterly Continuing Service Charges for Residential Sewer Service

Fiscal Year	Basic Charge	Rate per 1,000 gallons	Quarterly Total (2)	% Change
2011	$ -	$ 2.80	$ 58.80	0.0%
2012	-	2.80	58.80	0.0%
2013	-	3.22	67.62	15.0%
2014	-	3.22	67.62	0.0%
2015	-	3.22	67.62	0.0%
2016	5.66	2.93	67.19	-0.6%
2017	5.77	2.99	68.56	2.0%
2018	5.89	3.05	69.94	2.0%
2019	5.95	3.08	70.63	1.0%
2020	6.01	3.11	71.32	1.0%

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

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

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

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

Source: James City Service Authority Schedule of Rates and Fees

Table 4

JAMES CITY SERVICE AUTHORITY

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

Largest Utility Customers (1)

Current Year and Nine Years Ago

	2020			2011		
	Gallons Billed	**Service Charges**	**Rank**	**Gallons Billed**	**Service Charges**	**Rank**
Historic Powhatan Resort	31,752,668	$ 274,426	1	N/A	N/A	N/A
Owens-Illinois*	20,443,582	162,914	2	19,329,180	$ 120,807	2
Williamsburg Landing	16,394,761	148,702	3	N/A	N/A	N/A
Williamsburg Plantation	15,950,038	146,590	4	N/A	N/A	N/A
Country Village Mobile Home Park (sewer only)	14,293,817	44,397	5	16,742,484	46,879	4
Patriots Colony	12,636,434	114,826	6	21,058,270	131,614	1
Greystone*	12,414,664	98,163	7	11,013,000	68,831	8
Escalante Kingsmill Resort (sewer only)	11,818,384	36,928	8	N/A	N/A	N/A
Williamsburg-James City County Schools*	11,432,251	94,321	9	15,946,900	94,457	5
Marriott Ownership Resorts	11,279,896	102,269	10	N/A	N/A	N/A
Eastern State Hospital *	-	-		18,696,500	116,853	3
Windy Hill Trailer (sewer only)	-	-		12,970,320	36,317	6
Platinum Management	-	-		11,115,000	69,469	7
Rolling Meadows				8,616,700	53,854	9
Oxford-James	-	-		8,425,000	52,659	10
Total	158,416,495	$ 1,223,537		143,913,354	$ 791,740	

* Subject to wastewater sub-meter adjustments

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

Source: James City Service Authority, Administration Department

Table 5

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)
Ratio of Outstanding Debt
Last Ten Fiscal Years

Fiscal year	Revenue bonds	Number of water connections	Debt per water connection
2011	34,469,298	19,719	1,748.0
2012	32,938,175	20,070	1,641.2
2013	25,185,000	20,549	1,225.6
2014	24,660,000	20,858	1,182.3
2015	24,115,000	21,246	1,135.0
2016	24,118,109	21,669	1,113.0
2017	23,269,202	22,133	1,051.3
2018	22,600,295	22,540	1,002.7
2019	21,906,388	22,832	959.5
2020	30,322,481	23,116	1,311.8

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

Source: James City Service Authority, Administration Department

Table 6

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)
Revenue Bond Coverage
Last Ten Fiscal Years

Fiscal year	Gross revenue	Direct operating expenses	Net revenue available for debt service	Principal	Interest	Total	Coverage
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	21,633,148	11,241,739	9,019,105	630,000	725,250	1,355,250	6.65
2019	21,647,670	11,669,089	9,978,581	655,000	700,050	1,355,050	7.36
2020	22,615,631	12,364,418	10,251,213	1,274,000	802,305	2,076,305	4.94

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
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
2019	33,966,163	2,146,958	112,183,815	148,296,936
2020	29,479,003	1,086,117	102,028,321	132,593,441

Table 8

JAMES CITY SERVICE AUTHORITY

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

County Demographic and Economic Statistics

Last Ten Calendar Years

Calendar year	Population (1)	Personal income (2)	Per capita personal income (2)	Unemployment percentage (1)
2011	68,500	$ 4,474,583,000	$ 54,224	6.1%
2012	69,451	4,703,429,000	55,990	5.7%
2013	70,376	4,745,679,000	55,550	5.3%
2014	71,254	4,954,338,000	56,960	4.9%
2015	72,682	5,160,028,000	58,504	4.3%
2016	73,767	5,344,090,000	59,632	4.1%
2017	74,795	5,646,096,000	62,350	3.8%
2018	75,776	5,869,000,000	64,466	2.9%
2019	76,211	6,066,000,000	66,306	2.7%
2020	77,202	**	**	**

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

	2020			2011		
	Employees	Rank	Percent of total County employment	Employees	Rank	Percent of total County employment
Williamsburg-James City County Public Schools	1000+	1	5.14%	1000+	2	6.01%
Busch Entertainment	1000+	2	**	1000+	1	13.29%
Wal-Mart Distribution Center	500-999	3	2.84%	500-999	8	1.82%
James City County	500-999	4	2.46%	500-999	5	2.82%
Riverside Regional Medical Center	500-999	5	1.74%			
Eastern State Hospital	500-999	6	1.69%	500-999	4	3.14%
Anheuser-Busch Inbev	500-999	7	1.49%	500-999	6	2.31%
Williamsburg Landing	500-999	8	1.05%			
Owens & Minor/AVID	250-499	9	0.98%			
Jamestown-Yorktown Foundation	250-499	10	0.71%	250-499	10	1.32%
Lumber Liquidaters				1000+	3	3.75%
Busch Properties, Inc.				500-999	7	2.27%
Avid Medical				250-499	9	1.46%
			18.10%			38.19%

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

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

Table 10

JAMES CITY SERVICE AUTHORITY

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

Schedule of Insurance in Force

June 30, 2020

Insurer	Type of coverage	Policy number	Policy period	Annual Premium
Virginia Association of Counties Group Self-Insurance Risk Pool (VACoRP)	General liability, property, automobile, public officials' liability, crime, cyber risk, excess risk	VA-JA-131D-20	7/1/2019 - 7/1/2020	$ 96,493
Virginia Association of Counties Group Self-Insurance Risk Pool (VACoRP)	Workers' compensation	VA-JA-131D-20	7/1/2019 - 7/1/2020	$ 70,291

Table 11

JAMES CITY SERVICE AUTHORITY

(A Component Unit of the County of James City, Virginia)
Full-time Employees by Function
Last Ten Fiscal Years

Function	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Administration	60	63	63	63	63	63	63	63	68	68
Water	15	15	15	15	15	15	15	17	17	17
Sewer	11	11	11	11	11	11	11	11	11	11
Total	**86**	**89**	**89**	**89**	**89**	**89**	**89**	**91**	**96**	**96**

Source: James City County, Fiscal Year Adopted Budgets

Table 12

JAMES CITY SERVICE AUTHORITY

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

Operating Indicators by Function

Last Ten Fiscal Years

Function	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Water:										
New connections	388	351	448	359	388	423	464	407	292	284
Water main breaks	44	31	25	21	26	21	34	25	30	28
Sewer:										
New connections	375	296	347	261	380	447	470	414	287	290

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	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Water:										
Water lines (miles)	393	390	393	400	402	407	409	410	414	414
Water customers	19,719	20,070	20,549	20,858	21,246	21,669	22,133	22,540	22,832	23,116
Storage tanks (greater than 250,000 gallons)	7	7	7	7	7	7	7	7	7	7
Average ERCs (1)	20,866	19,200	18,597	18,937	19,415	18,921	20,025	20,220	19,247	18,977
Sewer:										
Sewer lines (miles)	419	423	425	430	435	439	440	440	446	446
Gallons collected (millions)	1,598	1,771	1,739	1,862	1,897	1,863	1,971	1,987	1,898	1,879
Sewer customers	21,127	21,488	21,962	22,575	22,955	23,402	23,872	24,286	24,573	24,863

(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	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Water:										
Average Day	5.1	4.8	4.7	4.7	4.7	4.7	5.0	5.1	4.8	4.7
Average Day in Month of Maximum Flow	7.4	6.4	6.1	5.9	6.1	5.9	6.4	7.2	6.3	6.0
Month of Maximum Flow	July	July	July	June	July	August	August	July	July	September
Sewer:										
Average Day	4.4	5.0	5.0	5.1	5.1	5.1	5.4	5.4	5.2	5.1

Source: James City Service Authority, Administration Department

Table 15

JAMES CITY SERVICE AUTHORITY

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

Comparison of Area Water Bills
Annual Consumption 60,000 Gallons as of June 2020

Virginia Jurisdiction	Water Service
City of Williamsburg	$ 381.60
City of Norfolk	491.76
City of Newport News	484.32
City of Virginia Beach	416.28
James City Service Authority	294.00

Source: James City Service Authority

Comparison of Area Sewer Bills
Annual Consumption 60,000 Gallons as of June 2020

Virginia Jurisdiction	Sewer Service *
City of Hampton	$ 171.60
City of Newport News	330.36
City of Virginia Beach	369.72
City of Norfolk	358.56
York County	312.00
James City Service Authority	210.60

* Rates charged by the municipality. Residents of these municipalities pay a separate wastewater treatment fee to Hampton Roads Sanitation District of $7.83 per 1,000 gallons.

Source: James City Service Authority

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

Fiscal Year	Water	Sewer	Total
2011	4,200	3,360	7,560
2012	4,200	3,360	7,560
2013	4,200	3,360	7,560
2014	4,200	3,360	7,560
2015	4,200	3,360	7,560
2016	4,200	3,360	7,560
2017	4,200	3,360	7,560
2018	4,200	3,360	7,560
2019	4,200	3,360	7,560
2020	4,200	3,360	7,560

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

Source: James City Service Authority

Table 16

JAMES CITY SERVICE AUTHORITY

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

Rates and Fees

Wastewater Charges

(a) System Facilities Charge

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

Metered Water Service

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

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

Nonmetered Water Service

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

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

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

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

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 $325 shall be paid for each separate connection to a grinder pump when the operation and maintenance of said residential grinder pump is the responsibility of the Authority. The payment for this charge will be prorated in equal amounts in the customers' utility service charge billing. The Authority shall not maintain nonresidential grinder pumps or other commercial pump stations unless such utility maintenance is deemed by the Authority to be in the interest of the public health or is necessary to protect the integrity of the system, or such facility is located within a designated Reservoir Protection Zone.

(d) Services Connection Charge

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

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

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

JAMES CITY SERVICE AUTHORITY

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

Rates and Fees

(e) Retail Service Rates

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

Metered Water Source

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

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

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

Meter Size	Quarterly Fixed Charge
5/8”	$ 6.01
3/4”	$ 9.01
1”	$ 15.02
1 1/2”	$ 30.02
2”	$ 48.03
3”	$ 96.06
4”	$ 150.10
6”	$ 300.18
8”	$ 480.30
10”	$ 690.43

Charge for all collection and treatment of wastewater:

Volume	Collection
Per 1,000 gallons of water consumed	$ 3.11
Per 100 cubic feet of water consumed	2.33

Nonmetered Water Source

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

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

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

Others to be established when needed

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

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

Water Charges

(a) System Facilities Charge

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

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

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

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

(b) Local Facilities Charge

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

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

(c) Service Connection Charge

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

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

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

(d) Retail Service Charge

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

Meter Size	Quarterly Fixed Charge
5/8”	$ 11.99
3/4”	$ 17.97
1”	$ 29.94
1 1/2”	$ 59.87
2”	$ 95.81
3”	$ 191.60
4”	$ 299.37
6”	$ 598.75
8”	$ 957.99
10”	$ 1,377.12

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
	0-15,000	15,001-30,000	30,000+
Rate Per 1,000 Gallons	$ 4.10	$ 8.19	$ 19.24

Multi-Family Residential and Non-Residential All Meter Sizes	All Use
Rate per 1,000 Gallons	$ 6.05

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 21 days following the date thereof.

(c) Interest Charge for Late Payment with a Lien

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

(d) Restoration of Service Charge

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

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

(e) Meter Test Deposit

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

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

(f) Fire Hydrant Charge

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

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

(g) Temporary Water Service Charge

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

(h) Fire Connection Detector Check Meter Charge

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

JAMES CITY SERVICE AUTHORITY

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

Rates and Fees

Multiple Charges Bills

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

No Free Service

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

Plan Review Fee

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

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

JAMES CITY SERVICE AUTHORITY

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

Rates and Fees

Inspection

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

Inspection Fee for Water and Sewer Lines

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

Sub-Meter Account Charge

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

COMPLIANCE SECTION

BROWNEDWARDS
certified public accountants

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

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

We have audited, in accordance with the auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; and the *Specifications for Audits of Authorities, Boards, and Commissions*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia, the financial statements of the James City Service Authority (the "Authority") as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise the James City Service Authority's basic financial statements, and have issued our report thereon dated December 7, 2020.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the James City Service Authority's internal control over financial reporting (internal control) as a basis for designing the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the James City Service Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the 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 was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the 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 financial statements. 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 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 James City Service Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purposes.

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

CERTIFIED PUBLIC ACCOUNTANTS

Newport News, Virginia
December 7, 2020

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

SUMMARY OF COMPLIANCE MATTERS
June 30, 2020

As more fully described in the Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*, we performed tests of the Authority's compliance with certain provisions of the laws, regulations, contracts, and grants shown below.

STATE COMPLIANCE MATTERS

Code of Virginia

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

AGENDA ITEM NO. E.1.

ITEM SUMMARY

DATE: 12/8/2020

TO: The Board of Directors

FROM: M. Douglas Powell, General Manager

SUBJECT: Authorization of a 2% General Wage Increase

ATTACHMENTS:

	Description	Type
🗋	Memorandum	Cover Memo
🗋	Resolution	Resolution

REVIEWERS:

Department	Reviewer	Action	Date
James City Service Authority	Powell, Doug	Approved	11/24/2020 - 12:04 PM
Publication Management	Daniel, Martha	Approved	11/24/2020 - 12:07 PM
Legal Review	Kinsman, Adam	Approved	11/24/2020 - 12:54 PM
Board Secretary	Fellows, Teresa	Approved	12/1/2020 - 11:09 AM
Board Secretary	Purse, Jason	Approved	12/1/2020 - 11:18 AM
Board Secretary	Fellows, Teresa	Approved	12/1/2020 - 2:26 PM

M E M O R A N D U M

DATE: December 8, 2020

TO: The Board of Directors

FROM: M. Douglas Powell, General Manager

SUBJECT: Authorization of a Two Percent General Wage Increase

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During the Fiscal Year 2021 Budget process, $55,624 was included in Compensation Contingency for a 2% general wage increase effective January 1, 2021, dependent upon economic conditions. Despite the COVID-19 Pandemic, the James City Service Authority's (JCSA) current financial position can fund the 2% general wage increase.

The 2% general wage increase would help maintain the market competitiveness of the Compensation Plan and recognize staff for its efforts over the past year. All full-time and part-time regular and limited term staff would be eligible, including the General Manager.

Staff recommends approval of the attached resolution that authorizes a 2% general wage increase for JCSA employees effective January 1, 2021, and authorizes the General Manager to transfer the necessary funds from Compensation Contingency to the respective salary and fringe benefit lines items within the Water Fund and Sewer Fund.

MDP/md
JCSAGenIncr-mem

Attachment

R E S O L U T I O N

AUTHORIZATION OF A TWO PERCENT GENERAL WAGE INCREASE

WHEREAS, the Board of Directors for the James City Service Authority (JCSA) approved a Fiscal Year 2021 Budget that included $55,624 in the Compensation Contingency for a 2% general wage increase effective January 1, 2021; and

WHEREAS, despite the COVID-19 Pandemic, JCSA's current financial position can fund the 2% general wage increase; and

WHEREAS, a 2% general wage increase would maintain market competitiveness of the Compensation Plan and recognize staff for its efforts.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the James City Service Authority, James City County, Virginia, hereby authorizes a 2% general wage increase effective January 1, 2021, for full-time and part-time regular and limited term positions, including the General Manager.

BE IT FURTHER RESOLVED that the Board of Directors authorize the General Manager to transfer the necessary funds from Compensation Contingency to the respective salary and fringe benefit line items within the Water Fund and the Sewer Fund.

____
P. Sue Sadler
Chairman, Board of Directors

ATTEST:

____
Teresa J. Fellows
Deputy Secretary to the Board

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

Adopted by the Board of Directors of the James City Service Authority, James City County, Virginia, this 8th day of December, 2020.

JCSAGenIncr-res

AGENDA ITEM NO. F.1.

ITEM SUMMARY

DATE:	12/8/2020
TO:	The Board of Directors
FROM:	M. Douglas Powell, General Manager, James City Service Authority
SUBJECT:	Acceptance of Responsibility for a Memorandum of Agreement for Grease Control Devices; Public Hearing on Endorsement of the Fats, Oils, and Grease Program, Enforcement Response Plan; and Adoption of Civil Penalties

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On October 13, 2020, the James City County Board of Supervisors entered into a Memorandum of Agreement (MOA) with HRSD and the Hampton Roads localities related to FOG in support of the MOM program and delegated the administration and enforcement of the MOA provisions to the James City Service Authority. The Board of Directors desires to accept responsibility for the administration and enforcement of the MOA.

ATTACHMENTS:

	Description	Type
🗋	Memo	Cover Memo
🗋	Resolution	Resolution
🗋	Exhibit 1 JCSA Regulations Fats, Oils, and Grease (FOG) Program	Exhibit
🗋	Exhibit 2 FOG Enforcement Response Plan	Exhibit

REVIEWERS:

Department	Reviewer	Action	Date
James City Service Authority	Luton, Stephanie	Approved	11/17/2020 - 4:04 PM
Publication Management	Daniel, Martha	Approved	11/17/2020 - 4:23 PM
Legal Review	Kinsman, Adam	Approved	11/18/2020 - 11:49 AM
Board Secretary	Fellows, Teresa	Approved	11/18/2020 - 12:39 PM
Board Secretary	Purse, Jason	Approved	12/1/2020 - 11:16 AM
Board Secretary	Fellows, Teresa	Approved	12/1/2020 - 2:24 PM

M E M O R A N D U M

DATE: December 8, 2020

TO: The Board of Directors

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

SUBJECT: Acceptance of Responsibility for a Memorandum of Agreement for Grease Control Devices; Public Hearing on Endorsement of the Fats, Oils, and Grease Program, Enforcement Response Plan; and Adoption of Civil Penalties

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The James City Service Authority's 2014 Consent Order with the Department of Environmental Quality requires each Hampton Roads locality to implement a Maintenance, Operations, and Management (MOM) program to minimize sanitary sewer overflows. Part of the MOM program is to reduce fats, oils, and grease (FOG) in the sanitary sewer system. In an effort to reduce FOG in the sanitary sewer system, the Hampton Roads localities and Hampton Roads Sanitation District (HRSD) have developed regional standards for the sizing and installation of grease control devices in food service establishments.

On October 13, 2020, the James City County Board of Supervisors entered into a Memorandum of Agreement (MOA) with HRSD and the Hampton Roads localities related to FOG in support of the MOM program and delegated the administration and enforcement of the MOA provisions to the James City Service Authority. The Board of Directors desires to accept responsibility for the administration and enforcement of the MOA.

On October 27, 2020, the Board of Directors delegated the development and administration of certain regulatory policies to the General Manager, including the FOG program as detailed in the two attached exhibits: the Fats, Oils, and Grease (FOG) Program and the FOG Enforcement Response Plan. The Board of Directors desires to endorse the General Manager's FOG program and adopt the civil penalties listed in the FOG Plan to support its enforcement. The proposed civil penalties for violations of the FOG Regulation are $100 for the initial summons, $150 for each additional summons, and not more than a total amount of $3,000 for a series of specified violations arising from the same operative set of facts. The purpose of the public hearing is to invite public comment on the proposed FOG program and the related civil penalties.

Staff recommends approval of the attached resolution accepting responsibility for the administration and enforcement of the MOA, endorsing the FOG program, and adopting the civil penalties.

MDP/md
FOGprogram-mem

Attachment

R E S O L U T I O N

ACCEPTANCE OF RESPONSIBILITY FOR A MEMORANDUM OF AGREEMENT WITH HAMPTON ROADS LOCALITIES FOR GREASE CONTROL DEVICES; AND ENDORSEMENT OF THE FATS, OILS, AND GREASE PROGRAM AND ENFORCEMENT RESPONSE PLAN; AND ADOPTION OF CIVIL PENALTIES

WHEREAS, the 2014 Consent Order with the Department of Environmental Quality requires each Hampton Roads locality to implement a Maintenance, Operations, and Management (MOM) program to minimize sanitary sewer overflows; and

WHEREAS, part of the MOM program is to reduce fats, oils, and grease (FOG) in the sanitary sewer system; and

WHEREAS, the installation and proper maintenance of grease control devices in food service establishments (FSEs) is necessary to aid in preventing the introduction and accumulation of FOG into the sanitary sewer system that may contribute to sanitary sewer blockages and obstructions; and

WHEREAS, in an effort to reduce FOG in the sanitary sewer system, the Hampton Roads localities and Hampton Roads Sanitation District (HRSD) have developed regional standards for the sizing and installation of grease control devices in FSEs; and

WHEREAS, the Board of Supervisors of James City County entered into a Memorandum of Agreement with HRSD and the Hampton Roads localities related to FOG in support of the MOM program, the administration and enforcement of which was delegated to the James City Service Authority by resolution adopted October 13, 2020; and

WHEREAS, the James City Service Authority is the political subdivision responsible for the wastewater system in James City County and the MOM program; and

WHEREAS, by resolution adopted on October 27, 2020, the Board of Directors delegated the development and administration of certain regulatory policies to the General Manager, including the FOG program; and

WHEREAS, the Board of Directors of the James City Service Authority desires to accept responsibility for the Memorandum of Agreement, endorse the General Manager's FOG program, and adopt civil penalties to support enforcement of the FOG program.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the James City Service Authority, James City County, Virginia, does hereby accept responsibility for the administration and enforcement of that Memorandum of Agreement executed between the County of James City, Virginia, the Hampton Roads localities, and the Hampton Roads Sanitation District as approved by a resolution adopted by the Board of Supervisors on October 13, 2020.

BE IT FURTHER RESOLVED that the Board of Directors of the James City Service Authority, James City County, Virginia, does hereby endorse the Fats, Oils, and Grease Regulation created by the General Manager and the associated Enforcement Response Plan.

BE IT FURTHER RESOLVED that the Board of Directors of the James City Service Authority, James City County, Virginia, does hereby adopt civil penalties for violations of the Fats, Oils, and Grease Regulation in the amount of $100 for the initial summons, $150 for each additional summons, and not more than a total amount of $3,000 for a series of specified violations arising from the same operative set of facts.

P. Sue Sadler
Chairman, Board of Directors

ATTEST:

Teresa J. Fellows
Deputy Secretary to the Board

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

Adopted by the Board of Directors of the James City Service Authority, James City County, Virginia, this 8th day of December, 2020.

FOGprogram-res

Fats, Oil and Grease (FOG) Program.

A. Purpose and applicability

1. The purpose of this section is to aid in preventing the introduction and accumulation of fats, oil and grease into the sanitary sewer system that may contribute to sanitary sewer blockages and obstructions. Food service establishments, grease haulers, and other industrial or commercial establishments generating or collecting wastewater containing fats, oils, and grease are subject to this section. This section regulates such users by requiring that grease control devices and other approved strategies be installed, implemented and maintained in accordance with the provisions of this section and other applicable requirements of the James City Service Authority (JCSA).

2. The provisions of this section shall apply to all food service establishments within the JCSA service area and to all grease haulers providing service to any such food service establishment.

B. Definitions

Automatic Grease Removal Device (AGRD): an active, automatic device that separates and removes FOG from effluent discharge and cleans itself of accumulated FOG at least once every twenty-four hours utilizing electromechanical apparatus.

Brown Grease: floatable fats, oils, grease and settled solids produced during food preparation that is recovered from grease control devices.

Commissary: a catering establishment, food service establishment, or any other place in which food, food containers, or supplies are kept, handled, prepared, packaged, or stored for distribution to satellite operations.

Core Sampler: a sampling tool, i.e. Sludge Judge, Dipstick Pro or equivalent, designed to take accurate readings of settleable solids, in a variety of liquids, to any depth.

Decanting: discharging of removed wastewater back into the grease control device, for the purpose of reducing the volume to be hauled or for recharging the grease control device.

Fats, Oils, and Grease (FOG): material, either liquid or solid, composed of fats, oils or grease from animal or vegetable sources. Examples of FOG include, but are not limited to, kitchen cooking grease, vegetable oil, bacon grease and organic polar compounds derived from animal and/or plant sources that contain multiple carbon triglyceride molecules. These substances are detectable and measurable using analytical test procedures established in the United States Code of Federal Regulations at 40 CFR Part 136, as may be amended from time to time. FOG may be referred to herein as “grease” or “greases.”

Food Service Establishment (FSE): any commercial, industrial, institutional, or food processing facility discharging kitchen or food preparation wastewaters including, but not limited to, restaurants, commercial kitchens, caterers, motels, hotels, cafeterias, correctional facilities, prisons or jails, care institutions, hospitals, schools, bars, and churches. Any establishment engaged in preparing, serving, or otherwise making food available for consumption by the public shall be included. Such establishments use one or more of the following preparation activities: cooking by frying (all methods), baking (all methods), grilling, sautéing, rotisserie cooking, broiling, boiling, blanching, roasting, toasting, or poaching. Also included are infrared heating, searing, barbequing, and other preparation activity that produces a hot, non-drinkable food product in or on a receptacle that requires washing.

General Manager: the General Manager of the James City Service Authority (JCSA).

Grease Control Device (GCD): a device used to collect, contain, or remove food waste and grease from the wastewater while allowing the remaining wastewater to be discharged to the JCSA's sanitary sewer system by gravity. Devices include grease interceptors, grease traps, AGRDs (if approved in writing by the General Manager), or other devices approved by the General Manager.

Gravity Grease Interceptor: a plumbing appurtenance of not less than 250 gallons (946 L) capacity that is installed in the sanitary sewer system to intercept free-floating fats, oils and grease from waste water discharge. Separation is accomplished by gravity during a retention time of not less than 30 minutes. Unless otherwise approved, GGIs shall not be installed for new or retrofitted installations.

Grease Hauler: a contractor who collects the contents of a grease interceptor or trap and transports it to an approved recycling or disposal facility. A grease hauler may also provide other services related to grease interceptor maintenance for a FSE.

Grease Removal Device: an active, automatic device that separates and removes FOG from effluent discharge and that cleans itself of accumulated FOG at least once every twenty-four hours utilizing electromechanical apparatus.

Grease Trap: a device typically located indoors and under the sink or in the floor designed for separating and containing grease prior to the wastewater exiting the trap and entering the sanitary sewer system. Such devices are typically passive (gravity fed) and compact with removable baffles.

Hampton Roads Regional Technical Standards for Grease Control Devices: shall mean a set of regionally-approved standards required to properly size grease control devices.

HR FOG Program: the regionally-approved Hampton Roads FOG training and certification programs for FSE employees and grease haulers administered by the Hampton Roads Planning District Commission (HRPDC).

Hydromechanical Grease Interceptor (HGI): a plumbing appurtenance that is installed in the sanitary sewer system to intercept free-floating fats, oils and grease from waste water discharge. Continuous separation is accomplished by air entrainment, buoyancy, interior baffling in combination or separately, and one of the following:

1) Units directly connected, with an external flow control, with an air intake (vent)
2) Units directly connected, with an external flow control, without an air intake (vent)
3) Units directly connected, without an external flow control, with or without internal flow control
4) Units indirectly connected, without an external flow control, with or without internal flow control

Mobile Food Unit: a food service establishment that is readily moveable from place to place at all times during operation and shall include but not limited to pushcarts, trailers, trucks, vans, or boats. May be subject to the requirements of this section.

Renderable Yellow Grease Container: a closed, leak-proof container for the collection and storage of yellow grease.

Sanitary Sewer System: a system of underground pipes that carries wastewater from bathrooms, sinks, kitchens, and other plumbing components to a wastewater treatment plant where it is filtered, treated and discharged.

Stormwater System: a network of structures, channels and underground pipes designed to carry stormwater (rain water) to ponds, lakes, streams, rivers and other surface waters.

Yellow Grease: FOG used in food preparation that have been in contact or contaminated with other sources such as water, wastewater or solid waste. An example of yellow grease is fryer oil, which can be recycled into products such as animal feed, cosmetics and alternative fuel. Yellow grease is also referred to as renderable FOG.

C. Registration Requirements

All FSEs shall register their GCDs with JCSA. Registration shall be on forms provided by the JCSA and utilized to ensure that such devices are maintained, as well as to facilitate inspection in accordance with the requirements established by the JCSA.

1. Existing FSEs shall register all GCDs within one (1) year of the adoption of this regulation. New FSEs shall register when setting up sewer service or prior to obtaining a Certificate of Occupancy.
2. In order to register a GCD, the FSE shall document that a current employee has successfully completed the HR FOG Program. This is an ongoing requirement and is necessary to maintain a valid registration in compliance with this regulation.

D. Discharge Limits

No person shall discharge or cause to be discharged from any FSE any wastewater with FOG in concentrations or quantities that will damage the sewers or sanitary sewer system, as determined by Section 301(D) of the HRSD Industrial Wastewater Discharge Regulations.

E. Grease Control Devices

1. Requirements. FSEs shall have a GCD(s) meeting all applicable requirements of the Virginia Uniform Statewide Building Code and the International Plumbing Code, or successor codes. GCDs shall be designed in accordance with and meet the Hampton Roads Regional Technical Standards for Grease Control Devices. AGRDs shall not be used unless otherwise approved in writing by the General Manager.

   a. Except as provided in subsection 1.b. below, FSEs shall be required to install, operate, and maintain a GCD in compliance with the requirements contained in this section. GCDs shall be installed and registered prior to the initiation of sewer service or issuance of a Certificate of Occupancy.

   b. FSEs with existing GCDs in operation as of the effective date of this regulation shall be allowed to operate and maintain those GCDs provided they are in proper operating condition and not found to be contributing FOG quantities sufficient to cause line stoppages or to necessitate increased maintenance of the sanitary sewer system. If a GCD is determined to be contributing FOG in quantities sufficient to cause line stoppages, or to necessitate increased maintenance of the sanitary sewer system, an existing FSE shall comply with the requirements of this section.

   c. Existing FSEs that are renovated or expanded shall install a GCD meeting the requirements of this section. GCDs shall be installed, inspected, and registered as a condition of final approval of such renovation or expansion, or issuance of a Certificate of Occupancy.

d. Any existing FSE may be required to install or upgrade a GCD if such FSE is contributing FOG to the sanitary sewer system, as determined by the General Manager and/or HRSD. Such devices shall be installed within sixty (60) days and registered with the JCSA within thirty (30) days of installation.

e. All grease haulers, owners, or employees servicing GCDs for FSEs within the JCSA service area shall be required to obtain a certification to service GCDs from the HR FOG Program.

2. Installation of Grease Control Devices.

a. GCDs shall be installed by a plumber licensed in the Commonwealth of Virginia. Every GCD shall be installed and connected so that it may be readily accessible for inspection, cleaning, and removal of the intercepted food waste and grease at any time. Installation shall be in compliance with the Virginia Plumbing Code and the manufacturer's instructions. AGRDs shall not be installed unless approved in writing by the General Manager.

b. GCD covers shall meet the following load rating requirements:

1) Indoor, foot traffic only: minimum of 300 pounds
2) Indoor, pallet jack or fork lift traffic: minimum of 2,000 pounds
3) Outdoor, non-vehicular traffic: minimum of 2,000 pounds
4) Outdoor, vehicular traffic: minimum of American Association of State Highway and Transportation Officials M306 H20/HS20 Traffic Rating, or equivalent successor standard.

c. GCDs shall have their manhole covers secured at all times by one or more of the following methods:
1) with bolts, or locking mechanisms;
2) with a manhole cover of sufficient weight to prevent unauthorized access; or
3) with a safety apparatus secured in place under the cover to prevent accidental entry if the cover is not secured in place.

3. Maintenance of Grease Control Devices

a. All GCDs shall be maintained at the owner's expense. Maintenance shall include the complete removal of all contents, including floating material, wastewater, and settled solids. Decanting or discharging of removed waste back into the grease interceptor or private line or into any portion of the JCSA or HRSD sanitary sewer system is prohibited. Unless otherwise approved in writing by the General Manager, GCDs shall be serviced and maintained by a grease hauler that is certified by the HR FOG Program.

b. Gravity Grease Interceptors shall be pumped out completely when the total accumulation of FOG, including floating solids and settled solids, reaches twenty-five percent (25%) of the overall liquid volume. At a minimum, Gravity Grease Interceptors or other GCDs shall be cleaned once every three (3) months unless approved in writing by the General Manager for good cause shown. Approval will be granted on a case-by-case basis upon submittal of a request by the FSE, documenting reasons for the proposed frequency variance.

c. AGRDs shall be opened daily to clean out the solids basket and the external grease container shall be emptied at a minimum of once daily. AGRDs shall be inspected and completely cleaned of food solids and FOG a minimum of once per week unless otherwise approved in writing by the General Manager. In no event shall the content of food solids and FOG exceed twenty-five percent (25%) of the overall liquid depth of the AGRD.

d. Existing older types of grease traps and grease removal devices shall be opened, inspected, and completely cleaned of food solids and FOG a minimum of once per week, unless otherwise approved in writing by the General Manager for good cause shown. Approval will be granted on a case-by-case basis upon submittal of a request by the FSE documenting reasons for the proposed frequency variance. In no event shall the content of food solids and FOG exceed twenty-five percent (25%) of the overall liquid depth of the device.

e. Hydromechanical Grease Interceptors shall be cleaned before their maximum capacity is reached as established by the manufacturer in accordance with test reports validated by a third party. The maintenance frequency shall be determined in accordance with the sizing and selection requirements for HGIs in the Hampton Roads Regional Technical Standards for Grease Control Devices. At no time shall an HGI be cleaned less frequently than once every three (3) months, or as otherwise approved in writing by the General Manager.

f. The General Manager may establish a more frequent cleaning schedule if the FSE is found to be contributing FOG in quantities sufficient to cause line stoppages or to necessitate increased maintenance of the sanitary sewer system.

4. Use of Additives. The use of additives by FSEs, including, but not limited to, products that contain solvents, emulsifiers, caustics, acids, enzymes or bacteria, are prohibited for use as grease management control; provided, however, that additives may be used to clean the FSE drain lines so long as the usage of such additives will not cause FOG to be discharged from the GCD to the sanitary sewer system. The use of additives shall not be substituted for the maintenance procedures required by this section.

5. Waste Disposal

a. Waste removed from GCDs shall be disposed of at a facility permitted to receive such wastes. Waste material removed from GCDs shall not be discharged directly or indirectly into any portion of the sanitary sewerage system, private sewer line, stormwater system, or returned to any GCD.

b. FSEs approved for self-cleaning shall comply with the following requirements for maintenance as required by the General Manager:

1) Remove cover(s).
2) Remove all FOG, solids, food debris, and wastewater.
3) Clean all internal surfaces from the build-up of FOG or other residual materials (chemicals and/or degreasers are prohibited).
4) Place all removed materials in garbage bag or other sealable container (not glass) along with an absorbent material, *i.e.* kitty litter, and dispose of solidified contents in trash receptacle.
5) Inspect all internal components, replace anything missing or broken and ensure flow control device is installed.
6) Refill with fresh water.
7) Replace cover(s).
8) Enter the required information on the maintenance log.
9) At least once per year, or more frequently as required by the General Manager, the HGI or older style existing grease trap shall be cleaned by a

certified grease hauler, documented by a manifest, reported in the maintenance log.

c. FSEs shall dispose of yellow grease in a renderable FOG container where contents will not be discharged to the environment. Yellow grease shall not be poured or discharged into the JCSA or HRSD sanitary sewer system.

6. Inspection of Grease Control Devices. The General Manager or their designee shall have the right of entry into any FSE, during reasonable hours, for the purpose of making inspections, observations, measurements, sampling, testing, or records review of the of the sanitary sewer system and GCDs installed to serve such FSE to ensure compliance with this regulation. The owner or occupant may accompany the General Manager or their designee. Operational changes, maintenance, and repairs required by the General Manager or their designee shall be implemented as noted in the written notice issued to the FSE.

7. Record Keeping

a. FSEs shall retain and make available for inspection and copying records of all cleaning and maintenance for the previous three (3) years for all GCDs. FSEs utilizing professional grease hauling services should provide cleaning and maintenance records meeting the requirements as outlined in Section F. Where approved, FSEs performing GCD cleaning and waste disposal shall provide cleaning and maintenance records as required by the General Manager or their designee. Such records shall be kept on site and shall be made immediately available to any employee of the JCSA or HRSD upon request.

b. FSEs shall retain and make available for inspection and copying records of yellow grease disposal for the previous three (3) years. FSEs utilizing professional yellow grease rendering services should provide service records meeting the requirements as outlined in Section F. Such records shall be kept on site and shall be made immediately available to any employee of the JCSA or HRSD upon request.

F. <u>Grease Hauler Requirements</u>

1. Any person collecting, pumping, or hauling waste from GCDs or yellow grease containers located within the JCSA service area shall be certified by HR FOG Program and hold all required waste hauling permits. All grease haulers shall obtain the required permits, certifications, and/or approvals from the facility in which waste will be disposed. Grease haulers discharging to a HRSD treatment plant shall be approved through the HRSD Indirect Wastewater Discharge Permit.

2. Grease haulers shall notify the JCSA at (757) 229-7421 within twenty-four (24) hours of any incident required to be reported to the Virginia Department of Environmental Quality.

3. Grease haulers shall retain and make available for inspection and copying, all records related to grease interceptor pumping and waste disposal from businesses located in the JCSA's wastewater service area. Records shall include, at a minimum, the dates of cleaning/maintenance, the name and business address of the company providing the service, the name of the technician(s) performing the service and their associated HR FOG Program certification number(s), the condition of the GCD, the volume of waste removed in the cleaning, and the following sludge judge measurements (in inches): total depth, depth of solids, and depth of grease, and anticipated destination of waste disposal. Photos of the GCD before and after cleaning are recommended. These records shall remain available for a period of at least three (3) years. The General Manager may require

additional record keeping and reporting, as necessary, to ensure compliance with the terms of this section.

4. Yellow grease rendering companies shall retain and make available for inspection and copying, all records related to yellow grease collected from businesses located in the JCSA's wastewater service area. Yellow grease disposal logs shall include, at a minimum, the dates of pickup, name and business address of the company and person performing the pickup, the volume of yellow grease removed, and anticipated destination of the yellow grease.

5. Submission of all reporting shall include the name of the form and may be submitted via mail or electronically via email.

6. Renderable yellow grease containers shall be labeled with the following information:

   a) Name of company supplying the container(s).
   b) Phone number of company supplying the container(s).
   c) Name and/or address (including unit number) of the FSE where the container has been placed.

G. <u>Fees</u>

Fees provided for in this subsection are separate and distinct from all other fees chargeable by the JCSA. Fees applicable to this subsection are as follows:

There shall be no initial inspection fee. Re-inspection fees shall be in the amount of fifty dollars ($50.00) per inspection, and shall be due upon invoice by the JCSA. Such fees may be added to the FSE's JCSA Utility Charges via the Hampton Roads Utility Billing Service (HRUBS). Failure to correct deficiencies by the third inspection may resort in penalties per paragraph I. of this section.

H. <u>Compliance</u>

The General Manager may require existing FSEs to modify or repair any noncompliant GCD and appurtenances as noted in the written notice received by the FSE.

I. <u>Violations and Penalties</u>

1. Any person who commits any of the acts prohibited by this ordinance shall be liable to the JCSA for all costs of containment, cleanup, abatement, removal and disposal of any substance unlawfully discharged into the sanitary sewer system, as well as the costs of any damages or regulatory fines resulting from such violations.

2. Any person who commits any of the acts prohibited by this section, or fails to properly install and or maintain a GCD shall be subject to a civil penalty in an amount not to exceed one hundred dollars ($100.00) for the initial violation, and not more than one hundred fifty dollars ($150.00) for each additional violation. Each day during which the violation is found to have existed shall constitute a separate offense; however, specified violations arising from the same operative set of facts shall not be charged more frequently than once in any ten-day period, and a series of specified violations arising from the same operative set of facts shall not result in fines that exceed a total of three thousand dollars ($3,000.00). JCSA may issue a civil summons or ticket for a violation. Any person summoned or issued a ticket for a violation may make an appearance in person or in writing by mail to the JCSA prior to the date fixed for trial in court. Any person so appearing may enter a waiver of trial, admit liability and pay the civil penalty. If a person charged with a scheduled violation does not elect to enter a waiver of trial and admit liability, the violation shall be tried in the general district court in the same manner and with the same right of appeal as provided for by law.

3. Enforcement will be in accordance with the associated JCSA FOG Enforcement Response Plan. Continuing violations of this regulation may result in revocation of the FSE's business license, a delay or hold on the reissuance of the business license, a delay or hold on the issuance of building permits, revocation of Certificates of Occupancy, or termination of water and/or sewer services.

4. In addition to any other remedy, the JCSA may bring legal action to enjoin the continuing violation of this regulation, and the existence of any other remedy, at law or in equity, shall be no defense to any such action.

5. The remedies set forth in this section are cumulative, not exclusive, and it shall not be a defense to any action, civil or criminal, that one (1) or more of the remedies set forth herein has been sought or granted; however, no civil action authorized by this section shall proceed while a criminal action related to the same violation is pending.

FOG ENFORCEMENT RESPONSE PLAN

General Responsibilities

A. *Purpose* – The purpose of this Enforcement Response Plan is to establish general responsibilities for enforcement of the Fats, Oils, and Grease (FOG) Regulation. It is the intention of the James City Service Authority (JCSA) to move quickly and responsibly in all enforcement actions. The following guidelines will help ensure that issues requiring enforcement are handled fairly and uniformly for all food service establishments (FSEs).

B. *FOG Inspectors* – Inspectors will be responsible for conducting compliance monitoring and FSE inspections. Inspectors will:

1. Conduct outreach and educational activities with users;
2. Check grease control device maintenance records;
3. Determine compliance with the FOG Regulation through on-site inspections and prepare inspection reports;
4. Provide compliance assistance as appropriate;
5. Identify instances of noncompliance;
6. Issue Notices of Noncompliance;
7. Prepare Notices of Violation (NOV) for issuance by the JCSA;
8. Develop draft compliance inspection schedules;
9. Participate in Show Cause meetings and NOV appeals as deemed necessary by the General Manager of the JCSA or County Attorney, as the case may be; and
10. Participate in hearings related to civil penalties in General District Court, as deemed necessary by the County Attorney.

C. *Regulatory Compliance Administrator or designee* – The Regulatory Compliance Administrator or designee will be responsible for ensuring fair and consistent implementation of FOG control requirements are in compliance with requirements of the FOG Regulation. The Administrator or designee will:

1. Review all violations;
2. Review all documents prepared by Inspectors;
3. Recommend appropriate response(s) to violations;
4. Promptly notify the General Manager of the JCSA of significant instances of noncompliance;
5. Conduct compliance meetings;
6. Develop and oversee compliance monitoring schedules;
7. Track enforcement compliance schedules;
8. Ensure consistency of the FOG control program;
9. Initiate Administrative Orders with compliance schedules;

10. Initiate terminations of service;
11. Consult with County Attorney on all legal issues;
12. Coordinate enforcement with other governmental agencies as appropriate; and
13. Sign Notices of Violation.

D. *General Manager of the JCSA* – General Manager of the JCSA will be responsible for the appropriate application of enforcement standards to FOG control plan violations. The General Manager will:

1. Conduct appeals of enforcement actions;
2. Approve terminations of service; and
3. Sign Administrative Orders and Summons for Civil Penalties;

E. *County Attorney* – The County Attorney's office will provide such legal assistance as deemed appropriate.

Enforcement Actions

A. *Compliance Assistance* – The inspectors will assist any FSE in achieving compliance with the FOG Regulation. The assistance may include, but is not limited to, providing information about training opportunities, providing copies of the regulations applicable to the establishment, assistance with the grease control device registration applications or distribution of training materials for employees.

B. *Notice of Non-Compliance* – This is an informal notice to the FSE, issued at the time of the inspection, advising of corrections that need to be made in order to comply with the FOG Regulation.

C. *Notice of Violation* – This is a formal written notice to the FSE that it has committed a violation of the FOG Regulation. The NOV will require corrective actions within a specified time frame to achieve compliance. The text of the NOV will include any fines and additional enforcement actions that may be pursued if corrective actions are not achieved as required.

1. Administrative Appeal: A FSE may appeal any Notice of Violation to the General Manager of the JCSA. Such appeal shall be requested in writing no later than five (5) business days after receipt of the notice. The General Manager of the JCSA shall conduct a hearing as soon as practicable, but no later than thirty (30) business days after receipt of request of appeal. A written determination will be issued within ten (10) business days of the hearing.

D. *Summons for Civil Penalties* – This is a formal action for civil penalties filed with the Williamsburg-James City County General District Court. The violating party can waive trial and pay the civil penalties, or contest them in a hearing with the court.

E. *Termination or Suspension of Service* – The JCSA may terminate or suspend service to a FSE to prevent any actual or threatened discharge to the sanitary sewer system that may endanger the public health or cause damage to the sanitary sewer system.

F. *Referral of Violations to County Officials* – Continued violations of the FOG Regulations may be referred to the James City County Building Official and/or Commissioner of the Revenue. Such referrals may lead to revocation of the FSE's business license, a delay or hold on the reissuance of the business license, a delay or hold on the issuance of building permits, revocation of Certificates of Occupancy, or separate enforcement action.

Compliance Schedules and Appropriate Response

A. *Compliance Schedule* – The compliance schedule will be based upon the violation and will be initiated by the Regulatory Compliance Administrator or designee.

B. *Selecting Appropriate Response* – The following factors should be taken into consideration when determining the appropriate enforcement action and compliance schedule:

1. Duration of the violation;
2. Compliance history of the FSE ;
3. Actual or potential danger to public health;
4. Actual or potential damage to the sanitary sewer system; and
5. Other appropriate factors.

AGENDA ITEM NO. G.1.

ITEM SUMMARY

DATE:	12/8/2020
TO:	The Board of Directors
FROM:	M. Douglas Powell, General Manager, James City Service Authority
SUBJECT:	Participation in the Coronavirus Aid, Relief, and Economic Security Act Delinquent Utility Bill Grant Program

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In mid-November 2020 a provision was approved in the State Appropriation Act entitled the COVID-19 Municipal Utility Relief Program (the Program). This program applies to any utility providing electric, gas, water, or wastewater service that is owned by a city, county, town, authority, or other political subdivision of the Commonwealth. The program will be administered by the State Corporation Commission (SCC) and the Virginia Department of Housing and Community Development (DHCD).

Staff recommends approval of the attached resolution authorizing: the Authority's participation in the grant program, required certifications to the SCC and DHCD that grant funds will be used only in accordance with state and federal law, execution of an agreement with James City County to serve as fiscal agent for the program, and creation of COVID-19 Utility Assistance accounts within the Authority's Fiscal Year 2021 budgets for the Water Fund and the Sewer Fund.

ATTACHMENTS:

	Description	Type
🗋	Memo	Cover Memo
🗋	Resolution	Resolution

REVIEWERS:

Department	Reviewer	Action	Date
James City Service Authority	Luton, Stephanie	Approved	11/30/2020 - 4:25 PM
Publication Management	Daniel, Martha	Approved	11/30/2020 - 4:27 PM
Legal Review	Kinsman, Adam	Approved	12/1/2020 - 10:57 AM
Board Secretary	Fellows, Teresa	Approved	12/1/2020 - 11:10 AM
Board Secretary	Purse, Jason	Approved	12/1/2020 - 11:19 AM
Board Secretary	Fellows, Teresa	Approved	12/1/2020 - 2:27 PM

M E M O R A N D U M

DATE: December 8, 2020

TO: The Board of Directors

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

SUBJECT: Participation in the Coronavirus Aid, Relief, and Economic Security Act Delinquent Utility Bill Grant Program

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In mid-November 2020 a provision was approved in the State Appropriation Act entitled the COVID-19 Municipal Utility Relief Program (the Program). This program applies to any utility providing electric, gas, water, or wastewater service that is owned by a city, county, town, authority, or other political subdivision of the Commonwealth. The program will be administered by the State Corporation Commission (SCC) and the Virginia Department of Housing and Community Development (DHCD).

Under the program, $100 million in Coronavirus Aid, Relief, and Economic Security (CARES) Act funding is available to utilities to assist customers who have been impacted by COVID-19 with delinquent utility bills. The SCC developed an application whereby interested municipal utilities may submit an application based on their arrearages over 30 days and 60 days as of October 31, 2020. An application has been submitted on behalf of the James City Service Authority (JCSA).

The SCC will determine the amount that each municipal utility is eligible to receive as a proportion of all statewide arrearages. JCSA is ineligible to receive the funds directly and requires James City County to serve as fiscal agent to receive and disburse the grant funds.

For a customer to be eligible, they must self-certify that they are delinquent due to a hardship created by COVID-19. Utilities will apply funds received to the accounts of eligible customers. Funds must be spent by January 29, 2021.

Staff recommends approval of the attached resolution authorizing: the Authority’s participation in the grant program, required certifications to the SCC and DHCD that grant funds will be used only in accordance with state and federal law, execution of an agreement with James City County to serve as fiscal agent for the program, and creation of COVID-19 Utility Assistance accounts within the Authority’s Fiscal Year 2021 budgets for the Water Fund and the Sewer Fund.

MDP/nb
CARESGrnt-JCSA-mem

Attachment

<u>R E S O L U T I O N</u>

<u>PARTICIPATION IN THE CARES ACT DELINQUENT UTILITY BILL GRANT PROGRAM</u>

WHEREAS, federal Coronavirus Aid, Relief, and Economic Security Act (CARES Act) funds are available through the State Corporation Commission (SCC) and the Virginia Department of Housing and Community Development (DHCD) to assist municipal utility customers experiencing with delinquent utility bills due to economic hardship caused by the COVID-19 Pandemic; and

WHEREAS, the James City Service Authority (the "Authority") is eligible to participate in the program as a municipal utility and the Board of Directors desires for the Authority to participate in the program to provide economic relief to eligible customers; and

WHEREAS, the grant program requires the Authority to establish a partnership with a city or county that will act as the fiscal agent to receive the funds from the Department of Accounts (DOA) and the city or county will then forward funds to the Authority to implement the program for its customers.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the James City Service Authority, James City County, Virginia, does hereby authorize and direct the General Manager to undertake all reasonable efforts and required processes to request state and federal coronavirus relief customer assistance funding offered through the SCC and the DHCD.

BE IT FURTHER RESOLVED that the Board of Directors of the James City Service Authority does hereby authorize the General Manager to make certifications to the SCC and the DHCD necessary to receive coronavirus relief fund payments, including that any funds awarded will be used only in accordance with state and federal law.

BE IT FURTHER RESOLVED that the Board of Directors of the James City Service Authority does hereby authorize and direct the General Manager to enter into an agreement with James City County, Virginia whereby the County shall serve as fiscal agent for the Authority to receive disbursements through the CARES Act delinquent utility bill grant program operated by the SCC and DHCD.

BE IT FURTHER RESOLVED that the Board of Directors of the James City Service Authority does hereby create COVID-19 Utility Assistance accounts within the Authority's Water Fund and Sewer Fund.

____
P. Sue Sadler
Chair, Board of Directors

ATTEST:

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Teresa J. Fellows
Deputy Secretary to the Board

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

Adopted by the Board of Directors of the James City Service Authority, this 8th day of December, 2020.

CARESGrnt-JCSA-res

AGENDA ITEM NO. J.1.

ITEM SUMMARY

DATE:	12/8/2020
TO:	The Board of Directors
FROM:	Teresa J. Fellows, Deputy Secretary
SUBJECT:	Adjourn until 4 p.m. on January 4, 2021 for the Organizational Meeting

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REVIEWERS:

Department	Reviewer	Action	Date
Board Secretary	Fellows, Teresa	Approved	12/1/2020 - 2:59 PM